

**Southern California Edison Company's Response to the California Public Utilities
Commissions' Deficiency Report For The Riverside Transmission Reliability Project
Application (A.15-04-013)
July 2015**

ATTACHMENT 2

***Initial Study / Mitigated Negative Declaration, Riverbend, Master Case 1201
(October 8, 2013) (including Traffic Impact Analysis)***



Final Initial Study/ Mitigated Negative Declaration

RIVERBEND
MASTER CASE 1201

CITY OF JURUPA VALLEY
8304 Limonite Avenue,
Suite M
Jurupa Valley, CA 92509
www.jurupavalley.org
October 8, 2013

Final Initial Study/ Mitigated Negative Declaration

RIVERBEND

City of Jurupa Valley Master Case 1201:

General Plan Amendment 1202

Zone Change 1201

Tentative Tract Map 36391

Prepared for:



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October 8, 2013

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
F. Final IS/MND	F-1
A. Introduction	F-1
B. Revisions to the Proposed Project	F-1
C. Corrections and Additions to the Initial Study/Mitigated Negative Declaration	F-1
D. No Recirculation of the Initial Study/Mitigated Negative Declaration Required	F-9
I. Introduction	I-1
A. Document Purpose	I-1
B. Project Location	I-1
C. Project Summary	I-1
D. California Environmental Quality Act (CEQA)	I-2
1. CEQA Objectives	I-2
2. CEQA Requirements for MNDs	I-2
3. CEQA Requirements for Environmental Setting and Baseline Conditions	I-2
4. Initial Study Findings	I-3
5. Format and Content of MND	I-3
6. IS/MND Processing	I-4
II. Environmental Checklist/Initial Study	II-1
III. Mitigation Monitoring and Reporting Program	III-1

Technical Appendices (bound under separate cover)

A1. Air Quality Impact Analysis	
A2. Supplemental Air Quality and Greenhouse Gas Impact Analysis	
A3. Health Risk Assessment	
A4. Wind Erosion Control for Soil Stockpile Memorandum	
B. Biological Technical Report	
C1. MSHCP Consistency Analysis	
C2. Supplemental MSHCP Consistency Analysis	
D. Phase I Cultural Resources Assessment	
E. Paleontological Resources Assessment	
F. Preliminary Geotechnical Evaluation	
G. Supplemental Geotechnical Evaluation	
H. Greenhouse Gas Analysis	
I. Phase I Environmental Site Assessment	
J. Preliminary Subsurface Methane Gas Investigation	
K. Phase II Environmental Site Assessment	
L. Environmental Site Assessment and Methane Gas Response Letter	
M. Preliminary Hydrology Report	
N1. Preliminary Water Quality Management Plan	
N2. Water Quality Management for Soil Stockpile Memorandum	
O. Santa Ana River Floodplain Report	
P1. Noise Impact Analysis	
P2. Supplemental Noise Impact Analysis	
Q1. Traffic Impact Analysis	
Q2. Supplemental Traffic Impact Analysis	
Q3. Traffic Impact Analysis Response Letter	

F. Final Initial Study/Mitigated Negative Declaration

F. FINAL INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

A. Introduction

This Final Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared in accordance with the California Environmental Quality Act (CEQA) as amended (Public Resources Code Section 21000 et seq.) and the CEQA Guidelines (Title 14, California Code of Regulations, Section 15000 et seq.). It acknowledges comments received by the Lead Agency (City of Jurupa Valley) on the Draft IS/MND that was circulated for public review. The content contained herein represents the Lead Agency's independent judgment.

B. Revisions to the Proposed Project

Since the Draft IS/MND was circulated for public review, minor technical changes have been made to the proposed Project by the Project Applicant, which include the following:

- i. A 0.23-acre Pocket Park is added in Planning Area A in a location previously planned for two (2) single-family residential lots. Proposed amenities within the pocket park include an open turf play area, a barbeque and picnic area, a shade pavilion, and landscaping. As a result, the number of residential homes proposed by the Project is reduced from 466 to 464.
- ii. The sidewalk position on most of the interior local streets is changed from a curb-adjacent sidewalk to a sidewalk separated from the curb by a landscaped parkway.

Additionally, the City determined that the Project Applicant's request for a front-yard setback variance is not required, as the front yard setback would be established by the proposed Development Plan required as part of the property's R-4 zoning designation. The updated Tentative Tract Map is illustrated on Figure F-1, *Tentative Tract Map No. 36391 (Revised)*. The substitution of a pocket park for two (2) single-family residential lots and the change in sidewalk position would not result in any new impacts or more severe physical disturbances to the environment beyond those already disclosed and evaluated in the Draft IS/MND.

C. Corrections and Additions to the Initial Study/Mitigated Negative Declaration

Substantive changes made to the text, tables, and/or exhibits of the IS/MND in response to the City of Jurupa Valley Planning Commission workshop held on September 11, 2013, the Planning Commission public hearing held on September 25, 2013, and written comments received by the City of Jurupa Valley on the Draft IS/MND are itemized in Table F-1, *Errata Table of Corrections and Additions*. Additions are shown in Table F-1 as underline text and deletions are shown as ~~stricken~~ text. (Note: Corrections and additions are shown as underline and ~~stricken~~ text in Table F-1 only; the body of the Initial Study/Mitigated Negative Declaration has been revised accordingly). No corrections or additions made to the Draft IS/MND are considered substantial new information requiring recirculation or additional environmental review under CEQA Guidelines Section 15073.5.



Table F-1 Errata Table of Corrections and Additions

Page(s)	Section	Corrections and Additions
II-4, II-23-25, II-28-29, II-31-32, II-46-48, II-77, II-82, II-85-88, II-97-99, II-119-123, II-126, II-128, III-10	Various sections throughout the IS/MND	At the request of the City of Jurupa Valley Planning Commission, all references to Lot 470 of TR36391 are changed from “Graded River Basin” to “Borrow Area/Open Space.” The design and proposed use and function of Lot 470 have not changed. The only change is to the descriptive name of the lot.
II-22-23	II.4.3, Project Description	The City of Jurupa Valley Planning Department confirmed that the Project does not need a variance for proposed front yard setbacks. All references to the variance have been removed from the IS/MND
II-24-25 II-121, II-123, II-124	II.4.3.1.C.1.a, Land Use Plan II.5.9(d), 5.9(g), 5.9(i), Hydrology and Water Quality	<p>The description of the proposed use and function of Lot 470 is revised at the request of the City of Jurupa Valley Planning Commission. The proposed use and function of Lot 470 has not changed. The wording changes are for clarification only.</p> <p>Graded River Basin <u>Borrow Area/Open Space</u>: Graded open space is proposed to consist of approximately 41.92 acres (Lot 470). This area would <u>serve as a borrow site for earth materials</u> be excavated to serve as an overflow area for the Santa Ana River during peak storm events. Earth materials excavated from this lot would be used to raise the pad elevations of the residential planning areas. An approximate 25-foot tall manufactured, hardened, soil cement slope would be established within proposed Lot ‘M’ at the northern edge of the graded river basin borrow area/open space area to protect the residential lots from peak flood events. Additionally, a 5:1 (horizontal:vertical) slope ranging in height from approximately four to 10 feet is planned along the southern and eastern edges of the graded river basin borrow area/open space lot, with an opening at the southwest corner to allow runoff from the residential and graded river basin borrow area/open space area to drain to the Santa Ana River without ponding. <u>During peak storm events, the borrow area/open space would act as an overflow area for the Santa Ana River. Over time, the borrow area/open space may fill with sediment and return in function to the natural Santa Ana River corridor.</u> Lot 470 is proposed to be planted with native species and conveyed to the Western Riverside County RCA or other conservation entity.</p>
II-30	II.4.3.1.C.1.f, Proposed Sewer Service and Improvements	<p>At the request of the Jurupa Community Services District’s Engineer, Albert A. Webb Associates, the discussion of proposed sewer service to the Project site is supplemented to reference the wastewater treatment plant that would provide service to the Project.</p> <p>Wastewater generated on-site would be conveyed via 8-inch and 10-inch diameter sanitary sewer lines that would be installed within all on-site roadways. These flows would be conveyed to the west and connect to a proposed 30-foot wide sewer</p>

Table F-1 Errata Table of Corrections and Additions

Page(s)	Section	Corrections and Additions
		easement located at the western boundary of TTM 36391 between proposed Lots 59 and 60, <u>and ultimately would be conveyed to the Western Riverside County Regional Wastewater Treatment Plant (owned and operated by the Western Riverside County Regional Wastewater Authority) for treatment.</u> A new 10-inch sewer line would be constructed off-site northerly for a distance of approximately 10 feet, where it would connect to an existing 21-inch sanitary sewer line.
II-49-50 III-1	II.5.1(d), Aesthetics III. MMRP	<p>Mitigation Measure AE-3 is revised as follows at the request of the City of Jurupa Valley Planning Commission. The revision achieves the same objective and end result as the original wording, and is more effective to implement and monitor:</p> <p><u>Prior to the issuance of a building permit to allow the installation of a photovoltaic (solar) panel attached to a residential structure, the City of Jurupa Valley shall review the proposed installation location and specific photovoltaic product specifications to ensure that the panel will be sited and designed to avoid glare on adjacent properties and roadways as part of the City's obligation to comply with CA Government Code Section 65850.5. The Project's homeowner association covenants, codes, and restrictions (CC&Rs) shall allow the installation of non-reflective photovoltaic (solar) panels but prohibit the installation of panels that are made of reflective, glare-producing material if the angle of reflection is directed at an adjacent property or public road. A copy of the CC&Rs shall be provided to City of Jurupa Valley staff to ensure that the provision is included. The homeowners association shall be required to enforce the CC&Rs.</u></p>
II-72 III-7	II.5.3(d), Air Quality III., MMRP	<p>Mitigation Measure AQ-9 is revised as follows at the request of the City of Jurupa Valley Planning Commission to provide additional specificity:</p> <p>Prior to building permit final inspection for any residential lots abutting I-15 (Lots 18-28, 38, 39, 49, 50, 58-68), the City shall verify that coniferous evergreen trees, such as Afghan and Aleppo pine trees (or equivalent), have been planted along the interface between Interstate 15 and residential areas along the western Project boundary. The trees shall be <u>positioned spaced in a naturally appearing pattern and be no further than 30 feet apart on-center and a minimum size of 36-inch box at initial planting.</u> to provide overlapping canopy coverage at maturity to maximize the filtration of airborne particulate matter. Tree planting may be phased concurrent with development adjacent to I-15.</p>
II-115	II.5.8(h), Hazards and Hazardous Materials	Clarifying information about the property's wildfire hazard designation is added at the request of the City of Jurupa Valley Planning Commission. The conclusion to Item 5.9(h) does not change as a result of adding this clarifying information.

Table F-1 Errata Table of Corrections and Additions

Page(s)	Section	Corrections and Additions
		<p>The proposed Project site is not located within a <u>Hazardous Fire Area as mapped by the Riverside County Land Information System high wildfire hazard area. Figure 9, Wildfire Susceptibility</u>, of both the Eastvale and Jurupa Area Plans classify the property as “Moderate” with respect to wildfire risk. The proposed Project site is located in an area that has been largely developed, with residential development and a public facility (i.e., elementary school) located immediately to the north of the site, an irrigated golf course to the east of the site, and a freeway (i.e., I-15) and residential land uses located to the west of the site. The Santa Ana River corridor is located to the south, <u>and although it which carries water and has a low fire hazard during wet periods, the corridor contains flammable vegetation that can pose a wildland fire hazard risk. Between the Project’s residential homes and the graded borrow site/open space area and the natural river basin, an embankment is proposed to be constructed beyond which the borrow site/open space area would act as an overflow area for the Santa Ana River during peak storm events. The embankment is proposed to be constructed of soil cement or other like material, overlain by irrigated vegetation. Additionally, a 15-foot wide trail is proposed at the top of the embankment. In total, there would be at least a 125-foot irrigated zone between the natural vegetation in the river corridor and any habitable structure constructed in the Project. As such, Because no wildlands are located on or adjacent to the Project site</u> implementation of the proposed Project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. No impact would occur.</p>
II-127	II.5.10(b), Land Use and Planning	<p>In response to a request from the Jurupa Community Services District’s Engineer, Albert A. Webb Associates, clarifying information is added to the discussion of Issue 5.10(b). The conclusion to Item 5.10(b) does not change as a result of adding this clarifying information.</p> <p>The Project Applicant also is processing an application with the JCSD to annex all portions of the Project site located south of 68th Street and east of Wineville Avenue into JCSD’s water and sewer service areas. The 3.89-acre surplus property located north of 68th Street also would be annexed to JCSD for water <u>sewer</u> service. The portions of the Project site located west of Wineville Avenue are already located within JCSD’s water and sewer service areas and eligible to receive service from JCSD under existing conditions. Upon approval of the annexation request by the JCSD Board of Directors, a petition to formally change JCSD’s service boundaries would be required to be filed with the Riverside Local Agency Formation Commission (LAFCO). Riverside LAFCO would review the proposed annexation petition to formally expand JCSD’s service area in compliance with its policies and procedures and would make the</p>

Table F-1 Errata Table of Corrections and Additions

Page(s)	Section	Corrections and Additions
		final determination on the petition in accordance with the applicable procedures set forth in California Government Code § 56000 et seq. The proposed Project would not conflict with any applicable goals, objectives, policies, or regulations of JCSO or Riverside LAFCO. <u>Because all water and sewer facilities needed to serve the proposed Project will be required to be designed, constructed, and maintained consistent with JCSD standards, the proposed Project would not conflict with any applicable goals, objectives, policies, or regulations of JCSD.</u> Furthermore, the proposed expansion of JCSD's service area to include portions of the Project site south of 68th Street and east of Wineville Avenue and (for sewer only) the 3.89-acre surplus property located north of 68th Street would neither result in any physical impacts to the environment <u>that have not been evaluated in this IS/MND,</u> nor would it adversely affect JCSD's ability to provide water and/or sewer services to its existing commitments (refer to Utilities and Service Systems discussion under Issues 5.17(b) and (d) on Pages II-180 and II-181, respectively).
II-164 II-176 III-24	II.5.16(a), Transportation/Traffic III.,MMRP	<p>Although the proposed Project would result in less-than-significant effects to the local circulation network during temporary, near-term construction activities, a mitigation measure is added to the IS/MND at the request of the City of Jurupa Valley Planning Commission. Near-term construction traffic impacts would remain less than significant. The following revisions are made to the to the IS/MND to reference the added mitigation measure:</p> <p>In conclusion, the Project is not anticipated to result in a conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system during near-term construction activities. Impacts during the Project construction phase would be less than significant and mitigation is not required. <u>Although the Project would result in less-than-significant effects to the local circulation system during near-term construction activities, Mitigation Measure TR-1 is recommended to ensure that construction-related traffic does not conflict with peak traffic at the nearby VanderMolen Elementary School.</u></p> <p><u>Mitigation Measure TR-1: Prior to grading and building permit issuance, the City shall verify that the following note is included on grading plans and building plans. Project contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by City of Jurupa Valley staff or its designee to confirm compliance. This note shall also be specified in bid documents issued to prospective construction contractors:</u></p> <p><u>a. Construction traffic shall not be permitted to use the segment of 68th Street between Pats Ranch Road and Frank Avenue from 30 minutes before to 30 minutes after the scheduled start time</u></p>

Table F-1 Errata Table of Corrections and Additions

Page(s)	Section	Corrections and Additions
		<u>and 30 minutes before to 30 minutes after the scheduled end time of school hours on days that the Louis VanderMolen Fundamental Elementary School of the Corona-Norco Unified School District (CNUSD) is in session. Contractors shall contact the CNUSD to obtain the school's operating schedule.</u>
II-153-179 III-24-25	II.5.16(a), Transportation/ Traffic III., MMRP	Because of the addition of mitigation measure, MM TR-1, the references to all Transportation/Traffic-related mitigation measures in the IS/MND required revision. Citations to the mitigation measures are updated throughout the Transportation/Traffic analysis and MMRP as follows: MM TR- 21 MM TR- 32 MM TR- 43 MMTR- 54
II-180	II.5.17(a), Utilities and Service Systems	The discussion under Item 5.17(a) is revised as follows at the request of the District Engineer for the Jurupa Community Services District. The conclusion to Item 5.17(a) does not change as a result of adding this clarifying information. Wastewater treatment and collection services would be provided to the Project site by the Jurupa Community Services District (JCSD). <u>Wastewater generated by the proposed Project will be treated at the Western Riverside County Regional Wastewater Treatment Plant, which is owned and operated by the Western Riverside County Regional Wastewater Authority (WRCRWA). WRCRWA</u> JCS <u>is required to operate all of its treatment facilities at the Western Riverside County Regional Wastewater Treatment Plant</u> in accordance with the waste treatment and discharge standards and requirements set forth by the Regional Water Quality Control Board (RWQCB).
II-181	II.5.17(b), Utilities and Service Systems	The discussion under Item 5.17(b) is supplemented with additional information provided by the District Engineer for the Jurupa Community Services District. The conclusion to Item 5.17(b) does not change as a result of adding this clarifying information. <u>Wastewater generated by the Project would be treated at the Western Riverside County Regional Wastewater Treatment Plant. Contingent upon the Project Applicant's construction schedule, treatment capacity at the Western Riverside County Regional Wastewater Treatment Plant may have to be purchased or leased for an interim period of time by JCSD to serve the proposed Project. The construction of new or expanded wastewater treatment facilities at the Western Riverside County Regional Wastewater Treatment Plant are not anticipated to be required to serve the Project. Therefore, the Project would not result in the need to construct new or expanded wastewater treatment facilities, and no significant effect to the environment would occur.</u>

Table F-1 Errata Table of Corrections and Additions

Page(s)	Section	Corrections and Additions
II-182-183	II.5.17(d), Utilities and Service Systems	<p>Clarifying information is added to the discussion under Item 5.17(d) at the request of the District Engineer for the Jurupa Community Services District. The conclusion to Item 5.17(d) does not change as a result of adding this clarifying information.</p> <p>Under existing conditions, portions of the Project site located east of Wineville Avenue are outside of JCSD's service area. Thus, the Project would have a potentially significant impact on JCSD water supplies and require mitigation in the form of annexation to the JCSD service area. However, based on information provided to JCSD by the Project Applicant, JCSD-Albert A Webb Associates (WEBB), as JCSD's District Engineer, prepared an "Information Form for Land Developments Requiring Water and Sewer Availability" for the proposed Project in dated May 29, 2013 also referred to as a "SAN 53 Letter" or "Availability Letter" (JCSD, 2013). This information form and the letter that transmitted it to JCSD are considered a draft staff report prepared for the District's Board of Directors. These are not considered final documents until they have been approved by the District's Board of Directors and do not constitute a commitment to provide water of sewer service to the proposed Project. This draft staff report The Availability Letter indicates that the JCSD's water supply exceeds the maximum day demand projected for the next five (5) years and that JCSD continues to develop additional water supply resources that are currently budgeted. The proposed Project is calculated by WEBB/JCSD to require an average daily water flow of 175 gallons per minute and maximum daily water flow demand of 472 gallons per minute to meet fire flow requirements. JCSD-WEBB, in the draft staff report, indicates that adequate water plant pumping capacity and water storage is available to service the proposed Project.</p> <p><u>Because JCSD will typically not extend water service to projects outside its service area (or portions thereof), the proposed Project includes annexation of that portion of the Project site south of 68th Street and east of Wineville Avenue to JCSD for water (and sewer) service. Once annexation to JCSD is complete, JCSD will be able to provide water service to the proposed Project. With implementation of Mitigation Measure U-1, which will confirm the completion of the annexation process, impacts would be reduced to below a level of significance.</u></p>
II-183	II.5.17(d), Utilities and Service Systems	At the request of the District Engineer for the Jurupa Community Services District, minor modifications were made to the language for Mitigation Measure U-1 as follows:
III-26	III., MMRP	<p>Prior to issuance of the first building permit, the portion of the Project site's development area located south of 68th Street shall be annexed into the Jurupa Community Services District for the purpose of domestic water and sewer service. The Project Proponent shall submit evidence to the City of Jurupa Valley that</p>

Table F-1 Errata Table of Corrections and Additions

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		the property has been annexed in the form of a Will-Serve Letter from ICSD -certified copy of the resolution adopted by the District's Board of Supervisors approving the annexation and a subsequent submittal of the appropriate LAFCO certification.

D. No Recirculation of the Initial Study/Mitigated Negative Declaration Required

CEQA Guidelines Section 15073.5 describes the conditions under which a Draft IS/MND that was circulated for public review is required to be recirculated for additional public review and comment. CEQA Guidelines Section 15073.5 states that new information added to a Draft IS/MND is not considered a “substantial revision” requiring recirculation unless a new, avoidable significant effect is identified and mitigation measures or project revisions must be added to reduce the effect to insignificance, or the lead agency determines that proposed mitigation measures or project revisions will not reduce potential effects to less than significance and new measures or revisions must be required. Examples of “minor” revisions that do not require recirculation include:

- a. Replacement of mitigation measures with equal or more effective measures pursuant to CEQA Guidelines Section 15074.1;
- b. Revisions in response to written or verbal comments on the projects effects which are not new avoidable significant effects;
- c. Measures or conditions of project approval that are added after public review which are not required by CEQA, which do not create new significant environmental effects, and are not necessary to mitigate an avoidable significant effect; and
- d. New information that merely clarifies, amplifies, or makes insignificant modifications to the Negative Declaration.

CEQA Guidelines Section 15074.1 states that the substitution of mitigation measures following the close of the public review process does not require the recirculation of a Draft IS/MND if: 1) the City determines the replacement mitigation measures are equivalent or more effective; 2) the City holds a public hearing on the matter; and 3) the City adopts a written finding that the new measures are equivalent or more effective in mitigating or avoiding potential significant effects and that it in itself will not cause any potentially significant effect on the environment.

As described above in Section F.B, *Revisions to the Proposed Project*, there were no changes to the Project that would result in a new, avoidable significant effect or a substantial increase in the severity of any significant effect previously disclosed in the Draft IS/MND. Furthermore, as described in summarized in Table F-1, *Errata Table of Corrections and Additions*, there were no public comments or “substantial revisions” to the Draft IS/MND that would warrant recirculation of the document. Although new and replacement mitigation measures were added to the Draft IS/MND following the close of the public review period (refer to Table F-1), these replacement measures were discussed in a public hearings before the City of Jurupa Valley Planning Commission and City Council and the City will adopt written findings as to the effectiveness of proposed mitigation (in conformance with CEQA Guidelines Section 15074.1).

Additionally, the Draft IS/MND was fundamentally and basically adequate, and all conclusions within the Draft IS/MND were supported by evidence provided within the Draft IS/MND or the administrative record for the proposed Project. Furthermore, public comment letters on the Draft IS/MND did not include any substantive evidence that the proposed Project would result in a significant impact on the environment or identify any alternatives to the mitigation measures or the proposed Project considerably different from those analyzed in the Draft IS/MND that would substantially lessen the significant environmental impacts of the proposed Project.

Based on the foregoing, recirculation of the Draft IS/MND is not warranted according to the guidance set forth in Section 15073.5 of the CEQA Guidelines.

I. Introduction

II. INTRODUCTION

A. Document Purpose

This document is an Initial Study/Mitigated Negative Declaration (IS/MND) prepared in accordance with the California Environmental Quality Act (CEQA), including all criteria, standards, and procedures of CEQA (California Public Resource Code Section 21000 et seq.) and the CEQA Guidelines (California Code of Regulations, Title 14, Division 6, Chapter 3, Section 15000 et seq.). This IS/MND is an informational document intended for use by the City of Jurupa Valley, Trustee and Responsible agencies, and members of the general public in evaluating the physical environmental effects of the proposed Riverbend Project (hereafter “the Project” and as further described in Subsection II.4.3).

This IS/MND was compiled by the City of Jurupa Valley Planning Department, serving as the Lead Agency for the proposed Project pursuant to CEQA §21067 and CEQA Guidelines Article 4 and §15367. “Lead Agency” refers to the public agency that has the principal responsibility for carrying out or approving a project.

The following information is provided in this Introduction: 1) the location of the proposed Project; 2) the standards of adequacy for a MND under CEQA; 3) a summary of the Initial Study findings supporting the Lead Agency’s decision to prepare a MND for the proposed Project; 4) a description of the format and content of this IS/MND; 5) the governmental processing requirements to consider the proposed Project for approval; and 6) a description of the proposed Project.

B. Project Location

The proposed Project site is 215.3 acres in size located in the City of Jurupa Valley, Riverside County, California. Specifically, the property is located north of the Santa Ana River, west of Dana Avenue, east of Interstate 15 (I-15), and south of 68th Street with the exception of 3.89 acres located north of 68th Street between Smith Avenue and Frank Avenue. The location of the Project site is graphically depicted on Figures 4-1 and 4-2 in Section II of this document.

C. Project Summary

The Project Applicant, CV Communities, LLC, submitted the following applications to the City of Jurupa Valley, which comprise the proposed Project: a General Plan Amendment (GPA 1202), Change of Zone (CZ 1201) and associated request for a front yard setback variance, Tentative Tract Map (TTM 36391), Development Agreement, and a request for a compatibility finding pursuant to Ordinance No. 509 Section 2(A)(15), (16), or (17) related to the property’s Williamson Act Contract. Collectively, the City of Jurupa Valley refers to these applications as Master Case No. 1201. The Project Applicant’s marketing name for the Project is “Riverbend.” GPA 1202 and CZ 1201 seek to modify the underlying land use regulations for the subject property to allow medium density residential, park, and open space land uses. TTM 36391 proposes to subdivide the subject property as a master planned residential community with 466 single-family residential lots, one park site, an infiltration basin, open space (including natural, graded, and community open space), as well as roadways and other supporting infrastructure. In addition, and as a stipulation of the proposed Development Agreement, the Project Applicant also proposes to convey a 3.89-acre surplus property located north of 68th Street to the City of Jurupa Valley for use at the City’s discretion as a community facility site.

Refer to Subsection II.4.3, *Project Description*, for a more detailed description of the proposed Project. The Project's application materials are on file with the City of Jurupa Valley Planning Department (8304 Limonite Avenue, Suite "M," Jurupa Valley, CA 92509) and are hereby incorporated by reference. CEQA Guidelines §15150 allows for the incorporation "by reference all or portions of another document...[and is] most appropriate for including long, descriptive, or technical materials that provide general background"

D. California Environmental Quality Act (CEQA)

1. CEQA Objectives

CEQA (Public Resources Code §21000, et seq.) requires that before a public agency makes a decision to approve a project that could have one or more adverse effects on the physical environment, the agency must inform itself about the project's potential environmental impacts, give the public an opportunity to comment on the environmental issues, and take feasible measures to avoid or reduce potential harm to the physical environment. The principal objectives of CEQA are to: 1) inform governmental decision makers and the public about the potential, significant environmental effects of proposed activities; 2) identify the ways that environmental damage can be avoided or significantly reduced; 3) prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible; and 4) disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

2. CEQA Requirements for MNDs

A MND is a written statement by the Lead Agency briefly describing the reasons a proposed project, which is not exempt from the requirements of CEQA, will not have a significant effect on the environment and therefore does not require the preparation of an Environmental Impact Report (EIR) (CEQA Guidelines § 15371). The CEQA Guidelines require the preparation of a MND if the Initial Study prepared for a project identifies potentially significant effects, but: 1) revisions in the project plans or proposals made by, or agreed to by the applicant before a proposed MND and Initial Study are released for public review would avoid the effects or mitigate the effects to a point where clearly no significant effects would occur; and 2) there is no substantial evidence, in light of the whole record before the Lead Agency, that the project as revised may have a significant effect on the environment. If the potentially significant effects associated with a project cannot be mitigated to a level below significance, then an EIR must be prepared (CEQA Guidelines § 15070[b]).

3. CEQA Requirements for Environmental Setting and Baseline Conditions

CEQA Guidelines §15125 establishes requirements for defining the environmental setting to which the environmental effects of a proposed project must be compared. The environmental setting is defined as "...the physical environmental conditions in the vicinity of the project, as they exist at the time the notice of preparation is published, or if no notice of preparation is published, at the time the environmental analysis is commenced..." (CEQA Guidelines §15125[a]). In the case of the proposed Project, the Initial Study determined that a MND is the appropriate form of CEQA compliance document, which does not require a Notice of Preparation (NOP). Thus, the environmental setting for the proposed Project is the approximate date that the Project's environmental analysis commenced.

The Project Applicant submitted applications for the proposed Project to the City of Jurupa Valley in early 2012. The City deemed the applications to be complete in July 2012, at which time the environmental analysis commenced. Accordingly, the environmental setting for the proposed Project is defined as the physical environmental conditions on the proposed Project site and in the vicinity of the proposed Project as they existed in July 2012.

4. Initial Study Findings

Section II of this document contains the Environmental Checklist/Initial Study that was prepared for the proposed Project pursuant to CEQA and City of Jurupa Valley requirements. The Environmental Checklist/Initial Study determined that implementation of the proposed Project would result in no impacts or less than significant environmental effects under the issue areas of Geology and Soils, Greenhouse Gas Emissions, Land Use and Planning, Mineral Resources, Population and Housing, Public Services, and Recreation. The Environmental Checklist/Initial Study determined that the proposed Project would result in potentially significant effects to the following issue areas, but the Project Applicant will incorporate mitigation measures that would avoid or mitigate effects to a point where clearly no significant environmental effects would occur: Aesthetics, Agriculture and Forestry Resources, Air Quality, Biological Resources, Cultural Resources, Hazards and Hazardous Materials, Hydrology and Water Quality, Noise, Transportation/Traffic, and Utilities. The Environmental Checklist/Initial Study determined that, with the incorporation of mitigation measures, there is no substantial evidence, in light of the whole record before the Lead Agency (City of Jurupa Valley), that the Project as revised may have a significant effect on the environment. Therefore, and based on the findings of the Environmental Checklist/Initial Study, the City of Jurupa Valley determined that a MND shall be prepared for the proposed Project pursuant to CEQA Guidelines § 15070(b).

5. Format and Content of MND

The following components comprise the MND in its entirety:

1. This document, including all Sections. Section II contains the completed Environmental Checklist/Initial Study and its associated analyses which document the reasons to support the findings and conclusions of the Initial Study;
2. The Mitigation Monitoring and Reporting Program (MMRP), which includes all mitigation measures imposed on the proposed Project to ensure that effects to the environment are reduced to less-than-significant levels. The basis for the MMRP is found in the Environmental Checklist/Initial Study; and
3. Twenty-five (25) technical reports that evaluate the effects of the proposed Project, which are attached as Technical Appendices A1-Q3. These technical reports also are on file and available for public review at the City of Jurupa Valley Planning Department (8304 Limonite Avenue Suite, "M," Jurupa Valley, CA 92509) and are hereby incorporated by reference pursuant to CEQA Guidelines §15150.
 - A1. Air Quality Impact Analysis
 - A2. Supplemental Air Quality and Greenhouse Gas Impact Analysis
 - A3. Health Risk Assessment
 - A4. Wind Erosion Control for Soil Stockpile Memorandum
 - B. Biological Technical Report
 - C1. MSHCP Consistency Analysis
 - C2. Supplemental MSHCP Consistency Analysis

- D. Phase I Cultural Resources Assessment
 - E. Paleontological Resources Assessment
 - F. Preliminary Geotechnical Evaluation
 - G. Supplemental Geotechnical Evaluation
 - H. Greenhouse Gas Analysis
 - I. Phase I Environmental Site Assessment
 - J. Preliminary Subsurface Methane Gas Investigation
 - K. Phase II Environmental Site Assessment
 - L. Environmental Site Assessment and Methane Gas Response Letter
 - M. Preliminary Hydrology Report
 - N1. Preliminary Water Quality Management Plan
 - N2. Water Quality Management for Soil Stockpile Memorandum
 - O. Santa Ana River Floodplain Report
 - P1. Noise Impact Analysis
 - P2. Supplemental Noise Impact Analysis
 - Q1. Traffic Impact Analysis
 - Q2. Supplemental Traffic Impact Analysis
 - Q3. Traffic Impact Analysis Response Letter
4. All plans, policies, regulatory requirements, and other documentation that is incorporated by reference in this document pursuant to CEQA Guidelines §15150.

6. IS/MND Processing

The City of Jurupa Valley Planning Department directed and supervised the preparation of this IS/MND. Although prepared with the assistance of the consulting firm T&B Planning, Inc., the content contained within and conclusions drawn by this IS/MND reflect the sole independent judgment of the City of Jurupa Valley.

This IS/MND and a Notice of Intent (NOI) to adopt the MND will be distributed to the following entities for a 30-day public review period: 1) organizations and individuals who have previously requested such notice in writing to the City of Jurupa Valley; 2) responsible and trustee agencies (public agencies that have a level of discretionary approval over some component of the proposed Project); 3) the Riverside County Clerk; and 4) the State Clearinghouse. The NOI also will be noticed to the general public in the Riverside County Record, which is a primary newspaper of circulation in the areas affected by the Project. The NOI identifies the location(s) where the IS/MND and its associated MMRP and technical reports are available for public review. During the 30-day public review period, comments on the adequacy of the IS/MND document may be submitted to the City of Jurupa Valley Planning Department.

Following the 30-day public review period, the City of Jurupa Valley will review any comment letters received and determine whether any substantive comments were provided that may warrant revisions to the IS/MND document. If substantial revisions are not necessary (as defined by CEQA Guidelines §15073.5(b)), then the IS/MND will be finalized and forwarded to the Jurupa Valley Planning Commission and City Council for review as part of their deliberations concerning the proposed Project.

The Jurupa Valley Planning Commission has the authority to recommend, conditionally recommend, or not recommend the Project for approval. The Jurupa Valley City Council has exclusive authority to approve, conditionally approve, or deny the Project. Accordingly, public hearings will be held before the Jurupa Valley Planning Commission and City Council to consider

the proposed Project and the adequacy of this IS/MND. Public comments will be heard and considered at the hearings. At the conclusion of the public hearing process, the City Council will take action to approve, conditionally approve, or deny the proposed Project. If approved, the City Council will adopt findings relative to the Project's environmental effects as disclosed in the IS/MND and a Notice of Determination (NOD) will be filed with the Riverside County Clerk.

II. Environmental Checklist/Initial Study

City of Jurupa Valley

ENVIRONMENTAL CHECKLIST/INITIAL STUDY

1.0 PROJECT CONTACT INFORMATION

1. Project Title and File Number:

Riverbend (Master Case 1201: General Plan Amendment 1202, Zone Change 1201, Tentative Tract Map 36391)

2. Lead Agency Name and Address:

City of Jurupa Valley Planning Department, 8304 Limonite Avenue, Suite M, Jurupa Valley, CA 92509

3. Project Location:

West of Dana Avenue, east of Interstate 15, south of 68th Street, north of the Santa Ana River

4. Lead Agency Contact Person(s) and Phone Numbers:

Laurie Lovret, (951) 332-6464

5. Project Sponsor's Name and Address:

CV Communities, LLC, 1900 Quail Street, Newport Beach, CA 92660

6. Other public agencies whose approval is required (e.g., permits, financing approval, or participation agreement):**Responsible Agencies:**

Jurupa Community Services District (annexation into service area, issuance of will-serve letter(s), domestic water and sewer system design)

Riverside Local Agency Formation Commission (approval of expansion of Jurupa Community Services District service area)

Other Agencies:

Federal Emergency Management Agency (approval of Conditional Letter of Map Revision)

2.0 ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED

The environmental factors checked below would be potentially affected by this Project, involving at least one impact that is a “Potentially Significant Impact” as indicated by the checklist on the following pages.

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

3.0 ENVIRONMENTAL DETERMINATION

On the basis of this initial evaluation:

I find that the proposed use COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.

☐

I find that although the proposal could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.

☒

I find that the proposal MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT REPORT is required.

☐

I find that the proposal MAY have a significant effect(s) on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets, if the effect is a "potentially significant impact" or "potentially significant unless mitigated." An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.

☐

I find that although the proposed project could have a significant effect on the environment, because all potentially significant effect (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION, pursuant to all applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures are imposed upon the proposed project, nothing further is required.

☐

Thomas G. Merrell

Signature

City of Jurupa Valley

Agency

THOMAS G. MERRELL

Printed Name/Title

PLANNING DIRECTOR

8/6/13

Date

4.0 PROJECT BACKGROUND INFORMATION

The proposed Project involves the construction and operation of a master-planned residential community on an approximately 215.3-acre property in the City of Jurupa Valley, Riverside County, California. The Project proposes to develop the northern portion of the subject property with 464 single-family residential homes and a 10.66-acre neighborhood park site, in addition to a pocket park, landscaped areas and supporting roadways, trails, utilities, and other infrastructure improvements. The southern portion of the property is planned to contain open space consisting of borrow area/open space and natural river basin open space on the north side of the Santa Ana River. The Project would offer to convey the borrow area/open space and natural river basin open space areas to the Western Riverside County Regional Conservation Authority (RCA) for permanent conservation pursuant to the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). The Project also would offer to convey 3.89 acres of surplus property located north of 68th Street to the City of Jurupa Valley for use at the City's discretion as a community facility site.

Information about the Project site's location and environmental setting is included in Subsections 4.1 and 4.2. Detailed information about the Project's proposed physical features and construction and operational characteristics is found in Subsection 4.3.

4.1 Environmental Setting

4.1.1 Project Location

The Project site is located in the City of Jurupa Valley in the northwestern portion of Riverside County, California. The City of Jurupa Valley encompasses approximately 43.5 square miles and is located in an urbanizing area of southern California commonly referred to as the Inland Empire. The Inland Empire is an approximate 28,000 square mile region comprising San Bernardino County, Riverside County, and the eastern tip of Los Angeles County. According to the Southern California Association of Governments' (SCAG) 2012 Integrated Growth Forecast, the Inland Empire is a fast-growing metropolitan area with large amounts of available land for future growth.

The approximate population of the City of Jurupa Valley according to 2010 census data is 94,235 persons. SCAG's adopted 2012 Regional Transportation Plan Growth Forecast estimates that the City's population will grow to 103,700 persons by 2020 and 126,000 persons by 2035. The City of Jurupa Valley abuts the city of Fontana (in San Bernardino County) to the north, the cities of Norco and Riverside to the south, the city of Eastvale to the west, and the city of Riverside and County of San Bernardino to the east. Figure 4-1, *Regional Map*, depicts the City of Jurupa Valley and location of the Project site in context to the regional setting.

The Project site is located in the southwestern portion of the City of Jurupa Valley, specifically situated east of Interstate 15 (I-15), north of the Santa Ana River, west of Dana Avenue, and primarily south of 68th Street with the exception of 3.89 acres located north of 68th Street, between Smith Avenue and Frank Avenue. The location of the subject property is shown on Figure 4-2, *Vicinity Map*.

The Project site lies within portions of Sections 29-31 of Township 2 South, Range 6 West of the San Bernardino Base and Meridian and includes the following Assessor Parcel Numbers:

Assessor Parcel Numbers:

157-190-006, -007, -008, -009;
157-210-001, -014;
152-020-003, -005, -007, -008;
153-020-003;
152-060-001, -008.

4.1.2 Surrounding Land Uses and Development

Figure 4-3, *Surrounding Land Uses*, illustrates the existing land uses in the vicinity of the Project site.

West: To the west of the Project site is the I-15 freeway, beyond which are medium-density, detached residential homes in the City of Eastvale. The residential subdivision located on the west side of I-15 directly across I-15 from the Project site and south of 68th Street was constructed in 2003-2004, while the subdivision west of I-15 and north of 68th Street was constructed in 2004-2005. There are no on/off ramps for I-15 at 68th Street, which overpasses the freeway between the northwest corner of the Project site and the residential subdivisions in the City of Eastvale.

East: Immediately abutting the Project site to the east is the Goose Creek Golf Club, a public golf course that features an 18-hole golf course, practice facility, and club house. The golf course maintenance buildings, parking areas, club house, and practice facilities are located south of 68th Street immediately adjacent to the Project site's northeastern boundary, east of Dana Avenue. South and east of this area are the 18 golf course holes. Chain link fencing with barbed wire is located on the golf course's northwest property boundary between a corrugated metal maintenance building and the Project site. Immediately east of the Goose Creek Golf Club are the Santa Ana River, agricultural operations, undeveloped lands, the Hidden Valley Wildlife Area, and a range of developed land uses in the City of Riverside.

North: Except for 3.89 acres located north of 68th Street between Smith Avenue and Frank Avenue, the Project site is bounded on the north by 68th Street. North of this roadway between I-15 and Pats Ranch Road is vacant land designated for future development with industrial uses. East of Pats Ranch Road is a residential subdivision and east of Carnelian Street is the Louis VanderMolen Fundamental Elementary School of the Corona-Norco Unified School District (CNUSD) that serves students in Kindergarten through 6th Grade. The school opened in 2010 and currently operates on a year-round schedule. East of the school site are rural residential homes. Farther north are numerous residential subdivisions, rural residential homes, and approximately 0.3-mile north of the Project site at Limonite Avenue is the Vernola Marketplace, a regional shopping center with more than 30 retail stores and restaurants.

South: Immediately abutting the Project site to the south is the Santa Ana River and undeveloped open space associated with the Santa Ana River floodplain. Along the river is a segment of the Santa Ana River Trail. Detached single-family residences in the City of Norco are located south of the Santa Ana River, approximately 0.5-mile south of the Project site. South and southwest of the Project site, north and south of the river in the City of Norco is River Trails Park, a public park with equestrian facilities.

4.1.3 Existing Physical Site Conditions

Pursuant to CEQA Guidelines §15125, the physical environmental condition for purposes of establishing the setting of an MND is the environment as it existed at the time the Lead Agency commenced the environmental analysis for the project. The Project's applications were deemed complete by the City of Jurupa Valley in July 2012, and the environmental analysis for the Project

commenced at that time. As such, the environmental baseline for the Project is established as July 2012 and the following subsections provide a description of the Project site's physical environmental condition as of that approximate date. Topics are presented in no particular order of importance.

A. Land Use

The Project site is located south of 68th Street except for 3.89 acres of land located north of 68th Street between Smith Avenue and Frank Avenue that currently contains one (1) single family residence that is occupied by one (1) person. South of 68th Street, a majority of the Project site was used for agricultural purposes since the early to middle 20th century. Prior to 1946, the property was used as a beef cattle ranch. Then, in the 1950s and 60s, two dairy farms established on the property, which later ceased operations in approximately 2009. Under existing conditions, a majority of the property is used for livestock grazing and the planting and harvesting of field crops. One (1) single family residence occupied by two (2) people and several agricultural ancillary structures are located on the site south of 68th Street. The southernmost portion of the property contains a segment of the Santa Ana River. Agricultural operations do not occur in the southernmost portions of the Project site in the area of the river. The existing land use condition is shown on Figure 4-4, *Aerial Photograph*.

B. Utilities and Service Systems

The portion of the Project site located west of Wineville Avenue (as an imaginary line extends south from the terminus of Wineville Avenue and bisects the Project site) is located in the service area of the Jurupa Community Services District (JCS D) for domestic water and sewer service. Domestic water service for the portion of the Project site located north of 68th Street is provided by the Santa Ana River Water Company. The remainder of the Project site is located outside of domestic water and sewer service areas. Under existing conditions, no domestic water or sewer connections are provided to the Project site. The two occupied residences located on the property use water wells for domestic water service and on-site sewage disposal systems (septic systems and leach fields) to treat and dispose wastewater. The Project site is located in the service territories of the following additional utility providers: Southern California Edison for electric; Southern California Gas Company for gas; and the Riverside County Waste Management Department for solid waste collection and disposal, which is currently contracted to Waste Management of the Inland Empire. The existing agricultural activities and two occupied residences that occur on the Project site generate a nominal demand for utility service under existing conditions.

C. Topography

The Project site slopes gently from north to south, with a high point of approximately 640 feet above mean sea level (amsl) adjacent to 68th Street and a low point of approximately 600 feet amsl adjacent to the Santa Ana River. There are no unique topographic or aesthetic features present on the subject property (such as rock outcroppings) other than the Santa Ana River, which the Jurupa Area Plan identifies as a unique and significant visual resource. The existing topographic conditions at the Project site are illustrated on Figure 4-5, *USGS Topographic Map*.

D. Geology

The Project site is located within the Peninsular Ranges Geomorphic Province, which is a prominent natural geomorphic province that extends from the Santa Monica Mountains approximately 900 miles south to the tip of Baja California, Mexico, and is bounded to the east by the Colorado Desert. More specifically, the Project site is located within the Riverside sub-block. The Peninsular Ranges

Geomorphic Province is characterized by steep, elongated ranges and valleys that generally trend northwesterly and are underlain with plutonic and metamorphic rock, Tertiary volcanic and sedimentary rock, and Quaternary drainage in-fills and sedimentary veneers. Refer to Appendices F and G for more detail.

There are no known active or potentially active earthquake faults on the Project site or in the immediate area and the Project site is not located within an Alquist-Priolo earthquake fault zone or a City-designated fault hazard zone. The nearest known active fault to the Project site is the Chino-Central Avenue fault, an extension of the Elsinore Fault, located approximately 7.2 miles west of the subject property. Similar to other properties throughout southern California, the Project site is located in a seismically active region and is subject to ground shaking during seismic events.

E. Soils

Based on a field investigation conducted by Alta California Geotechnical, Inc. (refer to Appendix F), the portion of the Project site located south of 68th Street is underlain by artificial fill, top soil, young wash deposits, old wash deposits, and old alluvial channel deposits. The artificial fill layer, which is characterized by moist to wet silt and sand mixtures, is estimated to range from approximately one (1) to four (4) feet in thickness across this portion of the Project site, beneath which is an estimated 0.5 to 1.5-foot thick layer of moist top soil. Beneath the artificial fill and top soil layers, young wash deposits (Holocene to late Pleistocene-age damp to wet, loose to moderately dense sands and silts), old wash deposits (late-to-middle Pleistocene-age damp to moist, moderately dense to firm sands and silts), and old alluvial channel deposits (late-to-middle Pleistocene-age damp to moist, dense to moderately well-cemented silts and sands), underlie the southern, central, and northern areas of the Project site, respectively.

Alta California Geotechnical, Inc. observed artificial fill, top soil, and old alluvial channel deposits underlying the 3.89-acre portion of the Project site located north of 68th Street (refer to Appendix G). The artificial fill layer is characterized by damp to moist silts and sands at a thickness of 0.5 to one (1) feet. Some asphalt is present in the artificial fill layer. The top soil layer blankets much of this portion of the Project site and consists of moist silts, sands, and clays at a thickness of approximately 0.5 to 2.5 feet. The old alluvial channel deposits that underlie this portion of the Project site are characterized by late-to-middle Pleistocene deposits of sands, silts, and clays that are damp to moist and dense to moderately well-cemented.

F. Hydrology

The Project site is located in the Santa Ana River watershed, which drains an approximately 2,650 square-mile area and is the principal surface flow water body within the region. A segment of the Santa Ana River crosses the southern portion of the Project site. Approximately two-thirds of the Project site is located within the 100-year floodplain (Zone AE) and/or floodway of the Santa Ana River, as mapped by the Federal Emergency Management Agency (FEMA) on the Flood Insurance Rate Map (FIRM, Panel 06065C0683G) (refer to Appendix O). The Santa Ana River starts in the San Bernardino Mountains approximately 42 miles northeast of the proposed Project site and flows southwesterly for approximately 96 miles across San Bernardino, Riverside, Los Angeles, and Orange counties before spilling into the Pacific Ocean.

Under existing conditions, the Project site receives off-site storm water drainage flows from an approximately 22-acre tributary area located north of 68th Street and east of Wineville Avenue. Storm water drainage flows from this off-site tributary area, as well as flows originating from within the Project site boundaries, are conveyed southerly across the subject property as sheet flow

before ultimately discharging into the Santa Ana River, which traverses the southern boundary of the Project site. Refer to Appendix M for more detail.

Groundwater was encountered on the portion of the Project site located south of 68th Street by GeoKinetics and Alta California Geotechnical, Inc., ranging from seven feet to 11 feet beneath ground surface (refer to Appendix F). Shallow groundwater was not observed and is not expected beneath the portion of the Project site located north of 68th Street (refer to Appendix G).

G. Vegetation Communities

Most of the Project site has been used for agricultural pursuits for over 75 years; therefore, a majority of the site is disturbed with the exception of the extreme southern edge of the Project site abutting the Santa Ana River.

Based on a biological survey conducted on the proposed Project site by Glenn Lukos Associates, six (6) distinct vegetation/land use types are present on the property. Refer to Appendix B for more detail. The vegetation/land use types include dairy and livestock feed yards, disturbed/developed land, field croplands, non-native grassland, residential/ urban/ exotic, and willow riparian forest, a summary of which is provided below.

- Dairy and Livestock Feed Yards: Approximately 66.1 acres in the central portion of the Project site is classified as “Dairy and Livestock Feed Yards.” Vegetation occurring in this area is predominantly non-native and includes species such as Bermuda grass (*Cynodon dactylon*), red brome (*Bromus madritensis ssp. rubens*), cheeseweed (*Malva parviflora*), redstem filaree (*Erodium cicutarium*), and several ornamental tree species.
- Disturbed/Developed Land: Approximately 16.3 acres of the Project site is classified as “Disturbed/Developed Land.” These areas are sparsely vegetated and include plant species such as Russian thistle (*Salsola tragus*), red brome, redstem filaree, cheeseweed, rattlesnake weed (*Chamaesyce albomarginata*), prickly lettuce (*Lactuca serriola*), dwarf nettle (*Urtica urens*), tocolote (*Centaurea melitensis*), tree tobacco (*Nicotiana glauca*), annual sunflower (*Helianthus annuus*), and telegraph weed (*Heterotheca grandiflora*).
- Field Croplands: Approximately 108.9 acres of “Field Croplands” occupy the western, central, and eastern portions of the Project site. These areas are characterized by cultivated crop species, but also include plant species such as prickly lettuce, dwarf nettle, tree tobacco, cheeseweed, Canadian horsetweed (*Conyza canadensis*), and milk thistle (*Silybum marianum*). One small stand of black willow (*Salix gooddingii*) and two Fremont’s cottonwood trees (*Populus fremontii*) were observed by Glenn Lukos Associates within on-site areas classified as “Field Croplands.” However, both stands occur in uplands and are not directly associated with the Santa Ana River. As such, neither of these small vegetation stands are classified as riparian habitat.
- Non-Native Grassland: The Project site includes approximately 2.9 acres of non-native grassland, located north of 68th Street. Non-native grassland on the property is dominated by non-native plant species including Bermuda grass, red brome, riggut brome (*Bromus diandrus*), redstem filaree, Russian thistle, and several ornamental tree species.
- Residential/Urban/Exotic: The Project site contains approximately 4.4 acres of land characterized by substantial disturbance as a result of the construction and on-going occupation of two (2) single-family residences. Areas classified as “Residential/Urban/Exotic” are located adjacent to 68th Street and are dominated by tree groves, including blue gum (*Eucalyptus globulus*), Peruvian peppertree (*Schinus molle*),

Mexican fan palm (*Washingtonia robusta*), and Canary Island date palm (*Phoenix Canariensis*), shrub cover, and lawns.

- **Willow Riparian Forest:** Areas classified as “Willow Riparian Forest” are located along the southern boundary of the Project site, abutting the Santa Ana River. This habitat is dominated by willow species including arroyo willow (*Salix lasiolepis*), Gooding’s willow (*Salix goodingii*), narrowleaf willow (*Salix exigua*), and mule fat (*Baccharis salicifolia*). Additional vegetation within this habitat includes Freemont’s cottonwood (*Populus fremontii*), salt cedar (*Tamarix ramosissima*), stinging nettle (*Urtica dioica*), tree tobacco (*Nicotiana glauca*), wild grape (*Vitis girdiana*), California rose (*Rosa californica*), giant reed (*Arrundo donax*), wild radish (*Raphanus sativus*), annual yellow sweetclover (*Melilotus indicus*), white sweetclover (*Melilotus albus*), creek monkey flower (*Mimulus guttatus*), common sow-thistle (*Sonchus oleraceus*), poison hemlock (*Conium maculatum*), Lamb’s quarters (*Chenopodium album*), alkali heliotrope (*Heliotropium curassavicum*), poison oak (*Toxicodendron diversilobum*), castor bean (*Ricinus communis*), rabbit-foot grass (*Polypogon monspeliensis*), Canadian horseweed (*Conyza canadensis*), black mustard (*Brassica nigra*), California encelia (*Encelia californica*), California buckwheat (*Eriogonum fasciculatum*), common cattail (*Typha latifolia*), Mexican fan palm (*Washingtonia robusta*), dwarf nettle (*Urtica urens*), sweet fennel (*Foeniculum vulgare*), Italian thistle (*Carduus pycnocephalus*), common sunflower (*Helianthus annuus*), rabbitsfoot grass (*Polypogon monspeliensis*) and broadleaved pepperweed (*Lepidium latifolium*). Approximately 16.71 acres of willow riparian forest is located on the Project site.

Sensitive plant surveys conducted by Glenn Lukos Associates did not identify any special-status plant species as occurring or having the potential to occur within the Project site with the exception of one (1) special status plant species, smooth tarplant (*Centromadia pungens ssp. Laevis*), which has a low potential to occur on-site (refer to Appendix B).

H. Wildlife

Five (5) special-status wildlife species were observed on the Project site during wildlife surveys conducted by Glenn Lukos Associates (refer to Appendix B), including: Cooper’s hawk (*Accipiter cooperii*), least Bell’s vireo (*Vireo bellii pusillus*), yellow-breasted chat (*Icteria virens*), yellow warbler (*Setophaga petechia*), and loggerhead shrike (*Lanius ludovicianus*).

In addition, the following special-status wildlife species have the potential to occur on the Project site: arroyo chub (*Gila orcutti*), Santa Ana speckled dace (*Rhinichthys osculus ssp. 3*), Santa Ana sucker (*Catostomus santaanae*), coast horned lizard (*Phrynosoma blainvillii*), coastal whiptail (*Aspidoscelis tigris*), orangethroat whiptail (*Aspidoscelis hyperythra*), Silvery legless lizard (*Anniella pulchra pulchra*), Southwestern pond turtle (*Emys marmorata pallida*), two-striped garter snake (*Thamnophis hammondi*), burrowing owl (*Athene cunicularia*), California horned lark (*Eremophila alpestris actia*), Ferruginous hawk (wintering) (*Buteo chrysaetos*), long-eared owl (*Asio otus*), northern harrier (nesting) (*Circus cyaneus*), peregrine falcon (nesting) (*Falco peregrinus*), prairie falcon (nesting) (*Falco mexicanus*), sharp-skinned hawk (nesting) (*Accipiter striatus*), southwestern willow flycatcher (*Empidonax traillii extimus*), western yellow-billed cuckoo (*Coccyzus americanus occidentalis*), white-tailed kite (nesting) (*Elanus leucurus*), and San Diego black-tailed jackrabbit (*Lepus californicus bennettii*). Refer to Appendix B for more detail.

I. Cultural Resources

The Project site is not known to have unique historical significance to the region. Two (2) residences and remnants of structures associated with the former dairy farm operations are

present on the site. These structures were built sometime between 1938 and 1972. On-site structures possess no distinctive features and are not identified as being eligible for the California Register of Historic Resources. Refer to Appendix D for more detail.

From an archaeology perspective, human habitation of southern California dates back to approximately 13,000 years ago. Over a series of cultural periods, the area transitioned from a hunting and gathering society, to settlements of small groups of people, to large occupations near natural water sources, to formations of distinct ethnographic groups. Research indicates that the Project site is located within the traditional use area of the Soboba Band of Luiseno Indians. However, no archaeological resources are known to be present on the Project site. Refer to Appendix D for more detail.

According to the City of Jurupa Valley General Plan, approximately one-third of the Project site is designated as a “High Potential/Sensitivity (High A)” area for fossil-bearing soils or rock formations (i.e., paleontological resources). Areas designated by the General Plan with a “High Potential/Sensitivity” for paleontological resources are generally located in the northwestern portion of the Project site, and correspond to the portions of the site underlain by middle-to-late Pleistocene alluvial channel and old wash deposits. According to the General Plan, the southwestern portion of the Project site contains a “Low Potential” for paleontological resources. There are no known paleontological resources located on or beneath the surface of the Project site. Refer to Appendix E for more detail.

J. Transportation

Under existing conditions, nominal traffic is generated by agricultural use of the property. I-15, State Route 60 (SR-60) and State Route 91 (SR-91) are major vehicular travel routes that provide regional access to the Project site. The Project site is located east of and adjacent to I-15, approximately 0.75-mile south of the Limonite Avenue/I-15 interchange. From the Limonite interchange, I-15 connects with SR-60 approximately four (4) roadway miles to the north and connects with SR-91 approximately seven (7) roadway miles to the south.

The Project site abuts 68th Street, which provides local access to the subject property. There are no on/off ramps for I-15 at 68th Street, which overpasses the freeway between the northwest corner of the Project site and single-family residential subdivisions in the City of Eastvale. The City of Jurupa Valley General Plan Circulation Element designates 68th Street as a “Major” road (118-foot wide right-of-way) west of Wineville Avenue. Under existing conditions, 68th Street is not fully improved adjacent to the Project site. Local access to the Project site also is provided via Wineville Avenue and Pats Ranch Road (via Limonite Avenue from the north). Wineville Avenue is designated by the City of Jurupa Valley General Plan Circulation Element as a “Secondary” road (100-foot wide right-of-way); Pats Ranch Road is not a designated General Plan Circulation Element roadway.

The Project area is served by the Riverside Transit Agency (RTA) with bus services along Hamner Avenue, Limonite Avenue, Pats Ranch Road, 68th Street and Citrus Street via Route 3. A transfer point for Route 3 is located at the intersection of 68th Street and Pats Ranch Road. Bus service is also available to the Project area via Route 29, which provides service along Hamner Avenue, Limonite Avenue, 68th Street and Pats Ranch Road. A transfer point for Route 29 is located at the intersection of Pats Ranch Road and 65th Street, which is a short distance from the Project site.

A segment of the Santa Ana River Trail is located along the Santa Ana River south of the Project site. When all segments are complete, the trail will be approximately 110 miles long, connecting the community of Big Bear in the San Bernardino Mountains to the mouth of the Santa Ana River, at the Pacific Ocean. Northeast of the Project site, a community trail is provided along 68th Street along the Goose Creek Golf Course frontage. North of the Project site a sidewalk is installed on the north frontage of 68th Street between Pats Ranch Road and Wineville Avenue.

K. Noise

Primary sources of noise in the Project vicinity include vehicle noise and noise from operations at the nearby Louis VanderMolen Fundamental Elementary School. To determine the existing acoustical setting of the Project site, 24-hour measurements were taken at two (2) receptor locations on the Project site by Urban Crossroads, Inc. on February 21 and February 22, 2012, while the Louis VanderMolen Fundamental Elementary School was in session. Measured hourly noise levels ranged from 55.8 equivalent level decibels (Leq dBA) to 66.1 Leq dBA, which correlates with a Community Noise Equivalent Level (CNEL) ranging from 64.3 to 72.9.

L. Air Quality and Climate

The Project site is located in the 6,745-square-mile South Coast Air Basin (SCAB), which includes portions of Los Angeles, Riverside, and San Bernardino Counties, and all of Orange County. The SCAB is bound by the Pacific Ocean to the west, the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east, and the San Diego County Line to the south. The SCAB is within the jurisdiction of South Coast Air Quality Management District (SCAQMD), the agency charged with bringing air quality in the SCAB into conformity with federal and state air quality standards. The climate of the SCAB is characterized as semi-arid and more than 90% of the SCAB's rainfall occurs from November through April. During the dry season, which also coincides with the months of maximum photochemical smog concentrations, the wind flow is bimodal, characterized by a daytime onshore sea breeze and a nighttime offshore drainage wind.

In 2008, the SCAQMD conducted an in-depth analysis of toxic air contaminants and their resulting health risks for all of Southern California. This study, titled the "Multiple Air Toxics Exposure Study in the South Coast Air Basin, MATES-III," shows that Project site has an ambient cancer risk ranging from 576 to 716 persons per million (SCAQMD 2008, MATES-III Carcinogenic Interactive Map), which is below the average concentrations at the SCAQMD's fixed monitoring sites, which is about 1,200 per million (MATES -III Final Report, p. ES-2). MATES-III is the most comprehensive dataset documenting the ambient air toxic levels and health risks associated with the SCAB. However, the Project site is located adjacent to a freeway with more than 100,000 vehicle trips per day (i.e., I-15). Based on an advisory issued by the California Air Resources Board (CARB) it is known that the Project site may be exposed to elevated levels of toxic air emissions, in particular portions of the subject property located within 500 feet of I-15.

The SCAB is currently not in attainment of state and/or federal standards established for Ozone (O₃) one-hour and eight-hour, particulate matter (PM₁₀ and PM_{2.5}), and Nitrogen Oxides (NO_x), and also not in attainment for Lead (Pb) in Los Angeles County. Local air quality in the vicinity of the Project site has exceeded air quality standards for O₃ one-hour and eight-hour and particulate matter (PM₁₀ and PM_{2.5}), as recorded at the nearest air monitoring station to the Project site (Mira Loma – SRA 23), during each of the last three years for which data is available. Refer to Table 2-3 in the Project's air quality report (refer to Appendix A1) for a summary of the number of days that local air quality exceeded applicable air quality standards.

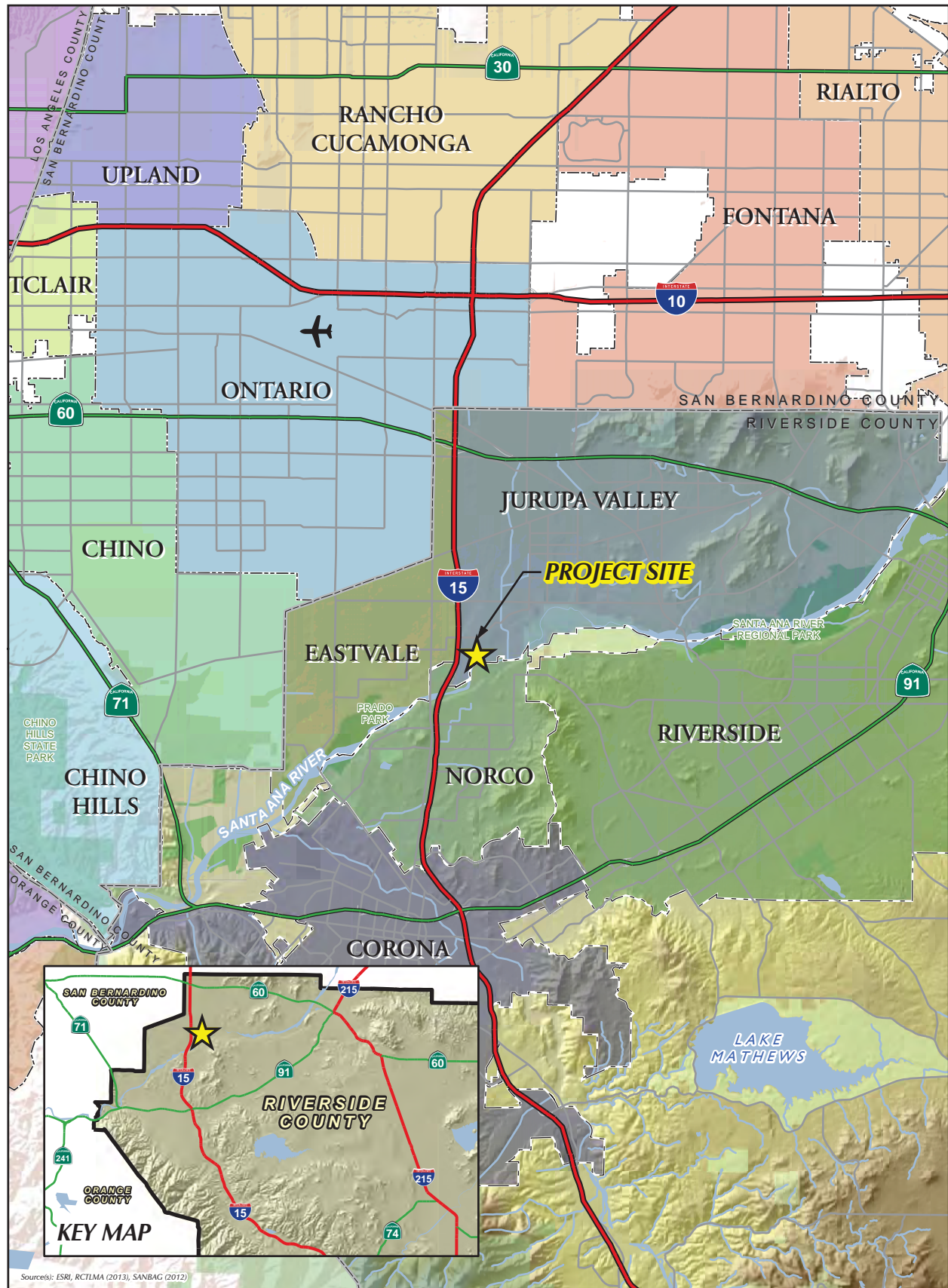


Figure 4-1

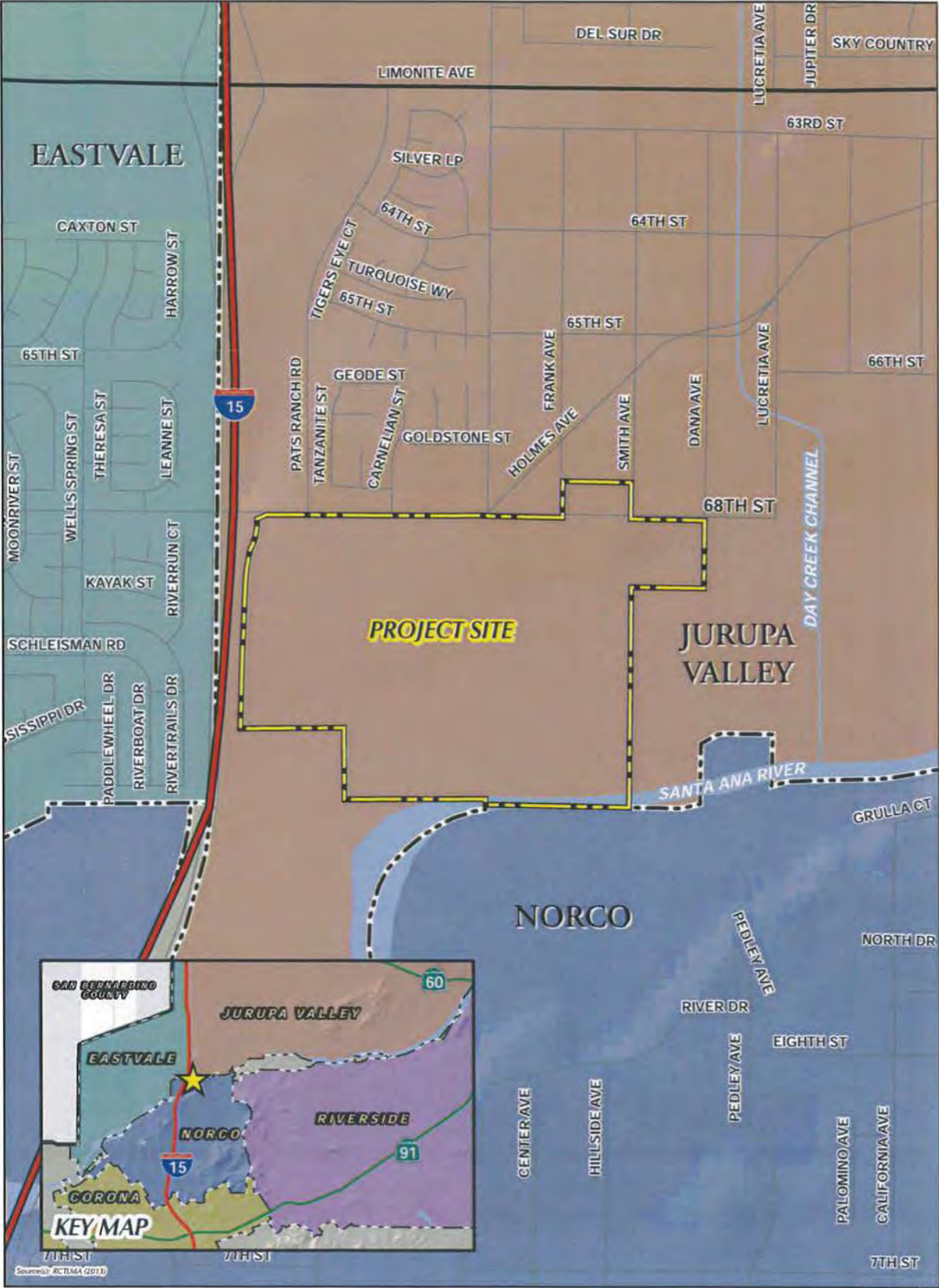
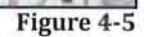


Figure 4-2





Source: City of Jurupa Valley



4.2 Planning Context

The City of Jurupa Valley is an incorporated city of Riverside County, California. Prior to its incorporation, the area was governed by Riverside County. On March 8, 2011, voters approved a ballot measure designated “Measure A” to incorporate the area into its own city. As a result, the City of Jurupa Valley became an incorporated city on July 1, 2011. City of Jurupa Valley Ordinance Nos. 2011-01 and 2011-10 adopted all ordinances and resolutions of the County of Riverside in effect as of July 1, 2011 (including land use ordinances and resolutions), to remain in full force and effect as City Ordinances. As such, development activities that occur in the City of Jurupa Valley are regulated by the Riverside County General Plan, including the Jurupa Valley Area Plan and applicable portions of the Eastvale Area Plan, and Riverside County Zoning Ordinance (Ordinance No. 348) and Subdivision Ordinance (Ordinance No. 460) that were in effect on July 1, 2011, unless otherwise superseded by a City ordinance or resolution.

4.2.1 General Plan

As described above, the prevailing planning document for the proposed Project site is the Riverside County General Plan (hereafter “City of Jurupa Valley General Plan”), as it was in effect on July 1, 2011, unless otherwise superseded by a City ordinance or resolution. To-date, the Jurupa Valley City Council has approved only one ordinance affecting the General Plan that is applicable to the Project site and supersedes the County’s General Plan. Specifically, City Ordinance No. 2013-02, approved on April 18, 2013, deleted Riverside County Ordinance No. 348, Article 1I, Section 2.5, Subsection 2.5(a)(4), “General Plan Foundation Component Amendments - Regular” from the City’s Municipal Code and replaced it with City Municipal Code Section 9.10.050 “Foundation Component Changes.”

The General Plan Foundation Components describe the overall nature and intent of development in the City. There are five: Open Space, Agriculture, Rural, Rural Community, and Community Development. Previously, proposals to change land use designations from one Foundation Component to another could only be considered by the City every five years, a policy established by Riverside County. With the adoption of City Ordinance 2013-02 and Resolution 2013-08, the City can consider proposals to change Foundation Component designations at any time, in compliance with state law, to provide flexibility in response to changing conditions and opportunities in the City, except for properties within a floodway or property that has a slope ratio of 4:1 or steeper, which can only be considered once every five years commencing in January 2011 with subsequent cycles at five calendar year intervals thereafter.

The General Plan is divided into a number of Area Plans that provide additional guidance for development and more specific land use designations under each Foundation Component category. Thus, each property has a Foundation Component land use designation and a more descriptive Area Plan designation. Portions of the Project site located west of Wineville Avenue (as an imaginary line extends south from the terminus of Wineville Avenue and bisects the subject property) are located within the boundary of the Eastvale Area Plan, while portions of the Project site located east of the imaginary extension of Wineville Avenue are located within the boundary of the Jurupa Area Plan.

A. Land Use Designations

The General Plan Foundation Components currently assigned to the Project site are Community Development (CD), Rural Community (RC) and Open Space (OS). Portions of the Project site located west of Wineville Avenue are further designated by the Eastvale Area Plan for Low Density

Residential (CD-LDR; 0.5-acre minimum lots) and Recreation (OS-R) land uses. The portions of the Project site located east of Wineville Avenue are designated by the Jurupa Area Plan for Low Density Residential (RC-LDR; 0.5-acre minimum lots) and Water (OS-W) land uses. Refer to Figure 4-6, *Existing General Plan and Area Plan Designations*. The CD-LDR and RC-LDR designations call for the development of single-family detached residential homes on lots ranging from 0.5-1.0 acre in size and limited agriculture. The CD-LDR designation also permits limited animal keeping, while intensive equestrian and animal keeping is expected and encouraged within areas designated for RC-LDR land uses. The OS-R designation calls for recreational uses including parks and trails. The OS-W designation includes bodies of water and natural and/or artificial drainage corridors. If the Project site were built out in accordance with its existing, underlying land use designations, a maximum of 274 residential dwelling units could be constructed on the subject property.

The Eastvale Area Plan and Jurupa Area Plan designate areas north of the Project site for Light Industrial (CD-LI, as provided by the Interstate 15 Corridor Specific Plan), Medium Density Residential (CD-MDR; 2.0-5.0 dwelling units per acre), and RC-LDR land uses. Areas south of the Project site are designated OS-R and OS-W, and areas east of the Project site are designated RC-LDR and OS-W. West of the Project site is I-15 and property designated for Medium Density Residential (2.1-5.0 dwelling units per acre) by the City of Eastvale.

A summary of the existing General Plan land use and zoning designations for the Project site and surrounding properties is provided in Table 4-1, *Existing General Plan & Zoning Designations*. Zoning is discussed below in Subsection 4.2.2.

Table 4-1 Existing General Plan & Zoning Designations

Location	General Plan Land Use Designation	Zoning Designation
Project Site	CD-LDR, RC-LDR, OS-R, OS-W	A-1-10, A-2-10, W-1
Adjacent Property to the North	CD-LI, CD-MDR, RC-LDR,	A-1, I-P, R-1
Adjacent Property to the South	OS-R, OS-W	W-1
Adjacent Property to the East	OS-W, RC-LDR	R-5, W-1
Adjacent Property to the West	MDR*	R-1*

*Located within City of Eastvale

B. Policy Areas

Policy Areas apply to portions of an Area Plan that contain special or unique characteristics that merit detailed attention and focused planning policies. The Project site is located within two Policy Areas: the Santa Ana River Corridor Policy Area (as designated by the Eastvale and Jurupa Area Plans) and the Protected Equestrian Sphere Policy Area (as designated by the Jurupa Area Plan).

The Santa Ana River Policy Area includes the southern and eastern portions of the Project site and property located adjacent to and east of the Project site. The purpose of the Santa Ana River Policy Area as stated by the Eastvale and Jurupa Area Plans is to preserve and protect the important biological functions and recreational features of the Santa Ana River.

The Protected Equestrian Sphere Policy Area includes all portions of the Project site located east of Wineville Avenue (as an imaginary line extends south from the terminus of Wineville Avenue and bisects the subject property) and property located northeast of the Project site. The purpose of the Protected Equestrian Sphere Policy Area as stated by the Jurupa Area Plan is to protect the

equestrian character prevalent throughout Jurupa Valley, including the communities of Mira Loma and Glen Avon.

4.2.2 Zoning

The Project site is zoned for Light Agriculture (A-1-10), Heavy Agriculture (A-2-10), and Watercourse, Watershed and Conservation Areas (W-1). Refer to Figure 4-7, *Existing Zoning Designations*.

The A-1-10 zone and A-2-10 zones are applied to the northern portions of the Project site. Permitted and conditionally permitted land uses in these areas allow a variety of rural and agricultural uses including but not limited to one-family dwellings, agriculture, animal husbandry, and farm animals (maximum five animals per acre). The W-1 zone is applied to the southern, eastern, and western portions of the Project site. Permitted and conditionally permitted uses include but are not limited to agriculture, apiaries, grazing of farm stock, aqua culture, and golf course on land subject to periodic flooding or other hazards.

Properties to the north of the Project site are zoned for Industrial Park (I-P, regulated by the Interstate 15 Corridor Specific Plan), One Family Dwellings (R-1), and Light Agriculture (A-1). Properties south of the Project site are zoned W-1 and areas east of the Project site are also zoned W-1, as well as Open Area Combining Zone (R-5), which allows golf courses and clubhouses, community association, recreation and assembly buildings, and appurtenant facilities. West of the Project site is I-15 and property zoned One Family Dwellings (R-1) by the City of Eastvale.

A summary of the existing zoning designations for the Project site and surrounding properties was previously provided above in Table 4-1.

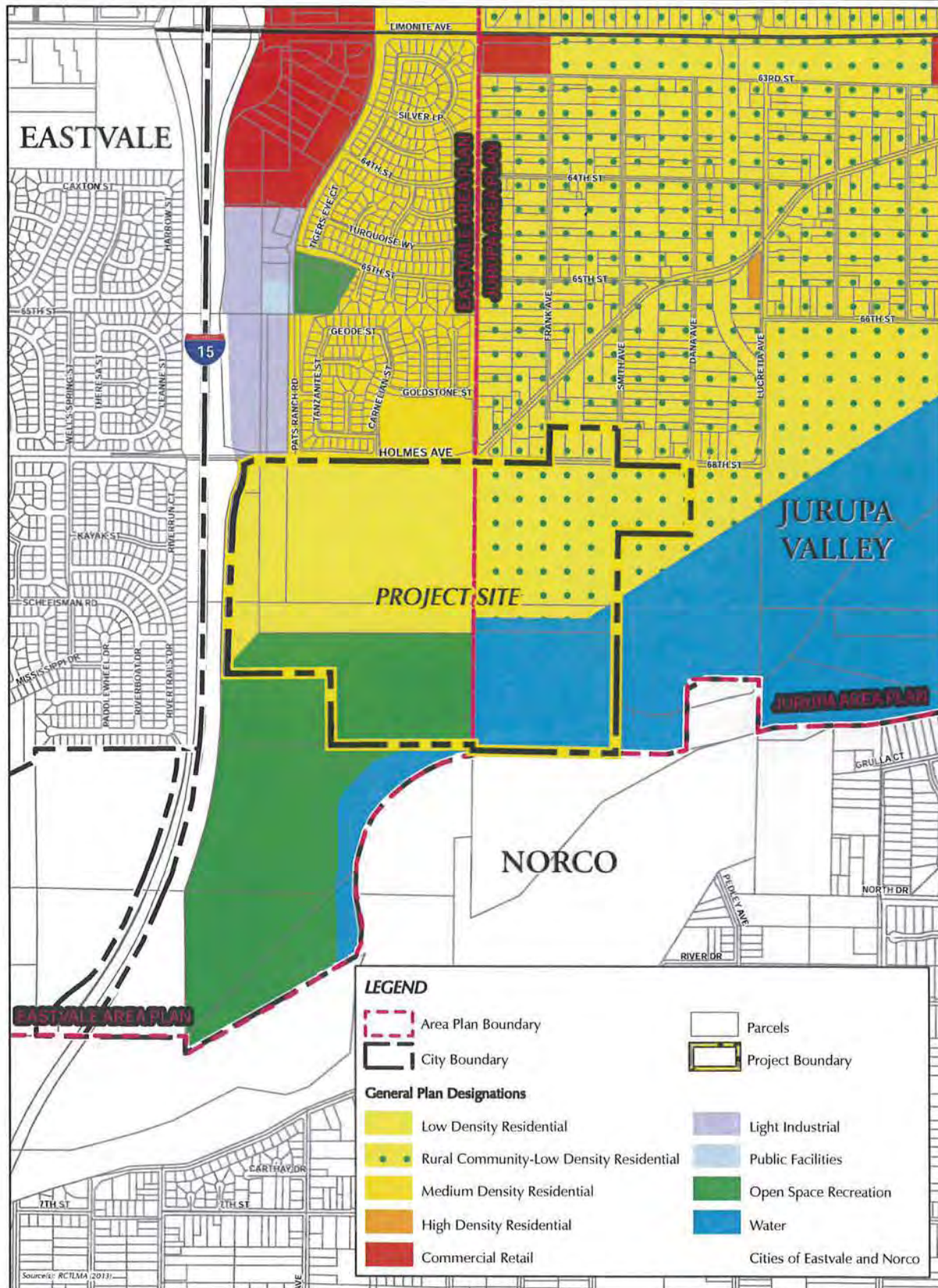


Figure 4-6
EXISTING GENERAL PLAN AND
AREA PLAN DESIGNATIONS



Figure 4-7

EXISTING ZONING DESIGNATIONS

4.3 Project Description

Note that the description contained herein describes the Project as proposed when the Draft IS/MND was circulated for public review. Refer to the Section F of this Final IS/MND for a description of the minor technical changes that were made between the time the Draft IS/MND was circulated for public review and the publication of the Final IS/MND.

The proposed Project consists of applications for a General Plan Amendment (GPA1202), Change of Zone (CZ1201), Tentative Tract Map (TTM 36391), Development Agreement, and a request for a compatibility finding pursuant to Ordinance No. 509 Section 2(A)(15), (16), or (17) related to the property's Williamson Act Contract. Copies of the entitlement applications for the proposed Project are available for review at the City of Jurupa Valley Planning Department, 8304 Limonite Avenue, Suite 'M,' Jurupa Valley, CA 92509. A detailed description of the proposed Project is provided below.

4.3.1 Proposed Discretionary Approvals

A. General Plan Amendment No. 1202 (GPA1202)

General Plan Amendment No. 1202 (GPA1202) proposes to change the Project site's existing General Plan land use designations south of 68th Street from Community Development: Low Density Residential (CD-LDR) (1/2 acre minimum lot size), Rural Community: Low Density Residential (RC-LDR) (1/2 acre minimum lot size), Open Space: Recreation (OS-R) and Open Space: Water (OS-W) to: Community Development: Medium Density Residential (CD-MDR) (2-5 dwelling units per acre), Open Space: Conservation Habitat (OS-CH) and Open Space: Water (OS-W). The RC-LDR designation assigned to the portion of the Project site located north of 68th Street would not be modified. Refer to Figure 4-8, *General Plan Amendment No. 1202*.

In addition, GPA1202 would convert approximately 50.0 acres in the eastern portion of the site from the Rural Community to Community Development Foundation component; approximately 2.3 acres in the eastern portion of the site from the Rural Community to Open Space Foundation Component; approximately 8.6 acres in the southwestern portion of the site from the Open Space to Community Development Foundation Component; and approximately 2.3 acres in the central portion of the site from the Community Development to Open Space Foundation Component. The Foundation Component designations for the remaining approximately 152.0 acres of the Project site, including the portion of the site located north of 68th Street, would not be modified. Refer to Figure 4-8.

As previously mentioned, if the Project site were built out in accordance with its existing General Plan designations, a maximum of 274 residential dwelling units could be constructed on the subject property. In comparison, the Project proposes to construct 466 residential homes associated with proposed GPA1202.

B. Change of Zone No. 1201 (CZ1201)

Change of Zone No. 1201 (CZ1201) proposes to change the Project site's zoning designations from Heavy Agriculture (A-2-10) and Watercourse, Watershed & Conservation Area (W-1) to Planned Residential (R-4) and Watercourse, Watershed & Conservation Area (W-1). The Light Agriculture (A-1-10) zoning designation assigned to the portion of the Project site located north of 68th Street would not be modified. Refer to Figure 4-9, *Change of Zone No. 1201*.

1. R-4 Development Plan

In association with the Change of Zone application, the Project Applicant submitted a R-4 Development Plan to the City of Jurupa Valley, which would become part of the Project's entitlement package and enforced by the City via conditions of approval placed on the Project. According to the proposed R-4 Development Plan, the primary aesthetic theme for the proposed Project would be riparian and the secondary theme would be agrarian in keeping with the ranches, farms, and dairies that once typified the area. Features such as river rock, exposed timber, and riparian flora are specified to be used in common areas to effectuate the "riparian/agrarian" theme. The R-4 Development Plan also specifies design guideline concepts for architectural styles, exterior colors and materials, garage and roof design, lot layouts, unit mixes, landscaping, and special features. At the Project's interface with I-15, coniferous evergreen trees (Afghan and Aleppo pine trees) are proposed to be planted. The R-4 Development Plan also calls for the installation of an air filtration system in every home, which is common practice in new residential construction adjacent to freeways. The air filtration system would have an efficiency equal to or exceeding Minimum Efficiency Reporting Value (MERV) 13 (or equivalent), as defined by the American Society of Heating, Refrigerating and Air Conditioning Engineers Standard 52.2.

C. Tentative Tract Map No. 36391 (TTM36391)

1. Land Uses and Design Characteristics

a. *Land Use Plan*

TTM 36391 is shown on Figure 4-10, *Tentative Tract Map No. 36391*. A summary of the lots proposed to be created through subdivision as part of TTM 36391 is presented below in Table 4-2, *Summary of Tentative Tract Map No. 36391*. As shown in Table 4-2, TTM 36391 would subdivide 211.42 acres into 466 single-family residential lots on 81.21 acres, a park site on 10.66 acres, an infiltration basin on 1.62 acres, open space (including natural, graded, and community open space) on 78.28 acres, an access road/trail on 2.16 acres, two maintenance access areas on 1.07 acres, and circulation facilities on 36.42 acres. A detailed description of the various land uses that would result from the approval of TTM 36391 is provided below.

- **Single-Family Residential.** TTM 36391 proposes to subdivide the property to provide a total of 466 single-family residential lots divided into four separate residential planning areas:
 - Planning Area A: 116 residential lots with a minimum lot size of 4,000 s.f.;
 - Planning Area B: 141 residential lots with a minimum lot size of 5,000 s.f.;
 - Planning Area C: 110 residential lots with a minimum lot size of 6,000 s.f.;
 - Planning Area D: 99 residential lots with a minimum lot size of 7,000 s.f.

In general, residential lot sizes increase in size from west to east, with the smaller lots within Planning Area A occurring in the western portion of the site adjacent to I-15 and the larger lots proposed within Planning Area D concentrated in the eastern portion of the site. Residential lots are sited so as to not preclude or obstruct common access to and views of the Santa Ana River.

Table 4-2 Summary of Tentative Tract Map No. 36391

Lots	Land Use	Minimum Lot Size	Acreage
1-116	Single-Family Residential	4,000 s.f.	81.21
117-257	Single-Family Residential	5,000 s.f.	
258-367	Single-Family Residential	6,000 s.f.	
368-466	Single-Family Residential	7,000 s.f.	
467, 469	Park Site	N/A	10.66
468	Infiltration Basin	N/A	1.62
470	Open Space (Borrow Area)	N/A	41.92
471	Access Road/Trail	N/A	2.16
472	Maintenance Access	N/A	0.10
473	Maintenance Access	N/A	0.97
'A'-'X', 'Z'	Open Space (Lettered Lots)	N/A	10.58
'Y'	Open Space (Natural River Basin)	N/A	25.78
--	Streets 'A', 'B', 'CC' (Backbone)	N/A	7.61
--	Streets 'C' through 'BB' and 'DD' through 'JJ' (Local)	N/A	23.66
--	68 th Street	N/A	5.15
Project Total:			211.42

Source: Tentative Tract Map No. 36391 prepared by MDS Consulting, July 29, 2013

- **Park Site.** A 10.66-acre park site is accommodated in the eastern portion of TTM 36391. A majority of this park site (Lot 469) would be located within the 100-year floodway and is designed to flood during peak storm events. The parking lot and restroom area (Lot 467) are proposed outside of the floodway. Refer to Figure 4-13, *TTM 36391 Park Concept Plan*, for an illustration of this facility.
- **Infiltration Basin.** A 1.62-acre infiltration basin is planned within the southern portion of the residential areas (Lot 468). The infiltration basin is designed to detain and treat stormwater runoff from the residential lots and streets within the community prior to discharging to the graded borrow area/open space lot. Refer to Subsection 4.3.1C.1.d, *Proposed Drainage and Water Quality Improvements*, below, for a more complete description of the Project's drainage and water quality features.
- **Open Space.** A total of 78.28 acres of the property is reserved for open space, including community open space lots, the graded borrow area/open space, and natural river basin. A description of each of these areas is provided below.
 - Community Open Space. Community open space areas are proposed on 10.58 acres in various locations throughout the proposed residential development area. The community open space lots would accommodate community entry monumentation, pedestrian access between cul-de-sacs and backbone roadways, and common landscaped areas.
 - Borrow Area/Open Space. Graded open space is proposed to consist of approximately 41.92 acres (Lot 470). This area would serve as a borrow site for earth materials. Earth materials excavated from this lot would be used to raise the pad elevations of the residential planning areas. An approximate 25-foot tall

manufactured, hardened, soil cement slope would be established within proposed Lot 'M' at the northern edge of the borrow area/open space area to protect the residential lots from peak flood events. Additionally, a 5:1 (horizontal:vertical) slope ranging in height from approximately four to 10 feet is planned along the southern and eastern edges of the borrow area/open space lot, with an opening at the southwest corner to allow runoff from the residential and borrow area/open space area to drain to the Santa Ana River without ponding. During peak storm events, the borrow area/open space would act as an overflow area for the Santa Ana River. Over time, the borrow area/open space may fill with sediment and return in function to the natural Santa Ana River corridor. Lot 470 is proposed to be planted with native species and conveyed to the Western Riverside County RCA or other conservation entity.

- Natural River Basin Open Space. The natural river basin open space areas are proposed to comprise 25.78 acres (Lot "Y"), which would remain undisturbed by the Project with exception of a small area of grading that would occur near the western portion of Lot 470 associated with the opening of the borrow area/open space area. The Project would offer to convey Lot "Y" to the Western Riverside County RCA for permanent conservation pursuant to the Western Riverside County MSHCP.
- **Access Road/Trail.** Approximately 2.16 acres would accommodate a 15-foot wide access road/trail between the Project's residential areas and the graded borrow site/open space and the natural river basin open space area. The access road/trail would provide a connection between 68th Street near Dana Avenue in the east, connect to the proposed Project's park site, and meander through the borrow area/open space area, exiting the Project site at its southwestern boundary. It is anticipated that the trail would primarily be used by pedestrians and equestrians, with periodic use by maintenance vehicles, and would provide trail users with views of the Santa Ana River. The access road/trail would consist of decomposed granite material.
- **Maintenance Access.** Approximately 1.07 acres of the property would be used to provide access for routine maintenance activities. Approximately 0.10-acre (Lot 472) would be reserved for access to the Infiltration Basin (Lot 468) and approximately 0.97-acre (Lot 473) would be reserved for access to storm drains for routine maintenance activities.
- **Roadways.** A total of 36.42 acres of the site are planned for on-site circulation facilities and for necessary improvements/dedications to 68th Street. All roadways constructed on the property would be publically owned and maintained roads. Refer to Subsection 4.3.1C.1.b, *Proposed Circulation Improvements*, below, for a more detailed description of the Project's planned circulation improvements.

b. Proposed Circulation Improvements

As shown on Figure 4-10, circulation facilities are planned throughout the TTM 36391 site. Figure 4-11, *TTM 36391 Roadway Cross-Sections*, depicts the right-of-way widths associated with each of the various roadways. The roadway improvements would primarily occur within the boundaries of TTM 36391, with exception of off-site improvements planned at the intersection of Pats Ranch Road and 68th Street. A description of the various roadway improvements planned as part of the Project is provided below.

- **68th Street.** The southern portion of 68th Street along the Project site's frontage is planned for improvement as part of TTM 36391. Between the westerly boundary of TTM 36391 and Wineville Avenue, 68th Street would be improved to provide an additional 18 feet of paved travel lanes, curb and gutter, and a 29-foot wide parkway along the southern edge of the road. A 12-foot wide multi-purpose community trail would be provided within the parkway along the Project's frontage. The total right-of-way for this portion of 68th Street would vary between 118 feet and 135 feet.

The portion of 68th Street between Wineville Avenue and Dana Avenue, which is only partially improved under existing conditions, would be improved to provide a total right-of-way of 76 feet, including 44 feet of pavement and a 21-foot wide parkway provided along the southern edge of the roadway. A 5.5-foot wide curb-adjacent sidewalk and 8-foot wide equestrian trail would be provided within the parkway along the Project's frontage. An 11-foot wide parkway is planned along the northern edge of this portion of 68th Street, but would not be improved as part of the Project.

- **Proposed Street 'A'.** Street 'A' is a north-south oriented roadway planned in the western portion of the site that would provide access between 68th Street and the Project's residential lots. The roadway would include paved travel lanes and parkways that include 6-foot wide curb-adjacent sidewalks along each side of the road. The total right-of-way for Street 'A' would be 80 feet.
- **Proposed Street 'B'.** Street 'B' is a north-south roadway planned in the central portion of the site to provide access between 68th Street and the Project's residential lots. Street 'B' would include paved travel lanes and parkways provided along both sides of the roadway. A 6-foot wide curb-adjacent sidewalk would be provided along one side of the roadway and an 8-foot wide community trail would be provided along the opposite side of the road. The total right-of-way for Street 'B' would be 72 feet.
- **Proposed Street 'CC'.** Street 'CC' is designed as a northeast-southwest trending roadway providing access between 68th Street in the northeast and Street 'B' in the south. The portion of Street 'CC' between 68th Street and proposed Street 'HH' would include paved travel lanes, with parkways along both sides of the roadway. Along this portion of Street 'CC,' a 6-foot wide curb-adjacent sidewalk would be provided along one side of the roadway and an 8-foot wide community trail would be provided along the opposite side of the road. The portion of Street 'CC' between proposed Street 'HH' and Street 'B' also would consist of paved travel lanes and parkways along both sides of the road, with 6-foot wide curb-adjacent sidewalks provided on both sides of the road. The total right-of-way for Street 'CC' would vary from 72 feet (between 68th Street and proposed Street 'HH') and 60 feet (between proposed Street 'HH' and Street 'B').
- **Local Roadways (Streets 'C' through 'BB' and 'DD' through 'JJ').** Local roadways would provide access to individual lots within the community, including paved travel lanes with parkways along both sides of the roadways. The total right-of-way for local roadways would be 56 feet.
- **Improvements to 68th Street/Pats Ranch Road Intersection.** TTM 36391 proposes to implement improvements at the intersection of Pats Ranch Road at 68th Street. Pats

Ranch Road is an existing north-south oriented roadway that ultimately would connect with proposed Street 'A' on-site. Off-site improvements to this intersection would involve only re-striping of the existing paved roadway, while additional improvements are planned within the portions of the Project site that would be dedicated to the City as part of 68th Street. Improvements planned to this intersection include the following:

- Installation of a traffic signal;
 - Construction of a northbound lane with a left turn lane and shared through-right turn lane (on-site);
 - Re-striping of the southbound lanes to provide a left turn lane, through lane and a right turn lane (to be accommodated within the existing painted median and left turn lane);
 - Construction of a 2nd eastbound through lane/shared right-turn lane; and
 - Re-striping of the westbound lanes to provide a left turn lane (to be accommodated within the existing painted median), two through lanes and right turn lane.
- **Improvements to 68th Street/Wineville Avenue/Holmes Avenue Intersection.** TTM 36391 proposes to implement improvements at the intersection of Wineville Avenue, Holmes Avenue and 68th Street. This intersection is skewed due to the intersecting alignment of Wineville Avenue, Holmes Avenue, and 68th Street; however the current configuration of the intersection would be maintained. Off-site improvements to this intersection would involve only re-striping of the existing paved roadway, while additional improvements are planned within the portions of the Project site that would be dedicated to the City. Improvements planned to this intersection include the following:
 - Construction of a northbound left turn lane (on-site);
 - Re-striping of the southbound lanes to provide one left turn lane, one through lane and one right turn lane (to be accommodated within the existing painted median and shared through-left turn lane); and
 - Construction of an eastbound right turn lane (on-site).
- **Improvements to 68th Street/Smith Avenue Intersection.** TTM 36391 proposes to implement improvements at the intersection of Smith Avenue and 68th Street. Off-site improvements to this intersection would involve only re-striping of the existing paved roadway, while additional improvements are planned within the portions of the Project site that would be dedicated to the City. Improvements planned to this intersection include the following:
 - Installation of a stop sign;
 - Construction of a northbound shared left-through-right turn lane (on-site);
 - Re-striping of the southbound approach to provide one shared left-through-right turn lane;
 - Re-striping of the westbound approach to provide one shared left-through-right turn lane; and

- Re-striping of the eastbound approach to provide one shared left-through-right turn lane.
- **Improvements to 68th Street/Proposed Driveway #2 Intersection.** TTM 36391 proposes to implement improvements at the intersection of 68th Street and Proposed Driveway #2 (located east of Carnelian Street and west of Wineville Avenue). Off-site improvements to this intersection would involve only re-striping of the existing paved roadway, while additional improvements are planned within the portions of the Project site that would be dedicated to the City. Improvements planned to this intersection include the following:
 - Installation of a stop sign;
 - Construction of a northbound shared left-right turn lane (on-site);
 - Construction of an eastbound through lane and shared through-right turn lane (on-site); and
 - Re-striping of the westbound approach to provide one left turn lane and two through lanes.

c. Proposed Non-Vehicular Circulation Improvements

Several community trails are planned throughout the TTM 36391 site, as shown on Figure 4-12, *TTM 36391 Community Trails Plan*. As shown on Figure 4-12, a community trail is proposed along the Project's frontage with 68th Street, and would connect to community trail segments accommodated within the Project's proposed park site and borrow area/open space. The width of the proposed community trail adjacent to 68th Street would vary; the trail segment from Wineville Avenue to the eastern Project boundary would be eight (8)-feet wide while the trail segment from Wineville Avenue to the western Project boundary would be 12 feet wide. The community trail would be constructed with decomposed granite material. Where the community trail is located adjacent to paved sidewalks, 33-inch tall polyvinyl chloride (PVC) trail fencing would be provided between the trail and the sidewalk. Refer to Figure 4-14, *TTM 36391 Wall and Fence Plan*, for an illustration. The community trail is planned to accommodate several different user types, including pedestrians and equestrian users.

In addition, a 15-foot wide access road/multi-purpose trail is proposed along the southern perimeter of the residential portions of the site. The trail would provide a connection to 68th Street at the northeastern corner of the community, and would extend to the southwestern boundary of TTM 36391 and also would provide trail users with views of the Santa Ana River. Connections to the Project's community trail segments also would be provided in the western and eastern portions of the on-site park and within the borrow area/basin open space.

d. Proposed Drainage and Water Quality Improvements

On-site stormwater runoff is engineered to be conveyed through public street improvements and storm drains, which would discharge southerly to the Santa Ana River. On-site storm drain lines, which are depicted on TTM 36391, would range in size from 24- to 72-inches in diameter. The on-site system is designed to use a pipe soffit as a hydraulic control to address the timing difference between on-site peak concentrations and peak flows within the Santa Ana River, such that peak flows discharging from the Project site would not occur simultaneous with peak flows in the Santa Ana River. The on-site storm drain facilities also are designed so that the Santa Ana River backwater effect does not pond onto residential lots. In rare peak storm events, backwater from

the Santa Ana River may pond in the Project's borrow area/open space (Lot 470) and in even more rare instances, in the Project's public streets. Backwater is a term used to describe the condition where an obstruction to river flow may cause water to temporarily lose its current and back up, or pond.

To meet National Pollutant Discharge Elimination System (NPDES) requirements, the Project's storm drain system would route first flush flows to an infiltration basin (within Lot 468) prior to discharge to the borrow area/open space and natural river basin. The infiltration basin is designed to treat all of the first flush volumes from the residential portions of the Project (i.e., the portions of the Project site located northerly of the proposed 15-foot Access Road/Multi-Purpose Trail).

Implementation of the proposed drainage and grading plan would ensure that all residential building pads are elevated above the 100-year floodplain by a minimum of one foot. Refer to Subsection 4.3.1C.2.a, *Earthwork and Grading*, below, for more information about on-site grading.

In addition to the drainage and water quality features described above, the Project also would extend the existing storm drain line installed beneath 68th Street easterly by approximately 1,100 lineal feet. The extended storm drain would connect to an existing 36-inch storm drain located near the intersection of Wineville Avenue and 68th Street, and extend easterly within 68th Street via 36-inch and 30-inch storm drain pipes. A sump and catch basin are proposed along the north side of 68th Street (approximately 250 feet west of Smith Avenue) to collect off-site runoff and direct it into the existing storm drainage system, which would then be conveyed to the west through existing facilities.

Runoff from the southern portions of 68th Street along the Project's frontage would be routed via three proposed catch basins into the on-site storm drainage system and treated via the on-site infiltration basin in Lot 468. To accommodate these connections, 20-foot wide storm drainage easements would be provided between Lots 172-173, Lots 409-410, and Lots 431-432.

e. Proposed Water Service and Improvements

Water service would be provided to the development proposed by TTM 36391 by the Jurupa Community Services District (JCSD). Under existing conditions, portions of the Project site located east of Wineville Avenue are outside of JCSD's service area. This area would need to be annexed into the JCSD service area in order to provide water service to the site. The Project Applicant is processing a JCSD application to annex this area into the JCSD service area concurrent with this Project's review by the City of Jurupa Valley.

Proposed on-site water lines are depicted on TTM 36391. As shown, an existing 8-inch diameter water line installed beneath 68th Street (westerly of Wineville Avenue) would be extended easterly within 68th Street to proposed Street 'CC'. Additionally, TTM 36391 would install approximately 500 linear feet of water line beneath 68th Street across I-15 to connect with an existing 18-inch line on the west side of I-15, to serve as a second supply connection. This line is a JCSD master planned line and the Project Applicant would be eligible for JCSD fee credit for its installation. New 8-inch water lines would be constructed on-site within proposed Streets 'A,' 'B,' and 'CC' to connect to the existing and proposed 8-inch water lines beneath 68th Street. New 8-inch water lines also would be constructed within all on-site roadways as necessary to serve individual lots.

f. Proposed Sewer Service and Improvements

Sanitary sewer service to the Project site would be provided by the JCSD. Under existing conditions, portions of the Project site located east of Wineville Avenue are outside of JCSD's service area. This area would need to be annexed into the JCSD service area in order to provide sewer service to the site. The Project Applicant is processing a JCSD application to annex this portion of the Project site into the JCSD service area concurrent with this Project's review by the City of Jurupa Valley.

Wastewater generated on-site would be conveyed via 8-inch and 10-inch diameter sanitary sewer lines that would be installed within all on-site roadways. These flows would be conveyed to the west and connect to a proposed 30-foot wide sewer easement located at the western boundary of TTM 36391 between proposed Lots 59 and 60, and ultimately would be conveyed to the Western Riverside County Regional Wastewater Treatment Plant (owned and operated by the Western Riverside County Regional Wastewater Authority) for treatment. A new 10-inch sewer line would be constructed off-site northerly for a distance of approximately 10 feet, where it would connect to an existing 21-inch sanitary sewer line.

g. Proposed Park Concept Plan

Figure 4-13, *TTM 36391 Park Concept Plan*, depicts the various improvements and amenities proposed within the park site within Lots 467 and 469. As shown, a parking area with restrooms is proposed within Lot 467, outside of the floodway. Stairs would be constructed along the slope leading down to Lot 469 to facilitate access between the main park site and the parking area. Within the main park site in Lot 469, a large open play area with a soccer field is proposed. Two tot lots also would be constructed along with shade structures and picnic benches. In the western portion of Lot 469, an open turf area and half-court basketball courts would be provided. Trails also would be provided within the park site, as described previously in Subsection 4.3.1C.1.c, *Proposed Non-Vehicular Circulation Improvements*, and shown on Figure 4-12.

h. Proposed Walls and Fences

Figure 4-14, *TTM 36391 Wall and Fence Plan*, depicts the location of walls and fences proposed within TTM 36391, while Figure 4-15, *TTM 36391 Wall and Fence Details*, depicts the designs of the walls and fences shown on Figure 4-14. As shown, 6-foot tall masonry walls are planned throughout the community, including along the Project's frontage with 68th Street and along the primary and secondary entrance roadways. Additional masonry walls are proposed where necessary to ensure privacy of individual lots and/or to reduce noise from adjacent roadways. Along the southern and eastern perimeters of the residential areas, 5-foot tall tubular steel view fencing would allow for views into the open space associated with the Santa Ana River to the south or to the existing off-site golf course to the east. Along the northern edge of the infiltration basin in Lot 468, 4-foot high three-strand cable fencing is proposed to prevent people from trespassing into the basin. Rail fencing also is proposed along portions of the Project's trail system.

Along the western boundary of the residential areas, an earthen landscaped berm and sound barrier wall are planned to attenuate noise associated with Interstate 15. Sections A-A, B-B, and C-C on Figure 4-16, *TTM 36391 Grading Cross-Sections*, depict these proposed noise barriers. As shown on Section A-A, the southern portions of the berm would have a gradient of 2:1 (horizontal:vertical) along the eastern edge of the berm and a gradient of 1.5:1 along the western edge of the berm. The berm would be approximately seven feet high, with a wall measuring 9.5 feet in height constructed on top of the berm. As shown on Sections B-B and C-C on Figure 4-16, the

northern portions of the noise barrier would be similar, but the berm would be 18 feet in height, while the proposed wall would measure only six feet in height.

2. Construction Characteristics

a. *Earthwork and Grading*

Earthwork and grading details are based on proposed TTM 36391. Grading of the property would be necessary to raise the proposed residential areas above the existing 100-year floodplain. The grading concept proposes 245,505 cubic yards (c.y.) of cut from within the residential portions of the site, and an additional 680,319 c.y. of cut from within the proposed park and borrow area/open space portion of the site (proposed Lots 469 and 470). When required remedial grading activities (i.e., over-excavation and compaction) are considered, the Project would require a total of 1,957,325 c.y. of cut. To raise the residential portions of the Project site out of the existing floodplain by a minimum of one foot, approximately 2,452,095 c.y. of fill would be required (including required remedial grading activities), of which approximately 494,770 c.y. of earth material would need to be imported from off-site. Temporary stockpiling of earth materials in some locations of the site may occur. The borrow site has not yet been identified, but it is expected to be within a five (5)- to 20-mile radius of the Project site and a property that is approved for earth disturbance and export.

Within the residential portions of the site, proposed elevations would range from approximately 631 feet above mean sea level (amsl) within the northeastern portion of the site, to approximately 603 feet amsl within the proposed infiltration basin (Lot 468) in the southwestern portion of the site. The residential portions of the Project site would be graded to drain towards the infiltration basin.

b. *Anticipated Construction Schedule*

The Project Applicant estimates that construction activities associated with the proposed Project would occur over approximately 4.5 years (CV Communities, 2012). Construction would occur in several general phases, including: demolition and clearing of remaining residential and agricultural structures and facilities, import and stockpiling of earth material, rough grading, fine grading, roadway and utility installations, building construction, and landscaping. The Project Applicant expects the following time durations for the construction process, which would be somewhat sequential but overlap in some cases:

- Demolition and clearing: 4 months
- Earth material import activities: 12-24 months
- Grading activities: 12 months
- Infrastructure installation: 18 months
- Paving, wall and fence installation, common landscape area installation: 10 months
- Building Construction: 33 months

c. *Construction Equipment*

Table 4-3, *Construction Equipment by Construction Phase*, indicates the major construction equipment that the Project Applicant anticipates the construction contractor(s) would use during each phase of Project construction.

d. Construction Employees

The Project Applicant anticipates that over the course of the proposed Project's construction, approximately 10 to 34 employees would be working on the Project site on any given day during the various phases of construction activity (CV Communities, 2013).

Table 4-3 Construction Equipment by Construction Phase

	Scraper	Grader	Rubber Tired Dozer	Excavator	Tractor / Loader / Backhoe	Pavers	Paving Equipment	Rollers	Forklift	Cranes	Air Compressor	Generator Set	Welder
Grading Import			3		4								
Grading	2	1	1	2	2								
Infrastructure Construction and Paving					4	2	2	2					
Building Construction/Painting					3				3	1	1	1	1

Source: CV Communities, 2012

3. Operational Characteristics

The proposed Project would be operated as a residential community. As such, typical operational characteristics include residents and visitors traveling to and from the site, leisure and maintenance activities occurring on individual residential lots and in the on-site park and trail system, and general maintenance of common areas. Low levels of noise and a moderate level of artificial exterior lighting typical of a residential community is expected.

a. Future Population

The Project would develop the subject property with 466 single-family detached residential homes. Pursuant to population estimates prepared by the State Department of Finance, , single-family detached units within the City are occupied by an average of 3.86 persons per dwelling unit (State of California, Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties and the State — January 1, 2011- 2013*). Therefore, using population generation estimates provided by the State, the proposed Project would increase the City of Jurupa Valley's population by up to 1,799 new residents. This represents an increase of up to 741 residents as compared to the population of 1,058 residents that would have been generated on the property if the site built out under its current General Plan land use designations.

b. Proposed Maintenance Plan

Figure 4-17, *TTM 36391 Maintenance Plan*, depicts the various maintenance responsibilities for the proposed Project site. As shown, all individual residential lots would be maintained by the homeowners. Landscaping within slopes, streetscapes, the infiltration basin, and on-site roadways would be maintained by the City of Jurupa Valley. The eight (8) and 12-foot wide decomposed granite community trails, the 15-foot wide access road/multi-purpose trail, and the park site (Lots 467 and 469) would be maintained by the Jurupa Area Recreation and Park District. The Project Applicant will offer to convey the borrow area/open space(Lot 470), including the 14-foot wide

natural dirt trail, and natural river basin (Lot "Y") to the Western Riverside County RCA for ownership, maintenance, and inclusion in the Western Riverside County MSHCP Conservation Area.

D. Development Agreement

The Project Applicant and the City of Jurupa Valley propose to enter into a Development Agreement related to the proposed Project. California Government Code Sections 65864-65869.5 authorizes the use of development agreements between any city, county, or city and county, with any person having a legal or equitable interest in real property for the development of the property. The Development Agreement would provide the Project Applicant with assurance that development of the Project may proceed subject to the rules and regulations in effect at the time of Project approval. The Development Agreement also would provide the City of Jurupa Valley with assurance that certain obligations of the Project Applicant will be met, including but not limited to, how the project will be phased, the required timing of public improvements, the Applicant's contribution toward funding community improvements, and other conditions. In addition, as part of the Development Agreement, the Project Applicant would offer to convey an approximate 3.89-acre surplus property located north of 68th Street to the City of Jurupa Valley for use at the City's discretion as a community facility site. Because physical impacts to the environment may result as a reasonable consequence of City ownership and use of the 3.89-acre property, physical disturbance of the surplus property is considered to be part of the Project evaluated herein.

The Santa Ana River Water Company provides and would continue to provide domestic water service to the 3.89-acre surplus property. Annexation to JCSD would be required to provide sewer service to this property.

E. City Council Finding of Compatibility

As discussed in Subsection 5.2(b), *Agriculture and Forestry Resources*, of this Initial Study/Mitigated Negative Declaration (IS/MND), the subject property is presently burdened with a Williamson Act Contract, which will expire on January 1, 2015. Riverside County Ordinance No. 509, as adopted by the City of Jurupa Valley, establishes Uniform Rules for Agricultural Preserves. As specified in Ordinance No. 509, unless uses are specifically determined to be compatible with agricultural uses, such other uses are prohibited. Sections 2(A)(15)-(17) of Ordinance No. 509 provide that in certain cases, uses which are not specifically listed as being compatible may nonetheless be determined to be compatible by the City of Jurupa Valley City Council. Thus, the Project Applicant is requesting that the City Council issue a Finding of Compatibility for the Project's temporary unlisted non-agricultural uses specified previously under Subsection 4.3.1C.2.a, *Earthwork and Grading*, of this IS/MND, based upon either one or all three of Sections 2(A)(15)-(17) of Ordinance No. 509, until the subject property's Williamson Act Contract expires on January 1, 2015.

F. Annexation to the Jurupa Community Services District

The Project Applicant is processing an application with the JCSD to annex all portions of the Project site located south of 68th Street and east of Wineville Avenue into JCSD's water and sewer service areas. The 3.89-acre surplus property located north of 68th Street also would be annexed to JCSD for sewer service. The portions of the Project site located west of Wineville Avenue are already located within JCSD's water and sewer service areas and eligible to receive service from JCSD under existing conditions. Upon approval of the annexation request by the JCSD Board of Directors, a petition to formally change JCSD's service boundaries would be required to be filed with the Riverside Local Agency Formation Commission (LAFCO). Riverside LAFCO would review the proposed annexation petition to formally expand JCSD's service area in compliance with its policies and procedures and would make the final determination on the petition in accordance with the applicable procedures set forth in California Government Code § 56000 et seq.

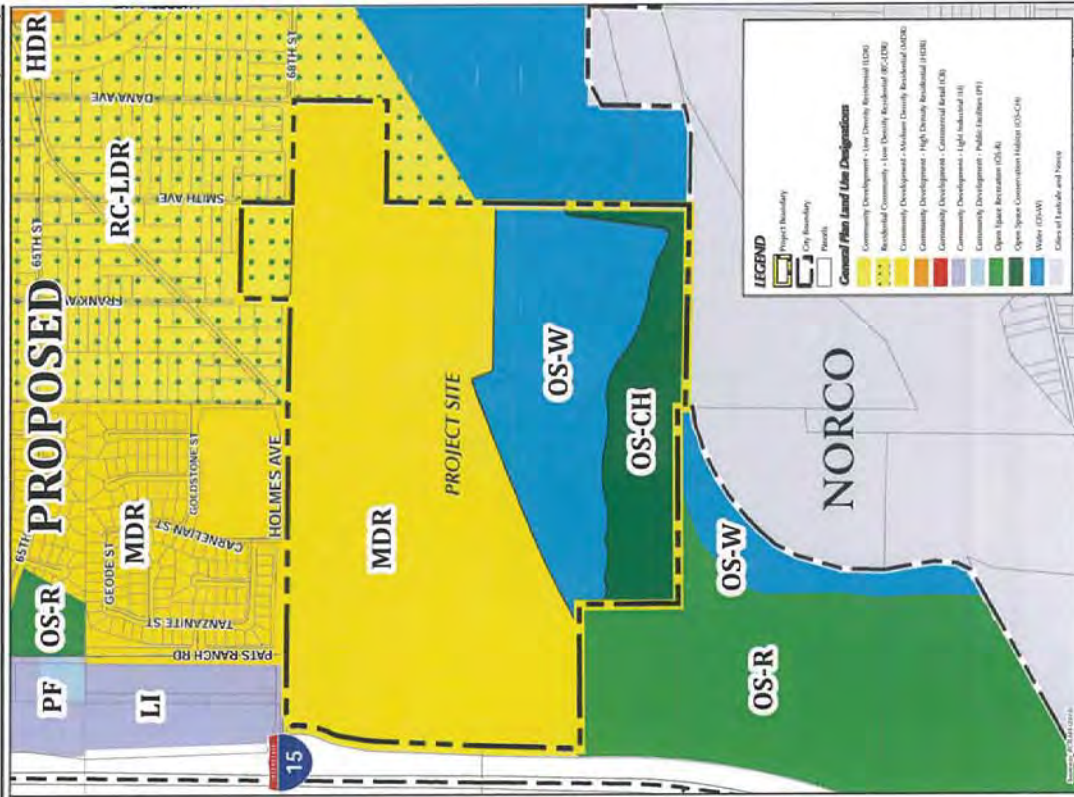
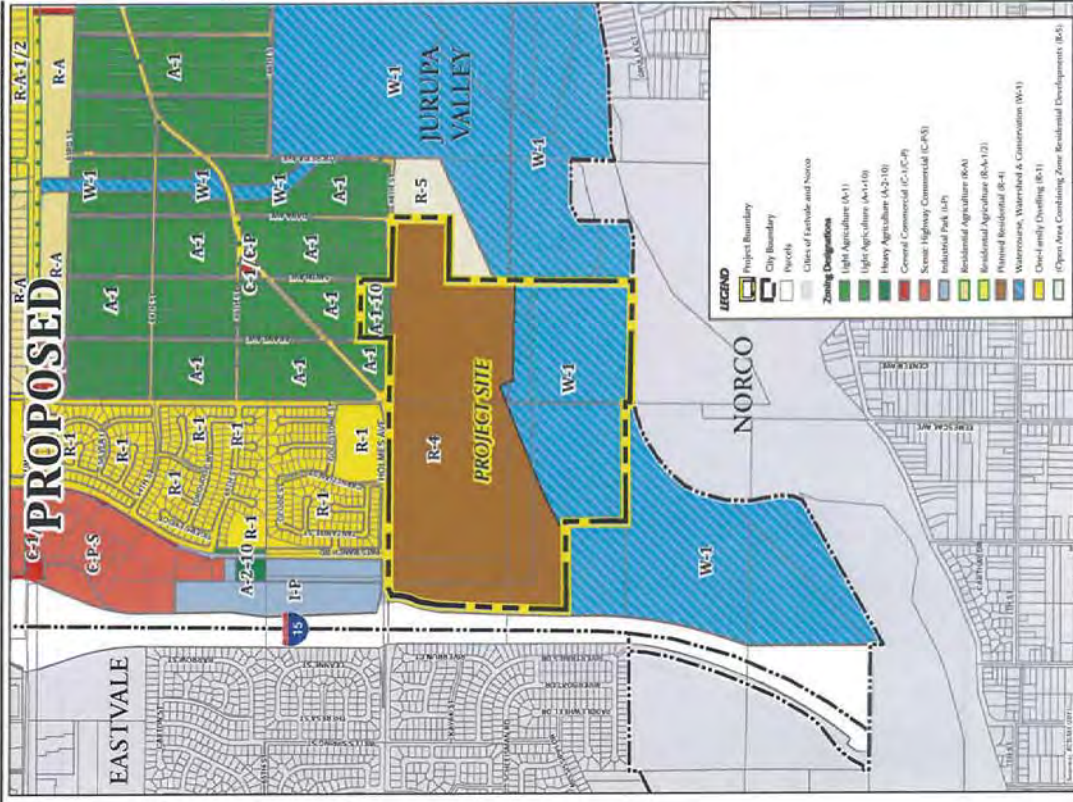


Figure 4-8



CHANGE OF ZONE NO. 1201

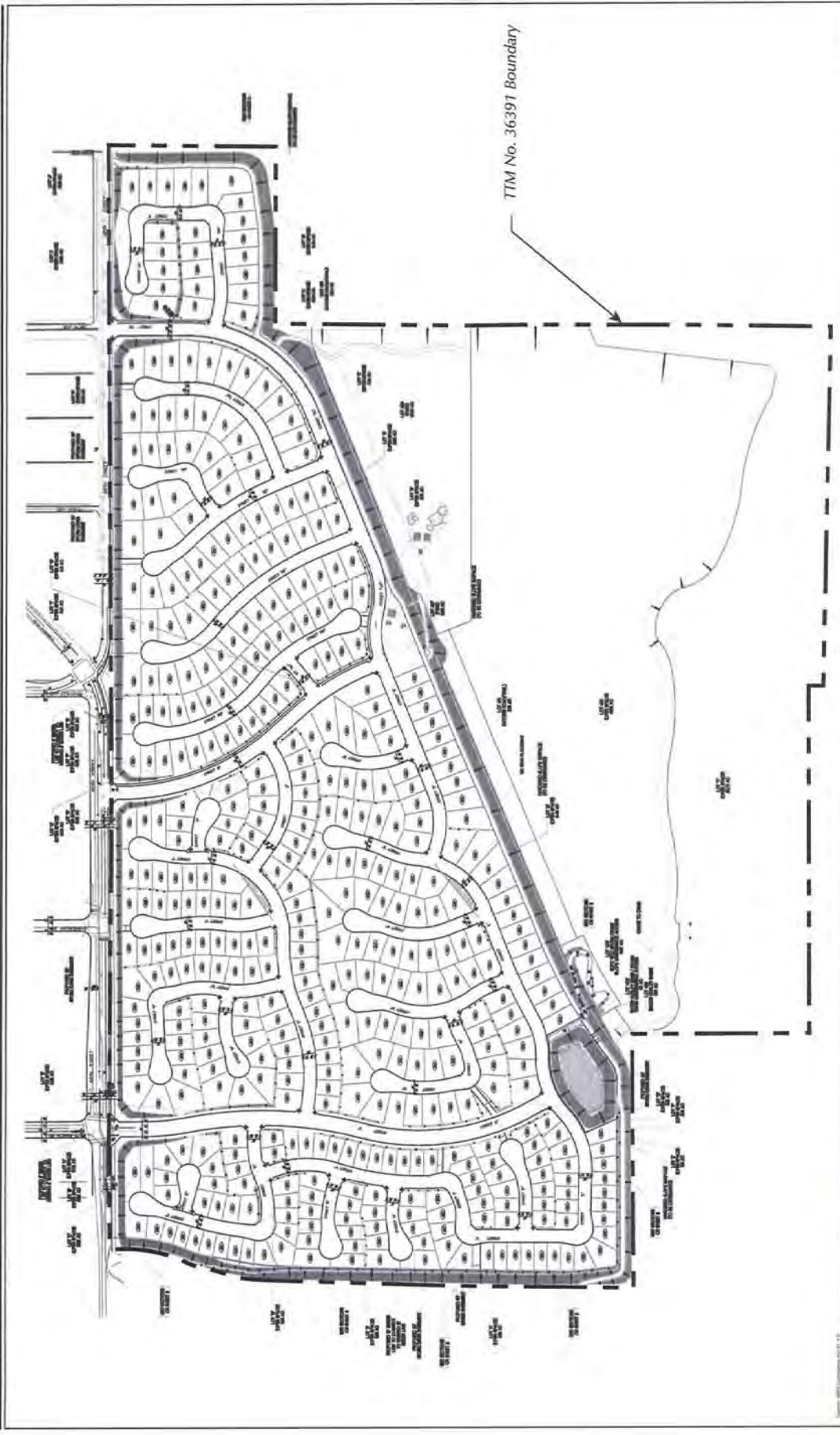


Figure 4-10

TENTATIVE TRACT MAP NO. 36391

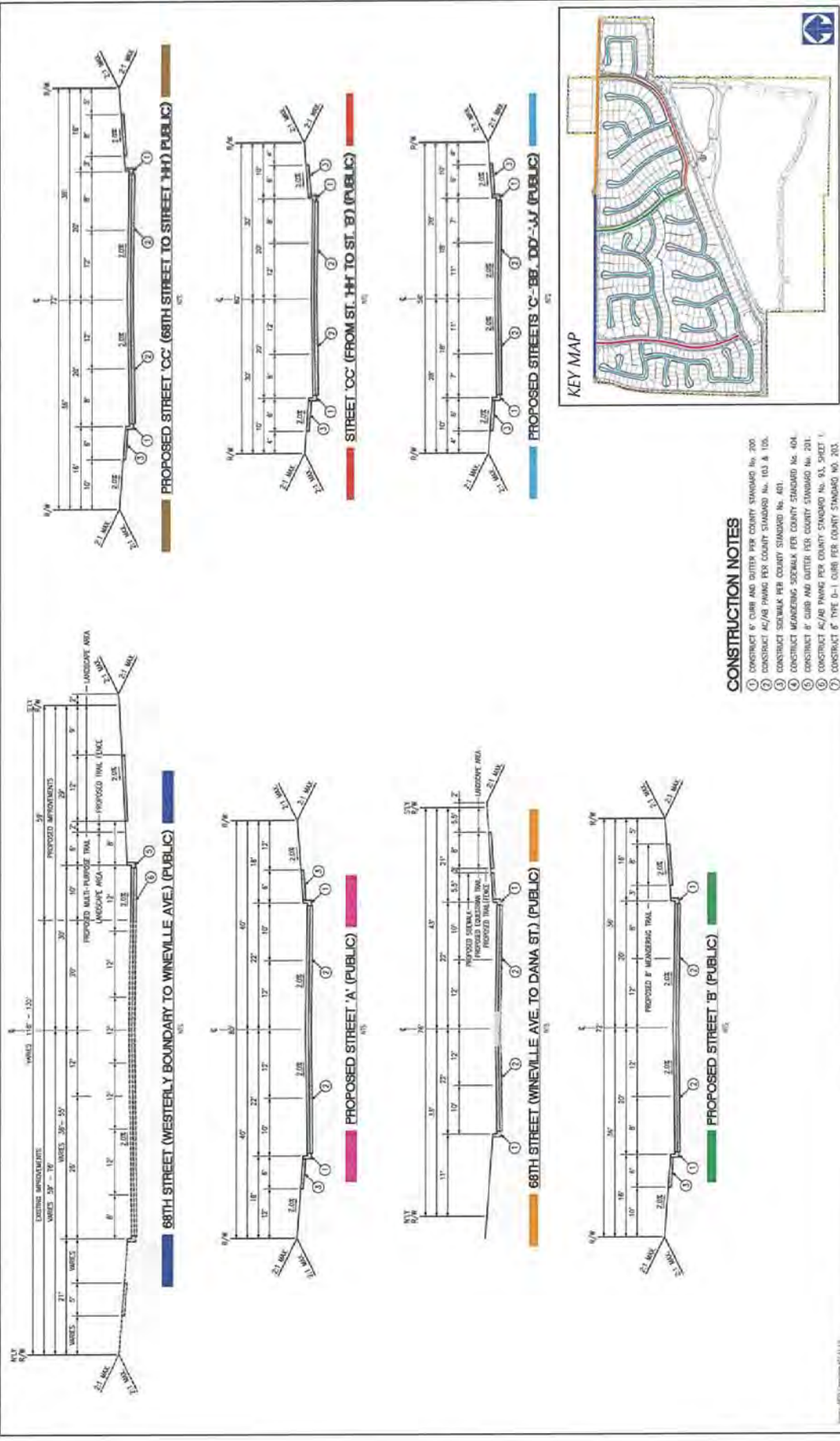


Figure 4-11

TTM 36391 ROADWAY CROSS-SECTIONS



Source: City of Jurupa Valley Master Case 1201



Figure 4-12

TTM 36391 COMMUNITY TRAILS PLAN



Source: AECOM & Green Infrastructure, 2011-12-18

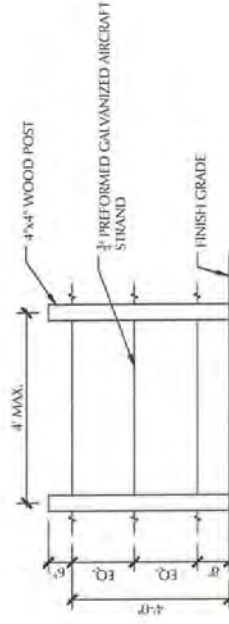
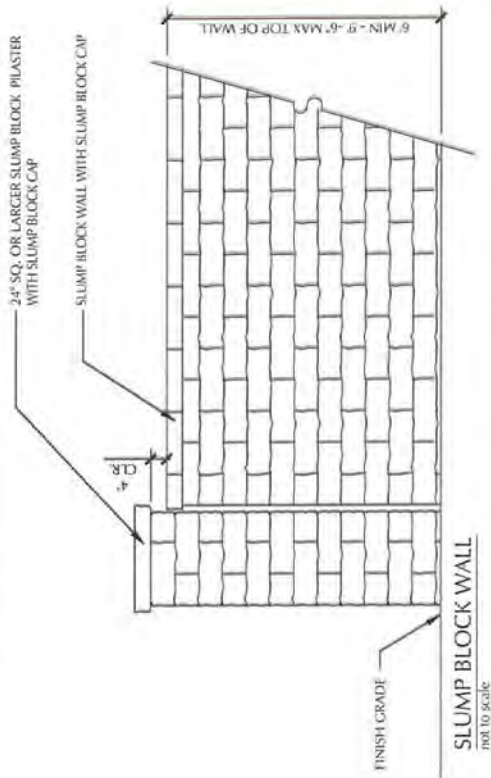


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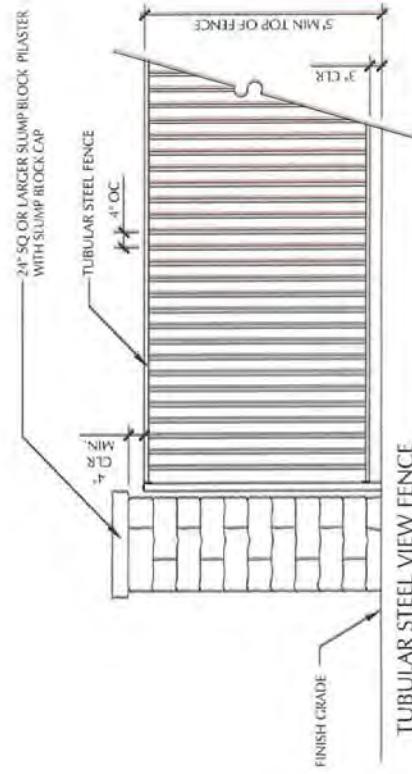


Figure 4-14

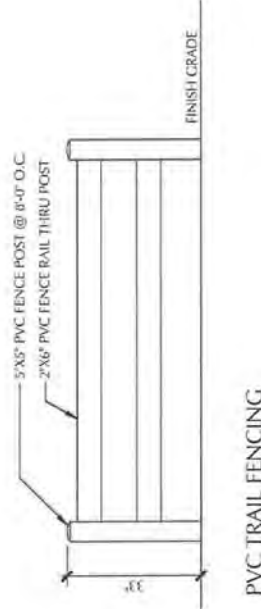
TTM 36391 WALL AND FENCE PLAN



THREE STRAND CABLE FENCE
not to scale



TUBULAR STEEL VIEW FENCE
not to scale



PVC TRAIL FENCING

Source: Fitch & Green Associates, Inc. (2018)



Figure 4-15

TTM 36391 WALL AND FENCE DETAILS

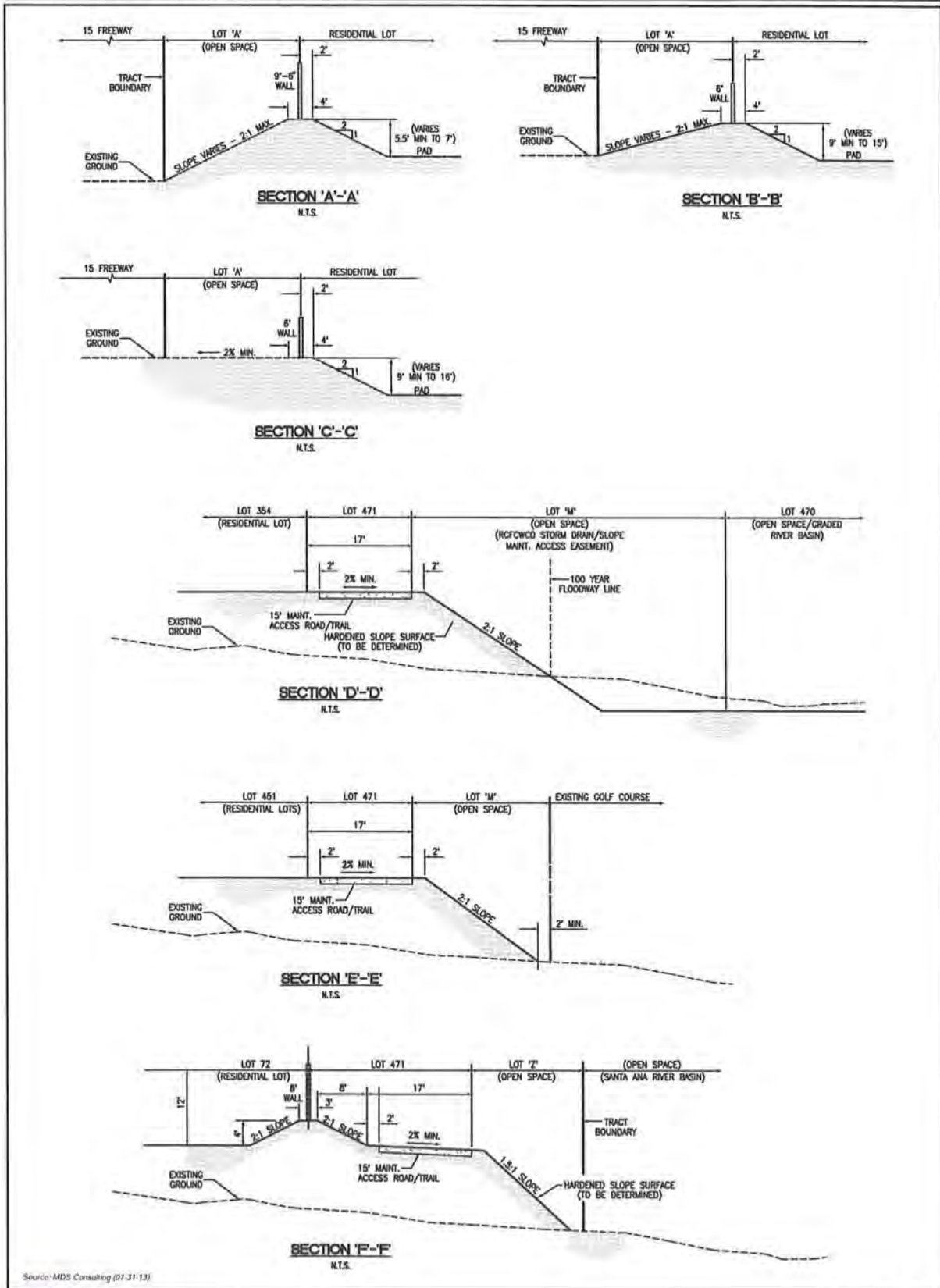


Figure 4-16



Source: City of Jurupa Valley, 2011



Figure 4-17

TTM 36391 MAINTENANCE PLAN

5.0 EVALUATION OF ENVIRONMENTAL IMPACTS

In accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000-21178.1), this Initial Study has been prepared to analyze the proposed Project to determine any potential significant impacts upon the environment that would result from construction and implementation of the Project. In accordance with California Code of Regulations, Section 15063, this Initial Study is a preliminary analysis prepared by the Lead Agency, the City of Jurupa Valley, in consultation with other jurisdictional agencies, to determine whether a Negative Declaration, Mitigated Negative Declaration, or an Environmental Impact Report is required for the proposed project. The purpose of this Initial Study is to inform the decision-makers, affected agencies, and the public of potential environmental impacts associated with the implementation of the proposed Project.

The environmental subject areas evaluated herein are listed below. Each section evaluates several specific subject matters related to the general topic of the subsection. The title of each subsection is not limiting; therefore, refer to each subsection for a full account of the subject matters addressed therein.

<u>Environmental Issue Area</u>	<u>Page</u>
5.1 AESTHETICS.....	II-46
5.2 AGRICULTURE AND FORESTRY RESOURCES	II-52
5.3 AIR QUALITY.....	II-58
5.4 BIOLOGICAL RESOURCES.....	II-76
5.5 CULTURAL RESOURCES.....	II-90
5.6 GEOLOGY AND SOILS	II-96
5.7 GREENHOUSE GAS EMISSIONS.....	II-103
5.8 HAZARDS AND HAZARDOUS MATERIALS	II-109
5.9 HYDROLOGY AND WATER QUALITY.....	II-117
5.10 LAND USE AND PLANNING.....	II-126
5.11 MINERAL RESOURCES.....	II-130
5.12 NOISE	II-131
5.13 POPULATION AND HOUSING.....	II-146
5.14 PUBLIC SERVICES.....	II-148
5.15 RECREATION	II-152
5.16 TRANSPORTATION/TRAFFIC	II-154
5.17 UTILITIES AND SERVICE SYSTEMS.....	II-181
5.18 MANDATORY FINDINGS OF SIGNIFICANCE	II-188

5.1 AESTHETICS

<i>Would the project:</i>	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect on a scenic vista?			✓	
b. Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?				✓
c. Substantially degrade the existing visual character or quality of the site and its surroundings?			✓	
d. Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?		✓		

Impact Analysis**5.1(a). Have a substantial adverse effect on a scenic vista?****Finding: Less-than-Significant Impact**

(Sources: City of Jurupa Valley General Plan Circulation Element & Multipurpose Open Space Element, Eastvale Area Plan, Jurupa Area Plan, Google Earth, Project Application Materials)

The proposed Project site is located in the City of Jurupa Valley, which lies within a relatively flat valley floor surrounded by rugged hills and mountains at a distance to the north, west, and east. North of State Route 60 and approximately 5.5 miles northeast of the Project site is the Jurupa Mountains. Mount Jurupa, the highest point of the Jurupa Mountains, has an elevation of approximately 2,217 feet and is about 7.1 miles from the northeast corner of the Project site. Further north and approximately 12 miles north of the Project site is the base of the San Gabriel Mountains. The Pedley Hills are lower in elevation, located approximately 4.2 miles from the northeast of the Project site. Approximately 0.9 miles and 2.2 miles southeast of the Project is the base of the La Sierra Hills and Norco Hills, respectively. Although atmospheric haze often obscures clear views, distant views of La Sierra and Norco Hills are visible from the Project site and 68th Street, looking southeast. The southern boundary of the Project site, which is also the southern boundary of the City of Jurupa Valley, is formed by the Santa Ana River. The river is described as a unique and significant visual resource by the Jurupa Area Plan, although because the river sits at a low elevation, its visibility is limited other than from properties that sit at a higher elevation and offer unobstructed views toward the river corridor.

The Project site consists of field croplands, disturbed vacant land, and open space including a segment of the Santa Ana River. With the exception of the Santa Ana River, the agricultural and open space nature of the Project site does not contribute to a scenic vista defined by the City's General Plan or any other planning document.

With implementation of the proposed Project, the northern portion of the Project site would be converted from an agricultural use to a master-planned residential community. The segment of the

Santa Ana River that crosses the site would not be disturbed and would be preserved within 25.78 acres of natural open space. Additionally, another 41.92 acres on the site north of the river would be converted from agricultural lands to open space (graded borrow area/open space), configured to serve as an overflow area for the river during peak storm events.

From the river corridor and Santa Ana River Trail that runs along the river, views of the Project's residential development, if visible at all, would be negligible because of the Project's open space configuration, substantial distance separation between the river and the residential development, and the proposed construction of a 25-foot tall, landscaped manufactured slope within proposed Lot 'M' at the northern edge of the borrow area/open space that would separate the open space from the residential community. Development proposed by the Project, including the manufactured slope in Lot 'M,' also would not preclude views from the Santa Ana River corridor of the prominent landforms north of the Project site (i.e., Jurupa Mountains, San Gabriel Mountains, and Pedley Hills). For these reasons, views from the river corridor would not be significantly impacted by the Project.

Views to the river corridor from the La Sierra Hills and Norco Hills from the southeast would not be impacted because the Project's residential development is proposed north of the river corridor, which has no potential to obstruct views from the south. Views of the river from 68th Street and other public roads north of the Project site are not present under existing conditions because there is not enough topographic elevation change to afford a view. Views of the river from higher elevations northeast of the Project site are at a distance of over four (4) miles and often obscured by atmospheric haze. Due to the linear distance, intervening development consisting of residential subdivisions, rural residential development and other uses, and the fact that structures on the Project site would be only one to two stories in height, the Project has no potential to obstruct, obscure, or otherwise adversely affect river views from the north.

As mentioned previously, distant landforms visible or periodically visible on clear days from the Project's vicinity include the Jurupa Mountains 5.5 miles to the northeast, the Pedley Hills 4.2 miles to the northeast, the La Sierra Hills 0.9 miles to the southeast, and the Norco Hills 2.2 miles to the southeast. According to the R-4 Development Plan included as part of the Project's application materials on file with the City of Jurupa Valley, the proposed residential homes would be constructed as one and two story buildings. Maximum lot coverage is proposed as 50% for a two-story house and 60% for a single-story house, including the garage. Furthermore, pursuant to the land use regulations contained within the City's Zoning Ordinance, the proposed R-4 zoning designation would apply a maximum height limit of 40 feet for all residential structures on-site. The one and two story structures proposed in the northern portion of the property would not block or completely obstruct views from surrounding public roadways to the hills and mountains visible in the horizon under existing conditions. A proposed six (6) foot high community theme wall is proposed along the site's shared boundary with 68th Street and a proposed 12 foot high noise barrier is proposed along the Project site's frontage with I-15, which would block views from these roadways to the visual foreground of the Project site. Regardless, views from public roads would still be possible over the walls to landform features visible in the horizon. Therefore, implementation of the proposed Project would result in a less-than-significant impact on scenic vistas.

5.1(b). Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

Finding: No Impact

(Sources: California Department of Transportation "Scenic Highway Program Eligible and Officially Designated Routes," City of Jurupa General Plan Figure C-9 - Riverside County Scenic Highways, Google Earth)

The proposed Project site is not located within or adjacent to a scenic highway corridor. The nearest State-eligible scenic highway is State Route (SR) 91, which is located approximately 5.25 miles south of the Project site. Intervening development blocks views of the Project site from SR-91. Additionally, other than a segment of the Santa Ana River that would be preserved as natural open space as part of the Project, there are no other designated scenic resources located on the property. Therefore, the proposed Project has no potential to damage scenic resources within a state scenic highway. No impact would occur.

5.1(c). Substantially degrade the existing visual character or quality of the site and its surroundings?

Finding: Less-than-Significant Impact

(Source: Project Application Materials, Google Earth)

The Project site consists of field croplands with ancillary agricultural structures, two (2) occupied residences, disturbed vacant land, and open space including a segment of the Santa Ana River. The existing visual character of the Project site is active agriculture operations and open space. The area surrounding the Project site, as described previously in Subsection 4.1.2, is characterized by contemporary residential subdivisions to the east and north, an elementary school to the north, a golf course to the east, and rural residential development to the northeast, supported by a developed infrastructure system including Interstate 15 that abuts the Project site to the west. To the south is the Santa Ana River corridor, beyond which are developed lands in the City of Norco.

With implementation of the proposed Project, the northern portion of the Project site would be converted from an agricultural use to a master-planned residential community. The segment of the Santa Ana River that crosses the site would not be disturbed and would be permanently preserved within 25.78 acres of natural open space pursuant to the Western Riverside County MSHCP. Additionally, another 41.92 acres on the Project site north of the river would be converted from agricultural lands to open space (graded borrow area/open space), configured to serve as an overflow area for the river during peak storm events, vegetated with native plant species, and also permanently conserved.

As part of the Project's entitlement applications, the Project Applicant submitted a R-4 Development Plan to the City of Jurupa Valley, which would be enforced by City conditions of approval placed on the Project. According to the proposed Development Plan, the primary aesthetic theme for the proposed Project would be riparian and the secondary theme would be agrarian in keeping with the ranches, farms, and dairies that once typified the area. Features such as river rock, exposed timber, and riparian flora are specified to be used in common areas to effectuate the "riparian/agrarian" theme. The Development Plan also specifies concepts for architectural styles, exterior colors and materials, garage and roof design, lot layouts, unit mixes, landscaping, and other design features.

During the Project's temporary construction period, construction equipment, supplies, and activities would be visible on the subject property from immediately surrounding areas. The major construction equipment expected to be used is described in Subsection 4.3, Table 4-3. This equipment has a similar character to the heavy agricultural equipment (e.g., tractors) that operate on the Project site under existing conditions. Construction activities are a common occurrence in the developing Inland Empire region of southern California and are not considered to substantially degrade the area's visual quality. All construction equipment would be removed from the Project site following completion of the Project's construction activities. For these reasons, the temporary visibility of construction equipment and activities at the Project site would not substantially degrade the visual character of the surrounding area. Visual character changes associated with construction would be less-than-significant.

At buildout of the proposed Project, views of the northern portion of the site from the surrounding area would change from agricultural field croplands and disturbed, vacant land to a developed residential community. As previously mentioned, the aesthetic theme proposed by the Project's R-4 Development Plan is "riparian/agrarian" in keeping with the visual character of the Santa Ana River to the south and ranches, farms, and dairies that once typified the area. Although the aesthetic changes in the northern portion of the property would be noticeable, such a change is not considered by the City of Jurupa Valley to be degrading. The northern portion of the property has been planned for residential uses by the prevailing General Plan since at least 2003 and although the Project proposes a higher density of residential development than previously indicated by the General Plan, implementation of the thematic elements described in the R-4 Development Plan will ensure that the Project blends into the existing visual character and quality of its surroundings. Additionally, nearly 33% of the Project site in the southern portion of the property would be preserved as either natural open space or as a graded borrow area/open space that would maintain the visual quality and character of the Santa Ana River corridor.

With respect to the visual character of the surrounding area, the proposed Project would be similar in character with the existing residential land uses located to the north of the site and on the opposite side of I-15 in the City of Eastvale. Lot sizes are proposed to increase from west to east, with the largest lots and a 10.66-acre public park site located in the eastern portion of the Project site, west of the Goose Creek Golf Club. As such, the Project reflects a continuation of existing development patterns within the local area. Additionally, the proposed Project would provide landscaping, trails, a public park, and open space that are of a similar visual character as the wide open spaces provided on the golf course to the east and in the Santa Ana River corridor to the south.

For all of the reasons stated above, implementation of the proposed Project would not substantially degrade the existing visual character or quality of the site and its surroundings. Impacts would be less than significant.

5.1(d). Create a new source of substantial light or glare, which would adversely affect day or nighttime views in the area?

Finding: Less-than-Significant Impact with Mitigation Incorporated

(Sources: Ordinance No. 461, Project Application Materials)

No substantial sources of artificial light are located on the property under existing conditions. Exterior artificial lighting associated with the property's two (2) occupied residences and agricultural activities is minimal. Implementation of the proposed Project would include the

installation of exterior lighting fixtures on the northern portion of the property that are typical of a single-family residential community. Exterior nighttime lighting fixtures would primarily include street lights, lights installed on individual residential lots, and lights associated with the proposed on-site park. As a result, the Project would increase the amount of artificial nighttime light emitted in the area, incrementally contributing to a reduction of nighttime, dark-sky views. Under existing conditions, however, the property does not have dark sky views because the Project site is surrounded by suburban development to the north and west, rural residential development to the northeast, and I-15 to the immediate west, all of which emit light. As such, the addition of exterior lighting fixtures in Project's development area would not constitute in a new source of substantial artificial light.

Even though the Project's exterior lighting would not be a substantial new source of light, exterior lighting fixtures installed on the property have the potential to result in adverse nighttime light and glare effects associated with off-site light trespass. Street lights are required to comply with design standards contained within City Ordinance No. 461 (Road Improvement Standards & Specifications) which establishes minimum design standards for street lights to ensure public safety and minimize public nuisance and would ensure that adverse effects associated with light trespass and/or glare would not occur. However, in the absence of design standards for other lighting fixtures, light trespass could occur causing light and glare impacts to off-site properties; thus, the potential impact is determined to be significant, for which mitigation measures are required. Additionally, the Project's proposed R-4 Development Plan specifies a roof design that could accommodate solar panel installation at homeowner discretion. Some solar panel materials are reflective and could cause glare impacts to adjacent properties if the angle of reflection is directed at an adjacent property. The potential for this occurrence would be rare, because the angle of most roof mounted solar panels are directed into the sky and not at adjacent properties. Regardless, the potential glare impact associated with solar panel installations is regarded as a potentially significant impact for which mitigation is required.

Mitigation

Mitigation Measure AE-1: Prior to residential building permit issuance, the City shall review construction drawings to ensure that proposed exterior, artificial lighting is located, adequately shielded, and directed such that no direct light falls outside the parcel of origin or onto the public right-of-way. Project contractors shall be required to comply with the construction drawings and permit periodic inspection of the construction site by City of Jurupa Valley staff or its designee to confirm compliance.

Mitigation Measure AE-2: Prior to approval of improvement plans for the community park, the City shall review the construction drawings to ensure that proposed exterior artificial lighting is located, adequately shielded, and directed such that no direct light falls outside the parcel of origin or onto the public right-of-way. If the open play area/field is proposed to be lit at night, the park improvement plans shall be accompanied by a lighting study that verifies compliance. Project contractors shall be required to comply with the improvement plans and permit inspection of the park site by City of Jurupa Valley staff or its designee to confirm compliance.

Mitigation Measure AE-3: Prior to the issuance of a building permit to allow the installation of a photovoltaic (solar) panel attached to a residential structure, the City of Jurupa Valley shall review the proposed installation location and specific photovoltaic product specifications to ensure that the panel will be sited and designed to avoid glare on

adjacent properties and roadways as part of the City's obligation to comply with CA Government Code Section 65850.5.

Mitigation Measure AE-4: Street lights shall comply with design standards contained within City Ordinance No. 461 (Road Improvement Standards & Specifications).

With implementation of Mitigation Measures AE-1, AE-2, AE-3, and AE-4, the Project's potential impact associated with off-site light and glare trespass would be reduced to below a level of significance.

5.2 AGRICULTURE AND FORESTRY RESOURCES

<i>Would the project:</i>	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?				✓
b. Conflict with existing zoning for agricultural use, or a Williamson Act contract?		✓		
c. Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?				✓
d. Result in the loss of forest land or conversion of forest land to non-forest use?				✓
e. Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?			✓	

Impact Analysis

5.2(a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

Finding: No Impact

(Sources: California Department of Conservation "Farmland Mapping and Monitoring Program: Riverside County Important Farmland 2010", City of Jurupa Valley General Plan Multipurpose Open Space Element, Ordinance No. 625)

Although a portion of the Project site is planted with field crops that undergo active cultivation under existing conditions, the site does not contain any lands designated as "Prime Farmland," "Unique Farmland," or "Farmland of Statewide Importance" as mapped by the State Department of Conservation Farmland Mapping and Monitoring Program (FMMP). As such, the Project has no potential to convert such lands to a non-agricultural use and no impact would occur. The Project would impact farmland resources on-site, as the FMMP classifies portions of the property as "Farmland of Local Importance;" however, there are no General Plan policies requiring the conservation of "Farmland of Local Importance." The Project would also affect on-site lands

mapped by the FMMP as “Urban and Built Up Land” and “Other Land;” however, these land use categories are classified as non-agricultural uses.

The Project would not directly convert any off-site farmland to non-agricultural use, including areas mapped by the FMMP as “Prime Farmland,” “Unique Farmland,” or “Farmland of Statewide Importance.” Furthermore, the Project would be required to comply with Ordinance No. 625 (“Right-to-Farm Ordinance”), which protects agricultural operations from nuisance complaints and encourages the development, improvement, and long-term viability of agricultural land where the landowner desires to continue agricultural operations in spite of urbanization that may occur in the surrounding areas. Mandatory compliance with Ordinance No. 625 would ensure that Project-related construction and operational activities would not indirectly cause or contribute to the conversion of off-site farmland to non-agricultural use, including areas mapped by the FMMP as “Prime Farmland,” “Unique Farmland,” or “Farmland of Statewide Importance.”

As such, the Project would not result in the conversion of areas mapped by the FMMP as “Prime Farmland,” “Unique Farmland,” or “Farmland of Statewide Importance” to non-agricultural use. No impact would occur.

Mitigation

Although Project-related impacts to FMMP Farmlands would be less than significant, the following mitigation measure is recommended to ensure compliance with the City’s Right to Farm Ordinance.

Mitigation Measure AG-1: The Project is required to comply with the provisions of City Ordinance No. 625, “Right-to-Farm.” As such, a “Notice to Buyer” shall be included in all sales agreements notifying buyers of real property located within 300 feet of agriculturally zoned property (zones A-1, A-P, A-2, A-D and C/V) that the property lies in close proximity to land zoned for primarily agricultural purposes, and that the presence of any legal agricultural activity, operation, or facility, or appurtenances thereof on agriculturally zoned lands, shall not be or become a nuisance because residential uses have entered the area.

5.2(b) Conflict with existing zoning for agricultural use, or a Williamson Act contract?

Finding: Less-than-Significant Impact with Mitigation Incorporated

(Sources: City of Jurupa Valley General Plan Land Use Map, City of Jurupa Valley Zoning Map, “RCIP General Plan Land Use Designations – Zoning Consistency Guidelines”, City of Jurupa Valley General Plan PEIR, Chapter 4.2 – Land Use/Agricultural Resources, Notice of Nonrenewal, Ordinance No. 509, Google Earth)

Approximately 33.89 acres of the Project site includes property zoned for agricultural uses, including approximately 30.0 acres located south of 68th Street zoned for Heavy Agriculture (A-2-10), which is under cultivation for field crops, and the 3.89-acre portion of the subject property located north of 68th Street zoned for Light Agriculture (A-1-10), which is not used for agricultural purposes. None of the agriculturally zoned property on the Project site is designated as “Prime Farmland,” “Unique Farmland,” or “Farmland of Statewide Importance” by the FMMP (as described above under the response to Issue 5.2(a)). The Project’s proposed Change of Zone (CZ1201) seeks to change the A-2-10 zoned area south of 68th Street to the zoning designation of Planned Residential (R-4). The Light Agriculture (A-1-10) zoning designation assigned to the portion of the Project site located north of 68th Street would not be modified. Refer to Figure 4-9, *Change of Zone No. 1201*, in Subsection 4.3 (see Page II-22).

The 30.0-acre area zoned A-2-10 is designated by the General Plan for non-agricultural use (i.e., Community Development: Low Density Residential, CD-LDR). The A-2-10 zone is considered to be “generally inconsistent” with the CD-LDR land use designation according to the *General Plan Land Use Designations Zoning Consistency Guidelines*. Because the A-2-10 zone is “generally inconsistent” with the CD-LDR General Plan Land Use designation applied to the subject property, it is reasonably foreseeable that these 30.0 acres would convert to non-agricultural land uses pursuant to the General Plan, with or without development of the Project as proposed. Additionally, it should be noted that the Project itself is comprised of 215.3 acres and only 30.0 of those acres would appear to conflict with existing agricultural zoning. Further, the Project itself includes a request to rezone the 30.0-acre area zoned A-2-10 to “Planned Residential” (R-4). Upon implementation of the Project, any potential agricultural zoning conflict would be eliminated. As such, because of the limited size and scope of this potential agricultural zoning conflict, because this area has already been designated for residential uses in the General Plan, and because the Project itself includes a request to rezone the 30.0 acres, any potential agricultural zoning conflict is deemed less than significant.

The 3.89 acres zoned A-1-10 north of 68th Street is designated for rural residential development by the General Plan (i.e., Rural Community: Low Density Residential). Although the existing A-1-10 zoning classification is consistent with the underlying Low Density Residential land use designation, this portion of the Project is not under active cultivation or agricultural use. Uses on the property include one (1) occupied residential structure and vacant land. With implementation of the Project, this property would remain under non-agricultural use, but would be conveyed to the City of Jurupa Valley and eventually converted from residential land uses and vacant land to a community facility site. The ultimate end-use of the community facility site has not yet been determined by the City, but could include any use permitted or conditionally permitted by the A-1-10 zoning designation, including but not limited to parks, playgrounds, and uses of similar intensity. As previously described in Subsection 4.3.1B, the zoning designation for this property would not change as part of the Project. It is also important to note that surrounding properties that are similarly zoned for Light Agriculture are developed with non-agricultural land uses as well (i.e., residential). As such, utilizing the 3.89-acre property for agricultural uses would likely be incompatible with adjacent residential uses. Accordingly, the use of this property as a community facility site by the City of Jurupa Valley would be consistent with the City’s Zoning Ordinance, as well as development patterns of the surrounding area, and would not result in an adverse environmental effect due conflict with agricultural zoning. Impacts would be less than significant.

The Project site is covered by a land conservation (Williamson Act) contract, pursuant to the California Land Conservation Act of 1965. The Williamson Act enables private landowners to voluntarily enter into contracts with local governments for the purpose of restricting specific parcels of land to agricultural or related open space use. In return, landowners receive lower property tax assessments based upon farming and open space uses as opposed to full market value.

Pursuant to the provisions of the Williamson Act, a land owner can initiate the termination of a land conservation contract by filing a notice of nonrenewal. The land conservation contract termination process begins on the next anniversary date following the filing of the notice of nonrenewal, and the contract winds down over a term of nine (9) years. The owners of the Project site filed a notice of nonrenewal of the land conservation contract that covers the subject property on September 13, 2005. The anniversary date of the land conservation contract for the Project site is January 1st; therefore, the process for terminating the contract commenced on January 1, 2006. The land conservation contract covering the Project site will be terminated officially on January 1, 2015. Activities associated with the construction and operation of the Project would conflict with the

provisions of the land conservation contract, if such activities interfere with agricultural activities occurring on the property prior to January 1, 2015.

Project-related soil import, soil stockpiling, grading, and temporary unlisted agricultural uses (as specified under Subsection 4.3.1C.2.a of this IS/MND) may be found to be compatible with the property's Williamson Act Contract if they occur on the property before January 1, 2015. The Project Applicant submitted a compatibility finding request to the Jurupa Valley City Council pursuant to Sections 2.A(15), (16), and/or (17) of Riverside County Ordinance No. 509 (as adopted by the City of Jurupa Valley).

Section 2.A(15) of Ordinance No. 509 provides that the City of Jurupa Valley City Council can determine after a public hearing, with 10 days' notice, that an unlisted non-agricultural use can be determined to be a compatible use, as long as the use would be compatible in all agricultural preserves.

Section 2.A(16) of Ordinance No. 509 provides that the City of Jurupa Valley City Council can determine, after a public hearing, with 10 days' notice, that an unlisted non-agricultural use can be determined to be a compatible use in a particular agricultural preserve, based on substantial difference in the character of the agricultural uses existing in that preserve as compared with other agricultural preserves.

Section 2.A(17) of Ordinance No. 509 provides that the City of Jurupa Valley City Council can determine, after a public hearing, with 10 days' notice, that an unlisted non-agricultural use on a specific parcel of land can be determined to be a compatible use based upon differences in the location and circumstances of owners of the agricultural land burdened with the Williamson Act Contract and which is based on character, location, or other particular circumstances of the specific parcel which are not applicable generally to other lands within that preserve.

If non-agricultural activity occurs on the subject property associated with the proposed Project prior to January 1, 2015, which directly or indirectly interferes with the ongoing agricultural operations, or is determined to be incompatible with the agricultural uses, a significant impact would occur. Therefore, mitigation is required for this impact.

Mitigation

Mitigation Measure AG-2: Prior to January 1, 2015, when the Williamson Act Contract on the Project site expires, the City shall prohibit all activities associated with the proposed Project that would interfere with ongoing agricultural activities occurring on the Project site, unless: (1) the owner of the Project site requests and the City of Jurupa Valley City Council makes a determination that a certain use is compatible with the agricultural preserve pursuant to Ordinance No. 509 and California Government Code §51238.1; or (2) the owner of the Project site petitions for the cancellation of the land conservation contract covering the subject property and this petition is approved by the City of Jurupa Valley City Council, pursuant to the provisions set forth in California Government Code §51280 et seq.

Implementation of Mitigation Measure AG-2 will ensure that the proposed Project does not conflict with the land use requirements of the Williamson Act Contract that covers the subject property by prohibiting development activities that could interfere with on-going agricultural operations until such a time as the Contract that covers the site, and all the land use restrictions attached thereto, has expired, or a petition to cancel the Contract has been granted by the City Council and all State-

mandated cancellation fees have been paid to the appropriate public agencies, or the City Council issues a Finding of Compatibility, determining that proposed non-agricultural uses are compatible with the Williamson Act Contract pursuant to Ordinance No. 509 and California Government Code §51238.1. With implementation of Mitigation Measure AG-2, the Project would have no potential to conflict with a Williamson Act contract, and potential impacts would be reduced to below a level of significance.

5.2(c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?

Finding: No Impact

(Sources: Biological Technical Report for the Riverbend Project (Glenn Lukos Associates, 2013), City of Jurupa Valley General Plan Land Use Map, City of Jurupa Valley Zoning Map)

The Project site is zoned for Light Agriculture (A-1-10), Heavy Agriculture (A-2-10), and Watercourse, Watershed and Conservation Areas (W-1). No portion of the Project site or surrounding area is zoned for forest land or timberland, nor are any forest lands or timberlands located on or nearby the Project site. Because no parcels zoned for forest land or timberland are present, the Project has no potential to impact such zoning. No impact would occur.

5.2(d) Result in the loss of forest land or conversion of forest land to non-forest use?

Finding: No Impact

(Sources: Biological Technical Report for the Riverbend Project (Glenn Lukos Associates, 2013))

The Project site does not contain any forest lands, is not zoned for forest lands, nor is it identified as containing forest resources by the General Plan. Based on a biological survey conducted on the proposed Project site by Glenn Lukos Associates, six (6) distinct vegetation/land use types are present on the property, including dairy and livestock feed yards, disturbed/developed land, field croplands, non-native grassland, residential/ urban/ exotic, and willow riparian forest, none of which are forest land. Because forest land is not present on the property or in the Project site's immediate vicinity, the Project has no potential to result in the loss of forest land or convert forest land or a non-forest use. No impact would occur.

5.2(e) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use or conversion of forest land to non-forest use?

Finding: Less-than-Significant Impact

(Sources: City of Jurupa Valley General Plan Multipurpose Open Space Element, City of Jurupa Valley General Plan PEIR, Chapter 4.2 – Land Use/Agricultural Resources, Google Earth)

The Project site is the former location of a cattle farm and dairy farms and is currently planted with field crops that undergo active cultivation activities. "Farmland" is defined in Section II (a) of Appendix G of the State CEQA Guidelines to mean Prime Farmland, Unique Farmland, or Farmland of Statewide Importance. As indicated in Issue 5.2(a) above, the Project itself would not lead to the conversion of any Farmland defined as Prime Farmland, Unique Farmland or Farmland of

Statewide Importance. Additionally, there is no Farmland within the vicinity of the Project site that could be converted by the Project. As such, there are no other changes in the existing environment that could result in the conversion of any Farmland, namely because none exists within the Project's immediate vicinity.

Other lands surrounding the Project site that were once used as agriculture have already converted to non-agricultural use. The Project site is located in an area that has largely been developed with residential and public facility (i.e., elementary school) uses to the north, rural residential uses to the northeast, a golf course to the east, and I-15 and contemporary residential subdivisions to the west. The Santa Ana River is located to the south. The nearest active agricultural use to the Project site is located approximately 0.75-mile to the north, north of Limonite Avenue, and is separated from the Project site by urban land uses, including a regional shopping center, medium density residential land uses, and an elementary school. This active agricultural use is designated as Farmland as defined in Section II (a) of Appendix G of the State CEQA Guidelines (i.e., Prime Farmland), but is planned for long-term non-agricultural use by the General Plan (i.e., Very High Density Residential and Medium Density Residential). Due to the distance of the Project site to this active agricultural use and existing intervening development, implementation of the Project is not expected to result in substantial changes to the environment that would expedite the conversion of existing off-site Farmland to a non-agricultural use.

As described above in the response to Issue 5.2(c), the Project site does not contain any forest lands and there are no forest lands located in the vicinity of the Project site. Accordingly, there are no components of the Project that could result in the conversion of forest land resources to non-forest use.

In conclusion, the Project will not involve other changes in the existing environment that could result in conversion of Farmland as no Farmland exists on the Project site or in the Project's immediate vicinity. As such, the Project would not result in impacts associated with the conversion of Farmland. Finally, the Project would not result in the conversion of forest land to non-forest use. As such, impacts would be less than significant.

5.3 AIR QUALITY

<i>Where available, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the following determinations. Would the project:</i>	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with or obstruct implementation of the applicable air quality plan?			✓	
b. Violate any air quality standard or contribute substantially to an existing or projected air quality violation?		✓		
c. 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)?		✓		
d. Expose sensitive receptors to substantial pollutant concentrations?		✓		
e. Create objectionable odors affecting a substantial number of people?			✓	

Impact Analysis**5.3(a) Conflict with or obstruct implementation of the applicable air quality plan?****Finding: Less-than-Significant Impact**

(Sources: Tentative Tract Map No. 36391 Air Quality Impact Analysis (Urban Crossroads, 2013), Riverbend (TTM No. 36391) Supplemental Air Quality and Greenhouse Gas Assessment (Urban Crossroads, 2013), South Coast Air Quality Management District, Final 2007 Air Quality Management Plan, South Coast Air Quality Management District, Final 2012 Air Quality Management Plan, South Coast Air Quality Management District, CEQA Air Quality Handbook, City of Jurupa Valley, Project Application Materials)

The Project site is located within the South Coast Air Basin (SCAB or “Basin”). The SCAB encompasses approximately 6,745 square miles and includes Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. The SCAB is bound by the Pacific Ocean to the west; the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east, respectively; and the San Diego County line to the south. The South Coast Air Quality Management District (SCAQMD) works directly with the Southern California Association of Governments (SCAG), county transportation commissions, local governments, and state and federal agencies to reduce emissions from stationary, mobile, and indirect sources to meet state and federal ambient air quality standards.

The SCAQMD has adopted a series of Air Quality Management Plans (AQMPs) to reduce air emissions in the Basin. When the applications for the Project were deemed complete by the City of Jurupa Valley and the environmental analysis for the Project commenced in the July 2012, the SCAQMD’s 2007 AQMP was in effect and therefore is the applicable AQMP for consistency evaluation. Since that time, SCAQMD adopted the 2012 AQMP on December 7, 2012. The 2012

AQMP incorporates the latest scientific and technological information and planning assumptions, including the 2012 Regional Transportation Plan/Sustainable Communities Strategy and updated emission inventory methodologies for various source categories. Similar to the 2007 AQMP, the 2012 AQMP is based on assumptions provided by both CARB and SCAG in the latest available EMFAC model for the most recent motor vehicle and demographics information, respectively. Additionally, like the 2007 AQMP, the 2012 AQMP assumes that development associated with general plans, specific plans, residential projects, and wastewater facilities will be constructed in accordance with population growth projections identified by SCAG. The 2012 AQMP relies on SCAG's 2012 RTP, which assumes the same land uses for the Project site as assumed in 2007. Therefore, consistency analysis for the 2007 AQMP and 2012 AQMP would be the same in regards to the proposed Project. For purposes of evaluation and to determine if the Project would conflict with or obstruct implementation of the applicable air quality plan, consistency with the 2007 AQMP is discussed below.

The SCAQMD has established criteria for determining consistency with the AQMP. These criteria are defined in Chapter 12, Sections 12.2 and 12.3 of the SCAQMD *CEQA Air Quality Handbook* and are discussed below.

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

Consistency Criterion No. 1 refers to violations of the California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS). As evaluated under Issues 5.3(b), (c), and (d), below, the Project would not exceed regional or localized significance thresholds for any criteria pollutant during construction or during long-term operation with mitigation measures applied. Accordingly, the Project's regional and localized emissions would not contribute substantially to an existing or potential future air quality violation or delay the attainment of air quality standards.

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

The growth forecasts used in the AQMP to project future emissions levels are based on the projections of the Regional Transportation Model utilized by SCAG, which incorporates land use data provided by lead agency general plan documentation, as well as assumptions regarding population number, location of population growth, and a regional housing needs assessment. SCAG's adopted 2012 Regional Transportation Plan Growth Forecast estimates that the number of households in the City of Jurupa Valley will grow from approximately 24,500 in 2010 to 27,100 by 2020 and 33,300 by 2030. Since the City's incorporation on July 1, 2011, only 28 residential building permits and two (2) mobile home installation permits have been issued, as well as six (6) demolition permits for residential homes. In total, the City gained only 24 households since its incorporation (City of Jurupa Valley, 2013). The Project proposes to construct 466 homes before 2020, which when considered with the City's actual rate of growth, will not exceed the Growth Forecast estimates used in SCAG's growth forecast. As such, the Project would not exceed the assumptions in the AQMP based upon the years of project build-out.

For the reasons stated above, the proposed Project would not result in an increase in the frequency or severity of existing air quality violations or cause or contribute to new violations, delay the timely attainment of air quality standards or the interim emissions reductions specified in the AQMP. Furthermore, based on the City's actual growth rate and projected growth rate through 2020, the Project would not exceed the growth assumptions in the AQMP. As such, the Project would be consistent with the AQMP and impacts would be less than significant.

5.3(b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?

Finding: Less-than-Significant Impact with Mitigation Incorporated

(Sources: Tentative Tract Map No. 36391 Air Quality Impact Analysis (Urban Crossroads, 2013), Riverbend (TTM No. 36391) Supplemental Air Quality and Greenhouse Gas Assessment (Urban Crossroads, 2013), Wind Erosion Control for Soil Stockpiles (Urban Crossroads, 2013))

The SCAQMD monitors levels of various criteria pollutants at 30 monitoring stations throughout the air district. In 2009, the most recent year that data was available, the federal and state standards were exceeded on one or more days for ozone (O₃), inhalable particulates (PM₁₀), and fine particulates (PM_{2.5}) at most monitoring locations. No areas of the SCAB exceeded federal or state standards for nitrogen dioxide (NO₂), sulfur oxides (SO₂), carbon monoxide (CO), sulfates, or lead. The most recent three (3) years of data available for air quality levels at the SCAQMD monitoring stations nearest the Project site are shown on Table 2-3 in the Air Quality Technical Report attached as Appendix A1.

As with any new development project, the proposed Project has the potential to generate substantial pollutant concentrations during both construction activities and long-term operation. The following provides an analysis based on the applicable significance thresholds established by the SCAQMD and Federal and State air quality standards. This analysis assumes that the proposed Project would comply with applicable, mandatory regional air quality standards, including: SCAQMD Rule 403, "Fugitive Dust;" SCAQMD Rule 431.2, "Sulfur Content of Liquid Fuels;" SCAQMD Rule 1113, "Architectural Coatings;" SCAQMD Rule 1186, "PM10 Emissions from Paved and Unpaved Roads, and Livestock Operations;" and SCAQMD Rule 1186.1, "Less-Polluting Street Sweepers."

□ Impact Analysis for Construction-Related Emissions

For purposes of analysis, it is assumed that construction of the Project would occur from 2014 to 2019. If construction activities actually occur at a slightly later date than assumed in this IS/MND, emissions associated with construction vehicle exhaust would be less than disclosed below due to the application of more restrictive regulatory requirements for construction equipment and the ongoing replacement of older construction fleet equipment with newer, less-polluting equipment by construction contractors, as contained in the CalEEMod model. The Project's construction characteristics and construction equipment fleet assumptions used in the analysis were previously described in Subsection 4.3.1C.2 (refer to Page II-31) and also are described in the Air Quality Technical Reports attached as Appendices A1 and A2, respectively.

The calculated maximum daily emissions associated with construction of the Project are presented in Table 5-4, *Construction-Related Emissions Summary (Pounds per Day)*, inclusive of diesel truck emissions associated with proposed soil import activities that would occur during construction.

Table 5-4 Construction-Related Emissions Summary (Pounds per Day)

Year	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
2014	8.9	80.67	44.22	0.1	23.51	13.71
2015	15.71	133.06	76.55	0.17	34.79	19.37
2016	19.67	125.12	74.04	0.17	34.34	18.93
2017	16.59	44.96	45.14	0.09	6.29	3.13
2018	13.12	24.61	29.8	0.07	4.43	1.36
2019	12.79	22.51	28.95	0.07	4.26	1.2
Maximum Daily Emissions	19.67	133.06	76.55	0.17	34.79	19.37
SCAQMD Regional Threshold	75	100	550	150	150	55
Significant?	NO	YES	NO	NO	NO	NO

Source: Urban Crossroads 2013a, Table 3-3.

Construction-related emissions of volatile organic compounds (VOC), carbon monoxide (CO), sulfur oxides (SO_x), and particulate matter (PM₁₀ and PM_{2.5}) would not exceed SCAQMD regional criteria thresholds, as summarized in Table 5-4. Accordingly, the Project would not emit substantial concentrations of these pollutants during construction and would not contribute to an existing or projected air quality violation, on a direct or cumulative basis. Impacts associated with construction-related emissions of VOC, CO, SO_x, PM₁₀ and PM_{2.5} would be less than significant and mitigation is not required.

Even though mitigation is not required for PM₁₀ and PM_{2.5} emissions, implementation of Mitigation Measures AQ-1 and AQ-4, below, will assist in assuring mandatory compliance with SCAQMD Rules 403, 1186, and 1186.1. As shown in the Air Quality Technical Report attached as Appendix A1 (Table XI-A of its Appendix B), implementation of Mitigation Measure AQ-1(a) and (b) is estimated to reduce PM₁₀ and PM_{2.5} fugitive dust emissions by approximately 61% and 44%, respectively. Mitigation Measure AQ-4 would further reduce PM₁₀ emissions. Although mitigation is also not required for VOC and SO_x emissions, Mitigation Measure AQ-3 will assist in ensuring mandatory compliance with SCAQMD Rule 412.2 and Rule 1113 requirements to use low SO_x content fuels and low VOC content architectural coatings.

As shown in Table 5-4, the Project is projected to exceed the SCAQMD regional criteria pollutant threshold for emissions of nitrogen oxides (NO_x) during construction. The SCAB does not attain the State standard for NO_x concentrations. Furthermore, NO_x is a precursor for ozone, a pollutant for which the SCAB does not attain Federal or State standards. Accordingly, the Project's emissions of NO_x during construction would violate the SCAQMD regional threshold for this pollutant and would result in a considerable net increase of criteria pollutants for which the Project region is in non-attainment. This impact is significant and mitigation is required.

Implementation of Mitigation Measure AQ-2, below, would reduce Project emissions of NO_x during construction. Additionally, Mitigation Measure AQ-4(b) would further reduce NO_x emissions. As shown in Table 5-5, *Construction-Related Emissions Summary – With Mitigation (Pounds per Day)*, implementation of these mitigation measures would reduce the Project's construction-related NO_x emissions below the SCAQMD significance threshold. Accordingly, with implementation of Mitigation Measures AQ-2 and AQ-4(b), the Project would not violate or contribute substantially to an existing or projected air quality violation or result in a cumulatively considerable net increase of any criteria pollutant for which the Project region is in non-attainment, and construction-related impacts associated with NO_x emissions would be reduced to less than significant.

**Table 5-5 Construction-Related Emissions Summary – With Mitigation
(Pounds per Day)**

Year	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
2014	6.57	55.52	42.01	0.1	9.96	5.27
2015	11.86	89.27	80.84	0.17	13.78	6.86
2016	17.86	89.26	80.72	0.17	13.78	6.87
2017	15.22	33.98	46.17	0.09	4.06	0.91
2018	13.15	22.90	31.76	0.07	3.67	0.6
2019	13.03	22.42	31.00	0.07	3.64	0.57
Maximum Daily Emissions	17.86	89.27	80.84	0.17	13.78	6.87
SCAQMD Regional Threshold	75	100	550	150	150	55
Significant?	NO	NO	NO	NO	NO	NO

Source: Urban Crossroads 2013a, Table 4-1.

As previously noted under the description of the Project's construction characteristics (refer to Subsection 4.3.1C.2.a, *Earthwork and Grading*, on Page II-31), soil would be imported from off-site. The location(s) of the borrow site(s) are not yet identified; however, it is anticipated that imported soil would be sourced within a five (5) to 20-mile radius of the Project site. Soil import activities are expected to occur over an approximately 12- to 24-month period, and may overlap with grading activities on-site, which roughly corresponds with Years 2014 and 2015. Although air pollutant emissions associated with proposed soil import activities are disclosed in Table 5-4, the emissions presented in this table are based on a maximum of 62 inbound or outbound truck trips per day at a trip distance of 20 miles (the CalEEMod air emissions model assumes a 20 mile trip distance by default and 64 inbound or outbound trips is the maximum number of trips that could occur to remain below the SCAQMD significance thresholds). However, if the location(s) of the borrow site(s) are less than a 20-mile trip length from the Project site (i.e., 5, 10, or 15 miles), more import truck trips could travel to and from the Project site while still remaining below SCAQMD significance thresholds, because total vehicle emissions would be reduced as total vehicle miles travelled decreased. Table 5-6 through Table 5-11 summarize the vehicle emissions associated with borrow site distances of five (5), 10 and 15 miles from the Project site, both without and with an overlap with grading activities. As shown, if a borrow site is located within five (5), 10, or 15 miles of the Project site, a maximum of 350, 240, and 170 inbound or outbound truck trips could occur without exceeding SCAQMD regional thresholds for criteria pollutants, respectively (without an overlap with grading activities). If soil import and grading activities overlap, a maximum of 175 inbound or outbound trips could occur at a distance of five (5) miles; 120 inbound or outbound trips could occur at a distance of 10 miles; or 85 inbound or outbound trips could occur at a distance of 15 miles without exceeding SCAQMD regional thresholds for criteria pollutants. Mitigation Measure AQ-5, below, would place a restriction on the maximum number of daily soil import truck trips allowed to and from the Project site to ensure that air pollutant emissions remain below the applicable SCAQMD thresholds.

**Table 5-6 Regional Emissions Summary – 5-mile One-Way Haul Distance
(Soil Import Only)**

Scenario	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Soil Import Only	9.43	83.88	58.75	0.13	11.22	5.93
SCAQMD Regional Threshold	75	100	550	150	150	55
Significant?	NO	NO	NO	NO	NO	NO

Note: This table assumes a maximum of 350 daily haul trips (inbound or outbound) from the Project site.

Source: Urban Crossroads 2013c, Table 5.

**Table 5-7 Regional Emissions Summary – 5-mile One-Way Haul Distance
(Soil Import and Grading Overlap)**

Scenario	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Soil Import / Grading	12.07	88.53	82.54	0.16	13.62	6.53
SCAQMD Regional Threshold	75	100	550	150	150	55
Significant?	NO	NO	NO	NO	NO	NO

Note: This table assumes a maximum of 175 daily haul trips (inbound or outbound) from the Project site.

Source: Urban Crossroads 2013c, Table 6.

**Table 5-8 Regional Emissions Summary – 10-mile One-Way Haul Distance
(Soil Import Only)**

Scenario	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Soil Import Only	9.65	89.14	58.74	0.15	12.59	6.54
SCAQMD Regional Threshold	75	100	550	150	150	55
Significant?	NO	NO	NO	NO	NO	NO

Note: This table assumes a maximum of 240 daily haul trips (inbound or outbound) from the Project site.

Source: Urban Crossroads 2013c, Table 3.

**Table 5-9 Regional Emissions Summary – 10-mile One-Way Haul Distance
(Soil Import and Grading Overlap)**

Scenario	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Soil Import / Grading	12.18	91.16	82.54	0.17	14.30	6.84
SCAQMD Regional Threshold	75	100	550	150	150	55
Significant?	NO	NO	NO	NO	NO	NO

Note: This table assumes a maximum of 120 daily haul trips (inbound or outbound) from the Project site.

Source: Urban Crossroads 2013c, Table 4.

**Table 5-10 Regional Emissions Summary – 15-mile One-Way Haul Distance
(Soil Import Only)**

Scenario	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Soil Import Only	9.38	87.30	56.61	0.15	12.88	6.66
SCAQMD Regional Threshold	75	100	550	150	150	55
Significant?	NO	NO	NO	NO	NO	NO

Note: This table assumes a maximum of 170 daily haul trips (inbound or outbound) from the Project site.

Source: Urban Crossroads 2013c, Table 1.

**Table 5-11 Regional Emissions Summary – 15-mile One-Way Haul Distance
(Soil Import and Grading Overlap)**

Scenario	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Soil Import / Grading	12.04	90.24	81.48	0.17	14.45	6.90
SCAQMD Regional Threshold	75	100	550	150	150	55
Significant?	NO	NO	NO	NO	NO	NO

Note: This table assumes a maximum of 85 daily haul trips (inbound or outbound) from the Project site.
Source: *Urban Crossroads 2013c, Table 1.*

Mitigation

Mitigation Measure AQ-2 and AQ-4(b) address the Project's significant impact associated with construction-related NO_x emissions. Implementation of Mitigation Measure AQ-2 will ensure that the proposed Project's construction-related emissions of NO_x are reduced to below a level of significance, as shown in Table 5-5. Although Project-related impacts associated with construction-related emissions of VOC, CO, SO_x, PM₁₀, and PM_{2.5}, would be less than significant, Mitigation Measures AQ-1, AQ-3, AQ-4(a), and AQ-5 are recommended to ensure compliance with applicable SCAQMD Rules and regional air pollutant thresholds.

Mitigation Measure AQ-1: The Project is required to comply with the provisions of South Coast Air Quality Management District Rule 403, "Fugitive Dust." Rule 403 requires implementation of best available dust control measures during construction activities that generate fugitive dust, such as earth moving and stockpiling activities, grading, and equipment travel on unpaved roads. Prior to grading permit issuance, the City shall verify that the following notes are included on grading plans and stockpile plans. Project contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by City of Jurupa Valley staff or its designee to confirm compliance. These notes also shall be specified in bid documents issued to prospective construction contractors.

- a. During soil stockpiling, grading and ground-disturbing construction activities, the construction contractor shall ensure that all unpaved roads, active soil stockpiles, and areas undergoing active ground disturbance within the Project site are watered at least three (3) times daily during dry weather. Watering, with complete coverage of disturbed areas by water truck, sprinkler system or other comparable means, shall occur in the mid-morning, afternoon, and after work has been completed for the day.
- b. Temporary signs shall be installed on the construction site along all unpaved roads and/or unpaved haul routes indicating a maximum speed limit of 15 miles per hour (MPH). The signs shall be installed before construction activities commence and remain in place during the duration of vehicle activities on all unpaved roads unpaved haul routes.

Mitigation Measure AQ-2: The Project is required to comply with California Code of Regulations Title 13, Division 3, Chapter 1, Article 4.5, Section 2025, "Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and Other Criteria Pollutants, from In-Use Heavy-Duty Diesel-Fueled Vehicles" and California Code of Regulations Title 13, Division 3, Chapter 10, Article 1, Section 2485, "Airborne Toxic Control Measure to Limit

Diesel-Fueled Commercial Motor Vehicle Idling.” Prior to grading permit issuance and building permit issuance, the City shall verify that the following notes are included on the grading and building plans. Project contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by City of Jurupa Valley staff or its designee to confirm compliance. These notes also shall be specified in bid documents issued to prospective construction contractors.

- a. The contractor shall utilize California Air Resources Board (CARB) Tier III certified equipment or better for all off-road diesel-powered construction equipment greater than 50 horsepower.
- b. Temporary signs shall be placed on the construction site at all construction vehicle entry points at 68th Street and at all loading, unloading, and equipment staging areas indicating that heavy duty trucks and diesel powered construction equipment are prohibited from idling for more than five (5) minutes. The signs shall be installed before construction activities commence and remain in place during the duration of construction activities at all loading, unloading, and equipment staging areas.

Mitigation Measure AQ-3: The Project is required to comply with the provisions of South Coast Air Quality Management District Rule 1113, “Architectural Coatings” and Rule 431.2, “Sulfur Content of Liquid Fuels.” Adherence to Rule 1113 limits the release of volatile organic compounds (VOCs) into the atmosphere during painting and application of other surface coatings. Adherence to Rule 431.2 limits the release of sulfur dioxide (SO_x) into the atmosphere from the burning of fuel. Prior to grading and building permit issuance, the City shall verify that the following notes are included on the grading and building plans. Project contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by City of Jurupa Valley staff or its designee to confirm compliance. These notes also shall be specified in bid documents issued to prospective construction contractors.

- a. All architectural coatings shall be compliant with South Coast Air Quality Management District Rule 1113, which limits VOC content to specified limits.
- b. All liquid fuels shall have a sulfur content of not more than 0.05 percent by weight, except as provided for by South Coast Air Quality Management District Rule 431.2.

Mitigation Measure AQ-4: The Project is required to comply with the provisions of South Coast Air Quality Management District Rule 1186 “PM₁₀ Emissions from Paved and Unpaved Roads and Livestock Operations” and Rule 1186.1, “Less-Polluting Street Sweepers.” Adherence to Rules 1186 and 1186.1 reduces the release of criteria pollutant emissions into the atmosphere during construction. Prior to grading and building permit issuance, the City shall verify that the following notes are included on the grading and building plans. Project contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by City of Jurupa Valley staff or its designee to confirm compliance. The notes also shall be specified in bid documents issued to prospective construction contractors.

- a. If visible dirt or accumulated dust is carried onto paved roads during construction, the contractor shall remove such dirt and dust at the end of each work day by street cleaning.

- b. Street sweepers shall be certified by the South Coast Air Quality Management District as meeting the Rule 1186 sweeper certification procedures and requirements for PM₁₀-efficient sweepers. All street sweepers having a gross vehicle weight of 14,000 pounds or more shall be powered with alternative (non-diesel) fuel or otherwise comply with South Coast Air Quality Management District Rule 1186.1.

Mitigation Measure AQ-5: Prior to issuance of stockpile and grading permits, the Project Applicant shall identify the soil/earth materials borrow site location(s) and obtain City approval of the haul route. Prior to approval of the haul route and issuance of stockpile and grading permits, the Applicant also shall submit a letter to the City from a qualified air quality specialist that calculates the haul route distance and the maximum number of daily haul trips and load sizes that can occur to maintain air quality emissions below SCAQMD significance thresholds. The City shall ensure that the haul route and maximum number of soil/earth materials haul trips are specified as notes on the grading plan. Project contractors shall be required to ensure compliance with the notes, keep a log of the actual number of daily haul trips, and permit periodic inspection of the construction site and haul trip log by City of Jurupa Valley staff or its designee to confirm compliance. These notes also shall be specified in bid documents issued to prospective construction contractors. In no case shall the maximum number of daily haul trips exceed the following:

Maximum Allowable Number of Daily Soil Import Haul Trips

Haul Trip Distance	5 miles	10 miles	15 miles	20 miles
Soil Import Only maximum number of trips permitted	350	240	170	62
Concurrent Soil Import and Grading maximum number of trips permitted	175	120	85	62

Note: Each inbound vehicle counts as one (1) trip and each outbound vehicle counts as one (1) trip.

☐ **Impact Analysis for Operational Emissions**

The proposed Project would be operated as a residential community. As such, typical operational characteristics include residents and visitors traveling to and from the proposed residences, park and community facility, leisure and maintenance activities occurring on individual residential lots and in the on-site park and trail system, and general maintenance of common areas. Long-term operational emissions associated with the Project are presented in Table 5-12, *Summary of Peak Operational Emissions (Pounds per Day)*.

As summarized in Table 5-12, Project-related operational emissions of VOC, NO_x, CO, SO_x, PM₁₀ and PM_{2.5} would not exceed SCAQMD regional criteria thresholds. Accordingly, the Project would not emit substantial concentrations of these pollutants during long-term operation and would not contribute to an existing or projected air quality violation, on a direct or cumulative basis. Impacts associated with long-term emissions of VOC, NO_x, CO, SO_x, PM₁₀ and PM_{2.5} would be less than significant and mitigation is not required.

Table 5-12 Summary of Peak Operational Emissions (Pounds per Day)*Summer*

Operational Activities	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Area Source Emissions ^a	20.59	0.45	39.31	--	0.84	0.84
Energy Source Emissions ^b	0.56	4.79	2.04	0.03	0.39	0.39
Mobile Emissions ^c	18.42	42.09	187.10	0.42	46.63	2.72
Maximum Daily Operational Emissions	39.57	47.33	228.45	0.45	47.86	3.95
SCAQMD Regional Threshold	55	55	550	150	150	55
Significant?	NO	NO	NO	NO	NO	NO

Winter

Operational Activities	VOC	NO _x	CO	SO _x	PM ₁₀	PM _{2.5}
Area Source Emissions ^a	20.59	0.45	39.31	0.00	0.84	0.84
Energy Source Emissions ^b	0.56	4.79	2.04	0.03	0.39	0.39
Mobile Emissions ^c	17.73	43.91	173.56	0.38	46.65	2.74
Maximum Daily Operational Emissions	38.88	49.15	214.91	0.41	47.88	3.97
SCAQMD Regional Threshold	55	55	550	150	150	55
Significant?	NO	NO	NO	NO	NO	NO

a Includes emissions of landscape maintenance equipment and architectural coatings emissions

b Includes emissions of natural gas consumption

c Includes emissions of vehicle emissions and fugitive dust related to vehicular travel

Source: Urban Crossroads 2013a, Table 3-4.

5.3(c) 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)?

Finding: Less-than-Significant Impact with Mitigation Incorporated

(Sources: Tentative Tract Map No. 36391 Air Quality Impact Analysis (Urban Crossroads, 2013), Riverbend (TTM No. 36391) Supplemental Air Quality and Greenhouse Gas Assessment (Urban Crossroads, 2013))

The Project area is designated as an extreme non-attainment area for ozone and a non-attainment area for PM₁₀ and PM_{2.5}. Germane to this non-attainment status, the Project-specific evaluation of emissions presented in the preceding analysis under Issue 5.3(b) demonstrates that the Project with mitigation measures applied would not result in exceedances of any applicable thresholds which are designed to assist the region in attaining the applicable state and national ambient air quality standards. The Project would comply with the mandatory requirements of SCAQMD's Rule 403 (fugitive dust control) during construction, as well as all other adopted AQMP emissions control measures. The Project also is required to comply with California Code of Regulations Title 13, Division 3, and specifically its Chapter 1, Article 4.5, Section 2025, "Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and Other Criteria Pollutants, from In-Use Heavy-Duty Diesel-Fueled Vehicles" and its Chapter 10, Article 1, Section 2485, "Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling." Per SCAQMD rules and mandates, and California Code of Regulation requirements, as well as the CEQA requirement that significant impacts be mitigated to the extent feasible, these same requirements are imposed on all projects in the SCAB.

In determining whether or not the Project would 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), the non-attainment pollutants of concern for this impact are ozone, PM₁₀ and PM_{2.5}. In developing the thresholds of significance for air pollutants disclosed above under Issue 5.3(b), SCAQMD considered the emission levels for which a project's individual emissions would be cumulatively considerable. If a project exceeds the identified significance thresholds, its emissions would be cumulatively considerable, resulting in significant adverse air quality impacts to the region's existing air quality conditions. Refer to the response to Issue 5.3(b), above. The analyses, conclusions, and mitigation measures are identical. The Project's cumulative impact would be less than significant with Mitigation Measures AQ-1, AQ-2, and AQ-4 applied.

Mitigation

Mitigation Measures AQ-1, AQ-2, AQ-4, and AQ-5 shall apply.

5.3(d) Expose sensitive receptors to substantial pollutant concentrations?

Finding: Less-than-Significant Impact with Mitigation Incorporated

(Sources: Tentative Tract Map No. 36391 Air Quality Impact Analysis (Urban Crossroads, 2013), Tentative Tract Map No. 36391 Mobile Source Air Toxic Health Risk Assessment (Urban Crossroads, 2013), South Coast Air Quality Management District, Multiple Air Toxics Exposure Study in the South Coast Air Basin (MATES III), South Coast Air Quality Management District "MATES III Carcinogenic Risk Interactive Map")

The following provides an analysis of the Project's potential to expose sensitive receptors in the immediate vicinity of the Project site to substantial pollutant concentrations during Project construction and long-term operation, including existing residences and the Louis VanderMolen Fundamental Elementary School located immediately north of the subject property on the north side of 68th Street. The analysis is based on the applicable localized significance thresholds established by the State of California and SCAQMD. This analysis assumes the Project would comply with applicable regional air quality requirements, including: SCAQMD Rule 403, "Fugitive Dust;" SCAQMD Rule 431.2, "Sulfur Content of Liquid Fuels;" SCAQMD Rule 1113, "Architectural Coatings;" SCAQMD Rule 1186, "PM10 Emissions from Paved and Unpaved Roads, and Livestock Operations;" and SCAQMD Rule 1186.1, "Less-Polluting Street Sweepers."

□ Impact Analysis for Construction-Related Localized Emissions

Sensitive receptors in the immediate vicinity of the Project site, including but not limited to the residences and elementary school located north of and adjacent to 68th Street as described above, would be exposed to localized emissions during Project construction. Table 5-13, *Summary of Construction Localized Emissions (Pounds per Day)*, presents the estimated localized emissions concentrations associated with construction activities on the Project site. Table 5-13 excludes diesel truck emissions associated with proposed soil import activities that would occur during Project construction. Emissions associated with soil import activities are classified by SCAQMD as a "mobile source" (i.e., off-site) and are excluded from the quantification of on-site localized emissions per SCAQMD methodology. Emissions associated with proposed soil import activities were disclosed above under the response to Issue 5.3(b). As shown, localized emissions of NO_x and CO would not exceed SCAQMD significance thresholds for 24-hour concentrations; thus, impacts

Table 5-13 Summary of Construction Localized Emissions (Pounds per Day)

Activity	NO _x	CO	PM ₁₀	PM _{2.5}
2014	50.69	29.13	20.51	12.37
2015	98.35	59.49	31.27	17.77
2016	95.07	58.19	31.07	17.57
2017	18.34	18.47	1.53	1.10
2018	18.52	18.77	1.08	1.08
2019	16.85	18.64	0.93	0.93
Maximum Daily Emissions	98.35	59.49	31.27	17.77
SCAQMD Localized Threshold	237	1,346	11	7
Significant?	NO	NO	YES	YES

Source: Urban Crossroads 2013a, Table 3-5.

would be less than significant. Emissions of PM₁₀ and PM_{2.5} are calculated to exceed SCAQMD localized thresholds for 24-hour concentrations of particulate matter during Project-related construction activities. Accordingly, construction of the Project has the potential to expose nearby sensitive receptors to substantial concentrations of PM₁₀ and PM_{2.5}, which is a significant impact and mitigation is required.

Table 5-14, *Summary of Construction Localized Emissions – With Mitigation (Pounds per Day)*, summarizes the Project's construction-related localized emissions following implementation of Mitigation Measures AQ-1, AQ-2, and AQ-4. Implementation of Mitigation Measure AQ-6 was assumed for both the with- and without-mitigation scenarios. Implementation of these mitigation measures would reduce localized PM₁₀ and PM_{2.5} concentrations below SCAQMD significance thresholds. Accordingly, with the implementation of identified mitigation, impacts to sensitive receptors associated with the Project's construction-related localized emissions would be reduced to below a level of significance.

Mitigation

Mitigation Measure AQ-6: Prior to grading permit issuance, the City shall verify that the following note is included on the grading plan. Project contractors shall be required to ensure compliance with the note and permit periodic inspection of the construction site by City of Jurupa Valley staff or its designee to confirm compliance. The note also shall be specified in bid documents issued to prospective construction contractors.

- a. The construction contractor shall ensure that mass grading activities be limited to no more than 4.0 acres of active ground disturbance per day. The construction contractor shall maintain a written log or map of daily mass grading activities, which shall be available for City of Jurupa Valley inspection upon request.

In addition, Mitigation Measures AQ-1, AQ-2, AQ-4, and AQ-5 shall apply.

**Table 5-14 Summary of Construction Localized Emissions – With Mitigation
(Pounds per Day)**

Activity	NO _x	CO	PM ₁₀	PM _{2.5}
2014	25.55	26.92	6.95	3.94
2015	59.21	64.87	10.50	5.51
2016	59.21	64.87	10.50	5.51
2017	16.87	20.76	0.33	0.33
2018	16.81	20.74	0.31	0.31
2019	16.75	20.68	0.30	0.30
Maximum Daily Emissions	59.21	64.87	10.50	5.51
SCAQMD Localized Threshold	237	1,346	11	7
Significant?	NO	NO	NO	NO

Source: Urban Crossroads 2013a, Table 3-6.

□ Impact Analysis for Operational Localized Emissions

Criteria Pollutant Emissions

Substantial localized emissions are typically associated with the operation of land uses that include stationary emissions sources (e.g., refineries, industrial plants, etc.) or would attract/generate diesel trucks that may spend long periods of time queuing or idling at the Project site (e.g., warehouses, transfer facilities, etc.). The proposed Project consists of a master-planned residential community with supporting recreation and open space land uses. The land uses proposed for the Project site are not regarded as a substantial source of emissions and would not attract or generate substantial diesel truck traffic during long-term operation. Accordingly, a detailed analysis of long-term localized significance threshold analysis is not required. Long-term operation of the Project as a master-planned residential community would not expose sensitive receptors in the vicinity of the Project site to substantial pollutant concentrations. Impacts would be less than significant and mitigation is not required.

Toxic Air Pollutant Emissions

SCAQMD documented existing baseline and projected basin-wide effects of toxic air contaminants in their study, titled the “Multiple Air Toxics Exposure Study in the South Coast Air Basin, MATES-III.” This study shows that Project site has an ambient cancer risk ranging from 576 to 716 persons per million (MATES-III Carcinogenic Interactive Map), which is below the average concentrations at the SCAQMD’s fixed monitoring sites, which is about 1,200 per million (MATES –III Final Report, p. ES-2). Residents on the Project site would be exposed to carcinogenic risks from air quality, as are all other residents in the South Coast Air Basin. On the Project site, risks would be highest in the western portion of the property, where new residences would be constructed within 500 feet of I-15, and lower in the eastern portion of the site, farthest from I-15. This information is presented for disclosure purposes and is not an effect caused by the proposed Project. As described above, the Project would not generate substantial stationary source emissions and would not attract or generate substantial diesel truck traffic. Accordingly, long-term operation of the Project would not emit substantial concentrations of toxic air pollutants and would not measurably or substantially increase ambient carcinogenic risk in the Project area above existing conditions.

Although CEQA requires an analysis of a project’s impact on the environment and not an analysis of the environment’s impact on a project, for full disclosure purposes the City of Jurupa Valley required an analysis of localized air quality effects on the Project site associated with the property’s

location, including air emissions associated with vehicular travel on the adjacent I-15 freeway (refer to Appendix A3).

Criteria Pollutant Emissions

The SCAQMD's significance thresholds for operational localized criteria pollutant emissions are summarized in Table 5-15, *SCAQMD Localized Air Quality Significance Thresholds*. A significant impact would occur if a project exposed sensitive receptors to localized criteria pollutant emissions in excess of these thresholds.

Table 5-15 SCAQMD Localized Air Quality Significance Thresholds

Pollutant	Averaging Time	Pollutant Concentration
Particulates (PM ₁₀) Particulates (PM _{2.5})	24-Hours	2.5 µg/m ³ (operation)
Particulates (PM ₁₀)	Annual	1.0 µg/m ³
Carbon Monoxide (CO)	1/8-Hours	SCAQMD is in attainment; impacts are significant if they cause or contribute to an exceedance of the following attainment standards 20 ppm (1-hour) and 9 ppm (8-hour).
Nitrogen Dioxide (NO ₂)	1-Hour	SCAQMD is in attainment; impacts are significant if they cause or contribute to an exceedance of the following attainment standard 0.18 ppm.

Abbreviations: ppm: parts per million; µg/m³: micrograms per cubic meter

Source: *Urban Crossroads 2013d, Table 5-3*

The analysis contained in Appendix A3 concludes that residents on-site would not be exposed to localized criteria pollutants in excess of SCAQMD's significance thresholds during long-term operation. The maximum exposed residential receptor on-site, located adjacent to I-15, would be exposed to localized PM₁₀ concentrations of 0.67µg/m³ (24-hour) and 0.41 µg/m³ (Annual), PM_{2.5} concentrations of 0.26 µg/m³, CO concentrations of 3.14 ppm (1-hour) and 2.8 ppm (8-hour), and NO₂ concentrations of 0.1282 ppm (1-hour). All of these localized pollutant concentrations are below the applicable SCAQMD significance threshold. Accordingly, under long-term operating conditions, the proposed Project would not expose any sensitive receptors to substantial pollutant concentrations. Impacts would be less than significant.

In the absence of the Project's special construction features, however (refer to Subsection 4.3.1B.1 on Page II-23, which describes the proposed installation of an air filtration system for each home), the maximum exposed residential receptor on-site would be exposed to localized PM₁₀ concentrations of 6.69824 µg/m³ (24-hour) and 4.129 µg/m³ (Annual), PM_{2.5} concentrations of 2.59265 µg/m³, CO concentrations of 3.14 ppm (1-hour) and 2.8 ppm (8-hour), and NO₂ concentrations of 0.1282ppm (1-hour), which are above significance thresholds. If the air filtration system was not proposed, impacts would be significant. Therefore, to ensure that Project residents are not exposed to localized criteria pollutant concentrations above threshold levels, the air filtration system is required pursuant to Mitigation Measure AQ-7, below.

Carcinogenic Chemical Risk

Carcinogenic compounds are not considered to have threshold levels (i.e., dose levels below which there are no risks). Any exposure has some associated risk. As a result, the State of California has established a threshold of one in one hundred thousand (or ten in one million) as a level posing no significant risk for exposures to carcinogens regulated under the Safe Drinking Water and Toxic Enforcement Act (Proposition 65). In their *CEQA Air Quality Handbook*, SCAQMD established a similar threshold (ten in one million) for direct and cumulative health risks associated with toxic air contaminants (TACs). Therefore, for purposes of analysis in this IS/MND, the Project's exposure of sensitive receptors to a carcinogenic health risk of greater than ten in one million would be considered significant.

Based on a *Mobile Source Air Toxic Health Risk Assessment* prepared for the Project (refer to Appendix A3), the maximum exposed residential receptor on-site and located adjacent to the I-15 freeway would be exposed to a carcinogenic risk of 5.32 in one million under a 30-year exposure scenario and 1.60 in one million under a nine (9) year exposure scenario. Thirty- (30) year and nine- (9) year exposure durations were calculated based on the U.S. Environmental Protection Agency's "Exposure Factors Handbook" (EPA, 2007, Table 15-176). Both exposure values are below the significance threshold for carcinogenic risk of 10 in one million. Therefore, long-term operation of the Project would not expose any on-site sensitive receptors to a substantial carcinogenic chemical risk. Impacts would be less than significant.

In the absence of the Project's special construction features, however (refer to Subsection 4.3.1B.1 on Page II-22, which describes the proposed installation of an air filtration system for each home), the maximum exposed residential receptor on-site located adjacent to the I-15 freeway would be exposed to a carcinogenic cancer risk of 14.3 in one million under a 30-year exposure scenario and 4.28 in one million under a nine (9) year exposure scenario. If the air filtration system was not proposed, impacts would be significant. Therefore, to ensure that Project residents are not exposed to carcinogenic concentrations above threshold levels, the air filtration system is required pursuant to Mitigation Measure AQ-7, below.

Non-Carcinogenic Chemical Risk

A non-carcinogenic chemical risk assessment was conducted to evaluate the potential for on-site receptors to be exposed to toxic contaminants that could result in adverse, non-carcinogenic health effects. A non-carcinogenic chemical risk greater than one in one million represents a significant effect.

Based on a *Mobile Source Air Toxic Health Risk Assessment* prepared for the Project (refer to Appendix A3), the maximum exposed residential receptor on-site would be exposed to a chronic non-carcinogenic risk less than one in one million under both the nine (9) and 30-year exposure volumes. As such, long-term operation of the Project would expose on-site residents to less-than-significant chronic non-carcinogenic chemical health risks. In addition, acute non-carcinogenic risks would not exceed unity and would also be less than significant during long-term operation of the Project. In the absence of the Project's special construction features (refer to Subsection 4.3.1B.1 on Page II-22, which describes the proposed installation of an air filtration system for each home), the maximum exposed residential receptor also would be exposed to risks less than one in one million resulting in a less than significant impact.

CO Hot Spot Analysis

CO Hot Spots are typically associated with idling vehicles at extremely busy intersections (i.e., intersections with an excess of 100,000 vehicle trips per day) in areas with unusual meteorological and topographical conditions (Urban Crossroads 2012a, 29-31). At Project buildout, the busiest intersections in the Project vicinity would attract approximately 66,900 vehicle trips per day (i.e., Limonite Avenue between I-15 and Pats Ranch Road), which is well below the 100,000 vehicle per day threshold typically associated with CO Hot Spots. In addition, there are no unique topographical or meteorological conditions in the Project vicinity that could contribute to the formation of a CO Hot Spot. Furthermore, the SCAB has been designated as an attainment area for CO since 2007. Therefore, Project-related vehicular emissions would not create a Hot Spot and would not substantially contribute to an existing or projected CO Hot Spot. Impacts would be less than significant and mitigation is not required.

Mitigation

Although the Project's residents would be exposed to less-than-significant localized air pollutant concentrations, the calculated exposure level is due in part to the proposed installation of an air filtration system in the residential homes. Therefore, the following mitigation measure is required to ensure that this feature is installed.

Mitigation Measure AQ-7: Prior to every residential building permit final inspection, the City shall verify that an operating air filtration system has been installed in each new residence. The air filtration system shall have a documented efficiency level equal to or exceeding Minimum Efficiency Reporting Value (MERV) 13 (or equivalent), as defined by the American Society of Heating, Refrigerating and Air Conditioning Engineers Standard 52.2.

To further reduce localized air pollutant concentrations, the following measures also are recommended:

Mitigation Measure AQ-8: The following note shall be specified in the project's CC&Rs and an operation and maintenance manual for the air filtration system shall be required to be included in all sales agreements notifying buyers of real property of their responsibility to operate and maintain the system. A copy of the CC&Rs shall be provided to City of Jurupa Valley staff or its designee to ensure that the provision is included. The project's homeowners' association shall enforce the CC&Rs.

- a. An air filtration system has been installed in each residential home that achieves a documented efficiency level equal to or exceeding Minimum Efficiency Reporting Value (MERV) 13 (or equivalent), as defined by the American Society of Heating, Refrigerating and Air Conditioning Engineers Standard 52.2. Operation and maintenance of the air filtration system is required to reduce interior air pollutant levels to within South Coast Air Quality Management District standards.

Mitigation Measure AQ-9: Prior to building permit final inspection for any residential lots abutting I-15 (Lots 18-28, 38, 39, 49, 50, 58-68), the City shall verify that coniferous evergreen trees, such as Afghan and Aleppo pine trees (or equivalent), have been planted along the interface between Interstate 15 and residential areas along the western Project boundary. The trees shall be positioned in a naturally appearing pattern and be no further than 30 feet apart on-center and a minimum size of 36-inch box at initial planting, to

provide overlapping canopy coverage at maturity to maximize the filtration of airborne particulate matter. Tree planting may be phased concurrent with development adjacent to I-15.

5.3(e) Create objectionable odors affecting a substantial number of people?

Finding: Less-than-Significant Impact

(Source: Tentative Tract Map No. 36391 Air Quality Impact Analysis (Urban Crossroads, 2013), Project Application Materials)

Proposed construction activities at the Project site could produce odors from equipment exhaust, application of asphalt, and/or the application of architectural coatings. However, any odors emitted during construction would be temporary, short-term, and intermittent in nature, and would cease upon completion of construction activities. Furthermore, standard construction practices would minimize odor emissions and their associated impacts and construction activities would be required to comply with SCAQMD Rule 402, which prohibits the discharge of odorous emissions that would create a public nuisance. Accordingly, the Project is not anticipated to create objectionable odors during construction activities, and short-term impacts would be less than significant.

During long-term operation, the proposed Project would include residential, recreation, and open space land uses, which are not typically associated with objectionable odors. The temporary storage of refuse and the placement of refuse containers on the streets for collection in the residential neighborhood could be a source of odor; however, Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with the City's solid waste regulations, thereby precluding any potential impact. In addition, the proposed Project would be required to comply with SCAQMD Rule 402, which prohibits the discharge of odorous emissions that would create a public nuisance, during long-term operation. As such, long-term operation of the Project would not create objectionable odors and impacts would be less than significant.

It is important to note that the Project site is occupied by an agricultural operation under existing conditions and was occupied by a cattle farm and two dairy farms for approximately 75 years. These land uses are commonly associated with nuisance odors. With implementation of the Project, agricultural activities on the Project site would cease and their associated odors would be eliminated. Accordingly, the Project is anticipated to reduce the concentration of objectionable odors as compared to existing conditions.

Mitigation

Although Project-related odor impacts would be less than significant, the following mitigation measure is recommended to ensure compliance with SCAQMD Rule 402.

Mitigation Measure AQ-10: The Project is required to comply with the provisions of South Coast Air Quality Management District Rule 402 "Nuisance." Adherence to Rule 402 reduces the release of odorous emissions into the atmosphere. Prior to grading and building permit issuance, the City shall verify that the following note is included on the grading and building plans. Project contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by City of Jurupa Valley staff or its designee to confirm compliance. The note shall be specified in bid documents issued to prospective construction contractors and shall also be specified in the project's CC&Rs.

- a. There shall be no discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.

5.4 BIOLOGICAL RESOURCES

<i>Would the project:</i>	Potentially Significant Impact	Less Than Significant Impact With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?		✓		
b. Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?				✓
c. Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?				✓
d. Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?			✓	
e. Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?				✓
f. Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?		✓		

Impact Analysis

5.4(a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Finding: Less-than-Significant Impact with Mitigation Incorporated

(Source: Western Riverside County MSHCP, Biological Technical Report for the Riverbend Project (Glenn Lukos Associates, 2013), HANS Application and MSHCP Consistency Analysis for the Riverbend Project (Glenn Lukos Associates, 2013))

Biologists/Regulatory Specialists from Glenn Lukos Associates (GLA) conducted literature research and site-specific biological resource surveys at the Project site from May to November 2011. The information below is based on the survey results documented in the Biological Technical Report attached as Appendix B. Refer to Appendix B for a description of the study methods employed by GLA regarding the general and focused biological resource surveys conducted on the property. Individual plant and animal species evaluated in Appendix B are based on one or more of the following criteria: a) listing through the Federal and/or State Endangered Species Act (ESA); b) occurrence in the California Native Plant Society (CNPS) Rare Plant Inventory (List 1B, 2, 3, or 4); and/or c) evaluation and coverage under the Western Riverside County MSHCP. Animals were considered “special-status” based on one or more of the following criteria: a) listing through the Federal and/or State ESA; b) designation as a Federal Species of Concern; c) designation by the State as a California Species of Special Concern (SSC) or California Fully-Protected Species (CFP); and/or d) evaluation and coverage under the MSHCP.

☐ **Special-Status Plants**

During general biological surveys, six (6) distinct vegetation/land use types were mapped for the Project site, including: 1) Dairy and Livestock Feedyards, 2) Disturbed/Developed, 3) Field Croplands, 4) Non-Native Grassland, 4) Residential/Urban/Exotic, and 6) Willow Riparian Forest. The California Natural Diversity Database (CNDDB) and MSHCP were then consulted by GLA to determine known occurrences of special status plants in the region. Other sources used to develop a list of target species for the survey program included the CNPS Online Inventory (CNPS 2010). Based on this information, a list of special-status plant species and habitats that could occur within the Project site were developed and incorporated into a mapping and survey program for the property. Habitat assessments for rare plants were conducted by GLA on July 26, 2011. Refer to Table 4-2 in Appendix B for a list of special-status plants evaluated for the Project site.

No special-status plants were observed on the Project site during field surveys conducted by GLA, and no special-status plants are expected to occur within the Project’s impact area due to the lack of suitable habitat/soils and the level of disturbance at the Project site. Accordingly, implementation of the Project would not impact any special-status plants. No impact would occur.

☐ **Special-Status Animals**

In addition to general biological surveys, GLA conducted habitat assessments and focused surveys for special-status animals including species designated by Sections 6.1.2 and 6.3.2 of the MSHCP. Focused surveys were conducted for burrowing owl (*Athene cunicularia*), least Bell’s vireo (*Vireo bellii pusillus*), southwestern willow flycatcher (*Empidonax traillii extimus*), and western yellow-billed cuckoo (*Coccyzus americanus occidentalis*). None of these species were detected except for the least Bell’s vireo as described below. Refer to Table 2-1 in Appendix B for a list of the focused field survey dates and Table 4-3 in Appendix B for a list of all of the special-status animals evaluated for the Project site.

Five special-status animals were detected within the Project site’s proposed area of impact, including the Cooper’s hawk (*Accipiter cooperii*), least Bell’s vireo, yellow-breasted chat (*Icteria virens*), yellow warbler (*Setophaga petechia*), and loggerhead shrike (*Lanius ludovicianus*). Refer to Table 4-3 in Appendix B for a list of special status animals that have the potential to occur on the site but were not observed.

The Cooper’s hawk does not have a federal or state designation, however this species is considered locally rare when nesting. The Cooper’s hawk was detected foraging on the site within portions of

the Santa Ana River, but was not observed nesting. There are no suitable areas for this species to nest in the Project's proposed impact footprint, so no impacts associated with nesting would occur. The loss of foraging habitat in the northern portion of the Project site that would occur from converting that portion of the property from agricultural lands to a residential community is considered a less-than-significant impact because compliance with and implementation of the MSHCP would ensure the maintenance of adequate foraging habitat region-wide.

Least Bell's vireo is designated as a federally and state endangered species and a portion of the Santa Ana River within the Project site is designated as Critical Habitat for the least Bell's vireo by the USFWS. Four least Bell's vireo pairs and two single unmated males were detected during field surveys within on-site portions of the Santa Ana River, and one unmated male was detected off site but immediately adjacent to the property boundary. The proposed Project would avoid direct disturbance to all riparian habitat occupied by the least Bell's vireo. Additionally, in accordance with MSHCP Species Conservation Objective 3 for the least Bell's vireo, the Project is designed to provide a minimum 100 meters of undeveloped landscape in the proposed borrow area/open space (Lot 470) adjacent to the species' conserved habitat. Therefore, no direct impact to the species would occur. (Refer to the response for Issue 5.4(f), below, for a description of the Project's potential indirect impacts to sensitive biological resources.)

The loggerhead shrike, yellow-breasted chat, and yellow warbler are designated as CDFW California Species of Special Concern when nesting. The loggerhead shrike was detected on the site on one occasion during biological surveys, while the yellow-breasted chat and yellow warbler were detected within the site's willow riparian areas associated with the Santa Ana River. The proposed Project would avoid direct disturbance to all riparian habitat, so impacts to these riparian nesting birds would not occur and mitigation is not required. (Refer to the response for Issue 5.4(f), below, for a description of the Project's potential indirect impacts to sensitive biological resources.)

Additionally, the riparian/riverine habitat in the southern portion of the property outside of the proposed Project's impact footprint has the potential to support other sensitive fish, reptile, and bird species associated with riparian/riverine habitat. However, because the Project would preserve all on-site riparian habitat and portions of the Santa Ana River as natural open space, potential direct impacts to special-status species that may occupy the on-site riparian/riverine habitat would not occur. In addition, the Project is designed to provide a minimum 100-meter buffer between proposed residential uses and on-site riparian/riverine habitat consistent with the Western Riverside County MSHCP recommendations to avoid potential impacts to habitat areas for special-status species in the riparian/riverine area during long-term operation. As such, implementation of the Project would result in less-than-significant direct impacts to special-status species associated with riparian/riverine habitat. (Refer to the response for Issue 5.4(f), below, for a description of the Project's potential indirect impacts to sensitive biological resources.)

Although no nesting migratory birds or burrowing owls were observed on the Project site during field surveys, there is the potential that these species could occupy the Project site prior to the commencement of grading activities. As such, there is a potential that the proposed Project could result in direct and/or indirect impacts to nesting migratory birds and the burrowing owl during construction of the proposed Project. This is a potentially significant impact and mitigation is required.

Implementation of Mitigation Measures BI-1 and BI-2, below, would ensure that pre-construction surveys are conducted for the burrowing owl and nesting migratory birds to determine the presence or absence prior to Project-related grading activities. If present, the mitigation requires

avoidance of migratory bird nests during the breeding season and avoidance and/or relocation of burrowing owls in conformance with the Western Riverside MSHCP objectives for the species. With implementation of the mitigation measures, direct and indirect impacts would be reduced to below levels of significance.

Mitigation

Mitigation Measure BI-1: Within 30 days prior to grading, a qualified biologist shall conduct a survey of the Project's proposed impact footprint and make a determination regarding the presence or absence of the burrowing owl. The determination shall be documented in a report and shall be submitted, reviewed, and accepted by the City of Jurupa Valley Planning Department prior to the issuance of a grading permit and subject to the following provisions:

- a. In the event that the pre-construction survey identifies no burrowing owls in the impact area, a grading permit may be issued without restriction.
- b. In the event that the pre-construction survey identifies the presence of at least one individual but less than three (3) mating pairs of burrowing owl, then prior to the issuance of a grading permit and prior to the commencement of ground-disturbing activities on the property, the qualified biologist shall passively or actively relocate any burrowing owls. Passive relocation, including the required use of one-way doors to exclude owls from the site and the collapsing of burrows, will occur if the biologist determines that the proximity and availability of alternate habitat is suitable for successful passive relocation. Passive relocation shall follow CDFW relocation protocol and shall only occur between September 15 and February 1. If proximate alternate habitat is not present as determined by the biologist, active relocation shall follow CDFW relocation protocol. The biologist shall confirm in writing that the species has fledged the site or been relocated prior to the issuance of a grading permit.
- c. In the event that the pre-construction survey identifies the presence of three (3) or more mating pairs of burrowing owl, the requirements of MSCHP Species-Specific Conservation Objectives 5 for the burrowing owl shall be followed. Objective 5 states that if the site (including adjacent areas) supports three (3) or more pairs of burrowing owls and supports greater than 35 acres of suitable Habitat, at least 90 percent of the area with long-term conservation value and burrowing owl pairs will be conserved onsite until it is demonstrated that MSHCP Species-Specific Conservation Objectives 1-4 have been met. Objectives 1-4 are listed in the MSHCP, Volume I, Appendix E. A grading permit shall only be issued, either:
 - i. upon approval and implementation of a property-specific Determination of Biologically Superior Preservation (DBESP) report for the western burrowing owl by the CDFW; or
 - ii. a determination by the biologist that the site is part of an area supporting less than 35 acres of suitable Habitat, and upon passive or active relocation of the species following accepted CDFW protocols.

Mitigation Measure BI-2: As a condition of approval for all grading permits, vegetation clearing and ground disturbance shall be prohibited during the migratory bird nesting

season (February 1 through September 15), unless a migratory bird nesting survey is completed in accordance with the following requirements:

- a. A migratory nesting bird survey of the Project's impact footprint shall be conducted by a qualified biologist within three (3) days prior to initiating vegetation clearing or ground disturbance.
- b. A copy of the migratory nesting bird survey results report shall be provided to the City of Jurupa Planning Department. If the survey identifies the presence of active nests, then the qualified biologist shall provide the Planning Department with a copy of maps showing the location of all nests and an appropriate buffer zone around each nest sufficient to protect the nest from direct and indirect impact. The size and location of all buffer zones, if required, shall be subject to review and approval by the Planning Department and shall be no less than a 200-foot radius around the nest for non-raptors and a 500-foot radius around the nest for raptors. The nests and buffer zones shall be field checked weekly by a qualified biological monitor. The approved buffer zone shall be marked in the field with construction fencing, within which no vegetation clearing or ground disturbance shall commence until the qualified biologist and Planning Department verify that the nests are no longer occupied and the juvenile birds can survive independently from the nests.

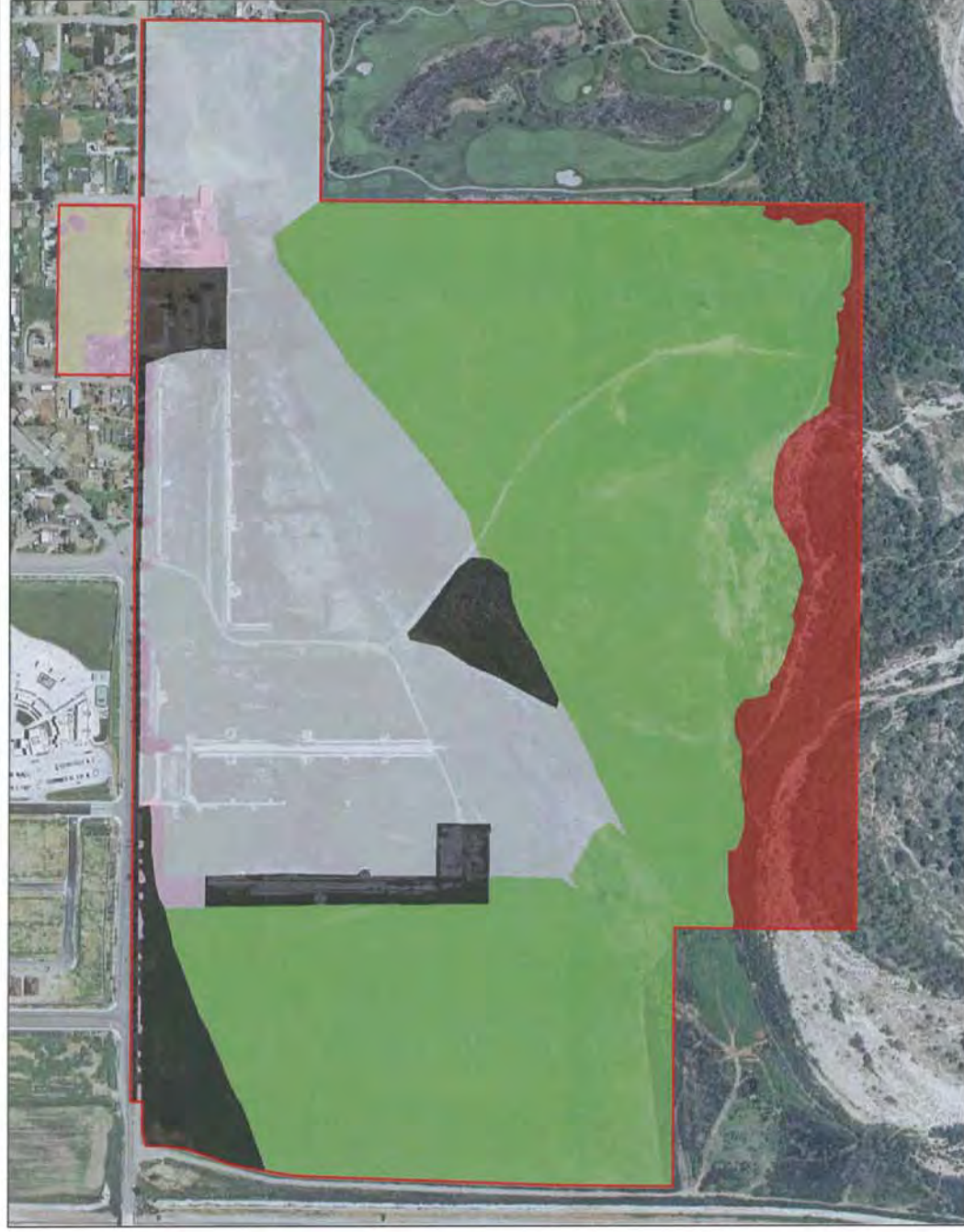
5.4(b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?

Finding: No Impact

(Sources: Western Riverside County MSHCP; Biological Technical Report for the Riverbend Project (Glenn Lukos Associates, 2013), HANS Application and MSHCP Consistency Analysis for the Riverbend Project (Glenn Lukos Associates, 2013), Supplemental MSHCP Consistency Analysis for the Riverbend Project (Glenn Lukos Associates, 2013))

During general biological surveys, six (6) distinct vegetation/land use types were mapped for the Project site, including: 1) Dairy and Livestock Feedyards, 2) Disturbed/Developed, 3) Field Croplands, 4) Non-Native Grassland, 4) Residential/Urban/Exotic, and 6) Willow Riparian Forest in the acreage amounts shown below in Table 5-16 and illustrated on Figure 5-1, *Existing Vegetation Map*. The only sensitive community present on the property is Willow Riparian Forest, comprising 16.71 acres in the southernmost portion of the site that would be conserved as natural open space.

The Willow Riparian Forest portion of the Project site contains a single major drainage (Santa Ana River), which includes three intermittent braids of the river and an inundated wetland area. The Project site does not contain any vernal pools. The on-site portion of the Santa Ana River includes areas under the jurisdiction of the U.S. Army Corps of Engineers (Corps), Regional Water Quality Control Board (RWQCB), and California Department of Fish and Wildlife (CDFW). The Project proposes to conserve all riparian/riverine areas, including all areas under the jurisdiction of the Corps, RWQCB, and CDFW, as natural open space. No impact to riparian habitat would occur.



Source: Google Earth, Esri, DeLorme, GeoEye, Inc. 2014-2015

Table 5-16 Vegetation Communities

Vegetation/Land Use Type	Existing Acreage	Impact Acreage
Dairy and Livestock Feedyards	66.08	66.07
Disturbed/Developed	16.30	16.30
Field Croplands	108.89	99.82
Non-Native Grassland	2.93	2.93
Residential/Urban/Exotic	4.40	4.40
Willow Riparian Forest	16.71	0.00
Total	215.31	189.52

The remaining portions of the Project site include low-quality, non-natural habitats that have been disturbed by past and on-going agricultural activities on the subject property. Accordingly, the Project would not impact any sensitive natural community. No impact would occur and mitigation is not required.

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

Finding: No Impact

(Sources: Biological Technical Report for the Riverbend Project (Glenn Lukos Associates, 2013), HANS Application and MSHCP Consistency Analysis for the Riverbend Project (Glenn Lukos Associates, 2013))

The Project site contains a single major drainage (the Santa Ana River), which includes three intermittent braids of the river, as well as an inundated wetland area. The Santa Ana River originates offsite in the east and flows in a westerly direction across the southern portion of the Project site for 2,613 linear feet before exiting the property at the western boundary. Refer to Appendix B (and its Appendix E) for a complete Jurisdictional Delineation Report.

Corps jurisdiction within the Project site totals 1.21 acres, of which 0.11-acre consists of jurisdictional wetlands and all of which is located outside of the Project impact footprint. Corps jurisdictional areas also are within RWQCB jurisdiction pursuant to Section 401 of the CWA. None of the waters at the Project site are non-federal waters that would require separate analysis under Section 13260 of the California Water Code. CDFW jurisdiction associated with the Project site totals 16.71 acres, which coincides with the Willow Riparian Forest vegetation community discussed above under Issue 5.4(b), which is vegetated riparian habitat. The Project proposes to conserve all riparian/riverine areas, including all areas under the jurisdiction of the Corps, RWQCB, and CDFW, as natural open space. No impact would occur and mitigation is not required.

5.4(d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

Finding: Less-than-Significant Impact

(Sources: Biological Technical Report for the Riverbend Project (Glenn Lukos Associates, 2013), HANS Application and MSHCP Consistency Analysis for the Riverbend Project (Glenn Lukos Associates, 2013),

Supplemental MSHCP Consistency Analysis for the Riverbend Project (Glenn Lukos Associates, 2013), County of Riverside, Western Riverside County MSHCP)

With implementation of the proposed Project, the northern portion of the Project site would be converted from an agricultural use to a master-planned residential community. The segment of the Santa Ana River that crosses the southern portion of the site would not be disturbed and would be preserved as 25.78 acres of natural open space. Additionally, another 41.92 acres on the site north of the river would be converted from agricultural lands to open space (graded borrow area/open space), configured to serve as an overflow area for the river during peak storm events. The open space nature of these areas would accommodate local east/west wildlife movement and may even improve movement of some species by removing active agricultural activities from the proposed borrow area/open space area. Conversion of the northern portion of the Project site from agricultural lands to a residential community would not significantly affect local wildlife movement, as such movement is already precluded by existing development to the north, a fenced golf course to the east, and I-15 to the west. Impacts to local wildlife movement would be less than significant and mitigation is not required.

The Project site is not located within or adjacent to areas identified by the Western Riverside County MSHCP as proposed or existing habitat linkages (including constrained linkages). Because the Western Riverside County MSHCP Reserve Area was designed to ensure the establishment and/or preservation of wildlife movement corridors, and because the Project site is not located in areas targeted for conservation for such purposes, Project implementation would not interfere substantially with the regional movement of any wildlife species. Additionally, there are no native wildlife nursery sites in close proximity to the proposed Project site. Accordingly, the Project would not result in any impacts to regional wildlife movement corridors or native wildlife nursery sites. Impacts would not occur and mitigation is not required.

5.4(e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

Finding: No Impact

(Sources: Biological Technical Report for the Riverbend Project (Glenn Lukos Associates, 2013), HANS Application and MSHCP Consistency Analysis for the Riverbend Project (Glenn Lukos Associates, 2013), Supplemental MSHCP Consistency Analysis for the Riverbend Project (Glenn Lukos Associates, 2013))

The City of Jurupa Valley, as a newly incorporated City, is in the process of developing a municipal code, and as of the writing of this Environmental Checklist/Initial Study had not adopted any ordinances or other policies protecting biological resources. The City has, however, adopted all County of Riverside ordinances and resolutions in effect as of July 1, 2011, to remain in full force and effect as City regulations. As such, the Project would be required to comply with the Riverside County Oak Tree Management Guidelines, which were adopted for the purpose of reducing impacts to oak woodland within the County. However, the Project site does not contain oak woodland or oak trees, so these Guidelines would not be applicable to the Project. There are no other ordinances in place protecting biological resources that are applicable to the Project or Project site. Therefore, no impact would occur and mitigation is not required.

5.4(f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

Finding: Less-than-Significant with Mitigation Incorporated

(Sources: Biological Technical Report for the Riverbend Project (Glenn Lukos Associates, 2013), HANS Application and MSHCP Consistency Analysis for the Riverbend Project (Glenn Lukos Associates, 2013), Supplemental MSHCP Consistency Analysis for the Riverbend Project (Glenn Lukos Associates, 2013), County of Riverside, RCA JPR Approval Letter, Western Riverside County MSHCP, Stephens' Kangaroo Rat HCP.)

The Project site is located within the boundaries of two habitat conservation plans (HCPs), "The Habitat Conservation Plan for the Stephens' Kangaroo Rat in Western Riverside County, California" and the "Western Riverside County Multiple Species Conservation Program (MSHCP)."

According to the biological field survey conducted for the Project site (refer to Appendix B), the proposed Project would not impact habitat for the Stephens' kangaroo rat (SKR) because the property does not contain suitable habitat. However, because the Project site is located within the SKR Fee Assessment Area as established by the SKR HCP, the Project is subject to mandatory payment of the per-acre local development mitigation fee pursuant to the City's Municipal Code. With mandatory fee payment, which will be made a condition of Project approval by the City of Jurupa Valley, impacts would be less than significant and mitigation is not required.

The following is an analysis of the proposed Project's compliance with the Western Riverside County MSHCP's Reserve Assembly Requirements, as well as other applicable MSHCP requirements. The Western Riverside County MSHCP, a regional HCP, was adopted on June 17, 2003, and an Implementing Agreement (IA) was executed between the USFWS, CDFW, and participating entities. The intent of the MSHCP is to preserve native vegetation and meet the habitat needs of multiple species, rather than focusing preservation efforts on one species at a time. As such, the MSHCP is intended to streamline review of individual projects with respect to the species and habitats addressed in the MSHCP, and to provide for an overall Conservation Area (also called MSHCP Reserve) that would be of greater benefit to biological resources than would result from a piecemeal regulatory approach. The MSHCP provides coverage (including take authorization for listed species) for special-status plant and animal species, as well as mitigation for impacts to sensitive species.

❑ Project Relation to Reserve Assembly

Approximately 39.9 acres of the Project site are located within MSHCP Criteria Cell 698 (Eastvale Area Plan, Subunit 1-Santa Ana River Central) and approximately 43.9 acres of the Project site are located within MSHCP Criteria Cell 699 (Jurupa Area Plan, Subunit 1-Santa Ana River North). Per the MSHCP, conservation within Cell 698 is planned for 35%-45% of the Cell, focusing in the southeastern portion of the Cell, and will include riparian scrub, woodland and forest and water habitats associated with Santa Ana River. Per the MSHCP, conservation of Cell 699 is planned for 25%-35% of the Cell, focusing in the northern portion of the Cell, and will include riparian scrub, woodland, forest and water habitat and agricultural land adjacent to the Santa Ana River. Refer to Figure 5-2, *MSHCP Criteria Cells*.



Figure 5-2

The proposed Project would avoid disturbance to approximately 25.78 acres of land that the Project Applicant would offer to convey to the Western Riverside County RCA for permanent conservation pursuant to the MSHCP. This would include approximately 16.71 acres of on-site willow riparian habitat associated with the Santa Ana River and approximately 9.07 acres of field croplands adjacent to the riparian habitat. The Project would avoid disturbance to habitats and locations targeted for conservation by the MSHCP Cell Criteria and would not conflict with the MSHCP Reserve Assembly policies. In compliance with the MSHCP Implementing Agreement, the City of Jurupa Valley submitted a Joint Project Review (JPR) application to the Western Riverside County RCA in March 2013, seeking their concurrence on MSHCP compliance. The Western Riverside County RCA issued an approval letter to the City of Jurupa Valley on April 3, 2013. After meeting with the USFWS and the CDFW (collectively the "Wildlife Agencies") in June 2013 and the preparation of supplemental documentation (refer to Appendix C2), the Western Riverside County RCA, Project Applicant, and the Wildlife Agencies have singularly concurred with the City's and Western Riverside County RCA's determination that the Project complies with the MSHCP.

❑ Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools

The Project site includes approximately 16.71 acres of MSHCP riparian/riverine areas associated with the Santa Ana River. The proposed Project would conserve all MSHCP riparian/riverine habitat located on-site as natural open space and would provide a minimum 100-meter buffer consisting of a borrow area/open space between proposed residential uses and on-site riparian/riverine habitat in order to preclude potential direct and indirect impacts with riparian/riverine habitat and associated species. The Project site does not contain vernal pools and does not contain suitable habitat for listed fairy shrimp; therefore, implementation of the Project would not impact vernal pools or listed fairy shrimp. Accordingly, the proposed Project would comply with *Volume 1, Section 6.1.2* of the MSHCP.

❑ Protection of Narrow Endemic Plants

Portions of the Project site are located within Narrow Endemic Plant Species Survey Area (NEPSSA) 7. As required by the MSHCP, a site-specific focused survey is required for all properties within a NEPSSA where appropriate soils and suitable habitat is present. The Project site does not contain suitable habitat or appropriate soils to support the target species within NEPSSA 7 (Brand's phacelia, San Diego ambrosia, and San Miguel Savory) and has been highly disturbed due to past and on-going agricultural activities on the subject property. Accordingly, none of the target species for NEPSSA 7 are expected to occur within the Project area and particularly within the Project site's impact footprint; thus, the Project would be consistent with *Volume 1, Section 6.1.3* of the MSHCP.

❑ Guidelines Pertaining to the Urban/Wildland Interface

The *MSHCP Urban/Wildland Interface Guidelines* are intended to address indirect effects ("edge effects") associated with locating development in proximity to the MSHCP Conservation Area. Edge effects are identified in the MSHCP as: Drainage; Toxics; Lighting; Noise; Invasive Species; Barriers; and Grading/Land Development. As described above, the southern portion of the Project site would be conveyed to the Riverside County RCA for permanent conservation as part of the MSHCP Reserve. Additionally, a minimum 100-meter buffer between the Project's proposed residential land uses and the Conservation Area would be provided by the project as a borrow area/open space area, which would preclude potential long-term edge effects.

Drainage: *Volume 1, Section 6.1.4 (Drainage)* states that proposed developments in proximity to the MSHCP Conservation Area shall incorporate measures, including measures required through the

National Pollutant Discharge Elimination System (NPDES) requirements, to ensure that the quantity and quality of runoff discharged to the MSHCP Conservation Area is not altered in an adverse way when compared with existing conditions. To meet NPDES requirements, the Project's storm drain system would route first flush flows to an infiltration basin (within Lot 468) prior to discharge to the borrow area/open space area and ultimately to the natural river basin. The infiltration basin is designed to treat all of the first flush volumes from the residential portions of the Project. Refer to the Project's Water Quality Management Plan (WQMP) in Appendix N1 for more information about post-development water quality best practices that would be implemented. Accordingly, the Project would be consistent with *Volume I, Section 6.1.4* as it pertains to drainage.

Toxics: *MSHCP Volume I, Section 6.1.4 (Toxics)* states that land uses proposed in proximity to the MSHCP Conservation Area that use chemicals or generate bio-products such as manure that are potentially toxic or may adversely affect wildlife species, habitat or water quality shall incorporate measures to ensure that application of such chemicals does not result in discharge to the MSHCP. A WQMP would be implemented by the Project to ensure that such discharge does not occur. Refer to the Project's WQMP in Appendix N1 for more information. Accordingly, the Project would be consistent with *Volume I, Section 6.1.4* as it pertains to toxics.

Lighting: *MSHCP Volume I, Section 6.1.4 (Lighting)* states that night lighting shall be directed away from the MSHCP Conservation Area. A detailed analysis of the Project's potential lighting impacts was previously presented in the discussion of *Aesthetics* impacts (refer to the response to Issue 5.1(d), see Page II-48). As concluded in that analysis, with implementation of Mitigation Measures AE-1, AE-2, and AE-3, the Project's potential impact associated with off-site light trespass would be reduced to below a level of significance. Accordingly, with adherence to Mitigation Measures AE-1, AE-2, and AE-3, the Project would be consistent with *Volume I, Section 6.1.4* as it pertains to lighting.

Noise: *MSHCP Volume I, Section 6.1.4 (Noise)* states that proposed noise generating land uses affecting the MSHCP Conservation Area shall incorporate setbacks, berms or walls to minimize the effects of noise on MSHCP Conservation Area resources and that for planning purposes, wildlife within the MSHCP Conservation Area should not be subject to noise that would exceed residential noise standards. As described previously, the Project's residential land uses would be set back a minimum of 100 meters (300 feet) from the edge of the riparian habitat and noise associated with the residential community would have no potential to exceed residential noise standards and adversely affect wildlife in the MSHCP Preserve. During Project construction, soil is proposed to be removed from the borrow area/open space lot (Lot 470) and a slope is proposed to be created around the borrow area/open space lot adjacent to the MSHCP Preserve. Temporary noise from the construction activity has the potential to exceed residential noise standards and have indirect, adverse effects on wildlife in the MSHCP Preserve. This is a significant impact and mitigation is required. With the implementation of Mitigation Measure BI-3, below, the impact would be reduced to below a level of significance and the Project would be consistent with *Volume I, Section 6.1.4* as it pertains to noise.

Invasives: *MSHCP Volume I, Section 6.1.4 (Invasives)* states that Permittees approving landscape plans for development adjacent to the MSHCP Conservation Area, shall not permit the invasive, non-native plant species listed in Table 6-2 of the MSHCP. The City of Jurupa Valley Planning Department reviewed the Project's proposed landscape plan and confirmed that none of the species listed in Table 6-2 will be planted during Project construction. To further ensure that these species are not planted on individual residential lots by homeowners, Mitigation Measure BI-4 is provided. With the implementation of Mitigation Measure BI-3, below, the Project would be consistent with *Volume I, Section 6.1.4* as it pertains to noise.

Barriers: *MSHCP Volume I, Section 6.1.4 (Barriers)* states that proposed land uses adjacent to the MSHCP Conservation Area shall incorporate barriers, where appropriate in individual project designs to minimize unauthorized public access, domestic animal predation, illegal trespass or dumping in the MSHCP Conservation Area. The City of Jurupa Valley Planning Department reviewed the Project design and determined that appropriate barriers are incorporated. An approximate 25-foot tall manufactured slope would be established within proposed Lot 'M' at the northern edge of the borrow area/open space to protect the residential lots from peak flood events, which also would serve as a physical barrier. Additionally, as shown in Figure 4-14, *TTM 36391 Wall and Fence Plan* (refer to Page II-40) fencing is proposed along portions of the Project's trail system to prohibit trespass off the trails. To further ensure that trespass is discouraged, Mitigation Measure BI-5 is provided. With the implementation of Mitigation Measure BI-5, below, the Project would be consistent with Volume I, Section 6.1.4 as it pertains to barriers.

Grading/Land Development: *MSHCP Volume I, Section 6.1.4 (Grading/Land Development)* states that manufactured slopes associated with proposed site development shall not extend into the MSHCP Conservation Area. The Project does not propose manufactured slopes in the MSHCP Preserve (Lot "Y"). Thus, the Project would be consistent with *Volume I, Section 6.1.4* as it pertains to grading.

☐ **Additional Survey Needs and Procedures**

The Project site is not located within the Criteria Area Plant Species Survey Area, Mammal Survey Area, or Amphibian Survey Area. The Project site is, however, located within the Burrowing Owl Survey Area. Focused surveys were conducted for burrowing owl on the Project site on August 8, 11, 24, and 30, 2011. Burrowing owls were not observed; however, the Project site does contain suitable habitat for burrowing owls and the species has the potential to migrate onto the property. If the species is located on the property prior when ground-disturbing construction activities occur, impacts would be significant. Mitigation Measure BI-1 (refer to the discussion under Issue 5.4(a), above) requires compliance with the provisions of Objective 6 of the MSHCP species-specific objectives for the burrowing owl prior. With implementation of Mitigation Measure BI-1, the Project would be consistent with *Volume I, Section 6.3.2* of the MSHCP as it pertains to burrowing owls and impacts would be reduced to less than significant.

Mitigation

Mitigation Measure BI-3: Prior to grading permit issuance, the City shall verify that the following note is included on the grading plan. Project contractors shall be required to ensure compliance with this note and permit periodic inspection of the construction site by City of Jurupa Valley staff or its designee to confirm compliance. This note also shall be specified in bid documents issued to prospective construction contractors.

- a. Grading activities and construction activities that generate noise greater than 65 dBA during daytime hours or 45 dBA during nighttime hours shall not occur within 100 meters of the natural open space area (Lot "Y") during the wildlife nesting season (March 1 through August 31).

Mitigation Measure BI-4: The Project's homeowner association covenants, codes, and restrictions (CC&Rs) shall prohibit the planting of the invasive, non-native plant species listed in Table 6-2 of the MSHCP. A copy of the CC&Rs shall be provided to City of Jurupa Valley staff or its designee to ensure that the provision is included. The homeowners association shall be required to enforce the CC&Rs.

Mitigation Measure BI-5: Prior to opening the Project's trail system to public use through the borrow area/open space lot (Lot 470), signs shall be installed to identify biologically sensitive areas in the MSHCP Preserve and inform trail users that trespass is not permitted. Prior to sign posting, the City of Jurupa Planning Department and Western Riverside County RCA shall review and approve the sign locations and messaging. The owner or conservator of Lot 470 shall be responsible for maintaining the signs and repairing/replacing them if they are damaged or removed.

Mitigation Measure BI-6: The Project shall comply with the Western Riverside County Multiple Species Habitat Conservation Plan Fee Program, which requires payment of a per-acre local development mitigation fee that will assist in providing revenue to acquire and preserve vegetation communities and natural areas within the city and western Riverside County that are known to support threatened, endangered or key sensitive populations of plant and wildlife species. Prior to the issuance of grading permits, the Project Applicant shall pay Local Development Mitigation Fees (per City Ordinance No. 810.2) for implementation of the MSHCP.

Mitigation Measure BI-7: The Project shall comply with The Habitat Conservation Plan for the Stephens' Kangaroo Rat in Western Riverside County, California, which requires payment of a development mitigation fee to assist in providing revenue to acquire and preserve habitat for the Stephens' kangaroo rat. Prior to the issuance of grading permits, the Project Applicant shall pay fees in accordance with City Ordinance No. 633 (Stephens' Kangaroo Rat Fee Assessment Area) for implementation of the Stephens' Kangaroo Rat Habitat Conservation Plan.

Mitigation Measures BI-1 and BI-2 also shall apply.

5.5 CULTURAL RESOURCES

<i>Would the project:</i>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?			✓	
b. Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?		✓		
c. Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?		✓		
d. Disturb any human remains, including those interred outside of formal cemeteries?			✓	

Impact Analysis

5.5(a) Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5?

Finding: Less-than-Significant Impact

(Sources: Phase I Cultural Resources Survey for Tentative Tract 36391 (Brian F. Smith and Associates, 2013))

The Project site is not known to have unique historical significance to the region. As with much of the site's vicinity, the property was used for agricultural operations since the early 20th century. The property's current owner, the Ter Maaten family, took ownership of the property in 1946 and operated the site as a dairy farm. The property was leased to a new dairy farm operator in 1989 and then converted from dairy farm to agricultural crop use in about 2009. Under existing conditions, the Project site contains agricultural field crop operations, two occupied residential structures, and remnants of the property's former dairy farm operations. For more information about the area's history and historical context, refer to Phase I Cultural Resources Assessment contained as Appendix D.

CEQA Guidelines §15064.5(a) clarifies that historical resources include the following:

1. A resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources.
2. A resource included in a local register of historical resources, as defined in section 5020.1(k) of the Public Resources Code or identified as significant in an historical resource survey meeting the requirements [of] section 5024.1(g) of the Public Resources Code.
3. Any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California.

A cultural resources survey of the property was conducted by Brian F. Smith and Associates on February 15 and 16, 2012, and January 3, 2013; the results are provided in Appendix D. In summary, the existing structures located on the Project site are not listed in the California Register of Historical Resources. In addition, pursuant to the criteria used by the California State Parks Office of Historic Preservation (OHP), the existing structures are not eligible for inclusion on the California Register of Historical Resources because: 1) they are not associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage; 2) they are not associated with the lives of persons important to local, California or national history; 3) they do not embody the distinctive characteristics of a type, period, region or method of construction or represent the work of a master or possess high artistic values; and 4) they have not yielded, nor do they have the potential to yield, information important to the prehistory or history of the local area, California, or the nation.

No evidence of historic trash deposits were observed at the Project site. Of the remaining structures present on the Project site, only the residence located at 11612 68th Street meets the age threshold to be considered as a potential historic building. According to the building record, this residence was constructed in 1951, with additions in 1971 and 1978. Although the main residence was originally part of the dairy, the associated outbuildings have all been removed except for the feed silos and some small sheds. Because of the change in original setting and physical alterations made to the structure, the residence has lost enough of its original characteristics to be of no historic value. Additionally, the building did not contain any architectural uniqueness or stylistic significance as part of its original construction and the structure is not included in any local register of significant historical resources. Therefore, this structure is not considered significant pursuant to CEQA Guidelines §15064.5(a) and its demolition proposed as part of the Project would be a less-than-significant impact. There are no other structures or features on-site that could be considered a historical resource pursuant to CEQA Guidelines §15064.5(a). Based on the foregoing analysis, the proposed Project would result in a less-than-significant impact to historic resource as defined by CEQA Guidelines §15064.5(a) and mitigation is not required.

5.5(b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5?

Finding: Less-than-Significant Impact with Mitigation Incorporated

(Sources: Phase I Cultural Resources Survey for Tentative Tract 36391 (Brian F. Smith and Associates, 2013); Soboba Band of Luiseno Indians Letter Sept. 11, 2012)

The area of Riverside County that encompasses the Project site was once inhabited by Native Americans from the Cahuilla, Gabrielino, and Luiseno tribes. The City completed consultation with local Native American tribes regarding the proposed Project pursuant to the requirements of California Government Code Section 65352.3 (Senate Bill 18), and as part of this consultation process the Soboba Band of Luiseno Indians identified the Project site as falling within their Tribal Traditional Use Area. Refer to Appendix D for more information about the Project site's cultural setting.

Based on the results of a field survey and records search conducted by Brian F. Smith and Associates, the Project site does not contain any recorded or known archaeological resources. Furthermore, due to the past dairy farm and agricultural operations that have occurred on the property for the past approximately 75 years and site's location within the Santa Ana River floodplain, the potential for subsurface archaeological deposits to be present at the Project site is considered low. Regardless, there is a remote potential to uncover archaeological resources during

excavation and/or grading activities on the Project site. If significant resources as defined in California Code of Regulations, Section 15064.5 are unearthed, they could be significantly impacted if not appropriately treated. Although the Project site does not contain any recorded or known archaeological resources and the likelihood of uncovering previously unknown resources during construction is considered low, Mitigation Measures CR-1 through CR-3 are required to mitigate potential impacts to archaeological resources to the maximum extent feasible. Implementation of these measures would ensure that an archaeological monitoring program is implemented during ground disturbing activities, and would ensure that any archaeological resources that may be uncovered are appropriately treated as recommended by a qualified archaeologist. With implementation of the required mitigation, the Project's potential impact to archaeological resources would be reduced to the maximum extent feasible and would be less than significant.

Mitigation

Mitigation Measure CR-1: Prior to the issuance of a grading permit, the Project Proponent shall provide evidence to the City that a qualified professional archaeological monitor has been retained by the Project Applicant to conduct monitoring of all mass grading and trenching activities in previously undisturbed soils and has the authority to halt and redirect earthmoving activities in the event that suspected archaeological resources are unearthed during Project construction.

Mitigation Measure CR-2: Prior to the issuance of a grading permit, the Project Proponent shall provide evidence to the City that appropriate Native American representative(s) shall be allowed to monitor and have received or will receive a minimum of 15 days advance notice of mass grading activities in previously undisturbed soils. During grading operations in previously undisturbed soils, a professional archaeological monitor shall observe the grading operation until such time as monitor determines that there is no longer any potential to uncover buried cultural deposits. If the monitor suspects that an archaeological resource may have been unearthed, the monitor shall immediately halt and redirect grading operations in a 100-foot radius around the find to allow identification and evaluation of the suspected resource. If the monitor determines that the suspected resource is potentially significant, the archaeologist shall notify the appropriate Native American Tribe(s) and invite a tribal representative to consult on the resource evaluation. In consultation with the appropriate Native American Tribe(s), the archaeological monitor shall evaluate the suspected resource and make a determination of significance pursuant to California Public Resources Code Section 21083.2. If the resource is significant, Mitigation Measure CR-3 shall apply.

Mitigation Measure CR-3: If a significant archaeological resource(s) is discovered on the property, ground disturbing activities shall be suspended 100 feet around the resource(s). The archaeological monitor and a representative of the appropriate Native American Tribe(s), the Project Proponent, and the City Planning Department shall confer regarding mitigation of the discovered resource(s). A treatment plan shall be prepared and implemented by the archaeologist to protect the identified archaeological resource(s) from damage and destruction. The treatment plan shall contain a research design and data recovery program necessary document the size and content of the discovery such that the resource(s) can be evaluated for significance under CEQA criteria. The research design shall list the sampling procedures appropriate to exhaust the research potential of the archaeological resource(s) in accordance with current professional archaeology standards (typically this sampling level is two (2) to five (5) percent of the volume of the cultural

deposit). The treatment plan shall require monitoring by the appropriate Native American Tribe(s) during data recovery excavations of archaeological resource(s) of prehistoric origin, and shall require that all recovered artifacts undergo laboratory analysis. At the completion of the laboratory analysis, any recovered archaeological resources shall be processed and curated according to current professional repository standards. The collections and associated records shall be donated to an appropriate curation facility, or, the artifacts may be delivered to the appropriate Native American Tribe(s) if that is recommended by the City of Jurupa Valley. A final report containing the significance and treatment findings shall be prepared by the archaeologist and submitted to the City of Jurupa Valley Planning Department and the Eastern Information Center.

5.5(c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Finding: Less-than-Significant Impact with Mitigation Incorporated

(Sources: Paleontological Resource Assessment and Monitoring Plan, Ter Maaten Parcel/TTM 36391 (Brian F. Smith and Associates, 2013, City of Jurupa General Plan Figure OS-8 – Paleontological Sensitivity)

Although the Project site does not contain any known unique geologic features, and no paleontological resources or sites were observed by the Project archaeologist during field investigations, the northwestern one-third of the proposed Project site is identified by the General Plan as having a high potential to contain unique paleontological resources. This area encompasses existing outcrops of old alluvial channel deposits (Qoa) and old sandy wash deposits (Qoa) of middle to late Pleistocene age. A map of this area is contained in Appendix E. Due to General Plan's high potential designation in this area of the site, ground disturbing activities associated with the Project could result in impacts to paleontological resources that may exist below the ground surface if they are unearthed and not properly treated. The Project's potential to physically impact unique paleontological resources that could be buried beneath the surface, however remote that possibility may be, is a significant impact before mitigation.

Implementation of Mitigation Measures CR-4 through CR-6 would ensure that a paleontological monitoring program is implemented during ground disturbing activities, and would ensure that any paleontological resources that may be uncovered are appropriately treated as recommended by a qualified paleontologist. With implementation of the required mitigation, the Project's potential impact to paleontological resources would be reduced to less than significant.

Mitigation

Mitigation Measure CR-4: Prior to the issuance of grading permits, the Project Proponent shall provide a letter of verification to the City stating that a qualified paleontologist has been retained to conduct full-time monitoring of all mass grading or excavation activities within old alluvial channel deposits and old sandy wash deposits of middle-to-late Pleistocene age, as well as where over-excavation of surficial alluvial sediments will encounter these formations. The monitor shall have the authority to temporarily halt or divert equipment during the grading operation. Monitoring may be reduced if the Pleistocene age old alluvial channel deposits and old sandy wash deposits are determined upon exposure and examination by the qualified paleontological monitor to have low potential to contain fossil resources.

Mitigation Measure CR-5: If a paleontological resource is discovered on the property, ground disturbing activities shall be suspended 100 feet around the resource(s) or as recommended by the paleontological monitor. The monitor shall be equipped to speedily collect specimens if they are encountered. The significance of the discovered resources shall be determined by the paleontologist. Discovered fossils or samples of such fossils shall be collected by the paleontological monitor, with assistance if necessary. Fossils recovered shall be cleaned and prepared to allow for identification. Specimens recovered shall be donated to a professional, accredited public museum repository.

Mitigation Measure CR-6: Following the completion of grading monitoring activities, the paleontological monitor shall submit a final monitoring report to the City. The final monitoring report shall describe the results, analysis, and conclusions of the paleontological monitoring program, and shall include lists of any fossils recovered and maps to accurately record the original location of recovered fossils. If no resources were observed during grading monitoring, then a final letter shall be submitted to the City documenting the site monitoring period and indicating that no resources were observed.

5.5(d) Disturb any human remains, including those interred outside of formal cemeteries?

Finding: Less-than-Significant Impact

(Sources: Phase I Cultural Resources Survey for Tentative Tract 36391 (Brian F. Smith and Associates, 2013))

The Project site does not contain a cemetery and no known formal cemeteries are located within the immediate site vicinity. Field surveys conducted on the Project site did not identify the presence of any human remains and no human remains are known to exist beneath the surface of the site. Nevertheless, the remote potential exists that human remains may be unearthed during grading and excavation activities associated with Project construction. In the event that human remains are discovered during Project grading or other ground disturbing activities, the Project would be required to comply with the applicable provisions of California Health and Safety Code §7050.5 as well as Public Resources Code §5097 et. seq. California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin. Pursuant to California Public Resources Code Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made by the Coroner. If the Coroner determines the remains to be Native American, the California Native American Heritage Commission (NAHC) must be contacted and the NAHC must then immediately notify the “most likely descendant(s)” of receiving notification of the discovery. The most likely descendant(s) shall then make recommendations within 48 hours, and engage in consultations concerning the treatment of the remains as provided in Public Resources Code Section 5097.98. Mandatory compliance with these requirements would ensure that potential impacts associated with the discovery of human remains would be less than significant and mitigation is not required.

Mitigation

Although impacts to human remains would be less than significant, the following mitigation measure is recommended to ensure compliance with California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097.98.

Mitigation Measure CR-7: Prior to grading permit issuance, the City shall verify that the following note is included on the grading plan. Project contractors shall be required to ensure compliance with the note. This note also shall be specified in bid documents issued to prospective construction contractors.

- a. If human remains are encountered, California Health and Safety Code Section 7050.5 requires that no further disturbance occur until the Riverside County Coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made by the Coroner. If the Riverside County Coroner determines the remains to be Native American, the California Native American Heritage Commission must be contacted within 24 hours. The Native American Heritage Commission must then immediately notify the “most likely descendant(s)” of receiving notification of the discovery. The most likely descendant(s) shall then make recommendations within 48 hours, and engage in consultations concerning the treatment of the remains as provided in Public Resources Code Section 5097.98.

5.6 GEOLOGY AND SOILS

<i>Would the project:</i>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:				
1) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.				✓
2) Strong seismic ground shaking?			✓	
3) Seismic-related ground failure, including liquefaction?		✓		
4) Landslides?				✓
b. Result in substantial soil erosion or the loss of topsoil?			✓	
c. Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?		✓		
d. Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?			✓	
e. Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?				✓

Impact Analysis

5.6(a)(1) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to Division of Mines and Geology Special Publication 42.

Finding: No Impact

(Sources: Preliminary Geotechnical Investigation, Ter Maaten Project, 68th Street and Interstate 15 (Alta California Geotechnical, 2013), Supplemental Geotechnical Investigation, North of the Ter Maaten Project, 68th Street and Interstate 15 (Alta California Geotechnical, 2013))

The proposed Project site is not located within any Alquist-Priolo Earthquake Fault Zones, and no known faults underlie the site. The nearest mapped fault is located approximately 7.2 miles to the west of the subject property (Chino-Central fault). Because there are no faults located on the

Project site, there is no potential for the Project to expose people or structures to adverse effects related to ground rupture.

5.6(a)(2) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: Strong seismic ground shaking?

Finding: Less-than-Significant Impact

(Source: Preliminary Geotechnical Investigation, Ter Maaten Project, 68th Street and Interstate 15 (Alta California Geotechnical, 2013), Supplemental Geotechnical Investigation, North of the Ter Maaten Project, 68th Street and Interstate 15 (Alta California Geotechnical, 2013))

The Project site is located in a seismically active area of southern California and is expected to experience moderate to severe ground shaking during the lifetime of the Project. This risk is not considered substantially different than that of other similar properties in the southern California area. As a mandatory condition of Project approval, the Project would be required to construct proposed structures in accordance with the California Building Standards Code (CBSC), also known as California Code of Regulations (CCR), Title 24 and the City Building Code. The CBSC and City Building Code are designed to preclude significant adverse effects associated with strong seismic ground shaking. In addition, the Project would be conditioned to comply with the site-specific ground preparation and construction recommendations contained in the geotechnical reports prepared for TR36391. With mandatory compliance with these standard and site-specific design and construction measures, potential adverse impacts associated with seismically induced ground shaking would be reduced to less than significant. As such, the Project would not expose people or structures to substantial adverse effects, including loss, injury or death, involving seismic ground shaking and mitigation is not required.

Mitigation

Although impacts associated with seismic shaking would be less than significant, the following mitigation measure is recommended to ensure compliance with the California Code of Regulations, Title 24.

Mitigation Measure GE-1: Prior to grading and building permit issuance, the City shall verify that the following note is included on grading and building plans. Project contractors shall be required to ensure compliance with the note. This note also shall be specified in bid documents issued to prospective construction contractors.

- a. Construction activities shall occur in accordance with all applicable requirements of the California Code of Regulations (CCR), Title 24 (also known as the California Building Standards Code (CBSC)) in effect at the time of construction.

5.6(a)(3) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: Seismic-related ground failure, including liquefaction?

Finding: Less-than-Significant Impact with Mitigation Incorporated

(Sources: Preliminary Geotechnical Investigation, Ter Maaten Project, 68th Street and Interstate 15 (Alta California Geotechnical, 2013), Supplemental Geotechnical Investigation, North of the Ter Maaten Project, 68th Street and Interstate 15 (Alta California Geotechnical, 2013))

Liquefaction and seismically induced settlement typically occur in loose granular and low-plastic silt and clay soils with groundwater near the ground surface. During an earthquake, ground shaking causes the soil to consolidate and increases the pore pressures in saturated soils. The Project site contains soils that may be subject to liquefaction during seismic ground shaking. Liquefaction can manifest in several ways, including loss of bearing, lateral spread, dynamic settlement, and flow failure. Alta California Geotechnical (Alta) conducted a liquefaction analysis of the Project, including the drilling of borings into the Project site's soils for study. Detailed results are included in Appendices F and G. In summary, liquefaction could cause differential settlement and/or lateral spreading at the site and as much as 1.5 inches of vertical settlement could occur, with half of that settlement considered differential.

As noted above under the response to Issue 5.6(a)(2), Project would be designed and constructed in accordance with the latest applicable seismic safety guidelines, including the standard requirements of the CBSC and City Building Code. Furthermore, the Project would be required to comply with the site-specific grading and construction recommendations contained within the Project's geotechnical reports, which the City would make conditions of Project approval to further reduce the risk of seismic-related ground failure due to liquefaction. Although compliance with geotechnical recommendations would be made conditions of Project approval, Mitigation Measure GE-2 is provided below to ensure compliance. As such, implementation of the Project would result in less-than-significant impacts associated with seismic-related ground failure and/or liquefaction hazards.

Mitigation

Mitigation Measure GE-2: Prior to the issuance of grading and building permits, a licensed geotechnical engineer contracted to the City or the Project Proponent shall review the detailed construction plans and sections and make a written determination of concurrence with the recommendations specified in the Project's Geotechnical Reports on file with the City associated with Master Case 1201. The written determination shall be filed with the City of Jurupa Valley. The City shall verify that all of the recommendations given in the Project's Geotechnical Reports and written determination are incorporated into the grading and building specifications, including but not limited to the recommendation to remove 10 feet of soil along the southern Project boundary and the use of a post-tensioned slab system for proposed structures to limit the potential for liquefaction-induced lateral spread.

Mitigation Measure GE-1 also shall apply.

5.6(a)(4) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving: Landslides?

Finding: No Impact

(Sources: Preliminary Geotechnical Investigation, Ter Maaten Project, 68th Street and Interstate 15 (Alta California Geotechnical, 2013), Supplemental Geotechnical Investigation, North of the Ter Maaten Project, 68th Street and Interstate 15 (Alta California Geotechnical, 2013), Google Earth)

The Project site is relatively flat, as is the surrounding area. There are no hillsides or steep slopes on the Project site or in the immediate vicinity of the site. Accordingly, the Project site is located within an area having low potential for landslides and development on the subject property would not be exposed landslide risks. The Project would construct an approximate 25-foot tall manufactured slope within proposed Lot "M" at the northern edge of the borrow area/open space;

however, this slope is proposed to be constructed with hardened, soil cement materials to protect on-site residences from peak flood flows and would not pose a landslide risk. Landslide impacts would not occur and mitigation is not required.

5.6(b) Result in substantial soil erosion or the loss of topsoil?

Finding: Less-than-Significant Impact

(Sources: Project Application Materials, Tentative Tract 36391 Preliminary Hydrology Report (MDS Consulting, 2012), Water Quality Management Plan for Tract 36391 (MDS Consulting, 2013), Tentative Tract Map No. 36391 Soil Stockpile Water Quality Management Memorandum (MDS Consulting, 2013), Wind Erosion Control for Soil Stockpiles (Urban Crossroads, 2013), TTM 36391 Santa Ana River Floodplain Report (Pacific Advanced Civil Engineering, 2012))

□ Impact Analysis for Temporary Construction-Related Activities

Under existing conditions the Project site is used for agricultural operations, which regularly disturbs on-site soils and subjects them to erosion. Proposed grading activities would continue to temporarily expose underlying soils at the Project site, which would increase erosion susceptibility during grading and construction activities. Exposed soils, along with any fill materials being stockpiled on the site for use in the grading operation, would be subject to erosion during rainfall events or high winds due to the removal of stabilizing vegetation and exposure of these erodible materials to wind and water.

Pursuant to the requirements of the State Water Resources Control Board, the Project applicant is required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for construction activities, including proposed grading and soil stockpiling. The NPDES permit is required for all projects that include construction activities, such as clearing, stockpiling of soil, grading, and/or excavation that disturb at least one acre of total land area. The City's MS4 NPDES Permit requires the Project Proponent to prepare and submit to the City for approval a Project-specific Storm Water Pollution Prevention Plan (SWPPP). The SWPPP would identify a combination of erosion control and sediment control measures (i.e., Best Management Practices) to reduce or eliminate sediment discharge to surface water from storm water and non-storm water discharges during construction. In addition, as described above under the evaluation of Subsection 5.3, *Air Quality*, the Project would be required to comply with SCAQMD Rule 403, which would reduce the amount of particulate matter in the air and minimize the potential for wind erosion. With mandatory compliance to the requirements noted in the Project's SWPPP, as well as applicable regulatory requirements, the potential for water and/or wind erosion impacts during Project construction would be less than significant and mitigation is not required.

□ Impact Analysis for Long-Term Operational Activities

Following construction, wind and water erosion on the Project site would be minimized, as the areas disturbed during construction would be landscaped or covered with impervious surfaces and drainage would be controlled through a storm drain system. Implementation of the Project would result in less long-term erosion and loss of topsoil than occurs under the site's existing agricultural conditions.

As described above, the City's MS4 NPDES Permit requires the Project Proponent to prepare and submit to the City for approval a Project-specific SWPPP and Water Quality Management Plan (WQMP). The WQMP (refer to Appendix N1) identifies an effective combination of erosion control and sediment control measures (i.e., Best Management Practices) to reduce or eliminate discharge

to surface water from storm water and non-storm water discharges. The WQMP for the Project requires post-construction measures to ensure on-going erosion protection. Compliance with the WQMP would be required as a condition of Project approval and long-term maintenance of on-site water quality features is required. Therefore, implementation of the proposed Project would not significantly increase the risk of erosion on- or off-site in the long term. Impacts would be less than significant and mitigation is not required.

Mitigation

Although impacts associated with soil erosion would be less than significant, the following mitigation measures are recommended to ensure compliance with regulatory permitting requirements.

Mitigation Measure GE-3: Prior to grading permit issuance, the Project Proponent shall obtain a National Pollutant Discharge Elimination System (NPDES) permit from the State Water Resources Control Board. Evidence that an NPDES permit has been issued shall be provided to the City of Jurupa Valley prior to issuance of the first grading permit.

Mitigation Measure GE-4: Prior to grading permit issuance, the Project Proponent shall prepare a Stormwater Pollution Prevention Plan (SWPPP). Project contractors shall be required to ensure compliance with the SWPPP and permit periodic inspection of the construction site by City of Jurupa Valley staff or its designee to confirm compliance.

Mitigation Measure GE-5: Project contractors shall be required to ensure compliance with the Project's Water Quality Management Plan (WQMP) associated with Master Case 1201 and permit periodic inspection of the construction site by City of Jurupa Valley staff or its designee to confirm compliance.

Mitigation Measures AQ-1 and AQ-4(a) also shall apply.

5.6(c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?

Finding: Less-than-Significant Impact with Mitigation Incorporated

(Sources: Preliminary Geotechnical Investigation, Ter Maaten Project, 68th Street and Interstate 15 (Alta California Geotechnical, 2013), Supplemental Geotechnical Investigation, North of the Ter Maaten Project, 68th Street and Interstate 15 (Alta California Geotechnical, 2013))

The Project site is flat and gently sloping and contains no substantial natural or man-made slopes. There is no evidence of on-site landslides on or near the Project site, nor are there any exposed boulders that could result in rock fall hazards. Slopes constructed as part of the Project, including the approximate 25-foot tall manufactured slope within proposed Lot "M" at the northern edge of the borrow area/open space, would be engineered for long term stability and would be required to comply with the site-specific recommendations contained within the Project's geotechnical reports. Accordingly, impacts associated with landslides and rock fall hazards would be less than significant.

Based on laboratory testing of subsurface soils from the Project site, Alta California Geotechnical determined that near surface soils at the Project site have potential for subsidence and collapse. However, the Project's geotechnical reports indicate that the site's subsidence and collapse

potential would be attenuated through removal of near surface soils down to competent materials and replacement with properly compacted fill, which is included as a recommendation in the Project geotechnical report. Through standard conditions of approval, the proposed Project would be required to incorporate the recommendations contained within the Project geotechnical report into the grading plan for the Project. Although compliance with geotechnical recommendations would be made conditions of Project approval, Mitigation Measure GE-6 is provided below to ensure compliance. As such, implementation of the Project would result in less-than-significant impacts associated with soil subsidence and collapse.

Lateral spreading is primarily associated with liquefaction hazards. As noted above under Issue 5.6(a)(3), the potential for liquefaction at the Project site would be low following the implementation of standard building requirements and the site-specific grading and construction recommendations contained within the Project's geotechnical reports. Accordingly, with adherence to Mitigation Measures GE-1 and GE-6, impacts associated with lateral spreading would be less than significant.

Mitigation

Mitigation Measure GE-6: Prior to the issuance of grading and building permits, a licensed geotechnical engineer contracted to the City or the Project Proponent shall review the detailed construction plans and sections and make a written determination of concurrence with the recommendations specified in the Project's Geotechnical Reports associated with Master Case 1201. The written determination shall be filed with the City of Jurupa Valley. The City shall verify that all of the recommendations given in the Project's Geotechnical Reports and written determination are incorporated into the grading and building specifications, including but not limited to the recommendation to remove near surface soils down to competent materials and replace those soils with properly compacted fill to limit the potential for soil subsidence and collapse.

Mitigation Measure GE-1 also shall apply.

5.6(d)	Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?
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Note: Appendix G of the CEQA Guidelines references Table 18-1-B of the 1994 Uniform Building Code (UBC). This Table no longer exists. The adopted 2001 California Building Code (CBC) included a "Classification of Expansive Soil" that correlated an expansion index with the potential for soil expansion. The subsequent update to the Building Code, the 2007 CBC, contained information on expansive soils, but no longer included a reference to Table 18-1-B. The Building Code currently in effect, the 2010 CBC, references ASTM D4829, a standard procedure for testing and evaluating the expansion index (or expansion potential) of soils established by ASTM International, which was formerly known as the American Society for Testing and Materials (ASTM).

Finding: Less-than-Significant Impact

(Sources: Preliminary Geotechnical Investigation, Ter Maaten Project, 68th Street and Interstate 15 (Alta California Geotechnical, 2013), Supplemental Geotechnical Investigation, North of the Ter Maaten Project, 68th Street and Interstate 15 (Alta California Geotechnical, 2013))

As documented in the Project's geotechnical reports contained as Appendices F and G, the Project site contains soils with "low" to "medium" expansion potential. With mandatory implementation of

standard building requirements, including the requirements of the CBC and City Building Code, and the site-specific grading and construction recommendations contained within the Project's geotechnical reports, on-site soils would be adequately stabilized to accommodate proposed development. Accordingly, implementation of the proposed Project would not create a substantial risk to life or property and impacts associated with expansive soils would be less than significant and mitigation is not required.

Mitigation

Although impacts associated with expansive soils would be less than significant, Mitigation Measures GE-1 and GE-2 are recommended to ensure compliance with the Project's Geotechnical Reports and applicable regulatory requirements.

5.6(e) Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?

Finding: No Impact

(Source: Project Application Materials)

The Project does not propose the use of septic tanks or alternative waste water disposal systems. The Project would install domestic sewer infrastructure and connect to the Jurupa Community Service District's (JCSD's) existing sewer conveyance and treatment system. Accordingly, no impact associated with septic tanks or alternative waste water systems would occur and mitigation is not required.

5.7 GREENHOUSE GAS EMISSIONS

<i>Would the project:</i>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?			✓	
b. Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?			✓	

Impact Analysis

In September 2006, Governor Schwarzenegger signed Assembly Bill (AB) 32, the California Climate Solutions Act of 2006. AB 32 states, in part, that “[g]lobal warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California.” AB 32 requires that statewide greenhouse gas (GHG) emissions be reduced to 1990 levels by the year 2020. To effectively implement the cap, AB 32 directs the California Air Resources Board (CARB) to develop and implement regulations to reduce statewide GHG emissions from stationary sources.

Because AB 32 is the primary plan, policy or regulation adopted in the State of California to reduce GHG emissions, the proposed Project would have a significant impact if it does not comply with the regulations developed under AB 32. A numerical threshold for determining the significance of greenhouse gas emissions in the South Coast Air Basin (SCAB, or “Basin”) has not been established by the South Coast Air Quality Management District (SCAQMD) for projects where it is not the lead agency. As an interim threshold based on guidance provided in the California Air Pollution Control Officers Association (CAPCOA) CEQA and Climate Change handbook (CAPCOA, 2008), the City has opted to use a non-zero threshold approach based on Approach 2 of the handbook. CAPCOA Handbook Threshold 2.5 (Unit-Based Thresholds Based on Market Capture) establishes a numerical threshold based on capture of approximately 90 percent of emissions from future development. The latest threshold developed by SCAQMD by its “GHG CEQA Significance Threshold Working Group” is a project-level efficiency target of 4.8 metric tons of carbon dioxide equivalent (MTCO_{2e}) per service population by 2020. This threshold will be utilized herein to determine if emissions of greenhouse gases from this Project will be significant.

Because global warming is the result of GHG emissions, and GHGs are emitted by innumerable sources worldwide, the proposed Project would not result in a direct impact to global warming; rather, Project-related impacts to global climate change only could be significant on a cumulative basis. Therefore, the analysis below focuses on the Project’s potential to contribute to GCC in a cumulatively considerable way.

5.7(a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?**Finding: Less-than-Significant Impact**

(Sources: Tentative Tract Map No. 36391 Greenhouse Gas Analysis (Urban Crossroads, 2013), Riverbend (TTM No. 36391) Supplemental Air Quality and Greenhouse Gas Assessment (Urban Crossroads, 2013))

GHG emissions associated with the proposed Project would primarily be associated with Project-related traffic. In addition, Project-related construction activities, energy consumption, water consumption, and solid waste generation also would contribute to the Project's overall generation of GHG gasses. As previously noted, the City of Jurupa Valley has not adopted any numerical thresholds of significance for GHG emissions. Nevertheless, the City is applying compliance with AB 32 and the SCAQMD's draft project-level efficiency target of 4.8 MT per service population to determine significance for this Project.

The analysis below sets out the factual basis for the City's determination regarding the effect of Project-related GHG emissions. The analysis is specific to this Project, and may not necessarily apply to other projects within the City of Jurupa Valley.

A summary of the proposed Project's projected annual operational GHG emissions, including amortized construction-related emissions, is provided in Table 5-17, *Total Annual Project Greenhouse Gas Emissions*. As shown, the Project is estimated to emit approximately 8,193.74 MTCO₂e per year, including amortized construction-related emissions, or approximately 4.55 MTCO₂e per service population. For more information, refer to Appendix H. Emissions of 4.55 MTCO₂e per service population is below the SCAQMD's draft project-level efficiency target of 4.8 MT per service population; thus, impacts would be less than significant.

Table 5-17 Total Annual Project Greenhouse Gas Emissions

Emission Source	Emissions (metric tons per year)			
	CO ₂	CH ₄	N ₂ O	Total CO ₂ E
Annual construction-related emissions amortized over 30 years	197.83	0.012	—	198.27
Area Source Emissions	348.79	0.02	0.01	351.09
Energy	1,756.22	0.06	0.03	1,767.07
Mobile Sources	5,384.28	0.23	—	5,389.11
Waste	111.50	6.59	—	249.89
Water Usage	210.29	0.94	0.03	238.31
Total CO₂E (All Sources)		8,193.74		
Service Population		1,799		
MT CO₂E/Service Population (SP)/Yr		4.55		
Threshold MT CO₂E/SP/Yr		4.8		
Significant?		NO		

Source: Urban Crossroads 2013b, Table 3-2.

AB 32 requires California to reduce its GHG emissions to 1990 levels by the Year 2020, which correlates to an approximate reduction of 29% below business as usual. CARB identified emissions reduction measures to achieve this goal as set forth in the CARB Scoping Plan. Thus, projects that are consistent with the CARB Scoping Plan are also consistent with AB 32's mandate to reduce GHG emissions. Table 5-18, *Recommended Actions from Climate Change Scoping Plan*, presents the 39 recommended actions identified to date by CARB in its Scoping Plan. Of the 39 measures identified, those that would be applicable to the Project consist primarily of actions related to transportation, electricity and natural gas use, and green building design. The Project's consistency with applicable measures of the CARB Scoping Plan is also summarized in Table 5-18. A detailed discussion of the Project's consistency with each applicable CARB recommend action is presented in the Greenhouse Gas Analysis prepared for the Project (see Appendix H).

As shown in Table 5-18, the Project is consistent with, or otherwise would not conflict with, the recommended measures from the CARB Scoping Plan. Because the proposed Project would be consistent with the CARB Scoping Plan and also would be below SCAQMD's draft project-level efficiency target of 4.8 MT per service population, Project-related GHG emissions would not be substantial and would not directly or indirectly result in a significant, cumulatively considerable impact on the environment. Therefore, the proposed Project would result in a less-than-significant impact to the environment as a result of Project-related GHG emissions.

5.7(b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Finding: Less-than-Significant Impact

(Sources: Tentative Tract Map No. 36391 Greenhouse Gas Analysis (Urban Crossroads, 2013), Riverbend (TTM No. 36391) Supplemental Air Quality and Greenhouse Gas Assessment (Urban Crossroads, 2013))

Refer to response to Issue 5.7(a), above. In addition, activities associated with the Project would be required to comply with all mandatory regulatory requirements imposed by the State to directly or indirectly reduce GHG emissions, including, but not limited to:

- Global Warming Solutions Act of 2006 (AB32)
- Regional GHG Emissions Reduction Targets/Sustainable Communities Strategies (SB 375)
- Pavely Fuel Efficiency Standards (AB1493). Establishes fuel efficiency ratings for new vehicles.
- Title 24 California Code of Regulations (California Building Code). Establishes energy efficiency requirements for new construction. Title 24 will become even more stringent beginning January 1, 2014.
- Title 20 California Code of Regulations (Appliance Energy Efficiency Standards). Establishes energy efficiency requirements for appliances.
- Title 17 California Code of Regulations (Low Carbon Fuel Standard). Requires carbon content of fuel sold in California to be 10% less by 2020.
- California Water Conservation in Landscaping Act of 2006 (AB1881). Requires local agencies to adopt the Department of Water Resources updated Water Efficient Landscape Ordinance or equivalent to ensure efficient landscapes in new development and reduced water waste in existing landscapes.

Table 5-18 Recommended Actions from Climate Change Scoping Plan

ID #	Sector	Strategy Name	Applicable to Project?	Will Project Conflict With Implementation?
T-1	Transportation	Pavley I and II – Light-Duty Vehicle GHG Standards	YES	NO
T-2	Transportation	Low Carbon Fuel Standard (Discrete Early Action)	YES	NO
T-3	Transportation	Regional Transportation-Related GHG Targets	YES	NO
T-4	Transportation	Vehicle Efficiency Measures	YES	NO
T-5	Transportation	Ship Electrification at Ports (Discrete Early Action)	NO	NO
T-6	Transportation	Goods-movement Efficiency Measures	NO	NO
T-7	Transportation	Heavy Duty Vehicle Greenhouse Gas Emission Reduction Measure – Aerodynamic Efficiency (Discrete Early Action)	NO	NO
T-8	Transportation	Medium and Heavy-Duty Vehicle Hybridization	NO	NO
T-9	Transportation	High Speed Rail	NO	NO
E-1	Electricity and Natural Gas	Increased Utility Energy efficiency programs More stringent Building and Appliance Standards	YES	NO
E-2	Electricity and Natural Gas	Increase Combined Heat and Power Use by 30,000GWh	NO	NO
E-3	Electricity and Natural Gas	Renewable Portfolio Standard	NO	NO
E-4	Electricity and Natural Gas	Million Solar Roofs	NO	NO
CR-1	Electricity and Natural Gas	Energy Efficiency	NO	NO
CR-2	Electricity and Natural Gas	Solar Water Heating	NO	NO
GB-1	Green Buildings	Green Buildings	YES	NO
W-1	Water	Water Use Efficiency	YES	NO
W-2	Water	Water Recycling	NO	NO
W-3	Water	Water System Energy Efficiency	NO	NO
W-4	Water	Reuse Urban Runoff	NO	NO
W-5	Water	Increase Renewable Energy Production	NO	NO
W-6	Water	Public Goods Charge (Water)	NO	NO
I-1	Industry	Energy Efficiency and Co-benefits Audits for Large Industrial Sources	NO	NO
I-2	Industry	Oil and Gas Extraction GHG Emission Reduction	NO	NO
I-3	Industry	GHG Leak Reduction from Oil and Gas Transmission	NO	NO
I-4	Industry	Refinery Flare Recovery Process Improvements	NO	NO
I-5	Industry	Removal of Methane Exemption from Existing Refinery Regulations	NO	NO
RW-1	Recycling and Waste Management	Landfill Methane Control (Discrete Early Action)	NO	NO
RW-2	Recycling and Waste Management	Additional Reductions in Landfill Methane – Capture Improvements	NO	NO
RW-3	Recycling and Waste Management	High Recycling/Zero Waste	NO	NO
F-1	Forestry	Sustainable Forest Target	NO	NO
H-1	High Global Warming Potential Gases	Motor Vehicle Air Conditioning Systems (Discrete Early Action)	NO	NO
H-2	High Global Warming Potential Gases	SF ₆ Limits in Non-Utility and Non-Semiconductor Applications (Discrete Early Action)	NO	NO
H-3	High Global Warming Potential Gases	Reduction in Perfluorocarbons in Semiconductor Manufacturing (Discrete Early Action)	NO	NO
H-4	High Global Warming Potential Gases	Limit High GWP Use in Consumer Products (Discrete Early Action, Adopted June 2008)	NO	NO
H-5	High Global Warming Potential Gases	High GWP Reductions from Mobile Sources	NO	NO
H-6	High Global Warming Potential Gases	High GWP Reductions from Stationary Sources	NO	NO
H-7	High Global Warming Potential Gases	Mitigation Fee on High GWP Gases	NO	NO
A-1	Agriculture	Methane Capture at Large Dairies	NO	NO

Source: Urban Crossroads 2013b, Table 3-3.

- Statewide Retail Provider Emissions Performance Standards (SB 1368). Requires energy generators to achieve performance standards for GHG emissions.
- Renewable Portfolio Standards (SB 1078). Requires electric corporations to increase the amount of energy obtained from eligible renewable energy resources to 20 percent by 2010 and 33 percent by 2020.

Activities associated with the Project would be required to comply with the above-listed measures; therefore, emissions reductions associated with these measures can be assumed as part of the proposed Project. There are no other plans, policies, or regulations that have been adopted for the purpose of reducing the emissions of GHGs that are applicable to the proposed Project. Therefore, the proposed Project would not conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases, and impacts would be less-than-significant.

Mitigation

Although impacts associated with greenhouse gas emissions would be less than significant, the following mitigation measures are recommended to ensure compliance with regulatory permitting requirements.

Mitigation Measure GG-1: Prior to building permit issuance, the City shall verify that the following note is included on building plans. Project contractors shall be required to ensure compliance with the note and permit inspection by City of Jurupa Valley staff or its designee to ensure compliance. The note also shall be specified in bid documents issued to prospective construction contractors.

- a. All installed appliances shall comply with California Code of Regulations Title 20 (Appliance Energy Efficiency Standards), which establishes energy efficiency requirements for appliances.

Mitigation Measure GG-2: Prior to the approval of landscaping plans, the City shall verify that the all landscaping will comply with City Ordinance No. 859, "Water Efficient Landscape Requirements." Project contractors shall be required to ensure compliance with approved landscaping plans.

Mitigation Measure GG-3: Prior to issuance of the first building permit, the Project Applicant shall submit energy usage calculations in the form of a Title 24 Compliance Report to the City of Jurupa Valley Planning Department showing that the Project will be constructed to achieve at least 20% energy efficiency beyond the 2008 California Building Code Title 24 requirements. Prior to issuance of the first building permit, the City shall review and approve the Report. Any combination of design features may be used to fulfill this mitigation measure provided that the total increase in efficiency meets or exceeds 20% beyond 2008 Title 24 Energy Efficiency Standards, including but not limited to, the following:

- a. Increasing insulation such that heat transfer and thermal bridging is minimized;
- b. Limiting air leakage through the structure and/or within the heating and cooling distribution system;
- c. Using energy-efficient space heating and cooling equipment;
- d. Installing dual-paned or other energy-efficient windows;

- e. Using interior or exterior energy-efficient lighting that exceeds the 2008 California Title 24 Energy Efficiency performance standards;
- f. Installing automatic devices to turn off lights where they are not needed;
- g. Applying paint and a surface color palette that emphasizes light and off-white colors that reflect heat away from buildings;
- h. Designing buildings with “cool roofs” using products certified by the Cool Roof Rating Council, and/or exposed roof surfaces using light and off-white colors;
- i. Designing buildings to accommodate photo-voltaic solar electricity systems or installation of photo-voltaic solar electricity systems;
- j. Installing Energy Star-rated appliances.

Mitigation Measures AQ-2, AQ-3, AQ-4(b), AQ-5, and GE-1 also shall apply.

5.8 HAZARDS AND HAZARDOUS MATERIALS

<i>Would the project:</i>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?		✓		
b. Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?			✓	
c. Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?		✓		
d. Be located on a site, which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, and, as a result, would it create a significant hazard to the public or the environment?				✓
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?				✓
f. 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?				✓
g. Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?			✓	
h. Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?				✓

Impact Analysis

5.8(a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

Finding: Less-than-Significant Impact with Mitigation Incorporated

(Sources: Phase I Environmental Site Assessment, Termaaten Property (GeoKinetics, 2005), Preliminary Subsurface Methane Gas Investigation for Termaaten Property (GeoKinetics, 2006), Phase II Environmental Site Assessment at the +/- 216 Termaaten Property (GeoKinetics, 2012), Response to

Comments from Peer Review of Riverbend (Termaaten) (GeoKinetics, 2013), Project Application Materials)

□ Impact Analysis for Existing Site Conditions

Environmental site assessments were conducted on the property by GeoKinetics to assess existing conditions. Refer to Appendices I, J, K, and L for more information. In summary, the Project site contains construction debris consisting of the remnants of two (2) dairy farms and a single-family dwelling unit that were constructed on the Project site between 1938 and the 1960s and demolished sometime between 2005 and 2011. The debris also includes the remnants of a single-family dwelling unit constructed on the Project site before 1938 and demolished sometime before the late-1950s. No documentation associated with the razing of these structures is available. Additionally, portions of the Project site are underlain by concrete irrigation lines installed by the dairy operation at an unknown date. The use of asbestos containing materials (ACM, a known carcinogen) and lead paint (a known toxic) was common in building construction prior to 1978 and was commonly added to concrete products through the 1950s. Accordingly, there is the potential of ACMs to be present in the construction debris, the subsurface concrete irrigation lines, as well as the two occupied on-site structures that would be demolished as part of the Project, thereby potentially exposing construction workers and nearby sensitive receptors to a substantial safety hazard during clearing of the site during the Project's construction process.

Asbestos is a carcinogen and is categorized as a hazardous air pollutant by the federal Environmental Protection Agency (EPA). Federal asbestos requirements are found in National Emission Standards for Hazardous Air Pollutants (NESHAP) within the Code of Federal Regulations (CFR) Title 40, Part 61, Subpart M, and are enforced in the Project area by the SCAQMD. In conformance with the NESHAP, SCAQMD Rule 1403 establishes survey requirements, notification, and work practice requirements to prevent asbestos emissions from emanating during building renovation and demolition activities. Assuming that ACMs are present in the existing construction debris, subsurface concrete irrigation lines, and structures located on the property, then Rule 1403 requires notification of the SCAQMD prior to commencing any demolition or renovation activities. Rule 1403 also sets forth specific procedures for the removal of asbestos, and requires that an on-site representative trained in the requirements of Rule 1403 be present during the stripping, removing, handling, or disturbing of ACM. Mandatory compliance with the provisions of Rule 1403 would ensure that construction-related grading, clearing and demolition activities do not expose construction workers or nearby sensitive receptors to significant health risks associated with ACMs. Because the Project would be required to comply with AQMD Rule 1403 during demolition activities, impacts due to asbestos would be less than significant. Nonetheless, Mitigation Measure HM-1 is provided below to ensure Project compliance with all applicable provisions of Rule 1403.

The construction debris and two existing residents also could contain lead based paint (LBP). Title 17, California Code of Regulations (CCR), Division 1, Chapter 8: Accreditation, Certification and Work Practices for Lead-Based Paint and Lead Hazards, defines and regulates lead-based paint. Any detectable amount of lead is regulated. During clearing of the existing on-site construction debris and demolition of the existing buildings, there is a potential for exposing construction workers to health hazards associated with lead. The Project would be required to comply with Title 17, California Code of Regulations (CCR), Division 1, Chapter 8, which includes requirements such as employer provided training, air monitoring, protective clothing, respirators, and hand washing facilities. Mandatory compliance with these mandatory requirements would ensure that construction workers are not exposed to significant LBP health hazards during demolition, and would reduce impacts to a level below significant. Although compliance with these provisions is

mandatory, Mitigation Measure HM-2 is provided below to ensure Project compliance with the CCR requirements for LBPs.

Several above ground storage tanks (ASTs) associated with the on-site dairy farms were previously located on the subject property, which stored milk, water, and diesel fuel. The ASTs were removed from the Project site at the time the dairy was razed. No documentation associated with the removal of the ASTs is available. GeoKinetics conducted a field survey and soil sampling at the former location of the ASTs. Surface soils near the location of two ASTs appeared to have minor hydrocarbon staining. Laboratory testing confirmed that slightly elevated hydrocarbon levels are present in the surface soil samples; however, detected levels of hydrocarbons are well below Regional Water Quality Control Board Environmental Screening Levels. As part of the site assessment conducted by GeoKinetics, all soils with visible and olfactory evidence of hydrocarbon staining were removed from the Project site and disposed off-site at a permitted disposal facility. Accordingly, the Project would not expose the public or environment to substantial hazards associated with hydrocarbon-contaminated soils. Impacts would be less than significant and mitigation is not required.

Portions of the Project site have been utilized for field crops since dairy farming operations on the subject property ceased in approximately 2006-2007. Due to the conversion of agricultural operations from dairy farming to field crops, potential on-site hazards associated with pesticides are considered low because the use of chlorinated pesticides (e.g., DDT, Dieldrin), which pose a substantial human health risk due to their toxicity and long-term persistence, was banned for over 30 years before field crops were planted on the Project site. Accordingly, potential risks related to pesticide use on the Project site are less than significant and mitigation is not required.

During the time that the Project site was occupied by dairy farms, manure was stockpiled on portions of the site, transported off-site on a yearly basis, and also spread over pastures in the southern portion of the site. Manure is associated with the generation of methane gas. A field investigation conducted by GeoKinetics detected elevated levels of methane below the ground surface on portions of the Project site. Methane is not toxic; however, it is combustible and potentially explosive at high concentrations. Methane also has the potential to accumulate beneath foundation systems, become pressurized, and crack the floor slab of a structure and enter the interior of a building. The presence of elevated methane levels poses a significant impact to the Project for which mitigation is required. With implementation of Mitigation Measures HM-3 and HM-4, this impact would be reduced to below a level of significance.

The proposed Project site contains several existing septic systems that would be removed during construction of the Project. The existing septic systems are required to be removed, handled, and disposed in accordance with all applicable local and State regulations. Accordingly, implementation of the Project would not expose the public or the environment to significant hazards associated with the removal and disposal of on-site septic systems. Impacts would be less-than-significant.

Four (4) groundwater wells are located on the Project site that would be abandoned as part of the proposed Project. The abandonment of the existing wells would be required to occur in accordance with applicable State well standards. Contaminated groundwater does not exist beneath the surface of the site; therefore, the well abandonment process has no potential to release contaminated groundwater. As such, a significant hazard to the public or the environment would not be created and impacts would be less than significant.

□ Impact Analysis for Temporary Construction-Related Activities

Heavy equipment (e.g., dozers, excavators, tractors) would be operated on the subject property during construction of the Project. This heavy equipment would likely be fueled and maintained by petroleum-based substances such as diesel fuel, gasoline, oil, and hydraulic fluid, which is considered hazardous if improperly stored or handled. In addition, materials such as paints, adhesives, solvents, and other substances typically used in building construction would be located on the Project site during construction. Improper use, storage, or transportation of hazardous materials can result in accidental releases or spills, potentially posing health risks to workers, the public, and the environment. This is a standard risk on all construction sites, and there would be no greater risk for improper handling, transportation, or spills associated with the proposed Project than would occur on any other similar construction site. Construction contractors would be required to comply with all applicable federal, state, and local laws and regulations regarding the transport, use, and storage of hazardous construction-related materials, including but not limited to requirements imposed by the Environmental Protection Agency (EPA), California Department of Toxic Substances Control (DTSC), South Coast Air Quality Management District (SCAQMD), Santa Ana Regional Water Quality Control Board (RWQCB).

□ Impact Analysis for Long-Term Operational Activities

The Project site would be primarily developed with residential land uses and supporting recreational and open space land uses, which are land uses not typically associated with the transport, use, or disposal of hazardous materials. Although residential land uses may utilize household products that contain toxic substances, such as cleansers, paints, adhesives, and solvents, these products are usually in low concentration and small in amount and would not pose a significant risk to humans or the environment during transport to/from or use at the Project site. Pursuant to State law and local regulations, residents would be required to dispose of household hazardous waste (e.g., batteries, used oil, old paint) at a permitted household hazardous waste collection facility. Accordingly, the Project would not expose people or the environment to significant hazards associated with the disposal of hazardous materials at the Project site. Long-term operation of the Project would not expose the public or the environment to significant hazards associated with the transport, use, or disposal of hazardous materials and impacts would be less than significant.

Mitigation

Mitigation Measure HM-1: The City of Jurupa Valley shall condition all grading and demolition permits associated with the clearing of existing on-site construction debris, the demolition of existing structures, and the uncovering and disposal of subsurface concrete irrigation lines to comply with South Coast Air Quality Management District (SCAQMD) Rule 1403 with respect to asbestos containing materials and the demolition contractor shall be required to comply with Rule 403. All asbestos-related clearing work conducted on the site shall be performed by a licensed asbestos-abatement contractor under the supervision of a certified asbestos consultant. Asbestos-containing construction materials (ACCMs) shall be removed and disposed of in compliance with notification and asbestos-removal procedures outlined in SCAQMD Rule 1403 to reduce asbestos-related health risks. The construction contractor shall maintain all records of compliance with Rule 1403, including, but not limited to, the following: evidence of notification of SCAQMD pursuant to Rule 1403; contact information for the asbestos-abatement contractor and asbestos consultant; and receipts (or other evidence) of off-site disposal of all ACCMs. These records shall be made available for City inspection upon request.

Mitigation Measure HM-2: The City of Jurupa Valley shall condition all grading and demolition permits associated with the clearing of existing on-site construction debris and the demolition of existing structures to comply with Title 17, California Code of Regulations (CCR), Division 1, Chapter 8 (LBP Regulations), which addresses requirements for the removal of components painted with lead-based paint (LBP) during site clearing and demolition of existing structures. The construction contractor shall be required to comply with these provisions. The removal of all LBP materials shall be conducted by a certified lead supervisor or certified lead works, as defined by §§ 35008 and 35009 of the LBP Regulations, using containment and in a manner which does not result in contamination of non-work areas with lead-contaminated dust, lead-contaminated soil, or lead-based paint debris.

Mitigation Measure HM-3: Prior to the issuance of a grading permit, all surface animal manure located on the property, if any, shall be removed.

Mitigation Measure HM-4: Prior to issuance of a residential building permit and no sooner than 30 days after rough grading is complete, a licensed engineer, geologist or registered environmental assessor shall conduct post rough grading methane testing on a lot by lot basis to identify any required construction specifications required as part of the structure's footing, slab grade, or other foundation component to meet the Riverside County Department of Environmental Health's Methane Design Guidelines. The construction specifications, which may include but shall not be limited to utility trench dams, utility conduit seals, sub-slab vents, sub-slab vapor barriers, and sub-slab gas barriers, shall be indicated on the lot and building's construction plan(s) prior to issuance of the building permit. Adherence to the construction specifications shall occur as part of building and safety inspections required during building construction. Prior to issuance of a residential occupancy permit, the Project's engineer of record shall provide a signed letter to the City of Jurupa Valley verifying that the specifications were installed as designed.

5.8 (b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?

Finding: Less-than-Significant Impact

(Sources: Phase I Environmental Site Assessment, Termaaten Property (GeoKinetics, 2005), Preliminary Subsurface Methane Gas Investigation for Termaaten Property (GeoKinetics, 2006), Phase II Environmental Site Assessment at the +/- 216 Termaaten Property (GeoKinetics, 2012), Response to Comments from Peer Review of Riverbend (Termaaten) (GeoKinetics, 2013), Project Application Materials)

Accidents involving hazardous materials that could pose a significant hazard to the public or the environment would be highly unlikely during the construction and long-term operation of the Project and are not reasonably foreseeable. As discussed above under Section 5.8(a), the transport, use and handling of hazardous materials on the Project site during construction is a standard risk on all construction sites, and there would be no greater risk for upset and accidents than would occur on any other similar construction site. Upon buildout, the Project site would operate as a residential community, which is a land use type not typically associated with the transport, use, or disposal of hazardous materials that could be subject to upset or accident involving the release of hazardous materials into the environment. The only potential for impact to the environment would

be the accidental release of toxics into the MSHCP Preserve in the southern portion of the Project site. As discussed under the topic of *Biological Resources* in Section 5.4(f)(refer to Page II-83), *MSHCP Volume I, Section 6.1.4 (Toxics)* states that land uses proposed in proximity to the MSHCP Conservation Area that use chemicals or generate bioproducts such as manure that are potentially toxic or may adversely affect wildlife species, habitat or water quality shall incorporate measures to ensure that application of such chemicals does not result in discharge to the MSHCP. A Project-specific Water Quality Management Plan (WQMP) has been prepared and is included as Appendix N1. Accordingly, the Project would be consistent with *Volume I, Section 6.1.4* as it pertains to toxics and impacts associated with the accidental release of hazardous materials would be less than significant during long-term operation of the Project.

Mitigation

Although impacts associated with release of hazardous materials would be less than significant, Mitigation Measures GE-3, GE-4, and GE-5 are recommended to ensure compliance with applicable regulatory requirements to reduce sediment and pollutants in water runoff.

5.8(c)	Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?
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Finding: Less-than-Significant Impact with Mitigation Incorporated

(Sources: Phase I Environmental Site Assessment, Termaaten Property (GeoKinetics, 2005), Preliminary Subsurface Methane Gas Investigation for Termaaten Property (GeoKinetics, 2006), Phase II Environmental Site Assessment at the +/- 216 Termaaten Property (GeoKinetics, 2012), Response to Comments from Peer Review of Riverbend (Termaaten) (GeoKinetics, 2013), Project Application Materials)

The Louis VanderMolen Elementary School is located at the southeast corner of 68th Street and Carnelian Street, north of the Project site. No other schools are located or proposed within 0.25-mile of the Project site. The potential for the Project to emit or handle hazardous or acutely hazardous materials is addressed above under the response to Issue 5.8(a). As noted, existing on-site construction debris and the two on-site residential structures have the potential to contain hazardous materials (asbestos and lead based paint) under existing conditions that may pose a significant hazard to the public and/or the environment. These materials, if present, would be removed as part of the Project's construction process and during the removal process there is a potential for asbestos to become airborne and impact nearby sensitive receptors, including the Louis VanderMolen Elementary School. The implementation of required remediation activities, pursuant to Mitigation Measure HM-1, above, would reduce risks associated with hazardous materials to less-than-significant levels, and would ensure that on-site hazardous materials do not pose a substantial risk to the school.

As further noted under the response to Issue 5.8(a), long-term operation of the Project site would not involve the emission or handling of hazardous materials that could pose a significant hazard to people or the environment, including the school. As such, Project operation would result in a less-than-significant impact.

Mitigation

Mitigation Measure HM-1 shall apply.

5.8(d) Be located on a site, which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, and, as a result, would it create a significant hazard to the public or the environment?

Finding: No Impact

(Source: California Department of Toxic Substances Control "EnviroStor Database")

The proposed Project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. No impact would occur.

5.8(e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?

Finding: No Impact

(Sources: City of Jurupa Valley General Plan Figure S-19 – Airport Locations, Riverside County Airport Land Use Compatibility Plan, Google Earth)

The Project site is not located within in the influence area of any airport land use plan, nor is the Project site located within two (2) miles of any public airport or public use airport. Accordingly, the Project has no potential to expose future residents in the Project area to airport-related safety hazards. No impact would occur.

5.8(f) 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?

Finding: No Impact

(Sources: City of Jurupa Valley General Plan Figure S-19 – Airport Locations, Riverside County Airport Land Use Compatibility Plan, Google Earth)

There are no private airfields or airstrips in the vicinity of the Project site. Accordingly, the Project has no potential to expose future residents in the Project area to airport-related safety hazards. No impact would occur.

5.8(g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

Finding: Less-than-Significant Impact

(Sources: City of Jurupa Valley General Plan Safety Element, Project Application Materials).

The Project site does not contain any emergency facilities nor does it serve as an emergency evacuation route. During construction and long-term operation, the proposed Project would be required to maintain adequate emergency access for emergency vehicles via 68th Street and connecting, on-site roadways as required by the City. Furthermore, the Project would not result in a substantial alteration to the design or capacity of any public road that would impair or interfere with the implementation of evacuation procedures. Because the Project would not interfere with an adopted emergency response or evacuation plan, impacts are less than significant.

5.8(h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?

Finding: No Impact

(Sources: City of Jurupa Valley General Plan Figure S-11 – Wildfire Susceptibility, Google Earth)

The proposed Project site is not located within a Hazardous Fire Area as mapped by the Riverside County Land Information System. Figure 9, *Wildfire Susceptibility*, of both the Eastvale and Jurupa Area Plans classify the property as “Moderate” with respect to wildfire risk. The proposed Project site is located in an area that has been largely developed, with residential development and a public facility (i.e., elementary school) located immediately to the north of the site, an irrigated golf course to the east of the site, and a freeway (i.e., I-15) and residential land uses located to the west of the site. The Santa Ana River corridor is located to the south, and although it carries water and has a low fire hazard during wet periods, the corridor contains flammable vegetation that can pose a wildland fire hazard risk. Between the Project’s residential homes and the graded borrow site/open space area and the natural river basin, an embankment is proposed to be constructed beyond which the borrow site/open space area would act as an overflow area for the Santa Ana River during peak storm events. The embankment is proposed to be constructed of soil cement or other like material, overlain by irrigated vegetation. Additionally, a 15-foot wide trail is proposed at the top of the embankment. In total, there would be at least a 125-foot irrigated zone between the natural vegetation in the river corridor and any habitable structure constructed in the Project. As such, implementation of the proposed Project would not expose people or structures to a significant risk of loss, injury, or death involving wildland fires. No impact would occur.

5.9 HYDROLOGY AND WATER QUALITY

<i>Would the project:</i>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Violate any water quality standards or waste discharge requirements?			✓	
b. Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?			✓	
c. Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site?			✓	
d. 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?			✓	
e. Create or contribute runoff which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?			✓	
f. Otherwise substantially degrade water quality?				✓
g. Place housing within a 100-year flood hazard as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?		✓		
h. Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?			✓	
i. 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?			✓	
j. Inundation by seiche, tsunami, or mudflow?				✓

Impact Analysis

5.9(a) Violate any water quality standards or waste discharge requirements?

Finding: Less-than-Significant Impact

(Sources: Water Quality Management Plan for Tract 36391 (MDS Consulting, 2013), Tentative Tract Map No. 36391 Soil Stockpile Water Quality Management Memorandum (MDS Consulting, 2013), Santa Ana River Basin Water Quality Control Plan, Integrated Regional Water Management Plan)

The California Porter-Cologne Water Quality Control Act (Section 13000 ("Water Quality") et seq., of the California Water Code), and the Federal Water Pollution Control Act Amendment of 1972 (also referred to as the Clean Water Act (CWA)) require that comprehensive water quality control plans be developed for all waters within the State of California. The Project site is located within the jurisdiction of the Santa Ana Regional Water Quality Control Board (RWQCB). Water quality information for the Santa Ana River is contained in the Santa Ana RWQCB's Santa Ana River Basin Water Quality Control Plan (updated February 2008) and the Integrated Regional Water Management Plan (IRWMP) for the Santa Ana River Watershed (also referred to as "One Water One Watershed," dated November 16, 2010), prepared by the Santa Ana Watershed Project Authority. These documents are herein incorporated by reference and are available for public review at the Santa Ana RWQCB office located at 3737 Main Street, Suite 500, Riverside, CA 92501.

The CWA requires all states to conduct water quality assessments of their water resources to identify water bodies that do not meet water quality standards. Water bodies that do not meet water quality standards are placed on a list of impaired waters pursuant to the requirements of Section 303(d) of the CWA. The Project site resides within the Santa Ana River Watershed, Region 8. Receiving waters for the property's drainage are the Santa Ana River Reach 3, 2, and 1, which discharges into the Pacific Ocean. The Santa Ana River Reach 3 is 303(d) impaired by copper, pathogens, and lead and Reach 2 is impaired by indicator bacteria. Before discharging into the Pacific Ocean approximately 43 miles west of the Project site, the tidal prism of the Santa Ana River and Newport Slough is impaired by pathogens.

A specific provision of the CWA applicable to the proposed Project is CWA Section 402, which authorizes the National Pollutant Discharge Elimination System (NPDES) permit program that covers point sources of pollution discharging to a water body. The NPDES program also requires operators of construction sites one acre or larger to prepare a Stormwater Pollution Prevention Plan (SWPPP) and obtain authorization to discharge stormwater under an NPDES construction stormwater permit.

□ Impact Analysis for Construction-Related Water Quality

Construction of the proposed Project would involve demolition, clearing, soil stockpiling, grading, paving, utility installation, building construction, and landscaping activities, which would result in the generation of potential water quality pollutants such as silt, debris, chemicals, paints, and other solvents with the potential to adversely affect water quality. As such, short-term water quality impacts have the potential to occur during construction of the Project in the absence of any protective or avoidance measures.

Pursuant to the requirements of the Santa Ana RWQCB and the City of Jurupa Valley, the Project would be required to obtain a National Pollutant Discharge Elimination System (NPDES) Municipal Stormwater Permit for construction activities. The NPDES permit is required for all projects that

include construction activities, such as clearing, soil stockpiling, grading, and/or excavation that disturb at least one acre of total land area. In addition, the Project would be required to comply with the Santa Ana RWQCB's Santa Ana River Basin Water Quality Control Program. Compliance with the NPDES permit and the Santa Ana River Basin Water Quality Control Program involves the preparation and implementation of a SWPPP for construction-related activities, including grading and soil stockpiling. The SWPPP would specify the Best Management Practices (BMPs) that the Project would be required to implement during construction activities to ensure that all potential pollutants of concern are prevented, minimized, and/or otherwise appropriately treated prior to being discharged from the subject property. Mandatory compliance with the SWPPP would ensure that the proposed Project does not violate any water quality standards or waste discharge requirements during construction activities. Therefore, water quality impacts associated with construction activities would be less than significant and no mitigation measures would be required.

❑ Post Development Water Quality Impacts

Storm water pollutants commonly associated with the land uses proposed by the Project (i.e., residential, park, and community facility) include sediment/turbidity, nutrients, trash and debris, oxygen-demanding substances, organic compounds, bacteria and viruses, oil and grease, pesticides, and metals. Based on current receiving water impairments (303d List) and allowable discharge requirements (USEPA TMDL List), the Project's pollutants of concern are pathogens (bacteria and viruses) and nutrients/low dissolved oxygen. To meet NPDES requirements, the proposed storm drain system is designed to route first flush runoff (85th percentile) to an infiltration basin located on-site just prior to discharging to the Santa Ana River. This basin has been sized to treat the entire Project's first flush volumes. Infiltration basin calculations are included in Appendix N (refer to its Appendix F for calculations).

Furthermore, the Project would be required to implement a Water Quality Management Plan (WQMP), pursuant to the requirements of the City's NPDES permit. The WQMP is a post-construction management program that ensures the on-going protection of the watershed basin by requiring structural and programmatic controls. The Project's WQMP has been prepared and is included as Appendix N1. The WQMP identifies structural controls (including an infiltration basin) and programmatic controls (including educational materials for property owners, best management practices for equestrian-related activities, common area litter control, etc.) to minimize, prevent, and/or otherwise appropriately treat storm water runoff flows before they are discharged from the site. Mandatory compliance with the WQMP would ensure that the Project does not violate any water quality standards or waste discharge requirements during long-term operation. Therefore, water quality impacts associated with post-development activities would be less than significant and no mitigation measures would be required.

Mitigation

Although impacts associated with adherence to water quality standards would be less than significant, Mitigation Measures GE-3, GE-4, and GE-5 are recommended to ensure compliance with applicable regulatory requirements related to water quality.

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

Finding: Less-than-Significant Impact

(Sources: Project Application Materials, Tentative Tract 36391 Preliminary Hydrology Report (MDS Consulting, 2012))

No potable groundwater wells are proposed as part of the Project. The proposed Project would be served with potable water by the JCSD (south of 68th Street) and the Santa Ana River Water Company (north of 68th Street). Domestic water supplies from these service providers are reliant on groundwater from the Chino Groundwater Basin as a primary source (the Project site is located in the southern portion of the Chino Groundwater Basin). All municipal water entities that exceed their safe yield incur a groundwater replenishment obligation, which is used to recharge the groundwater basin with State Water Project Water. Thus, the Project's demand for domestic water service 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. For more detailed information about domestic water supply refer to the *Utilities and Service Systems* discussion under Issue 5.17(d)(refer to Page II-182).

Development of Project would increase impervious surface coverage on the site by approximately 43.5%, which would in turn reduce the amount of direct infiltration of runoff into the ground. However, the Project's stormwater runoff is engineered to be conveyed through public street improvements and storm drains, which would discharge southerly to a borrow site/open space lot and natural river basin area of the Santa Ana River where groundwater recharge would continue to occur. Thus, with buildout of the Project, the local groundwater levels would not be significantly affected. Therefore, impacts to groundwater supplies and recharge would be less than significant, and mitigation would not be required.

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

Finding: Less-than-Significant Impact

(Sources: Project Application Materials, Tentative Tract 36391 Preliminary Hydrology Report (MDS Consulting, 2012), Water Quality Management Plan for Tract 36391 (MDS Consulting, 2013), Tentative Tract Map No. 36391 Soil Stockpile Water Quality Management Memorandum (MDS Consulting, 2013), TTM 36391 Santa Ana River Floodplain Report (Pacific Advanced Civil Engineering, 2012))

Implementation of the Project would include the installation of a stormwater drainage system in the developed areas of the property, which would discharge to an infiltration basin (Lot 468) and then southerly to a borrow area/open space lot (Lot 470) that would release water to the Santa Ana River. The on-site system is designed to use a pipe soffit as a hydraulic control to address the timing difference between on-site peak concentrations and peak flows within the Santa Ana River, such that peak flows discharging from the Project site would not occur simultaneous with peak flows in the Santa Ana River.

With buildout of the proposed Project, runoff from the Project site would continue to be conveyed to the Santa Ana River, and the site's general drainage pattern would be maintained. Additionally, all runoff from the developed portions of the property would be treated by an infiltration basin that would remove sediment. With buildout of the proposed Project site, there would be no significant alteration of the site's existing drainage pattern and there would not be any significant increases in the rates of erosion or siltation on or off site. No mitigation would be required.

5.9(d) 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?

Finding: Less-than-Significant Impact

(Sources: Project Application Materials, Tentative Tract 36391 Preliminary Hydrology Report (MDS Consulting, 2012), TTM 36391 Santa Ana River Floodplain Report (Pacific Advanced Civil Engineering, 2012))

As discussed above in Issue 5.9(c), runoff from the Project site would continue to be conveyed to the Santa Ana River, and the site's general drainage pattern would be maintained. In the southernmost portion of the Project site, a natural river basin open space area would occur (Lot "Y"), which would include a segment of the Santa Ana River. North of the open space lot, a borrow area/open space lot is proposed to consist of approximately 41.92 acres (Lot 470). This area would serve as an overflow area for the Santa Ana River during peak storm events. Earth materials excavated from this lot would be used to raise the pad elevations of the residential planning areas to protect the residential lots from peak flood events. Implementation of the proposed drainage and grading plan would ensure that all residential building pads are elevated above the 100-year floodplain by a minimum of one foot.

The on-site storm drain facilities are designed so that the Santa Ana River backwater effect does not pond onto residential lots. In rare peak storm events, backwater from the Santa Ana River may pond in the Project's borrow area/open space (Lot 470) and in even more rare instances, in the Project's public streets. Backwater is a term used to describe the condition where an obstruction to river flow may cause water to temporarily lose its current and back up, or pond. As discussed below under Issue 5.9(g), with mitigation that requires FEMA approval, residential areas of the site would be located outside of the 100-year floodplain and impacts would be reduced to below a level of significance.

5.9(e) Create or contribute runoff which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?

Finding: Less-than-Significant Impact

(Sources: Project Application Materials, Tentative Tract 36391 Preliminary Hydrology Report (MDS Consulting, 2012), Water Quality Management Plan for Tract 36391 (MDS Consulting, 2013), Tentative Tract Map No. 36391 Soil Stockpile Water Quality Management Memorandum (MDS Consulting, 2013), TTM 36391 Santa Ana River Floodplain Report (Pacific Advanced Civil Engineering, 2012))

On-site stormwater runoff associated with the Project is engineered to be conveyed through public street improvements and storm drains, which would discharge southerly to the Santa Ana River. On-site storm drain lines, which are depicted on TTM 36391, would range in size from 24- to 72-inches in diameter. To meet NPDES requirements, the Project's storm drain system would route first flush flows to an infiltration basin (within Lot 468) prior to discharge to the borrow area/open space and natural river basin (Lots 470 and "Y," respectively). The infiltration basin is designed to treat all of the first flush volumes from the residential portions of the Project.

The Project also would extend the existing storm drain line installed beneath 68th Street easterly by approximately 1,100 lineal feet. The extended storm drain would connect to an existing 36-inch storm drain located near the intersection of Wineville Avenue and 68th Street, and extend easterly within 68th Street via 36-inch and 30-inch storm drain pipes. As part of proposed improvements to 68th Street, a sump and catch basin would be provided along the north side of the street (approximately 250 feet west of Smith) to collect off-site runoff and direct it into the existing storm drainage system, which would then be conveyed to the west through existing facilities.

Runoff from the southern portions of 68th Street along the Project's frontage would be routed via three new catch basins that would be constructed as part of proposed improvements to 68th Street into the on-site storm drainage system and treated via the on-site infiltration basin in Lot 468. To accommodate these connections, 20-foot wide storm drainage easements would be provided between Lots 172-173, Lots 409-410, and Lots 431-432.

With the improvements to be installed by the Project described above, the Project would not create or contribute runoff which would exceed the capacity of existing or planned storm water drainage systems. Additionally, with required adherence to a SWPPP and WQMP as discussed above under Issue 5.9(a), the Project would not provide substantial additional sources of polluted runoff. Therefore, less than significant impacts would occur and mitigation is not required.

5.9(f) Otherwise substantially degrade water quality?

Finding: No Impact

(Sources: Project Application Materials)

There are no conditions associated with the proposed Project that could result in the substantial degradation of water quality beyond what is described above in the responses to Issues 5.9(a), 5.9(c), and 5.9(e). No impact would occur.

5.9(g) Place housing within a 100-year flood hazard as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?

Finding: Less-than-Significant Impact with Mitigation Incorporated

(Sources: Project Application Materials, Tentative Tract 36391 Preliminary Hydrology Report (MDS Consulting, 2012), TTM 36391 Santa Ana River Floodplain Report (Pacific Advanced Engineering, 2012), Written Correspondence from Pacific Advanced Engineering July 1, 2013)

A segment of the Santa Ana River crosses the southern portion of the Project site. Approximately two-thirds of the Project site is located within the 100-year floodplain (Zone AE) and/or floodway

of the Santa Ana River, as mapped by the Federal Emergency Management Agency (FEMA) on the Flood Insurance Rate Map (FIRM, Panel 06065C0683G) (refer to Appendix O).

As discussed above in Issue 5.9(d), the Project proposes to create a borrow area/open space lot (Lot 470), which would serve as an overflow area for the Santa Ana River during peak storm events. Earth materials excavated from this lot would be used to raise the pad elevations of the residential planning areas to protect the residential lots from peak flood events and to construct a hardened/protected floodway bank (Lot "M"). Implementation of the proposed drainage and grading plan would raise all residential building pads above the 100-year floodplain by a minimum of one foot.

In order to ensure that no housing would be placed in the FEMA floodplain, the Project necessitates a floodplain map revision. The Project is required to secure a Conditional Letter of Map Revision (CLOMR) and Permanent Letter of Map Revision (LOMR) from FEMA, without which a significant impact would occur. To obtain a CLOMR, the Project Applicant must prepare detailed construction drawings and flood hazard analyses as well as a standard application package (including project information forms, exhibits, etc.) for review by FEMA. If the proposed Project meets the minimum floodplain management criteria of the National Flood Insurance Program (NFIP), then FEMA will issue a CLOMR, which would allow full construction activities to occur on-site and upon issuance of the appropriate permits by the City of Jurupa Valley. Upon completion of construction activities, but prior to occupancy of any homes in the mapped floodplain, the Project Applicant must provide FEMA with detailed "as-built" drawings and flood hazard analyses, as well as a standard application package, to demonstrate that the Project was constructed in accordance with preliminary plans reviewed and approved by FEMA as part of the CLOMR process. If FEMA determines that the Project is consistent with the original CLOMR approval and meets the minimum floodplain management criteria of the NFIP, then a LOMR is issued and the Flood Insurance Rate Map (FIRM) is officially revised to remove the affected areas of the subject property from the floodplain. Mitigation Measures H-1 and H-2 are imposed to ensure that the CLOMR and LOMR are in place at the time of need. With issuance of a CLOMR and LOMR from FEMA, impacts would be reduced to below a level of significance.

Mitigation

Mitigation Measure H-1: Prior to final approval of street improvement plans and slope revetment plans, the Project Proponent shall provide evidence to the City of Jurupa Valley that a Conditional Letter of Map Revision (CLOMR) has been issued by FEMA for the Project. The grading plan shall substantially conform to the CLOMR.

Mitigation Measure H-2: Prior to the first building permit final inspection in area(s) subject to the FEMA floodplain designation, the Project Proponent shall provide evidence to the City of Jurupa Valley that a Final Letter of Map Revision (LOMR) has been issued by FEMA verifying that flood control measures have been completed and the residential development areas are permanently removed from the FEMA 100-year floodplain.

5.9(h) Place within a 100-year flood hazard area structures, which would impede or redirect flood flows?

Finding: Less-than-Significant Impact

(Sources: Project Application Materials, Tentative Tract 36391 Preliminary Hydrology Report (MDS Consulting, 2012), TTM 36391 Santa Ana River Floodplain Report (Pacific Advanced Civil Engineering, 2012))

As previously discussed in Issue 5.9(g), approximately two-thirds of the Project site is located within the 100-year floodplain (Zone AE) and/or floodway of the Santa Ana River under existing conditions. The Project is required to secure a Conditional Letter of Map Revision (CLOMR) and Permanent Letter of Map Revision (LOMR) from FEMA to verify that that flood control measures have been completed and the residential development areas are permanently removed from the FEMA 100-year floodplain. After the floodplain map revision, the only Project-related improvements that would be located in the floodway include the recreation areas of the community park (Lot 469), trails, and the borrow area/open space lot (Lot 470). Improvements in the community park and the proposed trails are designed to withstand water inundation and would not impede or redirect flood flows. The borrow area/open space lot is designed to facilitate, and not impede, flood flows. As such, impacts would be less than significant and mitigation is not required.

5.9(i) 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?

Finding: Less-than-Significant Impact

(Sources: Project Application Materials, Tentative Tract 36391 Preliminary Hydrology Report (MDS Consulting, 2012), TTM 36391 Santa Ana River Floodplain Report (Pacific Advanced Civil Engineering, 2012), Written Correspondence from Pacific Advanced Engineering July 1, 2013)

As analyzed in Appendix O, runoff from the Project site would not create any increased downstream flooding potential associated with the Santa Ana River. On-site, a borrow area/open space lot is proposed to consist of approximately 41.92 acres (Lot 470). Earth materials excavated from this lot would be used to raise the pad elevations of the residential planning areas to protect the residential lots from peak flood events. During peak storm events, the graded borrow area/open space would act as an overflow area for the Santa Ana River. Based on historical flow rates of the Santa Ana River in the vicinity of the Project site and flood hazard modeling performed by Pacific Advanced Civil Engineering, the Project is designed to provide protection against flood flows greater than any flows on record since 1971 (the earliest year for which data is available). For comparison purposes, the proposed Project is designed to provide protection against flood flows approximately three (3) times greater than the largest Santa Ana River flow events over the last 42 years (i.e., 2005 and 2011).

The on-site storm drain facilities are designed so that the Santa Ana River backwater effect does not pond onto residential lots. In rare peak storm events, backwater from the Santa Ana River may pond in the Project's borrow area/open space (Lot 470) and in even more rare instances, in the Project's public streets. Backwater is a term used to describe the condition where an obstruction to river flow may cause water to temporarily lose its current and back up, or pond. In the rare event that backwater was to pond in the Project's public streets, such ponding would be shallow and would not pose a significant risk to loss, injury, or death. Therefore, impacts would be less than significant and mitigation is not required.

5.9(j) Inundation by seiche, tsunami, or mudflow?

Finding: No Impact

(Source: Google Earth)

The Pacific Ocean is located more than 30 miles from the Project site; consequently, there is no potential for tsunamis to impact the Project. In addition, no steep hillsides subject to mudflow are located on or near the Project site. The nearest large body of surface water to the site is Lake Mathews, located approximately 9.0 miles southeast of the Project site. Due to the distance of Lake Mathews from the Project site and the topographic characteristics of the area, a seiche in Lake Mathews would have no impact on the Project site. Although the Santa Ana River traverses a portion of the Project site, it is not an enclosed or semi-enclosed basin that would be conducive to reverberation and creation of a seiche. Therefore, the Project site would not be subject to inundation by a seiche, mudflow, and/or tsunami; no impact would occur.

5.10 LAND USE AND PLANNING

<i>Would the project:</i>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Physically divide an established community?				✓
b. 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?			✓	
c. Conflict with any applicable habitat conservation plan or natural community conservation plan?		✓		

Impact Analysis**5.10(a) Physically divide an established community?****Finding: No Impact***(Source: Project Application Materials, Google Earth)*

Under existing conditions, a majority of the property is used for livestock grazing and the planting and harvesting of field crops. Two occupied residences, currently housing a total of three (3) people, are also located on-site. The two occupied residences on-site do not constitute an established community and are located on separate parcels that are physically separated by 68th Street under existing conditions.

To the west of the Project site is the I-15 freeway, beyond which are medium-density, detached residential homes in the City of Eastvale. I-15 forms a physical barrier between the Project site and the City of Eastvale. Immediately abutting the Project site to the east is the Goose Creek Golf Club, which does not contain any housing. Because the residential homes in the City of Eastvale and the Goose Creek Golf Club do not collectively function as an established community and are physically divided by agricultural uses on the Project site and I-15, the proposed Project has no potential to create an east to west division of an established community.

Except for 3.89 acres located north of 68th Street between Smith Avenue and Frank Avenue, the Project site bounded on the north by 68th Street. North of this roadway between I-15 and Pats Ranch Road is land used for agricultural purposes and designated for future development with industrial uses. East of Pats Ranch Road is a residential subdivision and east of Carnelian Street is the Louis VanderMolen Fundamental Elementary School. East of the school site are rural residential homes. Immediately abutting the Project site to the south is the Santa Ana River and undeveloped open space associated with the Santa Ana River floodplain, beyond which is the City of Norco. The Project would serve as a continuation of development patterns to the north and has no potential to create a north to south division of an established community because the Santa Ana River already provides physical barrier between the City of Jurupa Valley to the north and the City of Norco to the south. Future development of the 3.89-acre portion of the Project site north of 68th

Street at the City's discretion as a community facility site would not divide a community, but rather fill in a vacant parcel with a community-based use that would bring the community together. As such, no impact would occur.

5.10(b) 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?

Finding: Less-than-Significant Impact

(Source: City of Jurupa Valley General Plan, Eastvale Area Plan, Jurupa Area Plan, South Coast Air Quality Management District, Final 2007 Air Quality Management Plan, Southern California Association of Governments, 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy, Southern California Association of Governments, Final 2008 Regional Comprehensive Plan, County of Riverside, Western Riverside County Multiple Species Habitat Conservation Plan, Riverside LAFCO Policies & Procedures, Project Application Materials)

Under existing conditions, the Project site is designated for Community Development: Low Density Residential (CD-LDR), Rural Community: Low Density Residential (RC-LDR), Open Space: Recreation (OS-R) and Open Space: Water (OS-W) land uses by the General Plan. A General Plan Amendment (GPA) application proposed by the Project to re-designate portions of the site for Community Development: Medium Density Residential (MDR) and OS-R land uses to provide consistency with the land uses proposed by the Project's Tract Map. The proposed Project would increase the maximum number of residential dwelling units permitted on the Project site, as compared to the existing General Plan land use designations that govern the site. If the Project site were built out in accordance with its existing, underlying land use designations, a maximum of 274 residential dwelling units could be constructed on the subject property, whereas the Project is designed to include 466 residential homes.

Additionally, the Project site is zoned for Heavy Agriculture (A-2-10), Light Agriculture (A-1-10), and Water (W-1) under existing conditions. The A-1-10 zone and A-2-10 zones are applied to the northern portions of the Project site. Permitted and conditionally permitted land uses in these A-1 designated areas allow a variety of rural and agricultural uses including but not limited to one-family dwellings, agriculture, animal husbandry, and farm animals (maximum five animals per acre). The W-1 zone is applied to the southern, eastern, and western portions of the Project site. Permitted and conditionally permitted uses in W-1 areas include but are not limited to agriculture, apiaries, grazing of farm stock, aqua culture, and golf course on land subject to periodic flooding or other hazards. A Change of Zone (CZ 1201) application is proposed by the Project to re-designate portions of the Project site to R-4 to provide consistency with the land uses proposed by the Project's Tentative Tract Map. The proposed CZ 1201 would increase the maximum number of residential dwelling units permitted on the Project site, as compared to the existing zoning designations that govern the site. If the Project site were built out in accordance with its existing zoning designations, a maximum of seven (7) residential dwelling units could be constructed on the subject property, in addition to agriculture, animal husbandry, the keeping of farm animals, apiaries, golf course, and other similar uses. In comparison, the Project proposes a master-planned residential community of 466 homes and a public park site in the northern portion of the property, and 67.70 acres of natural river basin and the borrow area/open space in the southern portion of the property that would be conveyed to the RCA for inclusion in the Western Riverside County MSHCP Preserve. In addition, as part of the project, the Project Applicant would offer to convey to

the City 3.89 acres of surplus property in the northern portion of the Project site, north of 68th Street, for use at the City's discretion as a community facility site.

Although the proposed Project would be inconsistent with the existing General Plan land use and Zoning designations for the Project site, such an inconsistency would only be significant if it were to result in significant, adverse physical effects to the environment. As disclosed in this IS/MND, implementation of the proposed Project would develop the subject property at a greater intensity than allowed under the existing General Plan and Zoning designations and would result in adverse effects to the environment. However, in all instances where significant impacts have been identified, mitigation is provided to reduce each impact to less-than-significant levels. Therefore, because the Project is processing a GPA and CZ to modify the site's underlying land use regulations to be consistent with those proposed by the Project and because implementation of the Project would not result in significant impacts to the environment, the Project's inconsistency with the site's existing underlying General Plan land use and Zoning designations represents a less-than-significant impact for which no mitigation would be required.

The Project Applicant also is processing an application with the JCSD to annex all portions of the Project site located south of 68th Street and east of Wineville Avenue into JCSD's water and sewer service areas. The 3.89-acre surplus property located north of 68th Street also would be annexed to JCSD for sewer service. The portions of the Project site located west of Wineville Avenue are already located within JCSD's water and sewer service areas and eligible to receive service from JCSD under existing conditions. Upon approval of the annexation request by the JCSD Board of Directors, a petition to formally change JCSD's service boundaries would be required to be filed with the Riverside Local Agency Formation Commission (LAFCO). Riverside LAFCO would review the proposed annexation petition to formally expand JCSD's service area in compliance with its policies and procedures and would make the final determination on the petition in accordance with the applicable procedures set forth in California Government Code § 56000 et seq. The proposed Project would not conflict with any applicable goals, objectives, policies, or regulations of Riverside LAFCO. Because all water and sewer facilities needed to serve the proposed Project will be required to be designed, constructed, and maintained consistent with JCSD standards, the proposed Project would not conflict with any applicable goals, objectives, policies, or regulations of JCSD. Furthermore, the proposed expansion of JCSD's service area to include portions of the Project site south of 68th Street and east of Wineville Avenue and (for sewer only) the 3.89-acre surplus property located north of 68th Street would neither result in any physical impacts to the environment that have not been evaluated in this IS/MND, nor would it adversely affect JCSD's ability to provide water and/or sewer services to its existing commitments (refer to *Utilities and Service Systems* discussion under Issues 5.17(b) and (d) on Pages II-181 and II-182, respectively).

The Project would otherwise not conflict with any applicable goals, objectives, and policies of the City of Jurupa General Plan, Eastvale or Jurupa Area Plans, including the Santa Ana River and Protected Equestrian Sphere Policy Areas, or the City of Jurupa Valley Zoning Ordinance. Additionally with the mitigation measures set forth in this IS/MND, the Project would not conflict with any applicable policy document, including the Western Riverside MSHCP, SCAQMD AQMP, Southern California Association of Governments (SCAG) 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy, and SCAG 2008 Regional Transportation Plan.

In conclusion, the Project would not conflict with any applicable land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating adverse environmental effects and impacts would be less than significant.

5.10(c) Conflict with any applicable habitat conservation plan or natural community conservation plan?

Finding: Less-Than-Significant Impact with Mitigation Incorporated

(Sources: Biological Technical Report for the Riverbend Project (Glenn Lukos Associates, 2013), HANS Application and MSHCP Consistency Analysis for the Riverbend Project (Glenn Lukos Associates, 2013), Supplemental MSHCP Consistency Analysis for the Riverbend Project (Glenn Lukos Associates, 2013), County of Riverside, Western Riverside County Multiple Species Habitat Conservation Plan, RCA JPR Approval Letter)

The Project site is located within the boundaries of two habitat conservation plans (HCPs), “The Habitat Conservation Plan for the Stephens’ Kangaroo Rat in Western Riverside County, California” and the “Western Riverside County Multiple Species Conservation Program (MSHCP).”

As indicated in the analysis of the Project’s consistency with habitat conservation plans under Issue 5.4(f)(refer to *Biological Resources*, Page II-83), the Project would not impact habitat for the Stephens’ kangaroo rat (SKR); regardless, because the Project site is located within the SKR Fee Assessment Area as established by the SKR HCP, the Project is subject to mandatory payment of the per-acre local development mitigation fee pursuant to the City’s Municipal Code. With mandatory fee payment, which will be made a condition of Project approval by the City of Jurupa Valley, impacts would be less than significant and mitigation is not required.

As also indicated in the analysis of the Project’s consistency with habitat conservation plans under Issue 5.4(f), refer to Page II-83 above, portions of the Project site are located in MSHCP Criteria Cell 698 (Eastvale Area Plan, Subunit 1-Santa Ana River Central) and Criteria Cell 699 (Jurupa Area Plan, Subunit 1-Santa Ana River North). The Project proposes to avoid disturbance to approximately 25.78 acres of land that the Project Applicant would offer to convey to the Western Riverside County RCA for permanent conservation pursuant to the MSHCP. Western Riverside County RCA issued an approval letter to the City of Jurupa Valley on April 3, 2013, indicating their concurrence with the Project’s MSHCP consistency analysis. After meeting with the USFWS and the CDFW (collectively the “Wildlife Agencies”) in June 2013 and the preparation of supplemental information (refer to Appendix C2), the Western Riverside County RCA, Project Applicant, and the Wildlife Agencies have concurred with the City’s and Western Riverside County RCA’s determination that the Project complies with the MSHCP. As described in detail under Issue 5.4(f), the proposed Project would conserve all MSHCP riparian/riverine habitat located on-site as natural open space and would provide a minimum 100-meter buffer consisting of the graded borrow area/open space between proposed residential uses and on-site riparian/riverine habitat in order to preclude potential direct and indirect impacts with riparian/riverine habitat and associated species. Potential impacts to burrowing owl and potential indirect impacts to the MSHCP Conservation Area would be mitigated pursuant to Mitigation Measures BI-1 through BI-7. With mitigation, impacts would be reduced to less than significant.

Mitigation

Mitigation Measures BI-1 through BI-7 shall apply.

5.11 MINERAL RESOURCES

<i>Would the project:</i>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. 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?				✓
b. Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?				✓

Impact Analysis

5.11(a) 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?

Finding: No Impact

(Sources: City of Jurupa General Plan Figure OS-5, "Mineral Resources," City of Jurupa Valley General Plan PEIR, Chapter 4.12 – Mineral Resources, Google Earth)

The Project site has been under active agricultural operations for the past approximately 75 years. No mines, oil or gas wells, or other resource extraction activity occurs on the property or is known to have ever occurred on the property. According to mapping conducted by the California Geological Survey (CGS), which maps areas known as Mineral Resources Zones (MRZs), the proposed Project site is mapped within MRZ-3, which is defined as "areas with no known significant mineral deposits."

The Project site is not located within an area of known to be underlain by regionally- or locally-important mineral resources, or within an area that has the potential to be underlain by regionally- or locally-important mineral resources, as disclosed by the City's General Plan and the associated General Plan PEIR. Accordingly, implementation of the proposed Project would not result in the loss of availability of a known mineral resource that would be of value to the region or the residents of the State of California. Accordingly, no impact would occur.

5.11(b) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?

Finding: No Impact

(Sources: City of Jurupa General Plan Figure OS-5, "Mineral Resources," City of Jurupa Valley General Plan PEIR, Chapter 4.12 – Mineral Resources, Google Earth)

Refer to the response to Item 5.11(a), above. The City's General Plan does not identify any locally-important mineral resource recovery sites on-site or within close proximity to the Project site, nor are any mineral resource recovery operations located on-site or in the surrounding area. The City's General Plan does not identify the Project site as containing a locally important mineral resource recovery site. As such, no impact would occur.

5.12 NOISE

<i>Would the project:</i>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. 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?		✓		
b. Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?			✓	
c. A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?			✓	
d. A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?		✓		
e. For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?				✓
f. 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?				✓

Impact Analysis

5.12(a) 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?

Finding: Less-than-Significant Impact with Mitigation Incorporated

(Sources: Tentative Tract Map No. 36391 (Ter Maaten) Noise Impact Analysis (Urban Crossroads, 2012), Riverbend (TTM No. 36391) Supplemental Noise Impact Assessment (Urban Crossroads, 2013), Ordinance No. 847)

Noise generated at the Project site under existing conditions is limited to activities associated with the ongoing agricultural operations. There are no known unusual or loud noises that occur on the property on a regular basis. Primary noise sources near the site include vehicular noise on I-15 and operation noise at the Louis VanderMolen Elementary School located north of 68th Street. For more information about the existing noise environment surrounding the Project site, refer to Technical Appendix P1. Development of the Project site as a residential community has the potential to expose persons to or result in elevated noise levels during both near-term construction activities and under long-term conditions. Near-term (i.e., temporary) and long-term (i.e., permanent) noise impacts associated with the Project are discussed below.

□ **Impact Analysis for Near-Term Construction Noise**

The City's Noise Ordinance (Ordinance No. 847) includes a provision that exempts construction activities from any maximum noise level standard, provided that construction activities occur between the hours of 6:00am-6:00pm during the months of June through September or 7:00am-6:00pm during the months of October through May. The Project is required to comply with the City's Noise Ordinance, so implementation of the Project would not expose persons to or generate noise levels in excess of standards adopted by the City.

Off-Site Non-Transportation-Related Noise Impacts (Stationary Noise)

Regardless of the Project's consistency with the City's Noise Ordinance as described above, construction activities on the Project site, especially those involving heavy equipment, would initially create intermittent, short-term noise increases in the vicinity of the Project site, representing a temporary effect on ambient noise levels. Noise generated by construction equipment, including trucks, graders, bulldozers, concrete mixers, and portable generators, can reach high levels. The projected noise levels used for analysis assume the worst-case noise environment with all construction equipment operating simultaneously, at full power, at the same location on the Project site. In reality, noise levels would vary day to day and vary throughout the day, as it is highly unlikely that all pieces of construction equipment would simultaneously operate at the same time and location. Furthermore, grading activity on the Project site would be limited to a maximum of 4.0 acres per day, as required by Mitigation Measure AQ-6 (refer to *Air Quality* discussion under Issue 5.3(d) on Page II-67). As shown in Table 5-19 through Table 5-21, Project-related construction activities are estimated to reach a maximum noise level of 88.4 equivalent level decibels (Leq dBA) when measured at 50 feet from the noise source.

As described above, noise generated during near-term Project construction activities would cause an elevated temporary increase in ambient noise levels and affect off-site receptors particularly when construction equipment is operating in close proximity to 68th Street, north of which are residential homes and an elementary school site and in close proximity to the eastern property boundary, northeast of which are rural residential homes. Although near-term Project construction activities on the Project site would be consistent with the City's Noise Ordinance and impacts would be less than significant, implementation of Mitigation Measures N-1 and N-2, below, would ensure compliance with the City's Noise Ordinance and ensure that additional noise attenuation measures are incorporated into the Project's construction plans to minimize the exposure of nearby sensitive receptors to temporary increases in ambient noise levels such that the increases would not be considered substantial.

Table 5-19 Near-Term Construction Noise Levels: Grading¹

Equipment Type	Quantity	Usage Factor ²	Hours Of Operation ³	Reference Noise Level @ 50 Feet (Lmax dBA)	Cumulative Level @ 50 Feet (Leq dBA)
Scraper	2	40%	3.2	85.0	84.0
Grader	1	40%	3.2	85.0	81.0
Rubber Tired Dozers	4	40%	3.2	79.0	81.0
Excavator	2	40%	3.2	81.0	80.0
Tractor/Loader/Backhoe	2	40%	3.2	80.0	79.0
Cumulative Hourly Noise Levels 50 Feet (Leq dBA)					88.4

¹Federal Highway Administration's Roadway Construction Noise Model, January 2006

²Estimates the fraction of time each piece of equipment is operating at full power during construction operation.

³Represents the actual hours of peak construction equipment activity out of a typical 8-hour workday.

Source: Urban Crossroads 2012a, Table 9-1

Table 5-20 Near-Term Construction Noise Levels: Paving¹

Equipment Type	Quantity	Usage Factor ²	Hours Of Operation ³	Reference Noise Level @ 50 Feet (Lmax dBA)	Cumulative Level @ 50 Feet (Leq dBA)
Tractor/Loader/Backhoe	4	40%	3.2	80.0	82.0
Cement and Mortar Mixers	2	40%	3.2	79.0	78.0
Paver	2	50%	4.0	77.0	77.0
Rollers	2	20%	1.6	80.0	76.0
Cumulative Hourly Noise Levels 50 Feet (Leq dBA)					81.9

¹Federal Highway Administration's Roadway Construction Noise Model, January 2006

²Estimates the fraction of time each piece of equipment is operating at full power during construction operation.

³Represents the actual hours of peak construction equipment activity out of a typical 8-hour workday.

Source: Urban Crossroads 2012a, Table 9-2

Table 5-21 Near-Term Construction Noise Levels: Building Construction¹

Equipment Type	Quantity	Usage Factor ²	Hours Of Operation ³	Reference Noise Level @ 50 Feet (Lmax dBA)	Cumulative Level @ 50 Feet (Leq dBA)
Tractor/Loader/Backhoe	3	40%	3.2	80.0	80.8
Forklifts	3	20%	1.6	75.0	72.8
Crane	1	16%	1.3	81.0	73.0
Air Compressor	1	40%	3.2	78.0	74.0
Generator	1	50%	4.0	81.0	78.0
Welder	1	40%	3.2	74.0	70.0
Cumulative Hourly Noise Levels 50 Feet (Leq dBA)					84.1

¹Federal Highway Administration's Roadway Construction Noise Model, January 2006

²Estimates the fraction of time each piece of equipment is operating at full power during construction operation.

³Represents the actual hours of peak construction equipment activity out of a typical 8-hour workday.

Source: Urban Crossroads 2012a, Table 9-3

Off-Site Transportation-Related Noise Impacts (Mobile Noise)

Although noise generated during near-term Project construction would occur primarily on-site, the early stages of Project construction would include soil import. Transportation-related noise (i.e., mobile) would be added along local streets as trucks carrying dirt travel to and from the Project site. The location of the borrow site(s) are not yet identified; however, it is anticipated that imported soil would be sourced within a five (5) to 20-mile radius of the Project site. Although a specific borrow site and associated haul route have not yet been identified, it is anticipated that trucks would travel along 68th Street, between Pats Ranch Road and Wineville Avenue, to gain access to and deposit dirt on the Project site. As such, potential short-term noise effects along 68th Street were modeled to determine if proposed soil import activities would result in a significant impact and are disclosed in Table 5-22, *Near-Term Construction Noise Along 68th Street between Pats Ranch Road & Wineville Avenue – Soil Import Only*. In addition, a scenario where proposed soil import and grading activities occur simultaneously is summarized in Table 5-23, *Near-Term Construction Noise Along 68th Street between Pats Ranch Road & Wineville Avenue – Concurrent Soil Import and Grading*. Because this is the street segment where construction-related mobile source noise would be most concentrated, it also represents the worst-case (loudest) scenario for any segment along the haul route.

The City of Jurupa Valley considers a project to result in a significant transportation-related noise impact if traffic generated by that project would cause or contribute to exterior noise levels at sensitive receptor locations in excess of 65 dBA CNEL and the project's contribution to the noise environment equals 3.0 dBA CNEL or more. (A change of 3.0 dBA is considered "barely perceptible" by the human ear and changes of less than 3.0 dBA CNEL generally cannot be perceived except in carefully controlled laboratory environments). As shown in Table 5-22 and Table 5-23, noise levels along 68th Street between Pats Ranch Road and Wineville Avenue would not exceed 65 dBA CNEL under any near-term soil import or soil import plus grading scenario. In addition, the Project's direct and cumulative contribution to the noise environment along 68th Street between Pats Ranch Road and Wineville Avenue, and thus any other haul route segment, would be less than 3.0 dBA CNEL under any near-term soil import or soil import plus grading scenario. Accordingly, the Project's direct and cumulative near-term transportation-related, off-site mobile noise impacts would be less than significant.

**Table 5-22 Near-Term Construction Noise Along 68th Street
between Pats Ranch Road & Wineville Avenue – Soil Import Only**

Traffic Condition	Truck Activity	Haul Distance From Site (Miles)	ADT	Truck Trips (two-way)	Unmitigated Exterior Noise Level (dBA CNEL)	Truck Traffic Noise Level Impact (dBA CNEL)	Significant Impact? ²
Existing	No Construction Traffic	n/a	3,900	0	61.3	n/a	n/a
	Soil Import Activity	5	4,250	350	63.1	1.8	No
		10	4,140	240	62.6	1.3	No
		15	4,070	170	62.3	1.0	No
Existing + ambient growth	No Construction Traffic	n/a	4,480	0	61.9	n/a	n/a
	Soil Import Activity	5	4,830	350	63.5	1.6	No
		10	4,720	240	63.1	1.2	No
		15	4,650	170	62.8	0.9	No
Existing + ambient growth + cumulative	No Construction Traffic	n/a	5,700	0	62.9	n/a	n/a
	Soil Import Activity	5	6,050	350	64.3	1.4	No
		10	5,940	240	63.9	1.0	No
		15	5,870	170	63.6	0.7	No

Note: A significant impact would occur if noise levels exceed 65dBA and a project contributes 3.0 dBA or more to the affected roadway segment.

Source: Urban Crossroads 2013f, Table 4.

**Table 5-23 Near-Term Construction Noise Along Along 68th Street
between Pats Ranch Road & Wineville Avenue – Concurrent Soil Import and Grading**

Traffic Condition	Truck Activity	Haul Distance From Site (Miles)	ADT	Truck Trips (two-way)	Unmitigated Exterior Noise Level (dBA CNEL)	Truck Traffic Noise Level Impact (dBA CNEL)	Significant Impact? ²
Existing	No Construction Traffic	n/a	3,900	0	61.3	n/a	n/a
	Soil Import Activity + Grading Overlap	5	4,425	525	63.8	2.5	No
		10	4,260	360	63.1	1.8	No
		15	4,155	255	62.7	1.4	No
Existing + ambient growth	No Construction Traffic	n/a	4,480	0	61.9	n/a	n/a
	Soil Import Activity + Grading Overlap	5	5,005	525	64.1	2.2	No
		10	4,840	360	63.5	1.6	No
		15	4,735	255	63.1	1.2	No
Existing + ambient growth + cumulative	No Construction Traffic	n/a	5,700	0	62.9	n/a	n/a
	Soil Import Activity + Grading Overlap	5	6,225	525	64.8	1.9	No
		10	6,060	360	64.3	1.4	No
		15	5,955	255	63.9	1.0	No

Note: A significant impact would occur if noise levels exceed 65dBA and a project contributes 3.0 dBA or more to the affected roadway segment.

Source: Urban Crossroads 2013f, Table 5.

Mitigation

Mitigation Measure N-1: Prior to grading and building permit issuance, the City shall verify that the following notes are included on grading plans and building plans. Project contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by City of Jurupa Valley staff or its designee to confirm compliance. These notes also shall be specified in bid documents issued to prospective construction contractors.

- a) All construction activities shall comply with City Ordinance No. 847 (Noise Ordinance), including but not limited to the requirement that haul truck deliveries shall be limited to between the hours of 6:00am to 6:00pm during the months of June through September and 7:00am to 6:00pm during the months of October through May.
- b) Construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards.
- c) All stationary construction equipment shall be placed in such a manner so that emitted noise is directed away from the construction site's north and east property boundaries.
- d) Construction equipment staging areas shall be located at a minimum distance of 800 feet from the Project site's northern property boundary, as measured from the 68th Street right-of-way, unless a solid wall or intervening development has been constructed on the Project site that blocks a direct line-of-site between the staging area and 68th Street.

Mitigation Measure N-2: Prior to stockpile and grading permit issuance, the City shall review and approve a Construction Haul Route Exhibit prepared by the Project Applicant that identifies all public and private roadways that will be used for haul truck deliveries. Haul routes shall minimize passage by residential dwellings and other sensitive noise receptors. Prior to approval of the Haul Route Exhibit and issuance of stockpile and grading permits, the Applicant also shall submit a letter to the City from a qualified acoustician that identifies the haul route and verifies that project-related hauling activities along any segment of the haul route that passes sensitive noise receptors will not cause noise levels to exceed 65dBA or increase by more than 3.0 dBA if the existing noise level is already over 65dBA. A requirement to comply with the Construction Haul Route Exhibit shall be noted on all grading and building plans and also shall be specified in bid documents issued to prospective construction contractors.

☐ **Impact Analysis for Long-Term Operational Noise**

The Noise Element included as Chapter 7 of the City General Plan provides performance standards and noise control guidelines for determining and mitigating non-transportation (stationary) noise source impacts. The stationary noise source criteria are used to control operational noise sources such as idling trucks, outdoor speakers, and mechanical ventilation systems. As established by General Plan performance standards these project-related noises, as projected to any portion of any surrounding property containing a habitable dwelling, hospital, school, library or nursing home, shall not exceed 65 equivalent level dBA (dBA Leq) between 7 a.m. and 10 p.m. or 45 dBA Leq between 10 p.m. and 7:00 a.m. for a cumulative period of more than ten (10) minutes per hour.

While the General Plan provides background on noise fundamentals and establishes noise compatibility standards for noise-sensitive land uses, it does not include any standards or criteria to assess the impacts associated with transportation (mobile) noise source impacts. Therefore, for purposes of evaluating long-term operational transportation-related noise impacts within the City, the analysis in this Environmental Checklist/Initial Study relies on the noise criteria derived from the standards provided in the *General Plan Guidelines*, a publication of the State Office of Planning and Research. These standards are used by many California cities and counties. For noise-sensitive land uses, such as residential land uses, exterior noise levels up to 65 dBA community noise level equivalent level (CNEL) and interior noise levels up to 45 dBA CNEL are considered to be compatible with transportation-related noise sources. A project is considered to result in a significant transportation-related noise impact if traffic generated by that project would cause or contribute to exterior noise levels in excess of 65 dBA CNEL and the project's contribution to the noise environment equals 3.0 dBA CNEL or more. (A change of 3.0 dBA is considered "barely perceptible" by the human ear and changes of less than 3.0 dBA CNEL generally cannot be perceived except in carefully controlled laboratory environments).

Off-Site Non-Transportation-Related Noise Impacts (Stationary Noise)

The Project proposes the development of a master-planned residential community with supporting recreational and open space land uses. The proposed Project does not include any use that could be considered a stationary noise source (e.g., industrial machinery, loading docks, commercial air conditioning units, etc.) and proposed land uses are not anticipated to generate substantial noise levels or noise that may exceed the limits prescribed in the City's Noise Ordinance. Additionally, the Project would not result in a substantial permanent increase in noise levels above ambient conditions. Long-term impacts to off-site receptors associated with non-transportation-related noise would be less than significant.

Off-Site Transportation-Related Noise Impacts (Mobile Noise)

Future traffic generated by the proposed Project has the potential to cause or contribute to elevated traffic-related noise volumes at off-site locations, which could potentially impact sensitive receptors. To assess the off-site noise level increases associated with development of the proposed Project, noise contours were developed for the following traffic scenarios:

- Existing: This scenario refers to the existing traffic noise conditions, without and with the proposed Project.
- Project Completion (Year 2019): This scenario refers to the background noise conditions at Project completion (Year 2019) without and with the proposed Project.
- Year 2035: This scenario refers to the background noise conditions at Year 2035 without and with the proposed Project.

Traffic noise contour boundaries were established based on future traffic conditions on off-site study area road segments, which represent the equal levels of noise exposure as measured from the center of each roadway, and do not take into account the effect of any existing noise barriers or topography that may affect ambient noise levels. Existing and projected future noise levels, both with and without Project traffic, are presented in Table 5-24 through Table 5-26.

Table 5-24, *Existing Off-Site Project-Related Traffic Noise Impacts*, presents a comparison of the existing noise conditions to the noise conditions that would result with implementation of the proposed Project in the absence of cumulative development and ambient growth. Off-site roadway

Table 5-24 Existing Off-Site Project-Related Traffic Noise Impacts

Roadway	Segment	CNEL at 100 Feet (dBA)			Potential Significant Impact? ¹
		No Project	With Project	Project Addition	
Hamner Ave	North of Limonite Ave	72.2	72.3	0.1	No
Hamner Ave	Limonite Ave to 65th St	72.3	72.4	0.1	No
Hamner Ave	65th St to 68th St	71.4	71.6	0.1	No
Hamner Ave	68th St to Schleisman Rd	71.8	71.9	0.2	No
Hamner Ave	Schleisman Rd to A St	71.4	71.5	0.1	No
I-15 Fwy	North of Limonite Ave	82.2	82.2	0.0	No
I-15 Fwy	South of Limonite Ave	82.3	82.4	0.0	No
Pats Ranch Rd	South of Limonite Ave	62.0	62.8	0.8	No
Pats Ranch Rd	North of 68th St	59.2	60.7	1.5	No
Wineville Ave	North of Limonite Ave	67.5	67.8	0.3	No
Wineville Ave	South of Limonite Ave	58.2	59.0	0.8	No
Wineville Ave	North of 68th St	54.4	56.0	1.7	No
Etiwanda Ave	North of Limonite Ave	68.2	68.4	0.2	No
Etiwanda Ave	South of Limonite Ave	66.7	67.0	0.3	No
Limonite Ave	West of Hamner Ave	73.1	73.2	0.1	No
Limonite Ave	East of Hamner Ave	74.0	74.8	0.8	No
Limonite Ave	West of I-15 Fwy	74.7	74.8	0.1	No
Limonite Ave	I-15 Fwy to Pats Ranch Rd	74.2	74.5	0.3	No
Limonite Ave	Pats Ranch Rd to Wineville Ave	73.4	73.5	0.1	No
Limonite Ave	East of Wineville Ave	72.4	72.4	0.0	No
Limonite Ave	West of Etiwanda Ave	71.8	71.8	0.0	No
Limonite Ave	East of Etiwanda Ave	71.9	72.0	0.0	No
65th St	West of Hamner Ave	58.3	58.3	0.0	No
65th St	East of Hamner Ave	56.2	56.2	0.0	No
68th St	West of Hamner Ave	66.1	66.1	0.0	No
68th St	Hamner Ave to Pats Ranch Rd	68.2	68.8	0.6	No
68th St	Pats Ranch Rd to Wineville Ave	64.8	65.9	1.2	No
68th St	Wineville Ave to Smith Ave	59.3	60.9	1.6	No
68th St	East of Smith Ave	59.3	59.3	0.0	No
Schleisman Rd	West of Hamner Ave	68.1	68.2	0.1	No
Schleisman Rd	East of Hamner Ave	63.7	63.7	0.0	No

¹A significant impact occurs when noise levels exceed 65dBA and a project contributes 3.0 dBA or more to the affected roadway segment.

Source: *Urban Crossroads 2012a, Table 8-7.*

noise levels within the Project study area would increase from 0.0 to 1.7 dBA CNEL with development of the proposed Project. As shown in Table 5-24, there are several roadway segments in the Project study area that would exceed the City of Jurupa Valley's 65 dBA CNEL exterior noise standard for residential land uses both with-and-without the Project. However, the Project would not directly cause any roadway segment to exceed the 65 dBA CNEL noise standard and the Project's incremental noise contributions to study area roadways would be considered "barely perceptible" (i.e., less than 3.0 dBA CNEL). Under existing conditions, the Project would neither expose off-site sensitive receptors to or generate noise levels in excess of the City Noise Ordinance standards nor result in a substantial permanent increase in noise levels above ambient conditions. Therefore, off-site transportation-related noise impacts would be less than significant under Existing Plus Project conditions.

Table 5-25, *Year 2019 Off-Site Project-Related Traffic Noise Impacts*, presents a comparison of the projected noise conditions in the Year 2019 (estimated Project completion date), including cumulative development and ambient growth, to the noise conditions that would result with implementation of the proposed Project. Off-site roadway noise levels within the Project study area would increase from 0.0 to 1.5 dBA CNEL with development of the proposed Project. There are several roadway segments in the Project study area that are projected to exceed the City of Jurupa Valley's 65 dBA CNEL standard for residential land uses both with-and-without the Project, as summarized in Table 5-25. However, the Project would not directly cause any roadway segment to exceed the 65 dBA CNEL standard and the Project's incremental noise contributions to study area roadways would be considered "barely perceptible" (i.e., less than 3.0 dBA CNEL). Under Year 2019 conditions, the Project would neither expose off-site sensitive receptors to nor generate noise levels in excess of the City Noise Ordinance nor result in a substantial permanent increase in noise levels above ambient conditions. Therefore, off-site transportation-related noise impacts would be less than significant under Year 2019 Plus Project conditions.

Table 5-26, *Year 2035 Off-Site Project Related Traffic Noise Impacts*, presents a comparison of the projected noise conditions in the Year 2035, including cumulative development and ambient growth, to the noise conditions that would result with implementation of the proposed Project. Off-site roadway noise levels within the Project study area would increase from 0.0 to 1.0 dBA CNEL with development of the proposed Project. As shown in Table 5-26, there are several roadway segments in the Project study area that are projected to exceed the City of Jurupa Valley's 65 dBA CNEL standard for residential land uses both with-and-without the Project. However, the Project would not directly cause any roadway segment to exceed the 65 dBA CNEL standard and the Project's incremental noise contributions to study area roadways would be considered "barely perceptible" (i.e., less than 3.0 dBA CNEL). Accordingly, the Project would neither expose off-site sensitive receptors to or generate noise levels in excess of the City Noise Ordinance nor result in a substantial permanent increase in noise levels above ambient conditions under Year 2035 conditions. Therefore, off-site transportation-related noise impacts would be less than significant under Year 2035 Plus Project conditions.

In summary, long-term operation of the proposed Project would not generate a substantial permanent increase in transportation-related ambient noise levels, nor would Project-related traffic expose persons to permanent or noise levels in excess of the standards established by the City of Jurupa Valley. Impacts associated with off-site transportation-related noise would be less than significant, and no mitigation would be required.

Table 5-25 Year 2019 Off-Site Project-Related Traffic Noise Impacts

Roadway	Segment	CNEL at 100 Feet (dBA)			Potential Significant Impact? ¹
		No Project	With Project	Project Addition	
Hamner Ave	North of Limonite Ave	73.9	73.9	0.1	No
Hamner Ave	Limonite Ave to 65th St	74.0	74.0	0.1	No
Hamner Ave	65th St to 68th St	73.1	73.2	0.1	No
Hamner Ave	68th St to Schleisman Rd	73.2	73.3	0.1	No
Hamner Ave	Schleisman Rd to A St	72.7	72.8	0.1	No
I-15 Fwy	North of Limonite Ave	82.5	82.5	0.0	No
I-15 Fwy	South of Limonite Ave	82.7	82.7	0.0	No
Pats Ranch Rd	South of Limonite Ave	62.8	63.5	0.7	No
Pats Ranch Rd	North of 68th St	59.8	61.1	1.3	No
Wineville Ave	North of Limonite Ave	68.8	69.0	0.2	No
Wineville Ave	South of Limonite Ave	59.0	59.6	0.7	No
Wineville Ave	North of 68th St	55.1	56.5	1.5	No
Etiwanda Ave	North of Limonite Ave	69.2	69.3	0.1	No
Etiwanda Ave	South of Limonite Ave	67.3	67.6	0.2	No
Limonite Ave	West of Hamner Ave	75.2	75.2	0.1	No
Limonite Ave	East of Hamner Ave	76.4	76.5	0.0	No
Limonite Ave	West of I-15 Fwy	76.4	76.5	0.0	No
Limonite Ave	I-15 Fwy to Pats Ranch Rd	75.2	75.5	0.3	No
Limonite Ave	Pats Ranch Rd to Wineville Ave	74.5	74.5	0.1	No
Limonite Ave	East of Wineville Ave	73.4	73.4	0.0	No
Limonite Ave	West of Etiwanda Ave	72.8	72.8	0.0	No
Limonite Ave	East of Etiwanda Ave	72.8	72.9	0.0	No
65th St	West of Hamner Ave	59.4	59.4	0.0	No
65th St	East of Hamner Ave	57.5	57.5	0.0	No
68th St	West of Hamner Ave	67.1	67.1	0.0	No
68th St	Hamner Ave to Pats Ranch Rd	68.8	69.3	0.5	No
68th St	Pats Ranch Rd to Wineville Ave	65.4	66.4	1.0	No
68th St	Wineville Ave to Smith Ave	60.0	61.4	1.4	No
68th St	East of Smith Ave	60.0	60.0	0.0	No
Schleisman Rd	West of Hamner Ave	69.4	69.5	0.1	No
Schleisman Rd	East of Hamner Ave	64.6	64.6	0.0	No

¹A significant impact occurs when noise levels exceed 65dBA and a project contributes 3.0 dBA or more to the affected roadway segment.

Source: *Urban Crossroads 2013f, Table 3.*

Table 5-26 Year 2035 Off-Site Project Related Traffic Noise Impacts

Roadway	Segment	CNEL at 100 Feet (dBA)			Potential Significant Impact? ¹
		No Project	With Project	Project Addition	
Hamner Ave	North of Limonite Ave	74.9	74.9	0.0	No
Hamner Ave	Limonite Ave to 65th St	74.2	74.3	0.1	No
Hamner Ave	65th St to 68th St	73.3	73.5	0.1	No
Hamner Ave	68th St to Schleisman Rd	73.4	73.6	0.2	No
Hamner Ave	Schleisman Rd to A St	72.9	73.1	0.2	No
Hamner Ave	South of A St	72.8	72.8	0.0	No
I-15 Fwy	North of Limonite Ave	82.8	82.9	0.0	No
I-15 Fwy	South of Limonite Ave	83.0	83.0	0.0	No
Pats Ranch Rd	South of Limonite Ave	64.4	64.7	0.2	No
Pats Ranch Rd	North of 68th St	60.0	60.6	0.6	No
Wineville Ave	North of Limonite Ave	70.7	70.9	0.1	No
Wineville Ave	South of Limonite Ave	59.9	60.3	0.4	No
Wineville Ave	North of 68th St	56.8	57.6	0.8	No
Etiwanda Ave	North of Limonite Ave	70.1	70.3	0.2	No
Etiwanda Ave	South of Limonite Ave	70.4	70.7	0.3	No
Limonite Ave	West of Hamner Ave	74.8	74.8	0.0	No
Limonite Ave	East of Hamner Ave	76.4	76.4	0.0	No
Limonite Ave	West of I-15 Fwy	77.1	77.1	0.0	No
Limonite Ave	I-15 Fwy to Pats Ranch Rd	77.4	77.5	0.1	No
Limonite Ave	Pats Ranch Rd to Wineville Ave	76.6	76.6	0.0	No
Limonite Ave	East of Wineville Ave	76.5	76.5	0.0	No
Limonite Ave	West of Etiwanda Ave	76.7	76.7	0.0	No
Limonite Ave	East of Etiwanda Ave	76.1	76.2	0.0	No
65th St	West of Hamner Ave	60.8	60.9	0.1	No
65th St	East of Hamner Ave	58.3	58.3	0.0	No
68th St	West of Hamner Ave	67.3	67.3	0.0	No
68th St	Hamner Ave to Pats Ranch Rd	69.5	70.2	0.6	No
68th St	Pats Ranch Rd to Wineville Ave	66.3	67.3	1.0	No
68th St	Wineville Ave to Smith Ave	64.9	65.4	0.5	No
68th St	East of Smith Ave	64.7	64.7	0.0	No
Schleisman Rd	West of Hamner Ave	66.5	66.5	0.0	No
Schleisman Rd	East of Hamner Ave	65.4	65.4	0.0	No
A St	West of Hamner Ave	76.0	76.0	0.0	No
A St	Hamner Ave to I-15 Fwy	76.7	76.7	0.1	No
A St	East of I-15 Fwy	75.2	75.2	0.0	No

¹A significant impact occurs when noise levels exceed 65dBA and a project contributes 3.0 dBA or more to the affected roadway segment.

Source: Urban Crossroads 2012a, Table 8-9.

On-Site Non-Transportation-Related Noise Impacts (Stationary Source)

The Project site is surrounded by vacant land, residential development and an elementary school to the north, a golf course to the east and the Santa Ana River to the south. None of these land uses are considered to be a source of substantial non-transportation-related stationary noise. Accordingly, implementation of the Project would not expose future on-site residents to non-transportation-related stationary noise levels in excess of those allowed by the City's Noise Ordinance. Long-term on-site noise impacts associated with non-transportation-related noise would be less than significant.

On-Site Transportation-Related Noise Impacts (Mobile Source)

The Project site is bounded by two roadways, I-15 to the west and 68th Street to the north, that have the potential to be sources of substantial transportation-related noise. To determine if the future residents on the Project site would have the potential to be exposed to substantial transportation-related noise from I-15 and/or 68th Street, estimated noise levels under Year 2035 conditions were calculated at proposed on-site building facades. As shown in Table 5-27, *On-Site Exterior Traffic Noise Impacts*, on-site residential units would be exposed to exterior long-term noise levels ranging from 59.2 to 79.3 dBA CNEL. Exterior noise levels in excess of 65 dBA CNEL are considered unacceptable pursuant to the City Noise Ordinance. Accordingly, the Project has the potential to expose on-site residents to noise levels in excess of those allowed by the City or Jurupa Valley, which is regarded as a significant impact and mitigation is required.

Implementation of Mitigation Measure N-3, below, would require the Project to construct noise barriers adjacent to I-15 and 68th Street to ensure that future residents on-site are not exposed to exterior noise levels that exceed the City of Jurupa Valley's standard of 65 dBA CNEL (refer to Table 5-27). In addition, implementation of Mitigation Measure N-4, below, would require the Project to provide special building measures to ensure that future residents on-site are not exposed to interior noise levels that exceed the City of Jurupa Valley's standard of 45 dBA CNEL. With incorporation of the required mitigation, significant impacts associated with the exposure of on-site sensitive receptors to transportation noise would be reduced to less-than-significant levels.

Table 5-27 On-Site Exterior Traffic Noise Impacts

Lot	Roadway	Distance to Observer (Feet) ¹	Unmitigated Noise Level (dBA CNEL)	Mitigated Noise Level (dBA CNEL)	Barrier Height (Feet) ²	Top Of Barrier Elevation (Feet)
25	I-15 Freeway	128	79.3	64	12.0	635.4
49	I-15 Freeway	149	78.1	65	12.0	629.2
62	I-15 Freeway	135	78.9	65	12.0	626.3
172	68th Street	69	71.1	56	6.0	641.4
225	68th Street	69	71.3	57	6.0	635.0
371	I-15 Freeway	1,510	59.2	59	0.0	0.0
418	68th Street	69	71.5	60	6.0	638.5

¹ Preliminary distances based on the tentative tract map. Actual distances to be measured in a final noise study using the precise grading plans.

² Preliminary noise barrier heights needed to satisfy the City of Jurupa Valley exterior noise standards.

Source: *Urban Crossroads 2012a, Table 10-1.*

Mitigation

Mitigation Measure N-3: Prior to the issuance of any building permits for any residential lots abutting I-15 (Lots 18-28, 38, 39, 49, 50, 58-68), a 12-foot tall noise barrier measured from the adjacent pad elevation to the top of the adjacent wall shall be constructed along the western boundary of all residential lots adjacent to I-15. Construction of the barrier may be phased concurrent with development adjacent to I-15. Refer to Mitigation Measure N-6 for specifications.

Mitigation Measure N-4: Prior to the issuance of any building permits for any residential lots abutting 68th Street, a noise barrier shall be installed along the northern boundary of residential lots adjacent to 68th Street at the following heights. Construction of the barrier may be phased concurrent with development adjacent to 68th Street. Refer to Mitigation Measure N-6 for specifications.

- a) Between the northwest Project boundary and Pats Ranch Road, a 12-foot tall noise barrier gradually reducing to a height of 8-foot.
- b) Between Pats Ranch Road and Smith Avenue, a 6-foot tall noise barrier.

Mitigation Measure N-5: Prior to the issuance of any building permits for Lots 68 through 76 (at the southern boundary of the residential development immediately east of I-15), a 12-foot tall noise barrier adjacent to I-15 shall be installed along the southern boundary of these lots. Construction of the barrier may be phased concurrent with development of these lots. Refer to Mitigation Measure N-6 for specifications.

Mitigation Measure N-6: Prior to issuance of building permits, a final noise study based on final precise grading plan elevations shall be prepared by a qualified acoustician and approved by the City to validate appropriate noise barrier heights, locations, and construction materials. All required noise barriers shall be designed to reduce noise levels to below 65 dBA CNEL within private exterior areas (i.e., backyards) of residential lots. The noise barriers may consist of any material (block, tempered glass, earthen berm, etc.) or combination of materials that achieves the required noise attenuation and shall have no decorative cutouts or other line-of-sight openings between shielded areas and the noise source (adjacent roadway). Prior to issuance of building permits, the City of Jurupa Valley shall review and approve the noise barrier design, placement, and materials to ensure that the required level of sound attenuation will be achieved.

Mitigation Measure N-7: Prior to issuance of any residential building permit, an interior noise analysis shall be completed to the satisfaction of the City Planning Department demonstrating that proposed building materials will achieve interior noise levels less than 45 dBA CNEL. Building materials that would facilitate compliance with the 45dBA CNEL interior noise standard include, but are not limited to, dual-glazed windows and a means of “windows closed” mechanical ventilation (e.g., air conditioning).

5.12(b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Finding: Less-than-Significant Impact

(Sources: Tentative Tract Map No. 36391 (Ter Maaten) Noise Impact Analysis (Urban Crossroads, 2012), California Department of Transportation "Transportation- and Construction-Induced Vibration Guidance Manual," Project Application Materials, Google Earth)

Under existing conditions, there are no known sources of ground-borne vibration or noise that affect the Project site. The Project would not generate ground-borne vibration or ground-borne noise, except, potentially, during the construction phase from the use of heavy construction equipment. According to California Department of Transportation's *Transportation and Construction-Induced Vibration Guidance Manual*, ground-borne vibration from heavy construction equipment does not create vibration amplitudes that could cause structural damage, when measured at a distance of 10 feet. The nearest existing off-site structures are located over 50 feet from the nearest point of construction activities and would not be exposed to substantial ground-borne vibration due to the operation of heavy construction equipment on the Project site. Furthermore, the Project is not expected to employ any pile driving, rock blasting, or rock crushing equipment during construction activities, which are the primary sources of ground-borne noise and vibration during construction. As such, impacts from ground-borne vibration and noise during near-term construction would be less than significant.

There are no conditions associated with the long-term operation of the proposed Project that would result in the exposure of on- or off-site residents to excessive ground-borne vibration or noise. The proposed Project would develop the subject property as a master-planned residential community with supporting recreational and open space land uses, and would not include nor require equipment, facilities, or activities that would generate ground-borne vibration or ground-borne noise. In addition, the Project site is not located in the vicinity of a railroad line or any other use associated with ground-borne vibration or ground-borne noise; therefore, the Project would not expose future on-site residents to substantial ground-borne vibration or noise. Accordingly, under long-term operation the Project would not expose on- or off-site sensitive receptors to substantial ground-borne vibration or ground-borne noise. Impacts are evaluated as less than significant.

5.12(c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

Finding: Less-than-Significant Impact

(Sources: Tentative Tract Map No. 36391 (Ter Maaten) Noise Impact Analysis (Urban Crossroads, 2012), Riverbend (TTM No. 36391) Supplemental Noise Impact Assessment (Urban Crossroads, 2013))

As discussed above under Issue 5.12(a), the only potential for the Project to create a substantial permanent increase in ambient noise levels is the result of future traffic generated by the proposed Project that has the potential to cause or contribute to elevated traffic-related noise volumes at off-site locations. The analysis presented under Issue 5.12(a) concluded that the Project's incremental noise contributions to study area roadways would be considered "barely perceptible" (i.e., less than 3.0 dBA CNEL). Refer the analysis under Issue 5.12(a) for more information. As it concludes, off-site transportation-related noise impacts would be less than significant and mitigation is not required.

5.12(d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

Finding: Less-than-Significant Impact with Mitigation Incorporated

(Source: Tentative Tract Map No. 36391 (Ter Maaten) Noise Impact Analysis (Urban Crossroads, 2012), Riverbend (TTM No. 36391) Supplemental Noise Impact Assessment (Urban Crossroads, 2013))

As discussed above under Issue 5.12(a), the only potential for the Project to create a substantial temporary or periodic increase in ambient noise levels is during its construction phase. The analysis presented under Issue 5.12(a) concluded that the Project would result in elevated noise levels during construction and although the impact would be less than significant via mandatory compliance with the City's Noise Ordinance, Mitigation Measures N-1, and N-2 are included to reduce exposure of off-site receptors to construction-related noise.

Mitigation

Mitigation Measures N-1 and N-2 shall apply.

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

Finding: No Impact

(Sources: City of Jurupa Valley General Plan Figure S-19 – Airport Locations, Riverside County Airport Land Use Compatibility Plan, Google Earth)

The Project site is not located within in the influence area of any airport land use plan, nor is the Project site located within two (2) miles of any public airport or public use airport. Accordingly, the Project has no potential to expose future residents in the Project area to excessive, airport-related noise. No impact would occur.

5.12(f) 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?

Finding: No Impact

(Source: City of Jurupa Valley General Plan Figure S-19 – Airport Locations, Riverside County Airport Land Use Compatibility Plan, Google Earth)

There are no private airfields or airstrips in the vicinity of the Project site. Accordingly, the Project would have no potential to expose future residents in the Project area to excessive noise levels associated with a private airstrip. No impact would occur.

5.13 POPULATION AND HOUSING

<i>Would the project:</i>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. 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)?			✓	
b. Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?			✓	
c. Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?			✓	

Impact Analysis**5.13(a) 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)?****Finding: Less-than-Significant Impact**

(Sources: Project Application Materials, State of California, Department of Finance, "E-5 Population and Housing Estimates for Cities, Counties and the State — January 1, 2011- 2013")

The proposed Project would develop the northern portion of the subject property with 466 residential homes. At full build-out, the Project is estimated to provide housing for up to 1,799 residents, based on population estimates prepared by the State Department of Finance (466 dwelling units x 3.86 persons per household = 1,799 persons). This would represent a population increase in the Project area of up to 1,796 new residents as compared to existing conditions. If the Project site were built out in accordance with its existing, underlying General Plan land use designations, up to 1,058 residents could reasonably be expected on-site (274 dwelling units x 3.86 persons per household = 1,058 persons), or 741 fewer residents than anticipated under the Project.

It is unlikely that the Project could induce off-site population growth because the Project site is surrounded by existing development on three sides and the Santa Ana River corridor on the south side which is designated as permanent open space. The Project would include the extension of an existing water line and the installation of an off-site sewer line connection; however, proposed infrastructure improvements have been sized to serve the Project and do not contain adequate excess capacity to support substantial, unplanned growth. The Project also would install a 500 LF of water line in 68th Street over I-15 as a secondary connection, but this is a JCSO master-planned line that would be installed with or without construction of the proposed Project.

Under CEQA, direct population growth by a project is not considered necessarily detrimental, beneficial, or of little significance to the environment. Typically, population growth would be considered a significant impact pursuant to CEQA if it directly or indirectly affects the ability of agencies to provide needed public services and requires the expansion or new construction of

public facilities and utilities, or if it can be demonstrated that the potential growth results in a physical adverse environmental effect. As documented in this IS/MND, activities of the proposed Project's population would result in impacts associated with increased traffic and associated vehicular air emissions and has the potential to result in indirect impacts to biology associated with activities of the population that occur adjacent to the MSHCP Conservation Area in the southern portion of the property. However, mitigation measures are provided in this IS/MND to address all impacts associated with the Project's population to less-than-significant levels. Accordingly, the Project's direct impacts associated with population inducement would be less than significant.

5.13(b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

Finding: Less-than-Significant Impact

(Sources: Project Application Materials, Google Earth)

The Project site contains two (2) occupied residential structures under existing conditions, which currently provide housing for three (3) people. Although the Project would eliminate these homes from the property, the displacement of three (3) persons would not result in the need for construction of replacement housing elsewhere, as the elimination of two housing units does not comprise a substantial number of existing homes. Moreover, the Project involves the construction of 466 single-family homes on-site. Based on these considerations, implementation of the proposed Project would not displace a substantial number of existing housing, nor would it necessitate the construction of replacement housing elsewhere. Impacts would be less than significant.

5.13(c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

Finding: Less-than-Significant Impact

(Sources: Project Application Materials, Google Earth)

As described above under the response to Issue 5.13(b), the Project site contains two (2) occupied residential structures under existing conditions, which currently provide housing to three (3) people. The displacement of three persons from the site would not comprise a "substantial number of people." Moreover, the Project would result in the construction of 466 homes on-site, which would more than accommodate the three people that would be displaced by the Project. Accordingly, implementation of the proposed Project would not displace substantial numbers of people and would not necessitate the construction of replacement housing elsewhere. Impacts would be less than significant.

5.14 PUBLIC SERVICES

<i>Would the project:</i>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:				
1) Fire protection?			✓	
2) Police protection?			✓	
3) Schools?			✓	
4) Parks?			✓	
5) Other public facilities?			✓	

Impact Analysis

5.14(a)(1) Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:

Fire Protection

Finding: Less-than-Significant Impact

(Sources: Riverside County Fire Department Riverside County Fire Protection and Emergency Medical Master Plan, Riverside County Fire Department "Fire Stations," Google Earth, Ordinance No. 659, Project Application Materials)

The Riverside County Fire Department provides fire protection services to the Project area. Pursuant to the Riverside County Fire Department *Fire Protection and Emergency Medical Master Plan* the Project would be classified as "Category II – Urban," which requires a fire station to be within three (3) roadway miles of the Project and a full first alarm assignment team operating on the scene within 15 minutes of dispatch. The proposed Project would be primarily served by the Eastvale Fire Station (Station No. 27), an existing station located approximately 1.0 roadway mile west of the Project site, which would meet the Category II – Urban level of service criteria established by the Riverside County Fire Department.

Development of the proposed Project would impact fire protection services by placing an additional demand on existing Riverside County Fire Department resources should its resources not be augmented. To offset the increased demand for fire protection services, the proposed Project would be conditioned by the City to provide a minimum of fire safety and support fire suppression activities, including compliance with State and local fire codes, fire sprinklers, a fire hydrant system,

paved access, and secondary access routes. Furthermore, the Project would be required to comply with the provisions of the City's Development Impact Fee (DIF) Ordinance, which requires a fee payment to assist the City in providing for fire protection services. Payment of the DIF fee would ensure that the Project provides fair share funds for the provision of additional public services, including fire protection services, which may be applied to fire facilities and/or equipment, to offset the incremental increase in the demand for fire protection services that would be created by the Project.

Based on the foregoing analysis, implementation of the Project would not result in the need for new or physically altered fire protection facilities, and would not exceed applicable service ratios or response times for fire protection services. Impacts are less than significant and mitigation is not required.

Mitigation

Although Project-related impacts associated with new or physically altered fire station facilities would be less than significant, Mitigation Measure PS-1 is recommended to ensure compliance with City's Development Impact Fee (DIF) Ordinance

Mitigation Measure PS-1: The Project shall comply with City's Development Impact Fee (DIF) Ordinance, which requires payment of a development mitigation fee to assist in providing revenue that the City can use to improve public facilities and/or equipment, to offset the incremental increase in the demand for public services that would be created by the Project. Prior to the issuance of building permits, the Project Applicant shall pay fees in accordance with the City's Ordinance 659.

Police Protection

Finding: Less-than-Significant Impact

(Sources: Riverside County Sheriff's Department "Stations," Ordinance No. 659, City of Jurupa Valley General Plan PEIR, Chapter 4.15 – Public Services, Project Application Materials)

The Riverside County Sheriff's Department provides community policing to the Project area via the Jurupa Valley Station located at 7477 Mission Boulevard, Jurupa Valley, CA 92509. The Riverside County Sheriff's Department has set a minimum level of service standard of 1.0 deputy per 1,000 people.

At full buildout, the Project would introduce approximately 1,799 new residents to the Project site. There is not a direct correlation between population growth, the number of crimes committed, and the number of Sheriff's Department personnel needed to respond to these increases. As the population and use of an area increases, however, additional financing of equipment and manpower needs are required to meet the increased demand. The proposed Project would result in an increase in the cumulative demand for services from the Riverside Sheriff's Department. To maintain the desirable level of service, buildout of the proposed Project would generate a need for approximately 1.8 additional deputies. The proposed Project would not, however, result in the need for new or expanded physical sheriff facilities because the addition of approximately 1.8 deputies would not necessitate the construction of new or modified sheriff facilities.

The proposed Project's demand on sheriff protection services would not be significant on a direct basis because the Project would not create the need to construct a new Sheriff station or physically alter an existing station. The Project would be required to comply with the provisions of the City's DIF Ordinance, which requires a fee payment to assist the City in providing for public services, including police protection services. Payment of the DIF fee would ensure that the Project provides fair share funds for the provision of additional police protection services, which may be applied to sheriff facilities and/or equipment, to offset the incremental increase in the demand that would be created by the Project. The Project's incremental demand for sheriff protection services would be less than significant with the Project's required payment of DIF fees.

Mitigation

Mitigation Measure PS-1 shall apply.

Schools

Finding: Less-than-Significant Impact

(Sources: California Senate Bill 50 (Greene), Project Application Materials)

The construction of 466 residential homes as proposed by the Project would increase the population in the local area and would consequently place greater demand on the existing public school system by generating additional students to be served by the Corona-Norco Unified School District (CNUSD). Although it is possible that the CNUSD may ultimately need to construct new school facilities in the region to serve the growing population within their service boundaries, such facility planning is conducted by CNUSD and is not the responsibility of the Project. Furthermore, the proposed Project would be required to contribute fees to the CNUSD in accordance with the Leroy F. Greene School Facilities Act of 1998 (Senate Bill 50). Pursuant to Senate Bill 50, payment of school impact fees constitutes complete mitigation for project-related impacts to school services. Therefore, mandatory payment of school impact fees would reduce the Project's impacts to school facilities to a level below significant, and no mitigation would be required.

Mitigation

Although Project-related impacts associated with of new or physically altered schools would be less than significant, Mitigation Measure PS-2 is recommended to ensure compliance with the Leroy F. Greene School Facilities Act of 1998 (Senate Bill 50)

Mitigation Measure PS-2: The Project shall comply with the Leroy F. Greene School Facilities Act of 1998 (Senate Bill 50), which requires payment of a school impact fee on a per dwelling unit basis to assist in providing revenue that school districts (including CNUSD) can use to ensure the adequate provision of public education facilities and services to service new development. Prior to the issuance of building permits, the Project Applicant shall pay required impact fees to the CNUSD following CNUSD protocol for impact fee collection.

Parks

Finding: Less-than-Significant Impact

(Sources: Project Application Materials)

As discussed below under the Responses to Issues 5.15(a) and (b), the proposed Project would not substantially increase the use of existing public park facilities and would not result in the need to modify existing or construct new park facilities off-site because the Project would include on-site park and recreation facilities that would adequately meet the recreational needs of Project residents. Construction and operation of the proposed on-site park is fully analyzed throughout this IS/MND as an inherent component of the proposed Project. Accordingly, implementation of the Project would not adversely affect any park facility and impacts are regarded as less than significant.

Other Public Facilities

Finding: Less-than-Significant Impact

(Sources: Ordinance No. 659, Project Application Materials)

Implementation of the Project would result in an increase in the population in the Project area and would increase the demand for public services, including public health services and library services. The Project would not generate the need for the physical construction of new or expanded public facilities. The end-use of the community facility site proposed by the Project north of 68th Street is not yet known, but the physical impacts associated with development that portion of the Project site are analyzed throughout this IS/MND as an inherent component of the proposed Project.

The Project would be required to comply with the provisions of the City's DIF Ordinance, which requires a fee payment to assist the City in providing public services. Payment of the DIF fee would ensure that the Project provides fair share funds for the provision of additional public services, and these funds may be applied to the acquisition and/or construction of public services and/or equipment (including library books). Mandatory payment of DIF fees would ensure that Project-related impacts to public services would be less than significant.

5.15 RECREATION

<i>Would the project:</i>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?			✓	
b. Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?			✓	

Impact Analysis**5.15(a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?****Finding: Less-than-Significant Impact**

(Sources: Project Application Materials, State of California, Department of Finance, "E-5 Population and Housing Estimates for Cities, Counties and the State — January 1, 2011- 2013,")

The Project would develop the subject property with 466 single-family detached residential homes. Pursuant to the population estimates prepared by the State Department of Finance, single-family detached units within the City are occupied by an average of approximately 3.86 persons per dwelling unit (State of California, Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties and the State — January 1, 2011- 2013*). Therefore, using population generation estimates provided by the State, the proposed Project would generate up to 1,799 new residents. Based on the Jurupa Area Recreation and Parks District's (JARPD) goal of providing 5.0 acres of park land for each 1,000 residents, the Project would generate a demand for approximately 9.0 acres of park land. The proposed Project would construct an approximately 10.7-acre neighborhood park on-site, which would exceed the JARPD's requirement for park land. In addition, the Project also would construct a trail system that would traverse the subject property and offer to convey to the City an approximately 3.89-acre for use at the City's discretion as a community facility site, which has the potential to include recreational uses/amenities although the exact end-use is not yet determined. Because the proposed Project would provide for adequate on-site parkland to meet the recreational needs of the community, the proposed Project would not result in a substantial increase in the use of existing neighborhood parks, regional parks, or recreational facilities such that overuse would lead to or substantially contribute to their physical deterioration. Therefore, a less-than-significant impact would occur and mitigation is not required.

5.15(b) Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

Finding: Less-than-Significant Impact

(Source: Project Application Materials)

On-site recreation amenities proposed by the Project include an approximately 10.7-acre neighborhood park and a trail system. In addition, the Project would offer to convey an approximately 3.89-acre to the City for use at the City's discretion as a community facility site, which may include recreational uses/amenities but the exact end-use is not yet determined. No off-site parks or recreational improvements are proposed or required as part of the Project.

Development of proposed recreational features within the Project site would have a physical impact on the environment. However, impacts resulting from their construction are described throughout the analysis in this IS/MND. In instances where significant impacts have been identified, mitigation measures are recommended in each applicable subsection of this IS/MND to reduce the impact to less-than-significant levels. Therefore, the construction of recreation facilities on-site would not result in any significant physical effects on the environment that are not already identified and disclosed as part of this Initial Study. Accordingly, additional mitigation measures beyond those identified throughout this IS/MND would not be required.

5.16 TRANSPORTATION/TRAFFIC

<i>Would the project:</i>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?		✓		
b. Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?		✓		
c. Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?				✓
d. Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?			✓	
e. Result in inadequate emergency access?			✓	
f. Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?			✓	

Impact Analysis

5.16(a) Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?

Finding: Less-than-Significant Impact with Mitigation Incorporated

(Sources: Tentative Tract Map No. 36391 Traffic Impact Analysis (Urban Crossroads, 2012), Riverbend (TTM No. 36391) Supplemental Traffic Impact Assessment (Urban Crossroads, 2013), Traffic Impact Analysis Response Letter (Urban Crossroads, 2013))

Refer to the response under Issue 5.16(f), below, for an analysis of the Project's potential impacts to pedestrian and bicycle circulation and mass transit.

For purposes of analyzing the Project's potential impacts to traffic, the City of Jurupa Valley identified the traffic impact study area in conformance with the requirements of the Riverside County's Traffic Impact Analysis (TIA) preparation guidelines, which were adopted by the City. Based on these guidelines, the minimum area to be studied includes any intersection of "Collector" or higher classification street, with "Collector" or higher classification streets, at which a proposed project would add 50 or more peak hour trips. For the proposed Project, the traffic study impact area includes 16 intersections. Refer to Technical Appendix Q1 for more information about the analysis methodologies employed in the Project-specific TIA prepared by Urban Crossroads.

For purposes of determining the significance of traffic impacts under this Subsection and in accordance with the City's TIA preparation guidelines:

- During the weekday AM (between 7:00 a.m. and 9:00 a.m.) and/or PM (between 4:00 p.m. and 6:00 p.m.) peak hour, if an intersection is projected to operate at an acceptable level of service (i.e., LOS "D" or better) without the Project and the addition of Project traffic (as measured by 50 or more peak hour trips) is expected to cause the intersection to operate at an unacceptable level of service (i.e., LOS "E" or "F"), the impact is considered a significant direct impact.
- During the weekday AM (between 7:00 a.m. and 9:00 a.m.) and/or PM (between 4:00 p.m. and 6:00 p.m.) peak hour, if an intersection is projected to operate at an unacceptable level of service (i.e., LOS "E" or "F") without the Project, and the Project contributes 50 or more peak hour trips to that intersection, the impact is considered a significant direct impact.
- A significant cumulative impact is identified when an intersection is projected to operate below an acceptable LOS (i.e., LOS "E" or "F") with the addition of future traffic and Project-related traffic (as measured by 50 or more peak hour trips). Cumulative traffic impacts are created as a result of a combination of the proposed Project together with other future developments contributing to the overall traffic impacts requiring additional improvements to maintain acceptable LOS operations with or without the Project.

Under existing conditions, the agricultural operations at the Project site generate very little traffic. Existing traffic counts in the study area were collected on February 8, 2012 and May 17, 2012. Those days were representative of typical weekday peak hour traffic conditions in the study area, as no observations were made in the field by Urban Crossroads that would indicate atypical traffic conditions on this date. Schools were also in session and operating on normal schedules at the time the traffic counts were collected. Based on those traffic counts, all intersections in the study area operate at acceptable levels of service (LOS) except for the intersection of Etiwanda Avenue/Limonite in the City of Jurupa Valley that operates at LOS "F" in the AM peak hour and LOS "E" in the PM peak hour, whereas LOS is the acceptable standard. Refer to Technical Appendix Q for more information about existing traffic conditions.

❑ Project Trip Generation and Distribution

Trip generation represents the amount of traffic that is attracted to and produced by a development project. Determining traffic generation for a specific project is based upon forecasting the amount of traffic that is expected to be both attracted to and produced by the specific land uses proposed

for a given development. The land uses proposed by the Project are estimated to produce an estimated 4,476 daily vehicle trips, including 352 trips during the AM Peak Hour and 473 trips during the PM Peak Hour. For more information about trip generation, refer to Technical Appendices Q1 and Q2.

Trip distribution is the process of identifying the probable destinations, directions, or traffic routes that would be utilized by Project traffic. The potential interaction between the planned land uses and surrounding regional access routes are considered, to identify the routes where Project traffic would distribute. The trip distribution for the proposed Project was developed based on anticipated passenger car travel patterns to-and-from the Project site. The total volume on each roadway was divided by the Project's total traffic generation to indicate the percentage of Project traffic that would use each component of the regional roadway system in each relevant direction. The Project passenger car trip distribution pattern at Project Opening Year (2019) and at the Horizon Year (2035) is graphically depicted on Figure 5-3, *Project Trip Distribution – Opening Year (2019)*, and Figure 5-4, *Project Trip Distribution – Horizon Year (2035)*, respectively.

The assignment of traffic from the Project area to the adjoining roadway system is based on the Project trip generation, trip distribution, and the arterial highway and local street system improvements that would be in place by the time of Project buildout (2019) and the Horizon Year (2035). Based on the identified Project traffic generation and trip distribution patterns, Project average daily traffic (ADT) volumes for the weekday are shown on Figure 5-5, *Project Average Daily Traffic – Opening Year (2019)*, and Figure 5-6, *Project Average Daily Traffic – Horizon Year (2035)*, and Project AM and PM Peak Hour intersection turning movement volumes are shown on Figure 5-7 through Figure 5-10.

□ Analysis Scenarios

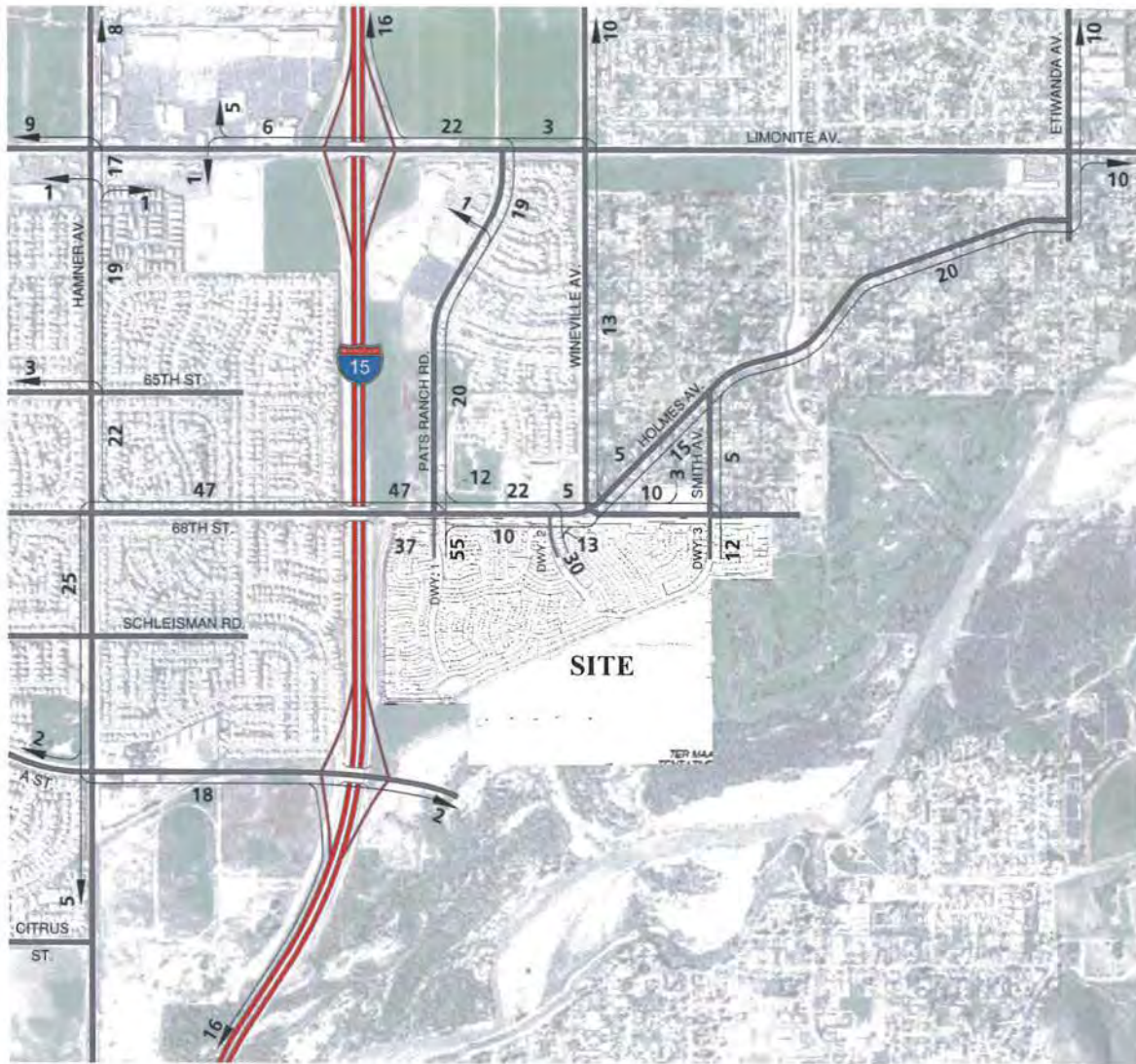
For the purpose of the proposed Project's traffic impact analysis, potential impacts to traffic and circulation are assessed for each of the conditions listed below.

- Near-Term Construction Conditions (1 scenario)
- Existing (2012) plus Project Conditions (1 scenario)
- Opening Year (2019) with Project and Opening Year (2019) with Project and cumulative development projects (2 scenarios)
- Horizon Year (2035) without Project and Horizon Year (2035) with Project (2 scenarios)

The Near-Term Construction Conditions analysis determines the potential for Project construction-related traffic to result in an adverse effect to the local roadway system. Types of traffic anticipated during construction include employees traveling to/from the Project site as well as deliveries of construction materials to the Project site.

The Existing (2012) plus Project (E+P) analysis determines direct Project-related traffic impacts that would occur on the existing roadway system in the theoretical scenario of the Project being placed upon existing conditions. Existing conditions (2012) represents the baseline traffic conditions as they existing at the time the Project's applications were deemed complete by the City of Jurupa Valley. Because the Project is not expected to be fully built and occupied until at least 2019, the E+P scenario is presented to disclose direct impacts as required by CEQA.





LEGEND:

10 = PERCENT TO/FROM PROJECT

Source: Urban Crossroads (12-06-12)



Source: Urban Crossroads (12-06-12)



LEGEND:

10.0 = VEHICLES PER DAY (1000's)
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

Source: Urban Crossroads (12-06-12)



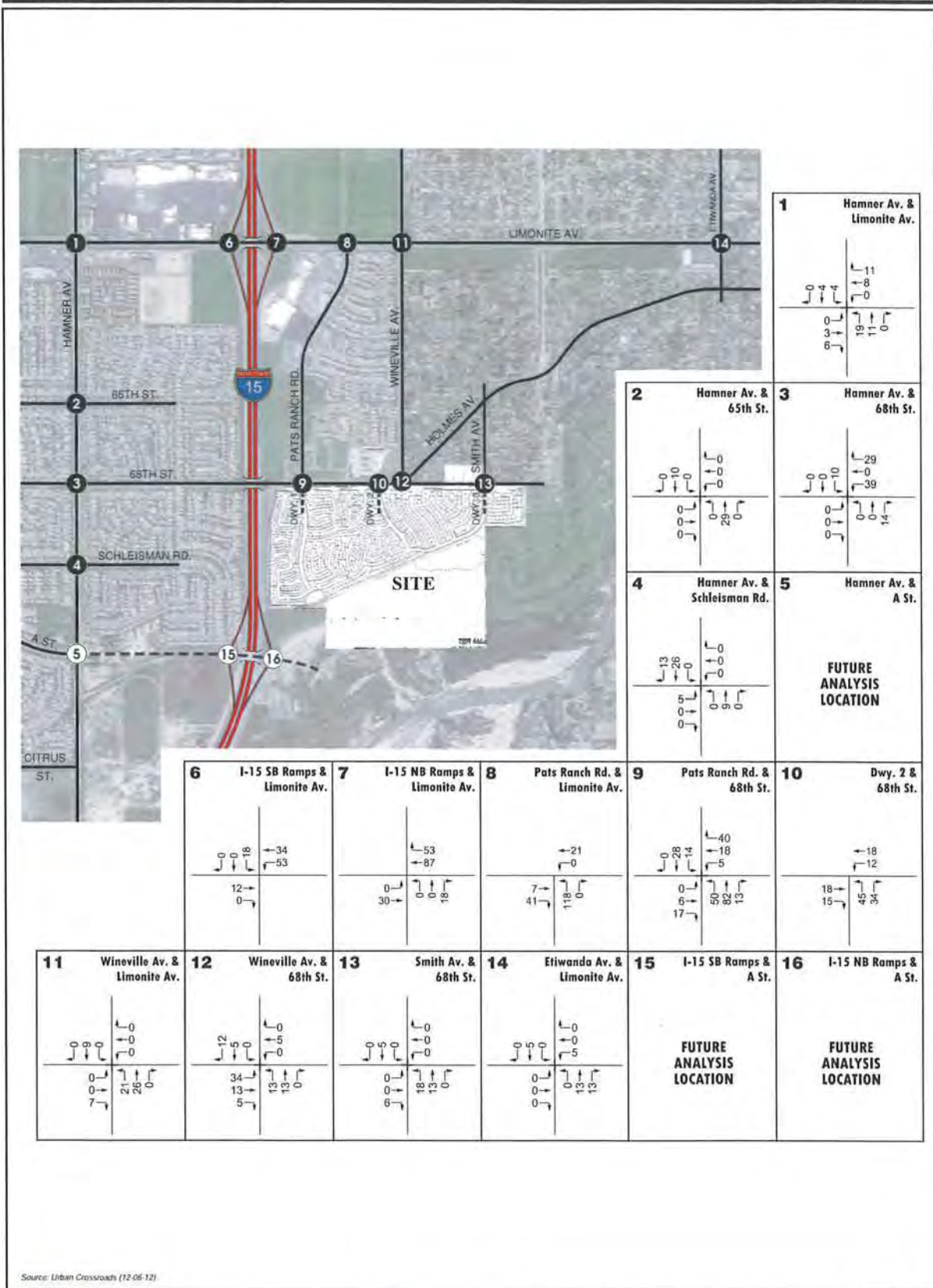
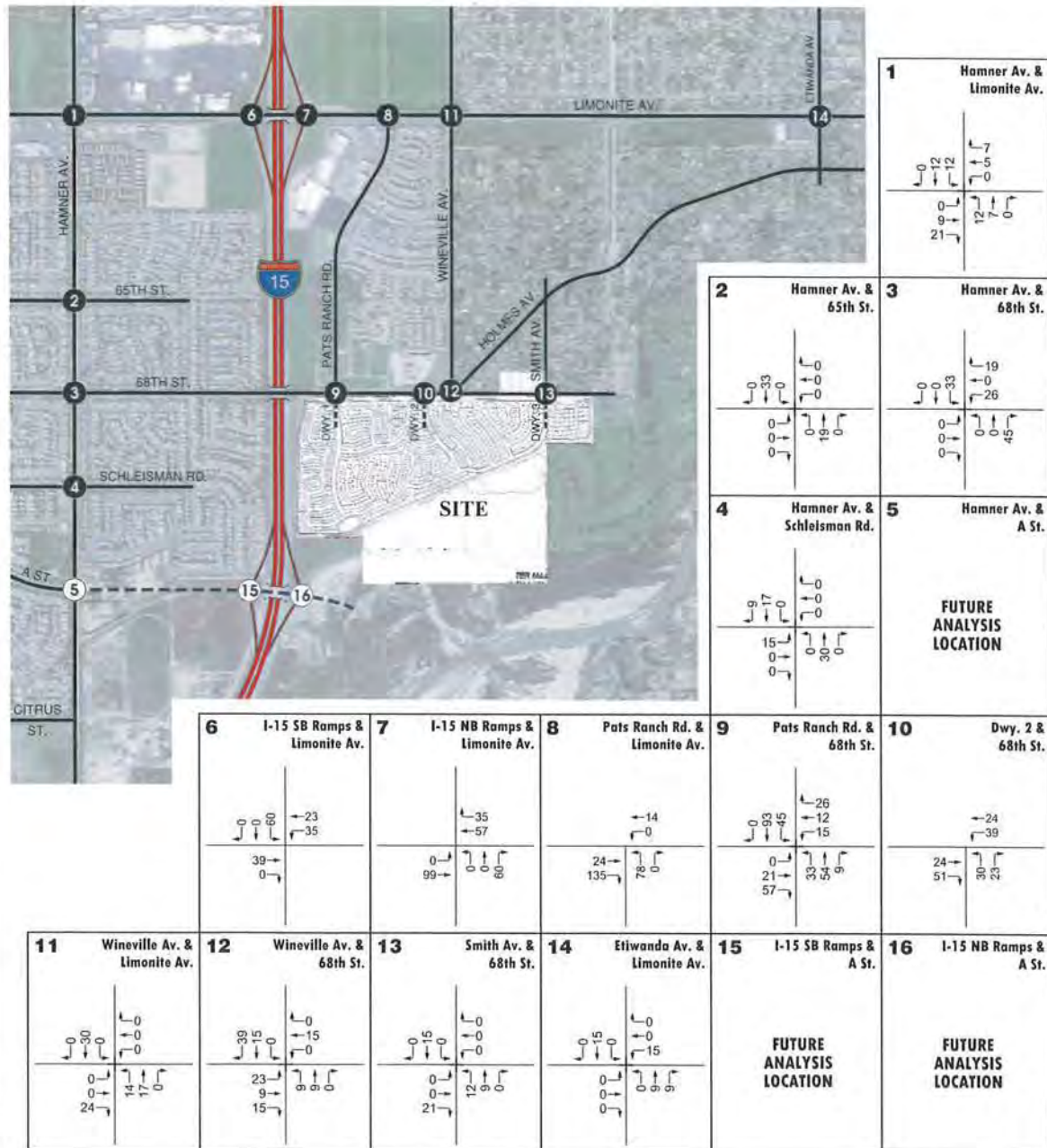


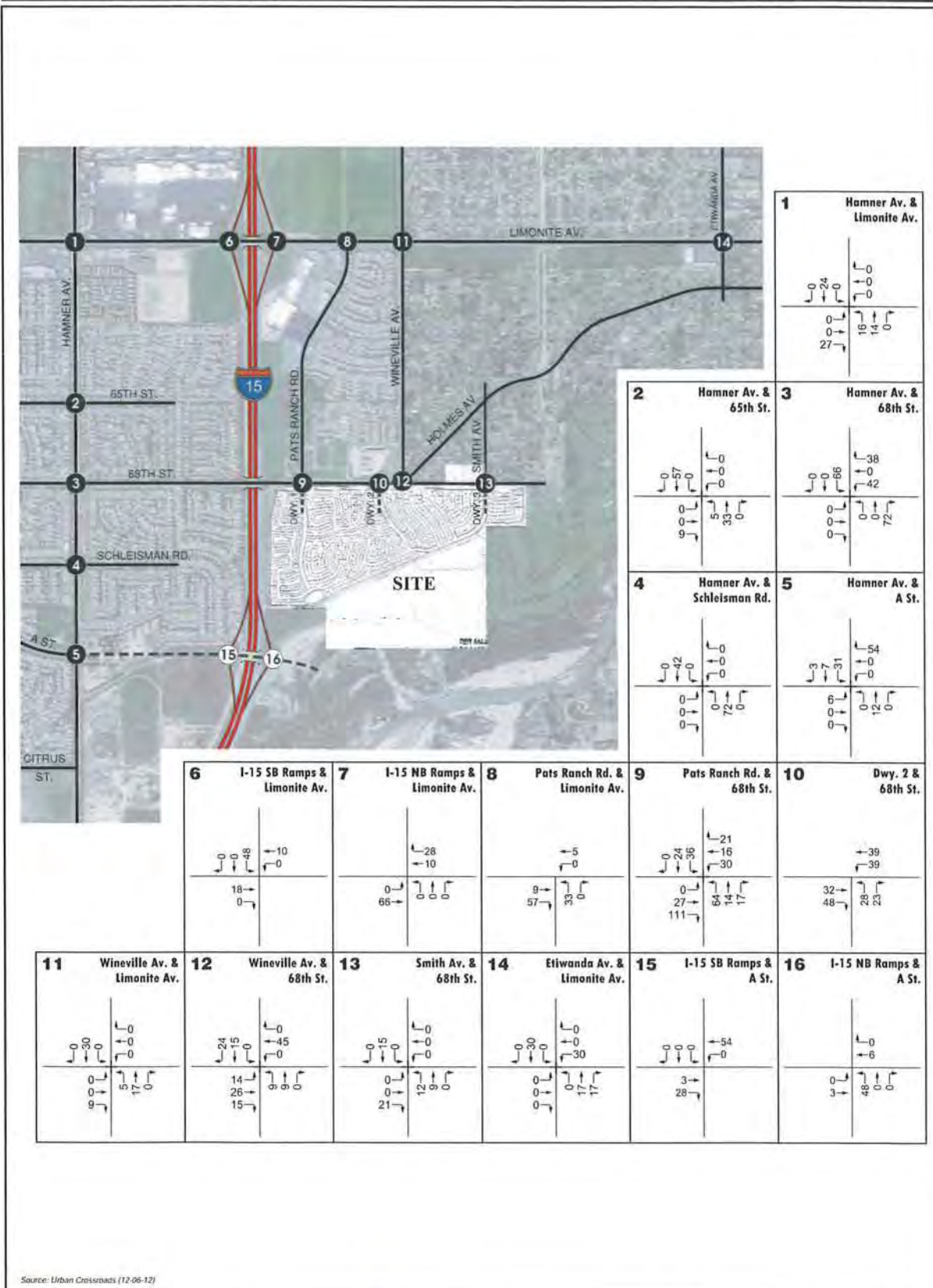
Figure 5-7

PROJECT AM PEAK HOUR INTERSECTION
VOLUMES - OPENING YEAR (2019)



Source: Urban Crossroads (12-06-12)





Source: Urban Crossroads (12-06-12)

The Opening Year (2019) analysis includes an evaluation the Existing plus Ambient Growth plus Project (E+A+P) traffic conditions. The E+A+P analysis is intended to identify the direct impacts associated solely with the development of the proposed Project based on the expected background growth within the study area. The Opening Year (2019) analysis also includes an evaluation of Existing plus Ambient Growth plus Project plus Cumulative Development (E+A+P+C) conditions to identify the Project's potential cumulative contribution to traffic impacts within the study area.

The Horizon Year (2035) conditions analysis is utilized to determine if improvements funded through local and regional transportation mitigation fee programs such as the TUMF program, City of Jurupa Valley Development Impact Fee (DIF) program, or other approved funding mechanism (Community Facilities District, etc.) can accommodate the cumulative traffic at the target level of service (LOS) identified in the City of Jurupa Valley General Plan. If the "funded" improvements can provide the target LOS, then the Project's payment into the TUMF and DIF is considered adequate cumulative mitigation as imposed through Conditions of Approval applied to the Project by the City of Jurupa Valley. If other improvements are needed beyond the "funded" improvements (such as localized improvements to non-TUMF or non-DIF facilities), they are identified as such.

❑ Near-Term Construction Impact Analysis

During the construction phase of the Project, traffic to-and-from the subject property would be generated by activities such as construction employee trips, soil import, delivery of construction materials, and use of heavy equipment. It is estimated that approximately 10 to 34 employees will be expected at the Project during the various phases of construction activity. Vehicular traffic associated with 10 to 34 employees would be minimal and is not expected to result in any adverse effects to the local roadway system.

Construction of the Project would require the import of soil from off-site locations. In addition, construction materials (e.g., wood, concrete, etc.) would be delivered to the Project site. Pursuant to Mitigation Measure AQ-5 (refer to *Air Quality* discussion under Issue 5.3(b) on Page II-59), and based on a soil material borrow site within five- (5) miles of the Project site, deliveries of earthwork materials to the Project site would be limited to a maximum of 350 trips per day (i.e., 175 inbound trips and 175 outbound trips or any combination thereof), which correlates to approximately 35 trips per hour and would not have a substantial, adverse effect on the local roadway system.

Deliveries of construction materials would have a nominal effect and also result in a less-than-significant impact. Heavy equipment would be utilized on the Project site during the construction phase. As most heavy equipment is not authorized to be driven on a public roadway, most equipment would be delivered and removed from the site via flatbed trucks. Delivery of heavy equipment to the Project site would not occur on a daily basis, but would occur periodically throughout the construction phase based on need. The delivery of heavy construction equipment to the Project site would also have a nominal effect on the local roadway system, and impacts to the roadway system would be less than significant.

In conclusion, the Project is not anticipated to result in a conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system during near-term construction activities. Impacts during the Project construction phase would be less than significant. Although the Project would result in less-than-significant effects to the local circulation system during near-term construction activities, Mitigation Measure TR-1 is recommended to ensure that construction-related traffic does not conflict with peak traffic at the nearby VanderMolen Elementary School.

❑ **Existing (2012) Plus Project Traffic Impact Analysis (E+P)**

Intersection Operations Analysis

For purposes of information disclosure, this subsection presents an analysis of existing traffic volumes plus traffic generated by the proposed Project (Existing plus Project, or E+P). The reason this particular analysis scenario is provided is to disclose the potential for direct impacts to the existing environment as required by CEQA. The E+P scenario rarely materializes as an actual scenario in the real world. The time period between the environmental baseline date and the date project buildout occurs can often be a period of several years or more. In the case of the proposed Project, the time period estimated between the City deeming the applications complete (2012) and estimated Project buildout (2019) is seven (7) years. During this time period, conditions are not static. Other projects are being constructed, the transportation network is evolving, and traffic patterns are changing. Therefore the E+P scenario is very unlikely to materialize in real world conditions and thus does not accurately describe the environment that exists when a particular project is constructed and becomes operational. Regardless, the E+P scenario is evaluated to satisfy CEQA requirements to identify the Project's impacts to the existing environment.

Intersection levels of service for the E+P are summarized in Table 5-28, *Existing Plus Project Conditions Intersection Analysis (2012)*.

As shown in Table 5-28, for E+P traffic conditions, the following study area intersections are projected to operate at unacceptable levels of service (LOS) during peak hours:

- Pats Ranch Road/68th Street in the AM Peak Hour; and
- Etiwanda Avenue/Limonite Avenue in the AM and PM Peak Hours.

Impacts to Pats Ranch Road/68th Street are regarded as a significant, direct impact of the Project, as Project-related traffic would cause this intersection to degrade from an acceptable LOS (i.e. LOS "D") to an unacceptable LOS (i.e., LOS "F") in the AM Peak Hour. Although the Project would not cause the LOS deficiency at the Etiwanda Avenue/Limonite intersection during the AM and PM Peak Hours, the Project would contribute more than 50 peak-hour trips to this intersection. Therefore, the impact to the Etiwanda Avenue/Limonite Avenue intersection is a significant, direct impact of the Project for which mitigation is required.

Implementation of Mitigation Measures TR-2 and TR-3, below, would require the Project to construct improvements to the Pats Ranch Road/68th Street and Etiwanda Avenue/Limonite Avenue intersections to ensure that adequate LOS can be maintained with the addition of Project traffic. As such, impacts to these intersections would be reduced to less-than-significant levels with adherence to required mitigation.

Table 5-28 Existing Plus Project Conditions Intersection Analysis(2012)

#	Intersection	Traffic Control ³	Intersection Approach Lanes ¹												Existing (2012)				E+P					
															Delay ² (secs.)		Level of Service		Delay ² (secs.)		Level of Service			
			Northbound			Southbound			Eastbound			Westbound			AM	PM	AM	PM	AM	PM	AM	PM		
#	Intersection		L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM	AM	PM	AM	PM	AM	PM
1	Hamner Av. / Limonite Av.	TS	2	3	1	2	2	1	2	3	1	2	2	1	35.5	40.2	D	D	35.6	40.4	D	D		
2	Hamner Av. / 65th St.	TS	1	3	d	1	3	d	1	1	1	1	1	0	29.9	30.6	C	C	30.0	30.8	C	C		
3	Hamner Av. / 68th St.	TS	1	3	d	1	3	d	1	1	0	1	1	1	35.1	30.4	D	C	36.6	32.1	D	C		
4	Hamner Av. / Schleisman Rd.	TS	1	3	0	1	2	1	1	1	0	1	1	0	38.3	35.9	D	D	39.0	36.8	D	D		
5	Hamner Av. / "A" St.		Future Analysis Location																					
6	I-15 SB Ramps / Limonite Av.	TS	0	0	0	1	1	1	0	2	1	2	2	0	21.7	21.6	C	C	20.9	23.0	C	C		
7	I-15 NB Ramps / Limonite Av.	TS	1	1	1	0	0	0	2	2	0	0	2	1	35.0	25.6	D	C	41.1	26.5	D	C		
8	Pats Ranch Rd. / Limonite Av.	TS	2	0	1	0	0	0	0	2	1	1	2	0	12.9	12.9	B	B	14.4	13.7	B	B		
9	Pats Ranch Rd. / 68th St.	AWS	1	1	0	1	1	1	1	2	0	1	2	1	28.3	10.7	D	B	40.8	12.7	F ⁴	B		
10	Driveway 2 / 68th St.	CSS	0	1	0	0	0	0	0	2	0	1	2	0	Not Applicable				12.4	10.9	B	B		
11	Wineville Av. / Limonite Av.	TS	1	2	0	1	1	0	1	2	1	1	2	d	31.7	35.5	D	D	32.2	36.5	C	D		
12	Wineville Av. / 68th St.	AWS	1	1	0	1	1	1	1	1	1	0	1	0	10.1	8.5	B	A	10.9	8.9	B	A		
13	Smith Av. / 68th St.	CSS	0	0	0	0	1	0	0	1	0	0	1	0	8.6	8.8	A	A	10.0	9.7	B	A		
14	Etiwanda Av. / Limonite Av.	TS	1	1	1	1	2	1>>	0	2	1	0	1	1	80.3	56.2	F	E	81.4	58.2	F	E		
15	I-15 SB Ramps / Schleisman Rd.		Future Analysis Location																					
16	I-15 NB Ramps / Schleisman Rd.		Future Analysis Location																					

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 Phasing; >> = Free-Right Turn Lane; d= Defacto Right Turn Lane

² Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. The I-15 Ramp Locations have been analyzed utilizing the Synchro software.

³ TS = Traffic Signal; AWS = All Way Stop; CSS = Cross-street Stop

⁴ Volume-to-capacity ratio is greater than 1.00; Intersection unstable, Level of Service "F"

BOLD = Unsatisfactory level of service.

Source: Urban Crossroads 2012b, Table 5-1.

□ Opening Year (2019) Traffic Impact Analysis (E+A+P)

Intersection Operations Analysis

The Opening Year (2019) conditions analysis identifies the specific impacts associated solely with the development of the proposed Project based on the expected background growth within the study area (Existing plus Ambient Growth plus Project, or E+A+P). Cumulative development projects within the Project study area are not included within the E+A+P evaluation. Intersection levels of service for the E+A+P condition are summarized in Table 5-29, *Opening Year (E+A+P) Intersection Analysis (2019)*.

As shown in Table 5-29, for E+A+P traffic conditions the following study area intersections are projected to operate at unacceptable levels of service (LOS) during peak hours:

- Pats Ranch Road/68th Street in the AM Peak Hour; and
- Etiwanda Avenue/Limonite Avenue in the AM and PM Peak Hours.

The impact to Pats Ranch Road/68th Street is a significant, direct impact of the Project, as Project-related traffic would cause this intersection to degrade from an acceptable LOS (i.e. LOS "D") to an unacceptable LOS (i.e., LOS "F") in the AM Peak Hour. Although the Project would not cause the LOS deficiency at the Etiwanda Avenue/Limonite intersection during the AM and PM Peak Hours, the

Table 5-29 Opening Year (E+A+P) Intersection Analysis (2019)

#	Intersection	Traffic Control ³	Intersection Approach Lanes ¹												Delay ² (secs.)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound			AM	PM	AM	PM
			L	T	R	L	T	R	L	T	R	L	T	R				
1	Hamner Av. / Limonite Av.	TS	2	3	1	2	2	1	2	3	1	2	2	1	39.4	45.2	D	D
2	Hamner Av. / 65th St.	TS	1	3	d	1	3	d	1	1	1	1	1	0	31.1	31.6	C	C
3	Hamner Av. / 68th St.	TS	1	3	d	1	3	d	1	1	0	1	1	1	39.1	33.7	D	C
4	Hamner Av. / Schleisman Rd.	TS	1	3	0	1	2	1	1	1	0	1	1	0	42.9	39.7	D	D
5	Hamner Av. / "A" St.		Future Analysis Location															
6	I-15 SB Ramps / Limonite Av. ⁴	TS	0	0	0	1	1	1	0	2	1	2	2	0	26.4	33.9	C	C
7	I-15 NB Ramps / Limonite Av. ⁴	TS	1	1	1	0	0	0	2	2	0	0	2	1	35.6	33.9	D	C
8	Pats Ranch Rd. / Limonite Av.	TS	2	0	1	0	0	0	0	2	1	1	2	0	15.3	15.2	B	B
9	Pats Ranch Rd. / 68th St.	AWS	1	1	0	1	1	1	1	2	0	1	2	1	72.5	14.3	F	B
10	Driveway 2 / 68th St.	CSS	0	1	0	0	0	0	0	2	0	1	2	0	13.1	11.2	B	B
11	Wineville Av. / Limonite Av.	TS	1	2	0	1	1	0	1	2	1	1	2	d	33.9	41.0	C	D
12	Wineville Av. / 68th St.	AWS	1	1	0	1	1	1	1	1	1	0	1	0	11.9	9.1	B	A
13	Smith Av. / 68th St.	CSS	0	1	0	0	1	0	0	1	0	0	1	0	10.2	9.8	B	A
14	Etiwanda Av. / Limonite Av.	TS	1	1	1	1	2	1>>	0	2	1	0	1	1	>100.0	81.0	F	F
15	I-15 SB Ramps / Schleisman Rd.		Future Analysis Location															
16	I-15 NB Ramps / Schleisman Rd.		Future Analysis Location															

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 Phasing; >> = Free-Right Turn Lane; d= Detacto Right Turn Lane

² Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. The I-15 Ramp Locations have been analyzed utilizing the Synchro software.

³ TS = Traffic Signal; AWS = All Way Stop; CSS = Cross-street Stop

⁴ Current timing sheets from August 2012 for the I-15 Northbound and Southbound Ramps at Limonite Avenue were obtained from Caltrans and utilized in this analysis and as a result the overall delay and subsequent LOS at intersections #6 and #7 which make up the I-15 Freeway at Limonite Interchange for EAP (2019) conditions show improvements over the results of the EAP (2017) conditions analysis presented in the Traffic Impact Analysis.

BOLD = Unsatisfactory level of service.

Source: Urban Crossroads 2013g, Table 1.

Project would contribute more than 50 peak-hour trips to this intersection. Therefore, the impact to the Etiwanda Avenue/Limonite Avenue intersection is a significant, direct impact of the Project and mitigation is required.

Implementation of Mitigation Measures TR-2 and TR-3, below, would require the Project to construct improvements to the Pats Ranch Road/68th Street and Etiwanda Avenue/Limonite Avenue intersections to ensure that adequate LOS can be maintained with the addition of Project traffic. As such, impacts to these intersections would be reduced to less-than-significant levels with adherence to required mitigation.

Progression Analysis

A progression analysis was performed for the E+A+P scenario to evaluate the performance of Limonite Avenue between I-15 and Wineville Avenue during peak hours. The traffic progression analysis assesses the potential needs of the intersections with traffic added from the proposed Project. Queues (i.e., stacking distance) reported are based upon the 95th percentile queues resulting from the progression analysis. The 95th percentile queue is the maximum back of queue with 95th percentile traffic volumes. The queue length reported is for the lane with the highest queue in the lane group. The stacking distances along Limonite Avenue under the E+A+P traffic

conditions are summarized in Table 5-30, *Opening Year (E+A+P) Stacking Length Summary along Limonite Avenue (2019)*.

As shown in Table 5-30, for E+A+P traffic conditions the following movements along Limonite Avenue may experience unacceptable stacking distances during 95th percentile traffic flows during peak hours:

- I-15 Southbound Ramp/Limonite Avenue (Eastbound Right) in the PM Peak Hour;
- I-15 Northbound Ramp/Limonite Avenue (Eastbound Left) in the AM Peak Hour; and
- Wineville Avenue/Limonite Avenue (Northbound Left) in the PM Peak Hour.

Potential impacts to I-15 Southbound Ramp/Limonite Avenue and I-15 Northbound Ramp/Limonite Avenue are regarded as less than significant because sufficient storage is available in adjacent travel lanes to accommodate any potential spill-back without resulting in any adverse effect to the operations of the upstream intersections or freeway ramps. Potential impacts to Wineville Avenue/Limonite Avenue are also regarded as less than significant because the projected stacking distances would not adversely affect the progression of vehicles along Limonite Avenue. Accordingly, adverse impacts to vehicle progression along Limonite Avenue, between I-15 and Wineville Avenue, during peak hours would not occur during E+A+P conditions. Impacts would be less than significant and mitigation is not required.

□ Opening Year (2019) Plus Cumulative Traffic Impact Analysis (E+A+P+C)

Intersection Operations Analysis

Traffic within the Project study area from development projects that are approved and not yet constructed, along with developments that are currently in the process of entitlement, have been added to the E+A+P traffic volumes to represent Existing plus Ambient Growth plus Project plus Cumulative Development conditions (E+A+P+C). The purpose of this analysis is to determine if the Project in conjunction with nearby development projects has the potential to result in traffic impacts that are individually less than significant but considerable on a cumulative basis. Intersection levels of service for the E+A+P+C (2017) scenario are summarized in Table 5-31, *Opening Year Plus Cumulative Conditions (E+A+P+C) Intersection Analysis (2019)*.

As shown in Table 5-31, for E+A+P+C (2019) traffic conditions the following study area intersections are projected to operate at unacceptable levels of service (LOS) during peak hours:

- Hamner Avenue/Limonite Avenue in the PM Peak Hour;
- I-15 Southbound Ramps/Limonite Avenue in PM Peak Hours;
- I-15 Northbound Ramps/Limonite Avenue in the AM and PM Peak Hours;
- Pats Ranch Road/68th Street in the AM Peak Hour; and
- Etiwanda Avenue/Limonite Avenue in the AM and PM Peak Hours.

With the exception of the Pats Ranch Road/68th Street and Etiwanda/Limonite Avenue intersections which would be directly impacted by the Project (refer to Table 5-29), the proposed Project would contribute to, but would not directly cause, cumulatively significant impacts at the above-listed intersections. Accordingly, impacts to the above-listed intersections (not including the intersections of Pats Ranch Road/68th Street and Etiwanda Avenue/Limonite Avenue that would be directly impacted) are significant on a cumulative basis under E+A+P+C (2019) conditions and mitigation is required.

**Table 5-30 Opening Year (E+A+P) Stacking Length Summary
along Limonite Avenue (2019)**

Intersection	Movement	Stacking Distance (Feet)	95 th Percentile Stacking Distance Required (Feet)		Acceptable? ¹	
			AM	PM	AM	PM
I-15 SB Ramps / Limonite Avenue	SBL	400	216 ²	310	Yes	Yes
	SBT	1,285	96	440 ²	Yes	Yes
	SBR	400	72	405 ²	Yes	Yes
	EBT	1,120	449	480 ²	Yes	Yes
	EBR	150	147	187	Yes	No
	WBL	275	135 ³	167 ³	Yes	Yes
	WBT	620	14 ³	169	Yes	Yes
I-15 NB Ramps / Limonite Avenue	NBL	450	296 ²	391 ²	Yes	Yes
	NBT	1,230	120	367 ²	Yes	Yes
	NBR	450	67	323 ²	Yes	Yes
	EBL	300	417²	168 ^{2,3}	No	Yes
	EBT	620	6	226 ³	Yes	Yes
	WBT	1,080	441 ²	359	Yes	Yes
	WBR	150	107	78	Yes	Yes
Pats Ranch Road / Limonite Avenue	NBL	200	209	200	Yes	Yes
	NBR	685	37	55	Yes	Yes
	EBT	1,080	227	321	Yes	Yes
	EBR	200	39	33 ³	Yes	Yes
	WBL	165	91 ³	153 ³	Yes	Yes
	WBT	825	91	67 ³	Yes	Yes
Wineville Avenue / Limonite Avenue	NBL	185	165 ²	214²	Yes	No
	NBT	1,260	40	28	Yes	Yes
	SBL	100	44	95 ²	Yes	Yes
	SBT	590	104	282	Yes	Yes
	EBL	250	137 ²	215 ^{2,3}	Yes	Yes
	EBT	825	60	249 ²	Yes	Yes
	EBR	360	1	5 ³	Yes	Yes
	WBL	250	63	46	Yes	Yes
	WBT	2,480	366	391 ²	Yes	Yes
	WBR	100	0	0	Yes	Yes

¹ Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 15 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

² 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

³ Volume for 95th percentile queue is metered by upstream signal.

Source: *Urban Crossroads 2013g, Table 3.*

**Table 5-31 Opening Year Plus Cumulative Conditions (E+A+P+C)
Intersection Analysis (2019)**

#	Intersection	Traffic Control ³	Intersection Approach Lanes ¹												Delay ² (secs.)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound			AM	PM	AM	PM
			L	T	R	L	T	R	L	T	R	L	T	R				
1	Hamner Av. / Limonite Av.	TS	2	3	1	2	2	1	2	3	1	2	2	1	44.6	73.5	D	E
2	Hamner Av. / 65th St.	TS	1	3	d	1	3	d	1	1	1	1	1	0	32.3	33.9	C	C
3	Hamner Av. / 68th St.	TS	1	3	d	1	3	d	1	1	0	1	1	1	36.8	37.7	D	D
4	Hamner Av. / Schleisman Rd.	TS	1	3	0	1	2	1	1	1	0	1	1	0	41.7	47.5	D	D
5	Hamner Av. / "A" St.		Future Analysis Location															
6	I-15 SB Ramps / Limonite Av. ⁴	TS	0	0	0	1	1	1	0	2	1	2	2	0	30.4	79.7	C	F⁵
7	I-15 NB Ramps / Limonite Av. ⁴	TS	1	1	1	0	0	0	2	2	0	0	2	1	52.6	58.2	F⁵	F⁵
8	Pats Ranch Rd. / Limonite Av.	TS	2	0	1	0	0	0	0	2	1	1	2	0	15.4	16.4	B	B
9	Pats Ranch Rd. / 68th St.	AWS	1	1	0	1	1	1	1	2	0	1	2	1	73.0	14.4	F	B
10	Driveway 2 / 68th St.	CSS	0	1	0	0	0	0	0	2	0	1	2	0	13.2	11.2	B	B
11	Wineville Av. / Limonite Av.	TS	1	2	0	1	1	0	1	2	1	1	2	d	35.9	50.3	D	D
12	Wineville Av. / 68th St.	AWS	1	1	0	1	1	1	1	1	1	0	1	0	11.9	9.1	B	A
13	Smith Av. / 68th St.	CSS	0	1	0	0	1	0	0	1	0	0	1	0	10.3	9.9	B	A
14	Etiwanda Av. / Limonite Av.	TS	1	1	1	1	2	1>>	0	2	1	0	1	1	>100.0	>100.0	F	F
15	I-15 SB Ramps / Schleisman Rd.		Future Analysis Location															
16	I-15 NB Ramps / Schleisman Rd.		Future Analysis Location															

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 Phasing; >> = Free-Right Turn Lane; d= Defacto Right Turn Lane

² Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. The I-15 Ramp Locations have been analyzed utilizing the Synchro software.

³ TS = Traffic Signal; AWS = All Way Stop; CSS = Cross-street Stop

⁴ Current timing sheets from August 2012 for the I-15 Northbound and Southbound Ramps at Limonite Avenue were obtained from Caltrans and utilized in this analysis and as a result the overall delay and subsequent LOS at intersections #6 and #7 which make up the I-15 Freeway at Limonite interchange for EAPC (2019) conditions show improvements over the results of the EAPC (2017) conditions analysis presented in the Traffic Impact Analysis.

⁵ Volume-to-capacity ratio is greater than 1.00; Intersection unstable; Level of Service "F".

BOLD = Unsatisfactory level of service.

Source: Urban Crossroads 2013g, Table 2.

Pursuant to Mitigation Measure TR-4, the Project Proponent would be required to participate in the Mira Loma Road & Bridge Benefit District (RBBD), Western Riverside Transportation Uniform Mitigation Fee (TUMF), and City of Jurupa Valley Development Impact Fee (DIF) programs. Participation in these mitigation fee programs would fund the construction of improvements to the local roadway system necessary to provide adequate LOS and would offset the Project's contribution of cumulative traffic to local roadways and intersections. Furthermore, the improvements required to the Pats Ranch Road/68th Street and Etiwanda Avenue/Limonite Avenue intersections pursuant to Mitigation Measures TR-2 and TR-3 would also ensure that these intersections operate at acceptable LOS in the Year 2019 with the addition of traffic from the Project and anticipated cumulative development. As such, cumulative impacts to these intersections would be reduced to less-than-significant levels with adherence to required mitigation.

Progression Analysis

A progression analysis was performed for the E+A+P+C scenario to evaluate the performance of Limonite Avenue between I-15 and Wineville Avenue during peak hours. The stacking distances

along Limonite Avenue under the E+A+P+C traffic conditions are summarized in Table 5-32, *Opening Year Plus Cumulative (E+A+P+C) Stacking Length Summary along Limonite Avenue (2019)*. As shown in Table 5-32, the following movements along Limonite Avenue may experience unacceptable stacking distances during 95th percentile traffic flows during peak hours:

- I-15 Southbound Ramp/Limonite Avenue (Southbound Right) in the PM Peak Hour;
- I-15 Southbound Ramp/Limonite Avenue (Eastbound Right) in the AM and PM Peak Hours;
- I-15 Northbound Ramp/Limonite Avenue (Northbound Left) in the PM Peak Hour;
- I-15 Northbound Ramp/Limonite Avenue (Eastbound Left) in the AM Peak Hour;
- Pats Ranch Road/Limonite Avenue (Northbound Left) in the AM Peak Hour;
- Wineville Avenue/Limonite Avenue (Northbound Left) in the PM Peak Hour;
- Wineville Avenue/Limonite Avenue (Southbound Left) in the PM Peak Hour; and
- Wineville Avenue/Limonite Avenue (Eastbound Left) in the PM Peak Hour.

Potential impacts to movements at I-15 Southbound Ramp/Limonite Avenue are less than significant because queuing would not adversely affect the progression of vehicles along Limonite Avenue or at upstream intersections during peak hours. Potential impacts to movements at I-15 Northbound Ramp/Limonite Avenue are also less than significant because sufficient storage is available in adjacent travel lanes to accommodate any potential spill-back without resulting in any adverse effect to the operations of the upstream intersections or freeway ramps. In addition, impacts to movements at Pats Ranch Road/Limonite Avenue and Wineville Avenue/Limonite Avenue are evaluated as less than significant as potential queuing would not adversely affect progression of vehicles along Limonite Avenue, and sufficient storage is available in adjacent travel lanes to accommodate any potential spill-back without resulting in any adverse effect to the operations of the upstream intersections or freeway ramps. Accordingly, adverse effects to vehicle progression would not occur along Limonite Avenue, between I-15 and Wineville Avenue, during E+A+P+C conditions. As such, the Project has no potential to cumulatively contribute to a vehicle progression deficiency along Limonite. Impacts would be less than significant and mitigation is not required.

**Table 5-32 Opening Year Plus Cumulative (E+A+P+C) Stacking Length Summary
along Limonite Avenue (2019)**

Intersection	Movement	Stacking Distance (Feet)	95 th Percentile Stacking Distance Required (Feet)		Acceptable? ¹	
			AM	PM	AM	PM
I-15 SB Ramps / Limonite Avenue	SBL	400	237 ²	328	Yes	Yes
	SBT	1,285	239 ²	727 ²	Yes	Yes
	SBR	400	225 ²	694²	Yes	No
	EBT	1,120	603 ²	732 ²	Yes	Yes
	EBR	150	224	477²	No	No
	WBL	275	142 ³	193 ^{2,3}	Yes	Yes
	WBT	620	14 ³	192 ³	Yes	Yes
I-15 NB Ramps / Limonite Avenue	NBL	450	390 ²	564²	Yes	No
	NBT	1,230	372 ²	502 ²	Yes	Yes
	NBR	450	75	456 ²	Yes	Yes
	EBL	300	505^{2,3}	198 ³	No	Yes
	EBT	620	16 ³	279 ³	Yes	Yes
	WBT	1,080	572 ²	655 ²	Yes	Yes
	WBR	150	143	94	Yes	Yes
Pats Ranch Road / Limonite Avenue	NBL	200	228	206	No	Yes
	NBR	685	38	54	Yes	Yes
	EBT	1,080	250 ³	289 ³	Yes	Yes
	EBR	200	29 ³	20 ³	Yes	Yes
	WBL	165	88 ³	139 ³	Yes	Yes
	WBT	825	66	61 ³	Yes	Yes
Wineville Avenue / Limonite Avenue	NBL	185	183 ²	228²	Yes	No
	NBT	1,260	41	28	Yes	Yes
	SBL	100	59	123²	Yes	No
	SBT	590	123	312	Yes	Yes
	EBL	250	183 ²	282^{2,3}	Yes	No
	EBT	825	38	501 ²	Yes	Yes
	EBR	360	0 ³	7 ³	Yes	Yes
	WBL	250	63	45	Yes	Yes
	WBT	2,480	398	495 ²	Yes	Yes
	WBR	100	0	4	Yes	Yes

¹ Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 15 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

² 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

³ Volume for 95th percentile queue is metered by upstream signal.

Source: Urban Crossroads 2013g, Table 4.

□ **Horizon Year (2035) Traffic Impact Analysis**

The Horizon Year (2035) conditions analysis is utilized to determine if improvements anticipated in long-term planning documents such as the City of Jurupa Valley General Plan are adequate to accommodate long-term cumulative traffic conditions at the target LOS, or if additional mitigation is necessary. Intersection levels of service for the Horizon Year scenario are summarized in Table 5-33, *Horizon Year Intersection Analysis (2035)*.

As shown in Table 5-33, under Horizon Year traffic conditions the following study area intersections are projected to operate at unacceptable levels of service (LOS) during peak hours with existing improvements:

- Hamner Avenue/Limonite Avenue in the AM and PM Peak Hours;
- Hamner Avenue/"A" Street in the AM and PM Peak Hours;
- I-15 Southbound Ramps/Limonite Avenue in AM and PM Peak Hours;
- I-15 Northbound Ramps/Limonite Avenue in the AM and PM Peak Hours;
- Pats Ranch Road/Limonite Avenue in the AM and PM Peak Hours;
- Pats Ranch Road/68th Street in the AM Peak Hour;
- Wineville Avenue/Limonite Avenue in the AM and PM Peak Hours; and
- Etiwanda Avenue/Limonite Avenue in the AM and PM Peak Hours.

Upon construction of the roadway improvements planned by the City of Jurupa General Plan and funded by existing traffic improvements programs (i.e., Mira Loma RBBB, Western Riverside TUMF, City of Jurupa Valley DIF), intersections in the Project study area would operate at the LOS shown in Table 5-34, *Horizon Year Intersection Analysis – With Improvements (2035)*. The Project would be required to contribute funds toward the improvements identified in Table 5-34 pursuant to Mitigation Measure TR-4 below.

As shown in Table 5-34, with the construction of planned improvements, all intersections in the Project study area would operate at acceptable LOS under Horizon Year traffic conditions with the exception of the Wineville Avenue/Limonite Avenue intersection, which would operate at deficient LOS during the AM and PM Peak Hours). The proposed Project would contribute to, but would not directly cause, significant impacts at this intersection; therefore, long-term impacts are evaluated as significant on a cumulative basis and mitigation is required.

Pursuant to Mitigation Measure TR-5, the Project Proponent would be required to contribute a fair-share payment toward the improvement of the Wineville Avenue/Limonite Avenue intersection. Payment of the fair-share fee would assist the City in the funding the improvements required to ensure adequate LOS at this intersection under long-term conditions (i.e., Year 2035) and would offset the Project's cumulative contribution of traffic to this intersection. With required implementation of Mitigation Measure TR-5, the Project's long-term cumulative impact to the Wineville Avenue/Limonite Avenue intersection would be reduced to a level below significant.

Table 5-33 Horizon Year Intersection Analysis (2035)

#	Intersection	Traffic Control ²	Intersection Approach Lanes ¹												2035 Without Project				2035 With Project				
															Delay ¹		Level of		Delay ¹		Level of		
			Northbound			Southbound			Eastbound			Westbound			(secs.)		Service		(secs.)		Service		
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM	AM	PM	AM	PM	
1	Hamner Av. / Limonite Av.	TS	2	3	1	2	2	1	2	3	1	2	2	1	58.3	95.3	E	F	58.1	94.8	E	F	
2	Hamner Av. / 65th St.	TS	1	3	d	1	3	d	1	1	1	1	1	0	33.5	37.5	C	D	33.7	37.9	C	D	
3	Hamner Av. / 68th St.	TS	1	3	d	1	3	d	1	1	0	1	1	1	39.8	44.3	D	D	43.4	53.2	D	D	
4	Hamner Av. / Schleisman Rd.	TS	1	3	0	1	2	1	1	1	0	1	1	0	32.9	35.8	C	D	33.4	35.3	C	D	
5	Hamner Av. / "A" St.	CSS	1	1	0	0	1	1	1	0	1	0	0	0	>100	>100	F	F	>100	>100	F	F	
6	I-15 SB Ramps / Limonite Av.	TS	0	0	0	1	1	1	0	2	1	2	2	0	>100	>100	F	F	>100	>100	F	F	
7	I-15 NB Ramps / Limonite Av.	TS	1	1	1	0	0	0	2	2	0	0	2	1	>100	>100	F	F	>100	>100	F	F	
8	Pats Ranch Rd. / Limonite Av.	TS	2	0	1	0	0	0	0	2	1	1	2	0	72.7	72.7	F ⁴	F ⁴	77.5	76.0	F ⁴	F ⁴	
9	Pats Ranch Rd. / 68th St.	AWS	1	1	0	1	1	1	1	2	0	1	2	1	72.8	12.7	F	B	>100	16.0	F	C	
10	Driveway 2 / 68th St.	CSS	0	1	0	0	0	0	0	2	0	1	2	0	Not Applicable					16.3	12.8	C	B
11	Wineville Av. / Limonite Av.	TS	1	2	0	1	1	0	1	2	1	1	2	d	>100	>100	F	F	>100	>100	F	F	
12	Wineville Av. / 68th St.	AWS	1	1	0	1	1	1	1	1	1	1	0	1	17.3	10.7	C	B	20.2	11.6	C	B	
13	Smith Av. / 68th St.	CSS	0	0	0	0	1	0	0	1	0	0	1	0	10.4	9.4	B	A	14.7	10.8	B	B	
14	Etiwanda Av. / Limonite Av.	TS	1	1	1	1	2	1>>	0	2	1	0	1	1	>100	>100	F	F	>100	>100	F	F	
15	I-15 SB Ramps / Schleisman Rd.		Not Applicable																				
16	I-15 NB Ramps / Schleisman Rd.		Not Applicable																				

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 Phasing; >> = Free-Right Turn Lane; d= Defacto Right Turn Lane

² Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. The I-15 Ramp Locations have been analyzed utilizing the Synchro software.

³ TS = Traffic Signal; AWS = All Way Stop; CSS = Cross-street Stop

⁴ Volume-to-capacity ratio is greater than 1.00; Intersection unstable; Level of Service "F".

BOLD = Unsatisfactory level of service.

Source: Urban Crossroads 2012b, Table 7-1.

Table 5-34 Horizon Year Intersection Analysis – With Improvements (2035)

#	Intersection	Traffic Control ³	Intersection Approach Lanes ¹												Delay ² (secs.)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound			AM	PM	AM	PM
			L	T	R	L	T	R	L	T	R	L	T	R				
1	Hamner Av. / Limonite Av.																	
	- Without Improvements	TS	2	3	1	2	2	1	2	3	1	2	2	1	58.1	94.8	E	F
	- With Improvements ⁵	TS	2	3	<u>1></u>	2	<u>3</u>	<u>1></u>	2	3	1	2	<u>3</u>	<u>1></u>	35.6	41.8	D	D
5	Hamner Av. / "A" St.																	
	- Without Improvements	CSS	1	1	0	0	1	1	1	0	1	0	0	0	>100	>100	F	F
	- With Improvements	TS	<u>2</u>	<u>2</u>	<u>1></u>	<u>2</u>	<u>2</u>	1	<u>2</u>	<u>3</u>	1	<u>2</u>	<u>3</u>	<u>1></u>	40.4	54.8	D	D
6	I-15 SB Ramps / Limonite Av.																	
	- Without Improvements	TS	0	0	0	1	1	1	0	2	1	2	2	0	>100	>100	F	F
	- With Improvements	TS	0	0	0	1	1	1	0	<u>3</u>	1	<u>0</u>	<u>3</u>	<u>1</u>	12.7	15.1	B	B
7	I-15 NB Ramps / Limonite Av.																	
	- Without Improvements	TS	1	1	1	0	0	0	2	2	0	0	2	1	>100	>100	F	F
	- With Improvements	TS	1	1	1	0	0	0	<u>0</u>	<u>3</u>	<u>1</u>	0	<u>3</u>	1	25.0	36.3	C	D
8	Pats Ranch Rd. / Limonite Av.																	
	- Without Improvements	TS	2	0	1	0	0	0	0	2	1	1	2	0	77.5	76.0	F⁴	F⁴
	- With Improvements	TS	2	0	1	0	0	0	0	<u>3</u>	1	1	<u>3</u>	0	25.3	23.9	C	C
9	Pats Ranch Rd. / 68th St.																	
	- Without Improvements	AWS	<u>1</u>	<u>1</u>	0	1	<u>1</u>	1	1	<u>2</u>	0	<u>1</u>	2	1	>100	16.0	F	C
	- With Improvements	TS	<u>1</u>	<u>1</u>	0	1	<u>1</u>	1	1	<u>2</u>	0	<u>1</u>	2	1	41.1	30.9	D	C
11	Wineville Av. / Limonite Av.																	
	- Without Improvements	TS	1	2	0	1	1	0	1	2	1	1	2	d	>100	>100	F	F
	- With Improvements	TS	1	2	0	<u>2</u>	<u>2</u>	<u>1></u>	<u>2</u>	<u>3</u>	1	<u>2</u>	<u>3</u>	<u>1</u>	60.2	82.5	E	F
	- With Additional Improvements	TS	1	2	0	<u>2</u>	<u>2</u>	<u>1></u>	<u>2</u>	<u>4</u>	1	<u>2</u>	<u>4</u>	<u>1</u>	35.2	43.9	D	D
14	Etiwanda Av. / Limonite Av.																	
	- Without Improvements	TS	1	1	1	1	2	1>>	0	2	1	0	1	1	>100	>100	F	F
	- With Improvements ⁶	TS	1	<u>2</u>	<u>0</u>	<u>2</u>	<u>2</u>	1>>	<u>2</u>	<u>3</u>	1	<u>2</u>	<u>3</u>	1	40.5	44.5	D	D
15	I-15 SB Ramps / Schleisman Rd.																	
	- Without Improvements		Not Applicable															
	- With Improvements	TS	0	0	0	<u>1</u>	<u>1</u>	<u>1</u>	0	<u>3</u>	<u>1</u>	<u>2</u>	<u>3</u>	0	18.7	23.4	B	C
16	I-15 NB Ramps / Schleisman Rd.																	
	- Without Improvements		Not Applicable															
	- With Improvements	TS	<u>1</u>	<u>1</u>	<u>1</u>	0	0	0	<u>2</u>	<u>3</u>	0	0	<u>3</u>	<u>1</u>	28.6	41.1	C	D

- 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 Phasing; >> = Free-Right Turn Lane; d = Defacto Right Turn Lane; 1 = Improvement
- ² Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. The I-15 Ramp Locations have been analyzed utilizing the Synchro software.
- ³ TS = Traffic Signal; AWS = All Way Stop; CSS = Cross-street Stop
- ⁴ Volume-to-capacity ratio is greater than 1.00; Intersection unstable; Level of Service "F".
- ⁵ Eliminate crosswalk on the east leg (northbound approach)
- ⁶ In addition to lane improvement shown, implement protected left-turn phasing on the eastbound/westbound left turning movements.

BOLD = Unsatisfactory level of service.

Source: Urban Crossroads 2012b, Table 7-2.

Mitigation

Mitigation Measure TR-1: Prior to grading and building permit issuance, the City shall verify that the following note is included on grading plans and building plans. Project contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by City of Jurupa Valley staff or its designee to confirm compliance. This note shall also be specified in bid documents issued to prospective construction contractors:

a. Construction traffic shall not be permitted to use the segment of 68th Street between Pats Ranch Road and Frank Avenue from 30 minutes before to 30 minutes after the scheduled start time and 30 minutes before to 30 minutes after the scheduled end time of school hours on days that the Louis VanderMolen Fundamental Elementary School of the Corona-Norco Unified School District (CNUSD) is in session. Contractors shall contact the CNUSD to obtain the school's operating schedule.

Mitigation Measure TR-2: Prior to the issuance of the Project's first occupancy permit, the Project Proponent shall assure the construction of the following improvements to the intersection of Pats Ranch Road/68th Street, with appropriate fee credit eligibility for improvements identified for funding by DIF or TUMF:

- Install a traffic signal;
- Construct the northbound leg with a left turn lane and shared through-right turn lane;
- Re-stripe the southbound lanes to provide a left turn lane (to be accommodated within the existing painted median), through lane and right turn lane;
- Construct a second eastbound through lane; and
- Re-stripe the eastbound lanes to provide a left turn lane (to be accommodated within the existing painted median), two through lanes and a right turn lane.

Mitigation Measure TR-3: Prior to the issuance of the Project's first occupancy permit, the Project Proponent shall assure the construction of the following improvements to the intersection of Etiwanda Avenue/Limonite Avenue, with appropriate fee credit eligibility for improvements identified for funding by DIF or TUMF:

- Re-stripe the northbound right turn lane as a shared through-right turn lane; and
- Construct a second westbound through lane.

Mitigation Measure TR-4: Prior to the issuance of any building permits, the Project Proponent shall make required per-unit fee payments associated with the Mira Loma Road & Bridge Benefit District (RBBD), Western Riverside County Transportation Uniform Mitigation Fees (TUMF), and the City of Jurupa Valley Development Impact Fee (DIF).

Mitigation Measure TR-5: Prior to issuance of the first building permit, the Project Proponent shall contribute a fair-share fee payment to the City of Jurupa Valley to address the Project's long-term cumulative impact to Intersection of Wineville Avenue/Limonite Avenue (Project's fair-share contribution is 1.6%).

5.16(b) Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Finding: Less-than-Significant Impact with Mitigation Incorporated

(Sources: Tentative Tract Map No. 36391 Traffic Impact Analysis (Urban Crossroads, 2012), Riverbend (TTM No. 36391) Supplemental Traffic Impact Assessment (Urban Crossroads, 2013), Riverside County Transportation Commission, 2011 Riverside County Congestion Management Plan)

The Riverside County Congestion Management Plan (CMP) prepared by the Riverside County Transportation Commission (RCTC) is applicable to the Project because three roadways in the vicinity of the Project site – I-15, Etiwanda Avenue, and Limonite Avenue – are designated as part of the CMP Roadway System. The Project would generate fewer than 100 two-way peak hour trips to I-15, which would not exceed the screening threshold for requiring an analysis of potential impacts to freeway mainline segments. According, implementation of the Project would not contribute substantial traffic to I-15 and impacts would be less than significant. As described above under the response to Issue 5.16(a), implementation of the proposed Project would result in significant direct and cumulative impacts to Etiwanda Avenue and Limonite Avenue; however, these impacts would be reduced to less-than-significant levels with implementation of required mitigation measures (i.e., Mitigation Measures TR-3 through TR-5). Accordingly, implementation of the Project would not conflict with the applicable CMP, including LOS standards, and impacts would be less than significant with mitigation.

Mitigation

Mitigation Measures T-2, T-3, and T-4 shall apply.

5.16(c) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?

Finding: No Impact

(Source: Project Application Materials)

The Project site is not in the vicinity of any public or private airfield and the Project does not include an air travel component (e.g., runway, helipad, etc.). Accordingly, the Project would not have the potential to affect air traffic patterns, including an increase in traffic levels or a change in flight path location that results in substantial safety risks. No impact would occur.

5.16(d) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

Finding: Less-than-Significant Impact

(Sources: Google Earth, Project Application Materials)

The residential land uses proposed Project would be compatible with existing development in the surrounding area; therefore, implementation of the Project would not create a transportation hazard as a result of an incompatible use. The Project proposes to construct physical improvements to 68th Street in conformance with City design standards, including but not limited to

streetscape improvements, intersection upgrades, construction of a traffic signal, vehicular travel lane/crosswalk striping improvements, and more as described previously in Subsection 4.3.1C.1.b (refer to Page II-25). With the implementation of these improvements, the Project would provide adequate vehicular and pedestrian safety and ensure that no hazardous transportation design features would be introduced by the Project. Accordingly, the Project would not substantially increase hazards due to a design feature or incompatible use. Impacts would be less than significant and mitigation is not required.

5.16(e) Result in inadequate emergency access?

Finding: Less-than-Significant Impact

(Source: Project Application Materials)

Adequate emergency access would be provided to the Project site. Buildout of the proposed Project would result in a new master-planned residential community, which would increase the need for emergency access to-and-from the site. During the course of the City of Jurupa Valley's required review of the proposed Project, the Project's transportation design was reviewed by the City's Engineering Department to ensure that adequate access to and from the site would be provided for emergency vehicles. Furthermore, Conditions of Approval will be issued by the City prior to consideration of the proposed Project by City Council, which will require that the Project provide adequate paved access to-and-from the site. With required adherence to City requirements for emergency vehicle access, impacts would be less than significant.

5.16(f) Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

Finding: Less-than-Significant Impact

(Sources: City of Jurupa Valley General Plan Circulation Element & Multipurpose Open Space Element, Eastvale Area Plan, Jurupa Area Plan, Project Application Materials)

The Project is designed to comply with all applicable transportation policies, plans, and programs. As described in Subsection 4.3.1C.1.b (refer to Page II-25), the Project would dedicate public right-of-way and improve 68th Street in accordance with City standards, as well as implement various other circulation improvements, including the installation of traffic signals, traffic signage, and crosswalks, to facilitate safe pedestrian and bicycle circulation along the Project frontage. In addition, the Project would construct a trail along 68th Street in conformance with the General Plan's *Trails and Bikeways System Plan*, and would also construct an on-site trail system to accommodate pedestrians, bicyclists, and equestrian riders. The Project also would accommodate pedestrians via on-site sidewalks. Riverside Transit Authority (RTA) operates a public bus route along 68th Street (i.e., Route 3) and implementation of the Project would not interfere with the operation of this transit route.

Mitigation Measure TR-5 presented above requires the Project Proponent to contribute a fair-share fee payment to the City of Jurupa Valley to address the Project's long-term cumulative vehicular traffic impact to Intersection of Wineville Avenue/Limonite Avenue (Project's fair-share contribution is 1.6%). This intersection includes an at-grade crosswalk at all four corners. If the City and surrounding area is fully built out at 2035 and this intersection has not been widened or otherwise improved by that time to operate at an acceptable level of service, to address the

cumulative impact the City could eliminate one crosswalk across Limonite to allow for longer signal time. If a pedestrian were on the corner without a crosswalk, the pedestrian would need to cross to the opposite side to cross, increasing the crossing time by a maximum of 120 seconds (three minutes). The City does not have a policy that addresses the preferred amount of time to cross a street, nor would the elimination of the crosswalk decrease pedestrian safety as a safe crossing on the opposite side of the street would still be available. As such, the Project's 1.6% contribution to the potential need for elimination of the crosswalk would be less than significant.

Accordingly, the proposed Project would not conflict with adopted policies, plans, or programs regarding public transit, bicycle or pedestrian facilities, or otherwise decrease the performance or safety of such facilities. Impacts would be less than significant and no mitigation would be required.

5.17 UTILITIES AND SERVICE SYSTEMS

<i>Would the project:</i>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?			✓	
b. Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			✓	
c. Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?			✓	
d. Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?		✓		
e. Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?		✓		
f. Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?			✓	
g. Comply with federal, state, and local statutes and regulations related to solid waste?			✓	

Impact Analysis

5.17(a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Finding: Less-than-Significant Impact

(Sources: Project Application Materials)

Wastewater treatment and collection services would be provided to the Project site by the Jurupa Community Services District (JCSD). Wastewater generated by the proposed Project will be treated at the Western Riverside County Regional Wastewater Treatment Plant, which is owned and operated by the Western Riverside County Regional Wastewater Authority (WRCRWA). WRCRWA is required to operate the Western Riverside County Regional Wastewater Treatment Plant in accordance with the waste treatment and discharge standards and requirements set forth by the Regional Water Quality Control Board (RWQCB). The proposed Project would not install or utilize septic systems or alternative wastewater treatment systems; therefore, the Project would have no

potential to exceed the applicable wastewater treatment requirements established by the RWQCB. Accordingly, impacts would be less than significant.

5.17(b) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Finding: Less-than-Significant Impact

(Sources: Project Application Materials)

The proposed Project would construct an on-site network of water and sewer pipes. The Project also would extend an existing water line beneath the paved right-of-way of 68th Street, install 500 linear feet of water line in 68th Street over I-15 as a second connection, and would connect to an existing off-site sewer line adjacent to I-15. The installation of water and sewer lines as proposed by the Project would result in physical impacts to the surface and subsurface of infrastructure alignments. These impacts are considered to be part of the Project's construction phase and are evaluated throughout this IS/MND accordingly. In instances where significant impacts have been identified for the Project's construction phase, mitigation measures are recommended in each applicable subsection of this IS/MND to reduce impacts to less-than-significant levels. The construction of water and sewer lines as necessary to serve the proposed Project would not result in any significant physical effects on the environment that are not already identified and disclosed as part of this IS/MND. Accordingly, additional mitigation measures beyond those identified throughout this Initial Study would not be required.

Wastewater generated by the Project would be treated at the Western Riverside County Regional Wastewater Treatment Plant. Contingent upon the Project Applicant's construction schedule, treatment capacity at the Western Riverside County Regional Wastewater Treatment Plant may have to be purchased or leased for an interim period of time by JCSD to serve the proposed Project. The construction of new or expanded wastewater treatment facilities at the Western Riverside County Regional Wastewater Treatment Plant are not anticipated to be required to serve the Project. Therefore, the Project would not result in the need to construct new or expanded wastewater treatment facilities, and no significant effect to the environment would occur.

5.17(c) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

Finding: Less-than-Significant Impact

(Source: Project Application Materials)

The proposed Project would construct an on-site network of storm drains, infiltration devices, and water quality/detention basins to convey storm water flows. As previously noted in the response to Issue 5.9(e), implementation of the Project would not increase peak runoff flows on the property above existing levels; therefore, the proposed Project would not require the expansion of any off-site existing storm water drainage facilities.

The construction of storm drain lines, infiltration devices, and detention/water quality basins as proposed by the Project would result in physical impacts to the surface and subsurface of the Project site. These impacts are considered to be part of the Project's construction phase and are

evaluated throughout this IS/MND accordingly. In instances where significant impacts have been identified for the Project's construction phase, mitigation measures are recommended in each applicable subsection of this Initial Study to reduce impacts to less-than-significant levels. The construction of storm drain infrastructure on-site as necessary to serve the proposed Project would not result in any significant physical effects on the environment that are not already identified and disclosed as part of this IS/MND. Accordingly, additional mitigation measures beyond those identified throughout this IS/MND would not be required.

5.17(d) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

Finding: Less-than-Significant Impact with Mitigation Incorporated

(Sources: Project Application Materials, JCSD Urban Water Management Plan; JCSD Information Form for Land Developments (Riverbend SAN 53 Letter))

Water service would be provided to the Project site by the Jurupa Community Services District (JCSD) and the Santa Ana River Water Company. The Santa Ana River Water Company would provide water service to the 3.89-acre surplus property located north of 68th Street while the JCSD would provide water service to all other portions of the Project site.

According to the 2010 JCSD Urban Water Management Plan, the JCSD relies predominantly on groundwater and desalinated brackish groundwater from the Chino Groundwater Basin. A detailed account of current and projected JCSD water supplies is available in JCSD's Urban Water Management Plan, which is herein incorporated by reference and available for review at JCSD, 11201 Harrel Street, Jurupa Valley, CA 91752 or online at www.jcsd.us. According to JCSD's 2010 Urban Water Management Plan, JCSD has 16 wells, 8 booster stations, and 15 reservoirs of 53.7 million-gallon capacity. In order to ensure a continuing supply of good quality water for current citizens and also future development, JCSD participates in a Joint Powers Authority (JPA) with other neighboring water purveyors, called the Chino Desalter Authority (CDA). The CDA owns and operates two water treatment plants (Desalters) for the removal of Total Dissolved Solids (TDS) and nitrates (NO₃) in the Chino Basin, along with the necessary wells, pipelines, booster pump stations and reservoirs for the delivery of this highly treated water. Both Desalters utilize Reverse Osmosis (RO) and Ion Exchange (IX) treatment processes to remove the nitrates from the groundwater. The treatment capacity for each plant is 12 million gallons/day (MGD). JCSD has a contractual obligation to purchase 10.9 MGD (11,500 acre feet per year (AFY)).

Under existing conditions, portions of the Project site located east of Wineville Avenue are outside of JCSD's service area. However, based on information provided to JCSD by the Project Applicant, Albert A Webb Associates (WEBB), as JCSD's District Engineer, prepared an "Information Form for Land Developments Requiring Water and Sewer Availability" for the proposed Project dated May 29, 2013. This information form and the letter that transmitted it to JCSD are considered a draft staff report prepared for the District's Board of Directors. These are not considered final documents until they have been approved by the District's Board of Directors and do not constitute a commitment to provide water or sewer service to the proposed Project. This draft staff report indicates that the JCSD's water supply exceeds the maximum day demand projected for the next five (5) years and that JCSD continues to develop additional water supply resources that are currently budgeted. The proposed Project is calculated by WEBB to require an average daily water flow of 175 gallons per minute and maximum demand of 472 gallons per minute. WEBB, in the draft staff report, indicates that adequate water plant pumping capacity and water storage is available to service the proposed Project.

Because JCSD will typically not extend water service to projects outside its service area (or portions thereof), the proposed Project includes annexation of that portion of the Project site south of 68th Street and east of Wineville Avenue to JCSD for water (and sewer) service. Once annexation to JCSD is complete, JCSD will be able to provide water service to the proposed Project. With implementation of Mitigation Measure U-1, which will confirm the completion of the annexation process, impacts would be reduced to below a level of significance.

Mitigation

Mitigation Measure U-1. Prior to issuance of the first building permit, the portion of the Project site's development area located south of 68th Street shall be annexed into the Jurupa Community Services District for the purpose of domestic water and sewer service. The Project Proponent shall submit evidence to the City of Jurupa Valley that the property has been annexed in the form of a certified copy of the resolution adopted by the District's Board of Supervisors approving the annexation and a subsequent submittal of the appropriate LAFCO certification.

Mitigation Measure U-2. The Project is required to install water and wastewater conveyance facilities in accordance with the California Building Standards Code and to the requirements of the Jurupa Community Services District.

5.17(e) Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?

(Sources: Project Application Materials, JCSD Sewer Master Plan (as amended through 2009) JCSD Information Form for Land Developments (Riverbend SAN 53 Letter, JCSD Sewer Study for Tract 36391)

Finding: Less-than-Significant Impact with Mitigation Incorporated

Sanitary sewer service to the Project site would be provided by the JCSD. Wastewater generated by the Project is designed to be conveyed via 8-inch and 10-inch diameter sanitary sewer lines that would be installed within all on-site roadways. These flows would be conveyed to the west and connect to a proposed 30-foot wide sewer easement located at the western boundary of TTM 36391 between proposed Lots 59 and 60. A new 10-inch sewer line would be constructed off-site northerly for a distance of approximately 10 feet, where it would connect to an existing 21-inch sanitary sewer line. As calculated by JCSD, the Project would generate approximately 0.04 million gallons per day (MGD) of wastewater requiring conveyance and treatment, based on a calculation of 220 gallons per day for each new residential home derived by JCSD monitoring of actual flows in the JCSD service area.

Under existing conditions, portions of the Project site located east of Wineville Avenue are outside of JCSD's service area. Thus, the Project would have a potentially significant impact on JCSD wastewater treatment facilities and require mitigation in the form of annexation to the JCSD service area. JCSD purchases treatment capacity at the Western Riverside County Regional Wastewater Authority Treatment Plant and the City of Riverside Treatment Plant to treat flows within its service area. According to a Sewer Study prepared for the proposed Project by JCSD and dated June 26, 2013, JCSD concluded that its wastewater collection system has adequate capacity to service the

Project, in addition to JCSD's other commitments. With implementation of Mitigation Measure U-1, impacts would be reduced to below a level of significance.

Mitigation

Mitigation Measure U-1 shall apply.

5.17(f) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?

Finding: Less-than-Significant Impact

(Sources: United States Environmental Protection Agency, Estimating 2003 Building-Related Construction and Demolition Materials Amounts, Riverside County Waste Management Department "Countywide Disposal Tonnage Tracking System Disposal Reports – 3rd Quarter 2012", City of Jurupa Valley General Plan PEIR, Chapter 4.15 – Public Services)

Construction and operation of the proposed Project would result in the generation of solid waste, requiring disposal at a landfill. During the third quarter of 2012 (July 1, 2012 through September 30, 2012), which is the most recent time period for which reporting data is available, all solid waste generated within the City of Jurupa Valley was deposited at the Badlands Sanitary Landfill and the El Sobrante Landfill. Therefore, the analysis below evaluates the Project's potential to result in adverse impacts to these two landfill facilities.

The Badlands Sanitary Landfill has a permitted disposal capacity of 4,000 tons per day. The Badlands Sanitary Landfill is estimated to reach capacity, at the earliest time, in the year 2024; however, future landfill expansion opportunities exist at this site. During the third quarter of 2012, the Badlands Sanitary Landfill accepted approximately 132,884.3 tons of landfilled waste (approximately 1,444.4 tons per day), which corresponds to approximately 36% of its permitted daily disposal volume.

The El Sobrante Landfill is has a permitted disposal capacity of 70,000 tons per week. The El Sobrante Landfill is estimated to reach capacity, at the earliest time, in the year 2045; however, future landfill expansion opportunities exist at this site. During the third quarter of 2012, the El Sobrante Landfill accepted approximately 481,487.12 tons of landfilled waste (approximately 37,037.5 tons per week), which corresponds to approximately 53% of its permitted daily disposal volume.

Construction Impact Analysis

During construction of the proposed Project, solid waste requiring landfill disposal would be required in the form of demolition debris and remnants of unused construction materials. Using a demolition waste generation factor of 98.4 pounds per square foot, demolition of the two existing structures on the site (totaling 4,800 s.f.) would generate approximately 236.2 tons of debris requiring disposal. Additional demolition debris (i.e., remnants of the previously demolished dairy farm structures) would also require disposal; however the volume of this waste is not anticipated to be substantial.

Waste also would be generated by the construction process, primarily consisting of discarded materials and packaging. Based on an average home size of 2,750 s.f., and a construction waste generation factor of 4.34 pounds per s.f., approximately 39 tons of waste would be generated

during the construction of each home, for a total of 18,174 tons of waste Project-wide. Additional waste would be expected from the construction of streets, common areas, infrastructure installation, and other Project-related construction activities.

Demolition debris and construction waste generated by the Project would be disposed at the Badlands Sanitary Landfill and/or the El Sobrante Landfill. These landfills receive well below their maximum permitted daily disposal volume and demolition and construction waste generated by the Project is not anticipated to cause these landfills to exceed their maximum permitted daily disposal volume. Furthermore, none of these regional landfill facilities are expected to reach their total maximum permitted disposal capacities during the Project's construction period. Because the Project would generate a relatively small amount of solid waste per day, as compared to the permitted daily capacities for Badlands Sanitary Landfill and the El Sobrante Landfill, these regional landfill facilities would have sufficient daily capacity to accept solid waste generated by the Project. Impacts would be less than significant.

☐ **Operational Impact Analysis**

Based on a waste generation factor of 0.41 tons per home per year as documented in the Riverside County General Plan EIR, the Project's proposed 466 homes would generate approximately 191.1 tons of waste per year, or 0.5 tons of waste per day.

Solid waste generated during long-term operation of the Project would be disposed at the Badlands Sanitary Landfill and/or the El Sobrante Landfill. During long-term operation, the Project's solid waste would represent approximately 0.01% of the daily permitted disposal capacity at the Badlands Sanitary Landfill and approximately 0.01% of the daily permitted disposal capacity at the El Sobrante Landfill. These landfills receive well below their maximum permitted daily disposal volume and solid waste generated by the Project is not anticipated to cause these landfills to exceed their maximum permitted daily disposal volume. Because the Project would generate a relatively small amount of solid waste per day, as compared to the permitted daily capacities for Badlands Sanitary Landfill and the El Sobrante Landfill, these regional landfill facilities would have sufficient daily capacity to accept solid waste generated by the Project. Impacts would be less than significant.

5.17(g) Comply with federal, state, and local statutes and regulations related to solid waste?

Finding: Less-than-Significant Impact

(Sources: California Assembly Bill 939 (Sher), Riverside County Waste Resources Management District, Riverside County Integrated Waste Management Plan, Riverside County Waste Management Department, Solid Waste System Study Report, Waste Management "El Sobrante Landfill")

The California Integrated Waste Management Act (Assembly Bill (AB) 939), signed into law in 1989, established an integrated waste management system that focused on source reduction, recycling, composting, and land disposal of waste. In addition, the bill established a 50% waste reduction requirement for cities and counties by the year 2000, along with a process to ensure environmentally safe disposal of waste that could not be diverted. Per the requirements of the Integrated Waste Management Act, the Riverside County Board of Supervisors adopted the Riverside Countywide Integrated Waste Management Plan (CIWMP), which outlines the goals, policies, and programs the County and its cities will implement to create an integrated and cost

effective waste management system that complies with the provisions of AB 939 and its diversion mandates.

In order to assist the City of Jurupa Valley and the County of Riverside in achieving the mandated goals of the Integrated Waste Management Act, the Project Proponent would be required to work with future refuse haulers to develop and implement feasible waste reduction programs, including source reduction, recycling, and composting. Additionally, in accordance with the California Solid Waste Reuse and Recycling Act of 1991 (Cal Pub Res. Code § 42911), the Project would provide adequate areas for collecting and loading recyclable materials where solid waste is collected. The collection areas are required to be shown on construction drawings and be in place before occupancy permits are issued. The implementation of these programs would reduce the amount of solid waste generated by the Project and diverted to landfills, which in turn would aid in the extension of the life of affected disposal sites. The Project would comply with all applicable solid waste statutes and regulations; as such, impacts would be less than significant.

Mitigation

Although impacts associated with compliance to federal, state, and local statutes and regulations related to solid waste would be less than significant, the following mitigation measure is recommended to ensure compliance with mandatory solid waste reduction requirements.

Mitigation Measure U-3: The Project shall participate in established County-wide programs for residential development projects to reduce solid waste generation, in accordance with the provisions of the Riverside Countywide Integrated Waste Management Plan.

Mitigation Measure U-4: The Project shall comply with the California Solid Waste Reuse and Recycling Act of 1991, which requires new development projects to prepare a waste recycling plan in order to reduce the amount of solid waste diverted to landfills. Prior to the issuance of grading and building permits, the Project Applicant shall submit a Waste Recycling Plan to the City of Jurupa Valley and the Riverside County Waste Management Department. The Waste Recycling Plan shall list the estimated quantity of waste to be generated on-site during construction and demolition activities and the methods that will be utilized to recycle, reuse, compost and/or salvage a minimum of 50% of the construction and demolition waste generated on-site. Following the completion of construction activities, the Project Applicant shall submit a final Waste Recycling Report to the City of Jurupa Valley and the Riverside County Waste Management Department that demonstrates the actual quantities of construction and demolition waste generated and recycled.

Mitigation Measure U-5: The Project shall comply with the California Solid Waste Reuse and Recycling Act of 1991, which requires new development projects to provide refuse/recycling collection and loading areas in order to reduce the amount of solid waste diverted to landfills. Prior to the issuance of building permits, the City of Jurupa Valley shall confirm that adequate areas for collecting and loading recyclable materials are identified on Project construction drawings.

5.18 MANDATORY FINDINGS OF SIGNIFICANCE

<i>Would the project:</i>	Potentially Significant Impact	Less than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact
a. Does the project have the potential to 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, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?		✓		
b. Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?		✓		
c. Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?		✓		

Impact Analysis

5.18(a) Does the project have the potential to 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, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?

Finding: Less-than-Significant Impact with Mitigation Incorporated

(Sources: Project Application Materials, this IS/MND)

All impacts to the environment, including impacts to habitat for fish and wildlife species, fish and wildlife populations, plant and animal communities, rare and endangered plants and animals, and historical and pre-historical resources were evaluated as part of this IS/MND. Throughout this IS/MND, where impacts were determined to be potentially significant, mitigation measures have been imposed to reduce those impacts to less-than-significant levels. Accordingly, with incorporation of the mitigation measures imposed throughout this IS/MND, the Project would not substantially degrade the quality of the environment and impacts would be less than significant.

Mitigation

All mitigation measures specified in this IS/MND shall apply.

5.18(b) Does the project have impacts that are individually limited, but cumulatively considerable? (“Cumulatively considerable” means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?

Finding: Less-than-Significant Impact with Mitigation Incorporated

(Sources: Project Application Materials, this IS/MND)

As discussed throughout this IS/MND, implementation of the proposed Project has the potential to result in effects to the environment that are individually limited, but cumulatively considerable, including impacts to Air Quality, Biological Resources, and Transportation/Traffic. In all instances where the Project has the potential to contribute to a cumulatively considerable impact to the environment, mitigation measures have been imposed to reduce potential effects to less-than-significant levels. As such, with incorporation of the mitigation measures imposed throughout this IS/MND, the Project would not contribute to environmental effects that are individually limited, but cumulatively considerable, and impacts would be less than significant.

Mitigation

Mitigation measures AQ-1 through AQ-10, BI-1 through BI-7, and TR-2 through TR-5 shall apply.

5.18(c) Does the project have environmental effects, which will cause substantial adverse effects on human beings, either directly or indirectly?

Finding: Less-than-Significant Impact with Mitigation Incorporated

(Sources: Project Application Materials, this IS/MND)

The Project’s potential to result in environmental effects that could adversely affect human beings, either directly or indirectly, has been discussed throughout this Environmental Checklist/Initial Study. In instances where the Project has potential to result in direct or indirect adverse effects to human beings, including impacts to Air Quality, Geology and Soils, Hazards and Hazardous Materials, and Noise, mitigation measures have been applied to reduce the impact to below a level of significance. With required implementation of mitigation measures identified in this IS/MND, construction and operation of the proposed Project would not involve any activities that would result in environmental effects which would cause substantial adverse effects on human beings, either directly or indirectly.

Mitigation

Mitigation measures AQ-1 through AQ-10, GE-1 through GE-6, HM-1 through HM-4, and N-1 through N-7 shall apply.

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6.2 Documents Incorporated by Reference

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Riverside, County of. 2003. *General Plan Program Environmental Impact Report*. October 7, 2003. Available for review online at: <<http://www.rctlma.org/genplan/content/eir/volume1.html>> & <<http://www.rctlma.org/genplan/content/eir/volume2.html>>.

Project Application Materials (General Plan Amendment 1202, Zone Change 1201, Tentative Map 36391, Development Agreement) on file at the City of Jurupa Valley Planning Department (8304 Limonite Avenue, Suite "M," Jurupa Valley, CA 92509).

6.3 Initial Study Preparers

6.3.1 City of Jurupa Valley Planning Department

Tom Merrell, AICP, Planning Director
Laurie Lovret, AICP, Senior Planner
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6.3.2 T&B Planning, Inc.

Tracy Zinn, AICP, Principal
David Ornelas, Project Manager
Sarah Nilson, GIS/Graphics Specialist

III. Mitigation Monitoring and Reporting Program

Mitigation Monitoring and Reporting Program (MMRP)

Impact	Mitigation Measure (MM)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
Aesthetics					
Threshold 5.1(d): The Project would introduce new sources of artificial lighting to the property, which has the potential to adversely affect nighttime views in the area.	<p>MM AE-1: Prior to residential building permit issuance, the City shall review construction drawings to ensure that proposed exterior, artificial lighting is located, adequately shielded, and directed such that no direct light falls outside the parcel of origin or onto the public right-of-way. Project contractors shall be required to comply with the construction drawings and permit periodic inspection of the construction site by City of Jurupa Valley staff or its designee to confirm compliance.</p> <p>MM AE-2: Prior to approval of improvement plans for the community park, the City shall review the construction drawings to ensure that proposed exterior artificial lighting is located, adequately shielded, and directed such that no direct light falls outside the parcel of origin or onto the public right-of-way. If the open play area/field is proposed to be lit at night, the park improvement plans shall be accompanied by a lighting study that verifies compliance. Project contractors shall be required to comply with the improvement plans and permit inspection of the park site by City of Jurupa Valley staff or its designee to confirm compliance.</p> <p>MM AE-3: Prior to the issuance of a building permit to allow the installation of a photovoltaic (solar) panel attached to a residential structure, the City of Jurupa Valley shall review the proposed installation location and specific photovoltaic product specifications to ensure that the panel will be sited and designed to avoid glare on adjacent properties and roadways as part of the City's obligation to comply with CA Government Code Section 65850.5.</p> <p>MM AE-4: Street lights shall comply with design standards contained within City Ordinance No. 461 (Road Improvement Standards & Specifications).</p>	Project Applicant/ Developer	City of Jurupa Valley Planning Department, City of Jurupa Valley Building & Safety Department	Prior to issuance of residential building permit	Less than Significant with Mitigation Incorporated
		Project Applicant/ Developer	City of Jurupa Valley Planning Department, City of Jurupa Valley Building & Safety Department	Prior to issuance of improvement plans for the community park	
		Building Permit Applicant	City of Jurupa Valley Building & Safety Department	Prior to the issuance of building permits for solar panel installations	
		Project Applicant/ Developer	City of Jurupa Valley Engineering Department	Prior to issuance of street improvement plans	

**Initial Study/Mitigated Negative Declaration
Riverbend (Master Case 1201)**

City of Jurupa Valley

Impact	Mitigation Measure (MM)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
Agriculture & Forestry Resources					
<u>Threshold 5.2(a):</u> Important Farmlands designated by the California Resources Agency Farmland Mapping and Monitoring Program (FMMP) are not located on the property, so no impact to FMMP. Important Farmlands would occur. Regardless, mitigation is recommended to ensure compliance with the City's Right to Farm Ordinance.	MM AG-1: The Project is required to comply with the provisions of City Ordinance No. 625, "Right-to-Farm." As such, a "Notice to Buyer" shall be included in all sales agreements notifying buyers of real property located within 300 feet of agriculturally zoned property (zones A-1, A-P, A-2, A-D and C/V) that the property lies in close proximity to land zoned for primarily agricultural purposes, and that the presence of any legal agricultural activity, operation, or facility, or appurtenances thereof on agriculturally zoned lands, shall not be or become a nuisance because residential uses have entered the area.	Project Applicant/ Developer	City of Jurupa Valley Planning Department	Prior to the first building permit final inspection	Less than Significant
<u>Threshold 5.2(b):</u> The Project site is burdened by a Williamson Act contract until January 1, 2015. If non-agricultural activity occurs on the subject property associated with the Project prior to January 1, 2015, which interferes with ongoing agricultural operations or is determined to be incompatible with the agricultural uses, a significant impact would occur.	MM AG-2: Prior to January 1, 2015, when the Williamson Act Contract on the Project site expires, the City shall prohibit all activities associated with the proposed Project that would interfere with ongoing agricultural activities occurring on the Project site, unless: (1) the owner of the Project site requests and the City of Jurupa Valley City Council makes a determination that a certain use is compatible with the agricultural preserve pursuant to Ordinance No. 509 and California Government Code §51238.1; or (2) the owner of the Project site petitions for the cancellation of the land conservation contract covering the subject property and this petition is approved by the City of Jurupa Valley City Council, pursuant to the provisions set forth in California Government Code §51280 et seq..	Project Applicant/ Developer	City of Jurupa Valley Planning Department, City of Jurupa Valley City Council	Prior to the issuance of grading, stockpile, and improvement permits	Less than Significant with Mitigation Incorporated
Air Quality					
<u>Threshold 5.3(b):</u> The proposed Project would generate NOx emissions during temporary near-term construction emissions that would exceed the SCAQMD regional threshold. Although proposed temporary near-term construction activities would not exceed applicable SCAQMD regional thresholds for VOC, CO, SOx, PM ₁₀ and/or PM _{2.5} emissions,	MM AQ-1: The Project is required to comply with the provisions of South Coast Air Quality Management District Rule 403, "Fugitive Dust." Rule 403 requires implementation of best available dust control measures during construction activities that generate fugitive dust, such as earth moving and stockpiling activities, grading, and equipment travel on unpaved roads. Prior to grading permit issuance, the City shall verify that the following notes are included on the stockpile and grading plans. Project contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by	Project Applicant/ Developer, Project Construction Manager	City of Jurupa Valley Building & Safety Department	Prior to the issuance of grading and stockpile permits	Less than Significant with Mitigation Incorporated

**Initial Study/Mitigated Negative Declaration
Riverbend (Master Case 1201)**

City of Jurupa Valley

Impact	Mitigation Measure (MM)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
mitigation is recommended to ensure compliance with applicable SCAQMD rules and thresholds.	<p>City of Jurupa Valley staff or its designee to confirm compliance. These notes also shall be specified in bid documents issued to prospective construction contractors.</p> <p>a. During soil stockpiling, grading and ground-disturbing construction activities, the construction contractor shall ensure that all unpaved roads, active soil stockpiles, and areas undergoing active ground disturbance within the Project site are watered at least three (3) times daily during dry weather. Watering, with complete coverage of disturbed areas by water truck, sprinkler system or other comparable means, shall occur in the mid-morning, afternoon, and after work has been completed for the day.</p> <p>b. Temporary signs shall be installed on the construction site along all unpaved roads and/or unpaved haul routes indicating a maximum speed limit of 15 miles per hour (MPH). The signs shall be installed before construction activities commence and remain in place during the duration of vehicle activities on all unpaved roads unpaved haul routes.</p> <p>MM AQ-2: The Project is required to comply with California Code of Regulations Title 13, Division 3, Chapter 1, Article 4.5, Section 2025, "Regulation to Reduce Emissions of Diesel Particulate Matter, Oxides of Nitrogen and Other Criteria Pollutants, from In-Use Heavy-Duty Diesel-Fueled Vehicles" and California Code of Regulations Title 13, Division 3, Chapter 10, Article 1, Section 2485, "Airborne Toxic Control Measure to Limit Diesel-Fueled Commercial Motor Vehicle Idling." Prior to grading permit issuance and building permit issuance, the City shall verify that the following notes are included on the grading and building plans. Project contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by City of Jurupa Valley staff or its designee to confirm compliance. These notes also shall be specified in bid documents issued to prospective construction contractors.</p> <p>a. The contractor shall utilize California Air Resources Board (CARB) Tier III certified equipment or better for all off-road diesel-powered construction</p>	Project Applicant/ Developer, Project Construction Manager	City of Jurupa Valley Building & Safety Department	Prior to the issuance of grading and building permits	

**Initial Study/Mitigated Negative Declaration
Riverbend (Master Case 1201)**

City of Jurupa Valley

Impact	Mitigation Measure (MM)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	<p>equipment greater than 50 horsepower.</p> <p>b. Temporary signs shall be placed on the construction site at all construction vehicle entry points at 68th Street and at all loading, unloading, and equipment staging areas indicating that heavy duty trucks and diesel powered construction equipment are prohibited from idling for more than five (5) minutes. The signs shall be installed before construction activities commence and remain in place during the duration of construction activities at all loading, unloading, and equipment staging areas.</p> <p>MM AQ-3: The Project is required to comply with the provisions of South Coast Air Quality Management District Rule 1113, "Architectural Coatings" and Rule 431.2, "Sulfur Content of Liquid Fuels." Adherence to Rule 1113 limits the release of volatile organic compounds (VOCs) into the atmosphere during painting and application of other surface coatings. Adherence to Rule 431.2 limits the release of sulfur dioxide (SO_x) into the atmosphere from the burning of fuel. Prior to grading and building permit issuance, the City shall verify that the following notes are included on the grading and building plans. Project contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by City of Jurupa Valley staff or its designee to confirm compliance. These notes also shall be specified in bid documents issued to prospective construction contractors.</p> <p>a. All architectural coatings shall be compliant with South Coast Air Quality Management District Rule 1113, which limits VOC content to specified limits.</p> <p>b. All liquid fuels shall have a sulfur content of not more than 0.05 percent by weight, except as provided for by South Coast Air Quality Management District Rule 431.2.</p> <p>MM AQ-4: The Project is required to comply with the provisions of South Coast Air Quality Management District Rule 1186 "PM₁₀ Emissions from Paved and Unpaved Roads and Livestock Operations" and Rule 1186.1, "Less-Polluting Street Sweepers." Adherence to Rules 1186 and 1186.1 reduces the release of criteria pollutant emissions into the atmosphere</p>	<p>Project Applicant/ Developer, Project Construction Manager</p>	<p>City of Jurupa Valley Building & Safety Department</p>	<p>Prior to the issuance of grading and building permits</p>	
		<p>Project Applicant/ Developer, Project Construction Manager</p>	<p>City of Jurupa Valley Building & Safety Department</p>	<p>Prior to the issuance of grading and building permits</p>	

**Initial Study/Mitigated Negative Declaration
Riverbend (Master Case 1201)**

City of Jurupa Valley

Impact	Mitigation Measure (MM)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	<p>during construction. Prior to grading and building permit issuance, the City shall verify that the following notes are included on the grading and building plans. Project contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by City of Jurupa Valley staff or its designee to confirm compliance. The notes also shall be specified in bid documents issued to prospective construction contractors.</p> <p>a. If visible dirt or accumulated dust is carried onto paved roads during construction, the contractor shall remove such dirt and dust at the end of each work day by street cleaning.</p> <p>b. Street sweepers shall be certified by the South Coast Air Quality Management District as meeting the Rule 1186 sweeper certification procedures and requirements for PM₁₀-efficient sweepers. All street sweepers having a gross vehicle weight of 14,000 pounds or more shall be powered with alternative (non-diesel) fuel or otherwise comply with South Coast Air Quality Management District Rule 1186.1.</p> <p>MM AQ-5: Prior to issuance of stockpile and grading permits, the Project Applicant shall identify the soil/earth materials borrow site location(s) and obtain City approval of the haul route. Prior to approval of the haul route and issuance of stockpile and grading permits, the Applicant also shall submit a letter to the City from a qualified air quality specialist that calculates the haul route distance and the maximum number of daily haul trips and load sizes that can occur to maintain air quality emissions below SCAQMD significance thresholds. The City shall ensure that the haul route and maximum number of soil/earth materials haul trips are specified as notes on the grading plan. Project contractors shall be required to ensure compliance with the notes, keep a log of the actual number of daily haul trips, and permit periodic inspection of the construction site and haul trip log by City of Jurupa Valley staff or its designee to confirm compliance. These notes also shall be specified in bid documents issued to prospective construction contractors. In no case shall the maximum number of daily haul trips exceed the</p>	Project Applicant/ Developer, Project Construction Manager	City of Jurupa Valley Building & Safety Department	Prior to the issuance of grading and stockpile permits	

**Initial Study/Mitigated Negative Declaration
Riverbend (Master Case 1201)**

City of Jurupa Valley

Impact	Mitigation Measure (MM)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	following totals based on travel distance. Each inbound vehicle counts as one (1) trip and each outbound vehicle counts as one (1) trip. Soil Import Only 5 miles – 350 trips 10 miles – 240 trips 15 miles – 170 trips 20 miles – 62 trips Concurrent Soil Import and Grading 5 miles – 175 trips 10 miles – 120 trips 15 miles – 170 trips 20 miles – 62 trips				
Threshold 5.3(c): The proposed Project would result in a cumulatively considerable net increase of criteria pollutants for which the project region is in non-attainment.	Mitigation Measures AQ-1, AQ-2, and AQ-4 shall apply.	Refer to MM AQ-1, MM AQ-2, and MM AQ-4	Refer to MM AQ-1, MM AQ-2, and MM AQ-4	Refer to MM AQ-1, MM AQ-2, and MM AQ-4	Less than Significant with Mitigation Incorporated
Threshold 5.4(d): The proposed Project could expose sensitive receptors in the vicinity of the Project site to substantial concentrations of particulate matter (PM ₁₀ and PM _{2.5}) during temporary near-term construction activities.	MM AQ-6: Prior to grading permit issuance, the City shall verify that the following notes are included on the grading plan. Project contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by City of Jurupa Valley staff or its designee to confirm compliance. These notes also shall be specified in bid documents issued to prospective construction contractors. a. The construction contractor shall ensure that mass grading activities be limited to no more than 4.0 acres of active ground disturbance per day. The construction contractor shall maintain a written log or map of daily mass grading activities, which shall be available for City of Jurupa Valley inspection upon request.	Project Applicant/ Developer, Project Construction Manager	City of Jurupa Valley Building & Safety Department	Prior to the issuance of a grading permit	Less than Significant with Mitigation Incorporated
Although the Project would not expose on-site residents to substantial toxic air pollutant concentrations during long-term operation, due in part to the installation of an air filtration system in every residential home, mitigation is recommended to ensure that this design feature is installed.	MM AQ-7: Prior to every residential building permit final inspection, the City shall verify that an operating air filtration system has been installed in each new residence. The air filtration system shall have a documented efficiency level equal to or exceeding Minimum Efficiency Reporting Value (MERV) 13 (or equivalent), as defined by the American Society of	Project Applicant/ Developer	City of Jurupa Valley Building & Safety Department	Prior to every residential building permit final inspection	

**Initial Study/Mitigated Negative Declaration
Riverbend (Master Case 1201)**

City of Jurupa Valley

Impact	Mitigation Measure (MM)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	<p>Heating, Refrigerating and Air Conditioning Engineers Standard 52.2.</p> <p>MM AQ-8: The following note shall be specified in the project's CC&Rs and an operation and maintenance manual for the air filtration system shall be required to be included in all sales agreements notifying buyers of real property of their responsibility to operate and maintain the system. A copy of the CC&Rs shall be provided to City of Jurupa Valley staff or its designee to ensure that the provision is included. The project's homeowners' association shall enforce the CC&Rs.</p> <p>a. An air filtration system has been installed in each residential home that achieves a documented efficiency level equal to or exceeding Minimum Efficiency Reporting Value (MERV) 13 (or equivalent), as defined by the American Society of Heating, Refrigerating and Air Conditioning Engineers Standard 52.2. Operation and maintenance of the air filtration system is required to reduce interior air pollutant levels to within South Coast Air Quality Management District standards.</p> <p>MM AQ-9: Prior to building permit final inspection for any residential lots abutting I-15 (Lots 18-28, 38, 39, 49, 50, 58-68), the City shall verify that coniferous evergreen trees, such as Afghan and Aleppo pine trees (or equivalent) have been planted along the interface between Interstate 15 and residential areas along the western Project boundary. The trees shall be positioned in a naturally appearing pattern and be no further than 30 feet apart on-center and a minimum size of 36-inch box at initial planting, to provide overlapping canopy coverage at maturity to maximize the filtration of airborne particulate matter. Tree planting may be phased concurrent with development adjacent to I-15.</p>	<p>Project Applicant/ Developer</p>	<p>City of Jurupa Valley Planning Department</p>	<p>Prior to the first building permit final inspection</p>	
	<p>MM AQ-10: The Project is required to comply with the provisions of South Coast Air Quality Management District Rule 402 "Nuisance." Adherence to Rule 402 reduces the release of odorous emissions into the atmosphere. Prior to grading and building permit issuance, the City shall verify that the following note is included on the grading and building plans. Project</p>	<p>Project Applicant/ Developer, Project Construction Manager</p>	<p>City of Jurupa Valley Planning Department, City of Jurupa Valley Building & Safety Department</p>	<p>Prior to issuance of grading and building permits, Prior to first building permit final inspection</p>	<p>Less than Significant</p>

**Initial Study/Mitigated Negative Declaration
Riverbend (Master Case 1201)**

City of Jurupa Valley

Impact	Mitigation Measure (MM)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
with SCAQMD Rule 402.	<p>contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by City of Jurupa Valley staff or its designee to confirm compliance. The note shall be specified in bid documents issued to prospective construction contractors and shall also be specified in the project's CC&Rs.</p> <p>a. There shall be no discharge from any source whatsoever such quantities of air contaminants or other material which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property.</p>				
Biological Resources					
<p><u>Threshold 5.4(a):</u> Although no nesting migratory birds and/or burrowing owls were observed on the Project site, there is the potential that these species could occupy the site prior to the commencement of construction activities and thus be impacted by such activities.</p>	<p>MM BI-1: Within 30 days prior to grading, a qualified biologist shall conduct a survey of the Project's proposed impact footprint and make a determination regarding the presence or absence of the burrowing owl. The determination shall be documented in a report and shall be submitted, reviewed, and accepted by the City of Jurupa Valley Planning Department prior to the issuance of a grading permit and subject to the following provisions:</p> <p>a. In the event that the pre-construction survey identifies no burrowing owls in the impact area, a grading permit may be issued without restriction.</p> <p>b. In the event that the pre-construction survey identifies the presence of at least one individual but less than three (3) mating pairs of burrowing owl, then prior to the issuance of a grading permit and prior to the commencement of ground-disturbing activities on the property, the qualified biologist shall passively or actively relocate any burrowing owls. Passive relocation, including the required use of one-way doors to exclude owls from the site and the collapsing of burrows, will occur if the biologist determines that the proximity and availability of alternate habitat is suitable for successful passive relocation. Passive relocation shall follow CDFW</p>	Project Biologist	City of Jurupa Valley Planning Department, City of Jurupa Valley Building & Safety Department	Prior to the issuance of a grading permit and within 30 days prior to grading	Less than Significant with Mitigation Incorporated

**Initial Study/Mitigated Negative Declaration
Riverbend (Master Case 1201)**

City of Jurupa Valley

Impact	Mitigation Measure (MM)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	<p>relocation protocol and shall only occur between September 15 and February 1. If proximate alternate habitat is not present as determined by the biologist, active relocation shall follow CDFW relocation protocol. The biologist shall confirm in writing that the species has fledged the site or been relocated prior to the issuance of a grading permit.</p> <p>c. In the event that the pre-construction survey identifies the presence of three (3) or more mating pairs of burrowing owl, the requirements of MSCHP Species-Specific Conservation Objectives 5 for the burrowing owl shall be followed. Objective 5 states that if the site (including adjacent areas) supports three (3) or more pairs of burrowing owls and supports greater than 35 acres of suitable Habitat, at least 90 percent of the area with long-term conservation value and burrowing owl pairs will be conserved onsite until it is demonstrated that MSHCP Species-Specific Conservation Objectives 1-4 have been met. Objectives 1-4 are listed in the MSHCP, Volume I, Appendix E. A grading permit shall only be issued, either:</p> <ul style="list-style-type: none"> i. upon approval and implementation of a property-specific Determination of Biologically Superior Preservation (DBESP) report for the western burrowing owl by the CDFW; or ii. a determination by the biologist that the site is part of an area supporting less than 35 acres of suitable Habitat, and upon passive or active relocation of the species following accepted CDFW protocols. <p>MM BI-2: As a condition of approval for all grading permits, vegetation clearing and ground disturbance shall be prohibited during the migratory bird nesting season (February 1 through September 15), unless a migratory bird nesting survey is completed in accordance with the following requirements:</p> <ul style="list-style-type: none"> a. A migratory nesting bird survey of the Project's impact footprint shall be conducted by a qualified biologist within three (3) days prior to initiating vegetation clearing or ground disturbance. b. A copy of the migratory nesting bird survey results report shall be provided to the City of Jurupa Planning 	Project Biologist	City of Jurupa Valley Planning Department, City of Jurupa Valley Building & Safety Department	Prior to issuance of a grading permit	

**Initial Study/Mitigated Negative Declaration
Riverbend (Master Case 1201)**

City of Jurupa Valley

Impact	Mitigation Measure (MM)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	<p>Department. If the survey identifies the presence of active nests, then the qualified biologist shall provide the Planning Department with a copy of maps showing the location of all nests and an appropriate buffer zone around each nest sufficient to protect the nest from direct and indirect impact. The size and location of all buffer zones, if required, shall be subject to review and approval by the Planning Department and shall be no less than a 200-foot radius around the nest for non-raptors and a 500-foot radius around the nest for raptors. The nests and buffer zones shall be field checked weekly by a qualified biological monitor. The approved buffer zone shall be marked in the field with construction fencing, within which no vegetation clearing or ground disturbance shall commence until the qualified biologist and Planning Department verify that the nests are no longer occupied and the juvenile birds can survive independently from the nests.</p>				
<p>Threshold 5.4(f): In the absence of mitigation, there is the potential that the Project could conflict with the provisions of the Western Riverside County MSHCP, including guidelines associated with the urban/wildlands interface and additional survey needs.</p>	<p>MM BI-3: Prior to grading permit issuance, the City shall verify that the following note is included on the grading plan. Project contractors shall be required to ensure compliance with this note and permit periodic inspection of the construction site by City of Jurupa Valley staff or its designee to confirm compliance. This note also shall be specified in bid documents issued to prospective construction contractors.</p> <p>a. Grading activities and construction activities that generate noise greater than 65 dBA during daytime hours or 45 dBA during nighttime hours shall not occur within 100 meters of the natural open space area (Lot "Y") during the wildlife nesting season (March 1 through August 31).</p> <p>MM BI-4: The Project's homeowner association covenants, codes, and restrictions (CC&Rs) shall prohibit the planting of the invasive, non-native plant species listed in Table 6-2 of the MSHCP. A copy of the CC&Rs shall be provided to City of Jurupa Valley staff or its designee to ensure that the provision is included. The homeowners association shall be required to enforce the CC&Rs.</p> <p>MM BI-5: Prior to opening the Project's trail system to public use through the borrow area/open space lot (Lot 470), signs shall be installed to identify</p>	<p>Project Applicant/ Developer, Project Construction Manager</p> <p>Project Applicant/ Developer</p> <p>Project Applicant/ Developer</p>	<p>City of Jurupa Valley Building & Safety Department</p> <p>City of Jurupa Valley Planning Department</p> <p>City of Jurupa Valley Planning Department</p>	<p>Prior to issuance of a grading permit</p> <p>Prior to first building permit final inspection</p> <p>Prior to opening of the Project's trail system</p>	<p>Less than Significant with Mitigation Incorporated</p>

**Initial Study/Mitigated Negative Declaration
Riverbend (Master Case 1201)**

City of Jurupa Valley

Impact	Mitigation Measure (MM)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	<p>biologically sensitive areas in the MSHCP Preserve and inform trail users that trespass is not permitted. Prior to sign posting, the City of Jurupa Planning Department and Western Riverside County RCA shall review and approve the sign locations and messaging. The owner or conservator of Lot 470 shall be responsible for maintaining the signs and repairing/replacing them if they are damaged or removed.</p> <p>MM BI-6: The Project shall comply with the Western Riverside County Multiple Species Habitat Conservation Plan Fee Program, which requires payment of a per-acre local development mitigation fee that will assist in providing revenue to acquire and preserve vegetation communities and natural areas within the city and western Riverside County that are known to support threatened, endangered or key sensitive populations of plant and wildlife species. Prior to the issuance of grading permits, the Project Applicant shall pay Local Development Mitigation Fees (per City Ordinance No. 810.2) for implementation of the MSHCP.</p> <p>MM BI-7: The Project shall comply with The Habitat Conservation Plan for the Stephens' Kangaroo Rat in Western Riverside County, California, which requires payment of a development mitigation fee to assist in providing revenue to acquire and preserve habitat for the Stephens' kangaroo rat. Prior to the issuance of grading permits, the Project Applicant shall pay fees in accordance with City Ordinance No. 633 (Stephens' Kangaroo Rat Fee Assessment Area) for implementation of the Stephens' Kangaroo Rat Habitat Conservation Plan.</p> <p>Mitigation Measures BI-1 and BI-2 shall also apply.</p>	<p>Project Applicant/ Developer</p> <p>Project Applicant/ Developer</p> <p>Refer to MM BI-1 and MM BI-2</p>	<p>City of Jurupa Valley Planning Department</p> <p>City of Jurupa Valley Planning Department</p> <p>Refer to MM BI-1 and MM BI-2</p>	<p>Prior to issuance of building permits</p> <p>Prior to issuance of building permits</p> <p>Refer to MM BI-1 and MM BI-2</p>	
Cultural Resources					
Threshold 5.5(b): The Project has the potential to uncover and affect previously unknown archaeological resources during construction activities.	MM CR-1: Prior to the issuance of a grading permit, the Project Proponent shall provide evidence to the City that a qualified professional archaeological monitor has been retained by the Project Applicant to conduct monitoring of all mass grading and trenching activities in previously undisturbed soils and has the	Project Applicant/ Developer	City of Jurupa Valley Planning Department, City of Jurupa Valley Building & Safety Department	Prior to the issuance of a grading permit	Less than Significant with Mitigation Incorporated

City of Jurupa Valley

Impact	Mitigation Measure (MM)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	<p>authority to halt and redirect earthmoving activities in the event that suspected archaeological resources are unearthed during Project construction.</p> <p>MM CR-2: Prior to the issuance of a grading permit, the Project Proponent shall provide evidence to the City that appropriate Native American representative(s) shall be allowed to monitor and have received or will receive a minimum of 15 days advance notice of mass grading activities in previously undisturbed soils. During grading operations in previously undisturbed soils, a professional archaeological monitor shall observe the grading operation until such time as monitor determines that there is no longer any potential to uncover buried cultural deposits. If the monitor suspects that an archaeological resource may have been unearthed, the monitor shall immediately halt and redirect grading operations in a 100-foot radius around the find to allow identification and evaluation of the suspected resource. If the monitor determines that the suspected resource is potentially significant, the archaeologist shall notify the appropriate Native American Tribe(s) and invite a tribal representative to consult on the resource evaluation. In consultation with the appropriate Native American Tribe(s), the archaeological monitor shall evaluate the suspected resource and make a determination of significance pursuant to California Public Resources Code Section 21083.2. If the resource is significant, Mitigation Measure CR-3 shall apply.</p> <p>MM CR-3: If a significant archaeological resource(s) is discovered on the property, ground disturbing activities shall be suspended 100 feet around the resource(s). The archaeological monitor and a representative of the appropriate Native American Tribe(s), the Project Proponent, and the City Planning Department shall confer regarding mitigation of the discovered resource(s). A treatment plan shall be prepared and implemented by the archaeologist to protect the identified archaeological resource(s) from damage and destruction. The treatment plan shall contain a research design and data recovery program necessary document the size and content of the discovery such that the resource(s) can be evaluated</p>	Project Applicant/ Developer, Project Archaeologist	City of Jurupa Valley Planning Department, City of Jurupa Valley Building & Safety Department	Prior to the issuance of a grading permit and concurrent with grading activities	
		Project Archaeologist	City of Jurupa Valley Planning Department	Concurrent with grading activities	

**Initial Study/Mitigated Negative Declaration
Riverbend (Master Case 1201)**

City of Jurupa Valley

Impact	Mitigation Measure (MM)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	<p>for significance under CEQA criteria. The research design shall list the sampling procedures appropriate to exhaust the research potential of the archaeological resource(s) in accordance with current professional archaeology standards (typically this sampling level is two (2) to five (5) percent of the volume of the cultural deposit). The treatment plan shall require monitoring by the appropriate Native American Tribe(s) during data recovery excavations of archaeological resource(s) of prehistoric origin, and shall require that all recovered artifacts undergo laboratory analysis. At the completion of the laboratory analysis, any recovered archaeological resources shall be processed and curated according to current professional repository standards. The collections and associated records shall be donated to an appropriate curation facility, or, the artifacts may be delivered to the appropriate Native American Tribe(s) if that is recommended by the City of Jurupa Valley. A final report containing the significance and treatment findings shall be prepared by the archaeologist and submitted to the City of Jurupa Valley Planning Department and the Eastern Information Center.</p>				
<p>Threshold 5.5(c): The Project has the potential to uncover and affect previously unknown paleontological resources during construction activities.</p>	<p>MM CR-4: Prior to the issuance of grading permits, the Project Proponent shall provide a letter of verification to the City stating that a qualified paleontologist has been retained to conduct full-time monitoring of all mass grading or excavation activities within old alluvial channel deposits and old sandy wash deposits of middle-to-late Pleistocene age, as well as where over-excavation of surficial alluvial sediments will encounter these formations. The monitor shall have the authority to temporarily halt or divert equipment during the grading operation. Monitoring may be reduced if the Pleistocene age old alluvial channel deposits and old sandy wash deposits are determined upon exposure and examination by the qualified paleontological monitor to have low potential to contain fossil resources.</p> <p>MM CR-5: If a paleontological resource is discovered on the property, ground disturbing activities shall be suspended 100 feet around the resource(s) or as recommended by the paleontological monitor. The</p>	<p>Project Applicant/ Developer</p>	<p>City of Jurupa Valley Planning Department, City of Jurupa Valley Building & Safety Department</p>	<p>Prior to the issuance of a grading permit and concurrent with grading activities</p>	<p>Less than Significant with Mitigation Incorporated</p>
		<p>Project Construction Manager, Project Paleontologist</p>	<p>City of Jurupa Valley Planning Department, City of Jurupa Valley Building & Safety</p>	<p>Concurrent with grading activities</p>	

**Initial Study/Mitigated Negative Declaration
Riverbend (Master Case 1201)**

City of Jurupa Valley

Impact	Mitigation Measure (MM)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	<p>monitor shall be equipped to speedily collect specimens if they are encountered. The significance of the discovered resources shall be determined by the paleontologist. Discovered fossils or samples of such fossils shall be collected by the paleontological monitor, with assistance if necessary. Fossils recovered shall be cleaned and prepared to allow for identification. Specimens recovered shall be donated to a professional, accredited public museum repository.</p> <p>MM CR-6: Following the completion of grading monitoring activities, the paleontological monitor shall submit a final monitoring report to the City. The final monitoring report shall describe the results, analysis, and conclusions of the paleontological monitoring program, and shall include lists of any fossils recovered and maps to accurately record the original location of recovered fossils. If no resources were observed during grading monitoring, then a final letter shall be submitted to the City documenting the site monitoring period and indicating that no resources were observed.</p>	Project Paleontologist	Department City of Jurupa Valley Planning Department	Following completion of grading monitoring activities	
<p>Threshold 5.5(d): Although impacts to human remains would be less than significant, mitigation is recommended to ensure compliance with California Health and Safety Code Section 7050.5 and California Public Resources Code Section 5097.98.</p>	<p>MM CR-7: Prior to grading permit issuance, the City shall verify that the following note is included on the grading plan. Project contractors shall be required to ensure compliance with the note. This note also shall be specified in bid documents issued to prospective construction contractors.</p> <p>a. If human remains are encountered, California Health and Safety Code Section 7050.5 requires that no further disturbance occur until the Riverside County Coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made by the Coroner. If the Riverside County Coroner determines the remains to be Native American, the California Native American Heritage Commission must be contacted within 24 hours. The Native American Heritage Commission must then immediately notify the "most likely descendant(s)" of receiving notification of the discovery. The most likely descendant(s) shall then make</p>	Project Applicant/ Developer, Project Construction Manager	City of Jurupa Valley Planning Department, City of Jurupa Valley Building & Safety Department	Prior to the issuance of a grading permit and concurrent with grading activities	Less than Significant

**Initial Study/Mitigated Negative Declaration
Riverbend (Master Case 1201)**

City of Jurupa Valley

Impact	Mitigation Measure (MM)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	recommendations within 48 hours, and engage in consultations concerning the treatment of the remains as provided in Public Resources Code Section 5097.98.				
Geology and Soils					
Threshold 5.6(a)(2): Although impacts associated with seismic shaking would be less than significant, mitigation is recommended to ensure compliance with the California Code of Regulations, Title 24.	<p>MM GE-1: Prior to grading and building permit issuance, the City shall verify that the following note is included on grading and building plans. Project contractors shall be required to ensure compliance with the note. This note also shall be specified in bid documents issued to prospective construction contractors.</p> <p>a. Construction activities shall occur in accordance with all applicable requirements of the California Code of Regulations (CCR), Title 24 (also known as the California Building Standards Code (CBSC)) in effect at the time of construction.</p>	Project Applicant/ Developer, Project Construction Manager	City of Jurupa Valley Building & Safety Department	Prior to issuance of grading and building permits, concurrent with grading and construction activities	Less than Significant
Threshold 5.6(a)(3): The Project contains soils that are subject to liquefaction and could expose people or structures to substantial adverse effects associated with soil failure.	<p>MM GE-2: Prior to the issuance of grading and building permits, a licensed geotechnical engineer contracted to the City or the Project Proponent shall review the detailed construction plans and sections and make a written determination of concurrence with the recommendations specified in the Project's Geotechnical Reports on file with the City associated with Master Case 1201. The written determination shall be filed with the City of Jurupa Valley. The City shall verify that all of the recommendations given in the Project's Geotechnical Reports and written determination are incorporated into the grading and building specifications, including but not limited to the recommendation to remove 10 feet of soil along the southern Project boundary and the use of a post-tensioned slab system for proposed structures to limit the potential for liquefaction-induced lateral spread.</p>	Project Geotechnical Engineer	City of Jurupa Valley Building & Safety Department	Prior to issuance of grading and building permits	Less than Significant with Mitigation Incorporated
Threshold 5.6(b): Although impacts associated with soil erosion would be less than significant, mitigation is recommended to ensure compliance with regulatory permitting requirements.	<p>MM GE-3: Prior to grading permit issuance, the Project Proponent shall obtain a National Pollutant Discharge Elimination System (NPDES) permit from the State Water Resources Control Board. Evidence that an NPDES permit has been issued shall be provided to the City of Jurupa Valley prior to issuance of the first grading permit.</p>	Project Applicant/ Developer	City of Jurupa Valley Building & Safety Department	Prior to the issuance of a grading permit	Less than Significant

**Initial Study/Mitigated Negative Declaration
Riverbend (Master Case 1201)**

City of Jurupa Valley

Impact	Mitigation Measure (MM)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	<p>MM GE-4: Prior to grading permit issuance, the Project Proponent shall prepare a Stormwater Pollution Prevention Plan (SWPPP). Project contractors shall be required to ensure compliance with the SWPPP and permit periodic inspection of the construction site by City of Jurupa Valley staff or its designee to confirm compliance.</p> <p>MM GE-5: Project contractors shall be required to ensure compliance with the Project's Water Quality Management Plan (WQMP) associated with Master Case 1201 and permit periodic inspection of the construction site by City of Jurupa Valley staff or its designee to confirm compliance.</p> <p>Mitigation Measures AQ-1 and AQ-4(a) shall apply.</p>	<p>Project Applicant/ Developer</p> <p>Project Construction Manager</p> <p>Refer to MM AQ-1 and MM AQ-4(a)</p>	<p>City of Jurupa Valley Building & Safety Department</p> <p>City of Jurupa Valley Building & Safety Department</p> <p>Refer to MM AQ-1 and MM AQ-4(a)</p>	<p>Prior to the issuance of a grading permit</p> <p>Concurrent with grading and construction activities</p> <p>Refer to MM AQ-1 and MM AQ-4(a)</p>	
<p>Threshold 5.6(c): The Project contains soils that are subject to liquefaction and could expose people or structures to substantial adverse effects associated with soil failure.</p>	<p>MM GE-6: Prior to the issuance of grading and building permits, a licensed geotechnical engineer contracted to the City or the Project Proponent shall review the detailed construction plans and sections and make a written determination of concurrence with the recommendations specified in the Project's Geotechnical Reports associated with Master Case 1201. The written determination shall be filed with the City of Jurupa Valley. The City shall verify that all of the recommendations given in the Project's Geotechnical Reports and written determination are incorporated into the grading and building specifications, including but not limited to the recommendation to remove near surface soils down to competent materials and replace those soils with properly compacted fill to limit the potential for soil subsidence and collapse.</p> <p>Mitigation Measure GE-1 shall apply</p>	<p>Project Geotechnical Engineer</p> <p>Refer to MM GE-1</p>	<p>City of Jurupa Valley Building & Safety Department</p> <p>Refer to MM GE-1</p>	<p>Prior to issuance of grading and building permits</p> <p>Refer to MM GE-1</p>	<p>Less than Significant with Mitigation Incorporated</p>
<p>Threshold 5.6(d): Although impacts associated with expansive soils would be less than significant, mitigation is recommended to ensure compliance with the Project's Geotechnical Reports and applicable regulatory requirements.</p>	<p>Mitigation Measures GE-1 and GE-2 shall apply</p>	<p>Refer to MM GE-1 and MM GE-2</p>	<p>Refer to MM GE-1 and MM GE-2</p>	<p>Refer to MM GE-1 and MM GE-2</p>	<p>Less than Significant</p>

**Initial Study/Mitigated Negative Declaration
Riverbend (Master Case 1201)**

City of Jurupa Valley

Impact	Mitigation Measure (MM)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
Greenhouse Gas Emissions Threshold 5.7(b): Although impacts associated with greenhouse gas emissions would be less than significant, mitigation is recommended to ensure compliance with regulatory permitting requirements.	MM GG-1: Prior to building permit issuance, the City shall verify that the following note is included on building plans. Project contractors shall be required to ensure compliance with the note and permit inspection by City of Jurupa Valley staff or its designee to ensure compliance. The note also shall be specified in bid documents issued to prospective construction contractors. a. All installed appliances shall comply with California Code of Regulations Title 20 (Appliance Energy Efficiency Standards), which establishes energy efficiency requirements for appliances.	Project Applicant/Developer	City of Jurupa Valley Building & Safety Department	Prior to building permit issuance	Less than Significant
	MM GG-2: Prior to the approval of landscaping plans, the City shall verify that the all landscaping will comply with City Ordinance No. 859, "Water Efficient Landscape Requirements." Project contractors shall be required to ensure compliance with approved landscaping plans.	Project Applicant/Developer	City of Jurupa Valley Building & Safety Department	Prior to the approval of landscaping plans	
	MM GG-3: Prior to issuance of the first building permit, the Project Applicant shall submit energy usage calculations in the form of a Title 24 Compliance Report to the City of Jurupa Valley Planning Department showing that the Project will be constructed to achieve at least 20% energy efficiency beyond the 2008 California Building Code Title 24 requirements. Prior to issuance of the first building permit, the City shall review and approve the Report. Any combination of design features may be used to fulfill this mitigation measure provided that the total increase in efficiency meets or exceeds 20% beyond 2008 Title 24 Energy Efficiency Standards, including but not limited to, the following: a. Increasing insulation such that heat transfer and thermal bridging is minimized; b. Limiting air leakage through the structure and/or within the heating and cooling distribution system; c. Using energy-efficient space heating and cooling equipment; d. Installing dual-paned or other energy-efficient windows;	Project Applicant/Developer	City of Jurupa Valley Planning Department	Prior to the issuance of the first building permit	

**Initial Study/Mitigated Negative Declaration
Riverbend (Master Case 1201)**

City of Jurupa Valley

Impact	Mitigation Measure (MM)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	<p>e. Using interior or exterior energy-efficient lighting that exceeds the 2008 California Title 24 Energy Efficiency performance standards;</p> <p>f. Installing automatic devices to turn off lights where they are not needed;</p> <p>g. Applying paint and a surface color palette that emphasizes light and off-white colors that reflect heat away from buildings;</p> <p>h. Designing buildings with “cool roofs” using products certified by the Cool Roof Rating Council, and/or exposed roof surfaces using light and off-white colors;</p> <p>i. Designing buildings to accommodate photo-voltaic solar electricity systems or installation of photo-voltaic solar electricity systems;</p> <p>j. Installing Energy Star-rated appliances.</p> <p>Mitigation Measures AQ-2, AQ-3, AQ-4(b), AQ-5, and GE-1 shall apply.</p>	Refer to MM-AQ-2, MM AQ-3, MM Q-4(b), MM AQ-5, and MM GE-1	Refer to MM-AQ-2, MM AQ-3, MM Q-4(b), MM AQ-5, and MM GE-1	Refer to MM-AQ-2, MM AQ-3, MM Q-4(b), MM AQ-5, and MM GE-1	
Hazards and Hazardous Materials					
Threshold 5.8(a): The Project has the potential to create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials.	<p>MM HM-1: The City of Jurupa Valley shall condition all grading and demolition permits associated with the clearing of existing on-site construction debris, the demolition of existing structures, and the uncovering and disposal of subsurface concrete irrigation lines to comply with South Coast Air Quality Management District (SCAQMD) Rule 1403 with respect to asbestos containing materials and the demolition contractor shall be required to comply with Rule 403. All asbestos-related clearing work conducted on the site shall be performed by a licensed asbestos-abatement contractor under the supervision of a certified asbestos consultant. Asbestos-containing construction materials (ACCMs) shall be removed and disposed of in compliance with notification and asbestos-removal procedures outlined in SCAQMD Rule 1403 to reduce asbestos-related health risks. The construction contractor shall maintain all records of compliance with Rule 1403, including, but not limited to, the following: evidence of notification of SCAQMD pursuant to Rule 1403; contact information</p>	Project Construction Manager	City of Jurupa Valley Building and Safety Department	Prior to issuance of grading and demolition permits and concurrent with grading and demolition activities	Less than Significant with Mitigation Incorporated

**Initial Study/Mitigated Negative Declaration
Riverbend (Master Case 1201)**

City of Jurupa Valley

Impact	Mitigation Measure (MM)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	<p>for the asbestos-abatement contractor and asbestos consultant; and receipts (or other evidence) of off-site disposal of all ACMs. These records shall be made available for City inspection upon request.</p> <p>MM HM-2: The City of Jurupa Valley shall condition all grading and demolition permits associated with the clearing of existing on-site construction debris and the demolition of existing structures to comply with Title 17, California Code of Regulations (CCR), Division 1, Chapter 8 (LBP Regulations), which addresses requirements for the removal of components painted with lead-based paint (LBP) during site clearing and demolition of existing structures. The construction contractor shall be required to comply with these provisions. The removal of all LBP materials shall be conducted by a certified lead supervisor or certified lead works, as defined by §§ 35008 and 35009 of the LBP Regulations, using containment and in a manner which does not result in contamination of non-work areas with lead-contaminated dust, lead-contaminated soil, or lead-based paint debris.</p> <p>MM HM-3: Prior to the issuance of a grading permit, all surface animal manure located on the property, if any, shall be removed.</p> <p>MM HM-4: Prior to issuance of a residential building permit and no sooner than 30 days after rough grading is complete, a licensed engineer, geologist or registered environmental assessor shall conduct post rough grading methane testing on a lot by lot basis to identify any required construction specifications required as part of the structure's footing, slab grade, or other foundation component to meet the Riverside County Department of Environmental Health's Methane Design Guidelines. The construction specifications, which may include but shall not be limited to utility trench dams, utility conduit seals, sub-slab vents, sub-slab vapor barriers, and sub-slab gas barriers, shall be indicated on the lot and building's construction plan(s) prior to issuance of the building permit. Adherence to the construction specifications shall occur as part of building and safety inspections required during building construction. Prior to issuance of a residential occupancy permit,</p>	Project Construction Manager	City of Jurupa Valley Building and Safety Department	Prior to issuance of grading and demolition permits and concurrent with grading and demolition activities	
		Project Applicant/ Developer	City of Jurupa Valley Building and Safety Department	Prior to the issuance of a grading permit	
		Project Applicant/ Developer	City of Jurupa Valley Building and Safety Department	Prior to the issuance of a residential building permit and no sooner than 30 days after rough grading is complete	

**Initial Study/Mitigated Negative Declaration
Riverbend (Master Case 1201)**

City of Jurupa Valley

Impact	Mitigation Measure (MM)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	the Project's engineer of record shall provide a signed letter to the City of Jurupa Valley verifying that the specifications were installed as designed.				
Threshold 5.8(b): Although impacts associated with release of hazardous materials would be less than significant, mitigation is recommended to ensure compliance with applicable regulatory requirements to reduce sediment and pollutants in water runoff.	Mitigation Measures GE-3, GE-4, and GE-5 shall apply.	Refer to MM GE-3 through MM GE-5	Refer to MM GE-3 through MM GE-5	Refer to MM GE-3 through MM GE-5	Less than Significant
Threshold 5.8(c): The Project has the potential to emit or handle hazardous or acutely hazardous materials within 0.25-mile of a school during construction.	Mitigation Measure HM-1 shall apply.	Refer to MM HM-1	Refer to MM HM-1	Refer to MM HM-1	Less than Significant with Mitigation Incorporated
Hydrology and Water Quality					
Threshold 5.9(a): Although impacts associated with adherence to water quality standards would be less than significant, mitigation is recommended to ensure compliance with applicable regulatory requirements related to water quality.	Mitigation Measures GE-3, GE-4, and GE-5 shall apply.	Refer to MM GE-3 through MM GE-5	Refer to MM GE-3 through MM GE-5	Refer to MM GE-3 through MM GE-5	Less than Significant
Threshold 5.9(g): In order to ensure that no housing would be placed in the FEMA floodplain, the Project necessitates a floodplain map revision. The Project is required to secure a Conditional Letter of Map Revision (CLOMR) and Permanent Letter of Map Revision (LOMR) from FEMA, without which a significant impact would occur.	<p>MM H-1: Prior to final approval of street improvement plans and slope revetment plans, the Project Proponent shall provide evidence to the City of Jurupa Valley that a Conditional Letter of Map Revision (CLOMR) has been issued by FEMA for the Project. The grading plan shall substantially conform to the CLOMR.</p> <p>MM H-2: Prior to the first building permit final inspection in area(s) subject to the FEMA floodplain designation, the Project Proponent shall provide evidence to the City of Jurupa Valley that a Final Letter of Map Revision (LOMR) has been issued by FEMA verifying that flood control measures have been completed and the residential development areas are permanently removed from the FEMA 100-year</p>	Project Applicant/Developer	City of Jurupa Valley City Engineer, City of Jurupa Valley Building and Safety Department	Prior to final approval of street improvement and slope revetment plans	Less than Significant with Mitigation Incorporated
		Project Applicant/Developer	City of Jurupa Valley City Engineer, City of Jurupa Valley Building and Safety Department	Prior to issuance of the first building permit	

**Initial Study/Mitigated Negative Declaration
Riverbend (Master Case 1201)**

City of Jurupa Valley

Impact	Mitigation Measure (MM)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	floodplain.				
Land Use and Planning					
Threshold 5.10(c): In the absence of mitigation, the Project would have the potential to conflict with the Western Riverside County MSHCP.	Mitigation Measures BI-1 through BI-7 shall apply	Refer to MM BI-1 through MM BI-7	Refer to MM BI-1 through MM BI-7	Refer to MM BI-1 through MM BI-7	Less than Significant with Mitigation Incorporated
Noise					
Threshold 5.12(a): The Project would have the potential to expose persons to noise levels in excess of local standards during long-term operation. Although temporary, near-term noise effects during construction would be less than significant, mitigation is recommended to ensure compliance with local noise standards and regulations.	<p>MM N-1: Prior to grading and building permit issuance, the City shall verify that the following notes are included on grading plans and building plans. Project contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by City of Jurupa Valley staff or its designee to confirm compliance. These notes also shall be specified in bid documents issued to prospective construction contractors.</p> <p>a. All construction activities shall comply with City Ordinance No. 847 (Noise Ordinance), including but not limited to the requirement that haul truck deliveries shall be limited to between the hours of 6:00am to 6:00pm during the months of June through September and 7:00am to 6:00pm during the months of October through May.</p> <p>b. Construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards.</p> <p>c. All stationary construction equipment shall be placed in such a manner so that emitted noise is directed away from the construction site's north and east property boundaries.</p> <p>d. Construction equipment staging areas shall be located at a minimum distance of 800 feet from the Project site's northern property boundary, as measured from the 68th Street right-of-way, unless a solid wall or intervening development has been constructed on the Project site that blocks a direct line-of-site between the staging area and 68th Street.</p> <p>MM N-2: Prior to stockpile and grading permit issuance, the City shall review and approve a</p>	Project Applicant/ Developer , Project Construction Manager	City of Jurupa Valley Building and Safety Department	Prior to the issuance of grading and building permits	Less than Significant with Mitigation Incorporated
		Project Applicant/ Developer , Project	City of Jurupa Valley Building and Safety	Prior to the issuance of stockpile and grading	

**Initial Study/Mitigated Negative Declaration
Riverbend (Master Case 1201)**

City of Jurupa Valley

Impact	Mitigation Measure (MM)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	<p>Construction Haul Route Exhibit prepared by the Project Applicant that identifies all public and private roadways that will be used for haul truck deliveries. Haul routes shall minimize passage by residential dwellings and other sensitive noise receptors. Prior to approval of the Haul Route Exhibit and issuance of stockpile and grading permits, the Applicant also shall submit a letter to the City from a qualified acoustician that identifies the haul route and verifies that project-related hauling activities along any segment of the haul route that passes sensitive noise receptors will not cause noise levels to exceed 65dBA or increase by more than 3.0 dBA if the existing noise level is already over 65dBA. A requirement to comply with the Construction Haul Route Exhibit shall be noted on all grading and building plans and also shall be specified in bid documents issued to prospective construction contractors.</p> <p>MM N-3: Prior to the issuance of any building permits for any residential lots abutting I-15 (Lots 18-28, 38, 39, 49, 50, 58-68), a 12-foot tall noise barrier measured from the adjacent pad elevation to the top of the adjacent wall shall be constructed along the western boundary of all residential lots adjacent to I-15. Construction of the barrier may be phased concurrent with development adjacent to I-15. Refer to Mitigation Measure N-6 for specifications.</p> <p>MM N-4: Prior to the issuance of any building permits for any residential lots abutting 68th Street, a noise barrier shall be installed along the northern boundary of residential lots adjacent to 68th Street at the following heights. Construction of the barrier may be phased concurrent with development adjacent to 68th Street. Refer to Mitigation Measure N-6 for specifications.</p> <p>a. Between the northwest Project boundary and Pats Ranch Road, a 12-foot tall noise barrier gradually reducing to a height of 8-foot.</p> <p>b. Between Pats Ranch Road and Smith Avenue, a 6-foot tall noise barrier.</p> <p>MM N-5: Prior to the issuance of any building permits for Lots 68 through 76 (at the southern boundary of the residential development immediately east of I-15),</p>	Construction Manager	Department	permits	
		Project Applicant/ Developer	City of Jurupa Valley Building and Safety Department	Prior to issuance of residential building permits for lots abutting I-15	
		Project Applicant/ Developer	City of Jurupa Valley Building and Safety Department	Prior to issuance of building permits for residential lots abutting 68 th Street	
		Project Applicant/ Developer	City of Jurupa Valley Building and Safety Department	Prior to issuance of residential building permits for Lots 69	

**Initial Study/Mitigated Negative Declaration
Riverbend (Master Case 1201)**

City of Jurupa Valley

Impact	Mitigation Measure (MM)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	<p>a 12-foot tall noise barrier adjacent to I-15 shall be installed along the southern boundary of these lots. Construction of the barrier may be phased concurrent with development of these lots. Refer to Mitigation Measure N-6 for specifications.</p> <p>MM N-6: Prior to issuance of building permits, a final noise study based on final precise grading plan elevations shall be prepared by a qualified acoustician and approved by the City to validate appropriate noise barrier heights, locations, and construction materials. All required noise barriers shall be designed to reduce noise levels to below 65 dBA CNEL within private exterior areas (i.e., backyards) of residential lots. The noise barriers may consist of any material (block, tempered glass, earthen berm, etc.) or combination of materials that achieves the required noise attenuation and shall have no decorative cutouts or other line-of-sight openings between shielded areas and the noise source (adjacent roadway). Prior to issuance of building permits, the City of Jurupa Valley shall review and approve the noise barrier design, placement, and materials to ensure that the required level of sound attenuation will be achieved.</p> <p>MM N-7: Prior to issuance of any residential building permit, an interior noise analysis shall be completed to the satisfaction of the City Planning Department demonstrating that proposed building materials will achieve interior noise levels less than 45 dBA CNEL. Building materials that would facilitate compliance with the 45dBA CNEL interior noise standard include, but are not limited to, dual-glazed windows and a means of “windows closed” mechanical ventilation (e.g, air conditioning).</p>	Project Applicant/ Developer	City of Jurupa Valley Building and Safety Department	through 76 Prior to issuance of building permits	
	<p>MM N-7: Prior to issuance of any residential building permit, an interior noise analysis shall be completed to the satisfaction of the City Planning Department demonstrating that proposed building materials will achieve interior noise levels less than 45 dBA CNEL. Building materials that would facilitate compliance with the 45dBA CNEL interior noise standard include, but are not limited to, dual-glazed windows and a means of “windows closed” mechanical ventilation (e.g, air conditioning).</p>	Project Applicant/ Developer	City of Jurupa Valley Planning Department	Prior to issuance of building permits	
Threshold 5.12(d): Construction activities on the Project site would result in a substantial temporary increase in ambient noise levels in the vicinity of the Project site.	Mitigation Measures N-1 and N-2 shall apply.	Refer to MM N-1 and MM N-2	Refer to MM N-1 and MM N-2	Refer to MM N-1 and MM N-2	Less than Significant with Mitigation Incorporated
Public Services					
Threshold 5.14(a): Although the Project would not cause the need to build new or physically altered fire,	MM PS-1: The Project shall comply with City's Development Impact Fee (DIF) Ordinance, which requires payment of a development mitigation fee to	Project Applicant/ Developer	City of Jurupa Valley Planning Department, City of Jurupa Valley	Prior to the issuance of building permits	Less than Significant

**Initial Study/Mitigated Negative Declaration
Riverbend (Master Case 1201)**

City of Jurupa Valley

Impact	Mitigation Measure (MM)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
sheriff, other public facilities, and public schools and impacts would be less than significant, mitigation is recommended to ensure compliance with local ordinances and State law relating to impact fees required for the provision of public services.	<p>assist in providing revenue that the City can use to improve public facilities and/or equipment, to offset the incremental increase in the demand for public services that would be created by the Project. Prior to the issuance of building permits, the Project Applicant shall pay fees in accordance with the City's Ordinance 659.</p> <p>MM PS-2: The Project shall comply with the Leroy F. Greene School Facilities Act of 1998 (Senate Bill 50), which requires payment of a school impact fee on a per dwelling unit basis to assist in providing revenue that school districts (including CNUSD) can use to ensure the adequate provision of public education facilities and services to service new development. Prior to the issuance of building permits, the Project Applicant shall pay required impact fees to the CNUSD following CNUSD protocol for impact fee collection.</p>	Project Applicant/ Developer	<p>Building and Safety Department</p> <p>City of Jurupa Valley Planning Department, City of Jurupa Valley Building and Safety Department</p>	Prior to the issuance of building permits	
Transportation/Traffic					
Threshold 5.16(a): The Project would result in less-than-significant effects to the local circulation system during temporary construction activities; however, mitigation is proposed to ensure that construction traffic does not conflict with peak traffic at the nearby Louis VanderMolen Fundamental Elementary School. Implementation of the proposed Project has the potential to directly cause and cumulatively contribute to level of service deficiencies in the local circulation system in near-term (Opening Year) and long-term (Horizon Year) conditions.	<p>MM TR-1: Prior to grading and building permit issuance, the City shall verify that the following note is included on grading plans and building plans. Project contractors shall be required to ensure compliance with the notes and permit periodic inspection of the construction site by City of Jurupa Valley staff or its designee to confirm compliance. This note shall also be specified in bid documents issued to prospective construction contractors:</p> <p>a. Construction traffic shall not be permitted to use the segment of 68th Street between Pats Ranch Road and Frank Avenue from 30 minutes before to 30 minutes after the scheduled start time and 30 minutes before to 30 minutes after the scheduled end time of school hours on days that the Louis VanderMolen Fundamental Elementary School of the Corona-Norco Unified School District (CNUSD) is in session. Contractors shall contact the CNUSD to obtain the school's operating schedule.</p> <p>MM TR-2: Prior to the issuance of the Project's first occupancy permit, the Project Proponent shall assure the construction of the following improvements to the intersection of Pats Ranch Road/68th Street, with</p>	Project Applicant/ Developer, Project Construction Manager	City of Jurupa Valley Building and Safety Department	Prior to issuance of grading and building permits	Less than Significant
		Project Applicant/ Developer	City of Jurupa Valley Planning Department	Prior to the first building permit final inspection	Less than Significant with Mitigation

**Initial Study/Mitigated Negative Declaration
Riverbend (Master Case 1201)**

City of Jurupa Valley

Impact	Mitigation Measure (MM)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	<p>appropriate fee credit eligibility for improvements identified for funding by DIF or TUMF:</p> <ul style="list-style-type: none"> • Install a traffic signal; • Construct the northbound leg with a left turn lane and shared through-right turn lane; • Re-stripe the southbound lanes to provide a left turn lane (to be accommodated within the existing painted median), through lane and right turn lane; • Construct a second eastbound through lane; and • Re-stripe the eastbound lanes to provide a left turn lane (to be accommodated within the existing painted median), two through lanes and a right turn lane. <p>MM TR-3: Prior to the issuance of the Project's first occupancy permit, the Project Proponent shall assure the construction of the following improvements to the intersection of Etiwanda Avenue/Limonite Avenue, with appropriate fee credit eligibility for improvements identified for funding by DIF or TUMF:</p> <ul style="list-style-type: none"> • Re-stripe the northbound right turn lane as a shared through-right turn lane; and • Construct a second westbound through lane. <p>MM TR-4: Prior to the issuance of any building permits, the Project Proponent shall make required per-unit fee payments associated with the Mira Loma Road & Bridge Benefit District (RBBD), Western Riverside County Transportation Uniform Mitigation Fees (TUMF), and the City of Jurupa Valley Development Impact Fee (DIF).</p> <p>MM TR-5: Prior to issuance of the first building permit, the Project Proponent shall contribute a fair-share fee payment to the City of Jurupa Valley to address the Project's long-term cumulative impact to Intersection of Wineville Avenue/Limonite Avenue (Project's fair-share contribution is 1.6%).</p>	Project Applicant/ Developer	City of Jurupa Valley Planning Department	Prior to the first building permit final inspection	
		Project Applicant/ Developer	City of Jurupa Valley Planning Department	Prior to the issuance of building permits	
		Project Applicant/ Developer	City of Jurupa Valley Planning Department	Prior to the issuance of the first building permit	
Threshold 5.16(b): The Project would result and contribute to a level of service deficiency to the Riverside County Congestion Management Program circulation system in near-	Mitigation Measures T-2 through T-4 shall apply	Refer to MM T-2 through MM T-4	Refer to MM T-2 through MM T-4	Refer to MM T-2 through MM T-4	Less than Significant with Mitigation Incorporated

**Initial Study/Mitigated Negative Declaration
Riverbend (Master Case 1201)**

City of Jurupa Valley

Impact	Mitigation Measure (MM)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
term (Opening Year) and long-term (Horizon Year) conditions.					
Utility and Service Systems					
Threshold 5.17(d): A portion of the Project site requires annexation into JCSD's service area to be eligible for water service. The annexation must occur to ensure that implementation of the Project would not adversely affect JCSD's ability to provide water service to its existing commitments.	<p>MM U-1: Prior to issuance of the first building permit, the portion of the Project site's development area located south of 68th Street shall be annexed into the Jurupa Community Services District for the purpose of domestic water and sewer service. The Project Proponent shall submit evidence to the City of Jurupa Valley that the property has been annexed in the form of a certified copy of the resolution adopted by the District's Board of Supervisors approved the annexation and a subsequent submittal of the appropriate LAFCO certification.</p> <p>MM U-2: The Project is required to install water and wastewater conveyance facilities in accordance with the California Building Standards Code and to the requirements of the Jurupa Community Services District.</p>	Project Applicant/ Developer	City of Jurupa Valley Planning Department, City of Jurupa Valley Building and Safety Department	Prior to issuance of the first building permit	Less than Significant with Mitigation Incorporated
Threshold 5.17(e): A portion of the Project site requires annexation into JCSD's service area to be eligible for wastewater service. The annexation must occur to ensure that implementation of the Project would not adversely affect JCSD's ability to provide wastewater service to its existing commitments.	<p>Mitigation Measures U-1 and U-2 shall apply.</p>	Project Applicant/ Developer	City of Jurupa Valley Planning Department, City of Jurupa Valley Building and Safety Department	Prior to issuance of the first building permit	Less than Significant with Mitigation Incorporated
Threshold 5.17(g): Although impacts associated with compliance to federal, state, and local statutes and regulations related to solid waste would be less than significant, mitigation is recommended to ensure compliance with mandatory solid waste reduction requirements.	<p>MM U-3: The Project shall participate in established County-wide programs for residential development projects to reduce solid waste generation, in accordance with the provisions of the Riverside Countywide Integrated Waste Management Plan.</p> <p>MM U-4: The Project shall comply with the California Solid Waste Reuse and Recycling Act of 1991, which requires new development projects to prepare a waste recycling plan in order to reduce the amount of solid waste diverted to landfills. Prior to the issuance of grading and building permits, the Project Applicant shall submit a Waste Recycling Plan to the City of</p>	Project Applicant/ Developer	City of Jurupa Valley Planning Department, City of Jurupa Valley Building and Safety Department	Prior to the issuance of the first building permit final inspection	Less than Significant

Impact	Mitigation Measure (MM)	Responsible Party	Monitoring Party	Implementation Stage	Level of Significance
	<p>Jurupa Valley and the Riverside County Waste Management Department. The Waste Recycling Plan shall list the estimated quantity of waste to be generated on-site during construction and demolition activities and the methods that will be utilized to recycle, reuse, compost and/or salvage a minimum of 50% of the construction and demolition waste generated on-site. Following the completion of construction activities, the Project Applicant shall submit a final Waste Recycling Report to the City of Jurupa Valley and the Riverside County Waste Management Department that demonstrates the actual quantities of construction and demolition waste generated and recycled.</p> <p>MM U-5: The Project shall comply with the California Solid Waste Reuse and Recycling Act of 1991, which requires new development projects to provide refuse/recycling collection and loading areas in order to reduce the amount of solid waste diverted to landfills. Prior to the issuance of building permits, the City of Jurupa Valley shall confirm that adequate areas for collecting and loading recyclable materials are identified on Project construction drawings.</p>	Project Applicant/ Developer	City of Jurupa Valley Building and Safety Department	Prior to the issuance of building permits	



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TENTATIVE TRACT MAP No. 36391
TRAFFIC IMPACT ANALYSIS (REVISED)
CITY OF JURUPA VALLEY, CALIFORNIA

December 6, 2012 (Revised)
October 8, 2012 (Revised)
May 1, 2012

JN:08142-11 Report
AE:CH:JC:rd

TABLE OF CONTENTS

<u>Section</u>	<u>Page</u>
1.0 INTRODUCTION	1
1.1 Project Overview	1
1.2 Analysis Scenarios.....	1
1.2.1 Existing (2012) Conditions	
1.2.2 Existing Plus Project Conditions	
1.2.3 Existing Plus Ambient Growth Plus Project (EAP) Conditions	
1.2.4 Existing Plus Ambient Growth Plus Project Plus Cumulative (EAPC) Conditions	
1.2.5 Horizon Year (2035) Conditions	
1.3 Study Area.....	4
1.4 Summary of Impacts	6
1.5 Summary of Project Impacts and Mitigation Measures	7
1.6 Summary of Cumulative Impacts and Recommended Improvements.....	9
1.7 On-Site Roadway and Site Access Improvements	14
1.7.1 On-Site Roadway Improvements	
1.7.2 Non-Motorized Accommodations	
1.7.3 Site Access Improvements	
2.0 METHODOLOGIES	23
2.1 Level of Service.....	23
2.2 Intersection Capacity Analysis.....	23
2.2.1 Signalized Intersections	
2.2.2 Unsignalized Intersections	
2.3 Traffic Signal Warrant Analysis Methodology.....	25
2.4 LOS Criteria	26
2.5 Thresholds of Significance.....	27
2.6 Project Fair Share Calculation Methodology.....	28
3.0 AREA CONDITIONS	29
3.1 Existing Circulation Network	29
3.2 County of Riverside General Plan Circulation Element	29
3.3 Transit Service	29
3.4 Existing Traffic Counts	29
3.5 Existing Conditions Intersection Operations Analysis.....	35
3.6 Existing Conditions Traffic Signal Warrants Analysis	35

TABLE OF CONTENTS (CONT.)

<u>Section</u>	<u>Page</u>
4.0 PROJECTED FUTURE TRAFFIC.....	41
4.1 Project Trip Generation.....	41
4.2 Project Trip Distribution.....	41
4.3 Modal Split.....	44
4.4 Project Trip Assignment.....	44
4.5 Construction Traffic.....	44
4.5.1 Employee Trips	
4.5.2 Soil and Import of Construction Materials	
4.5.3 Heavy Equipment	
4.6 Background Traffic.....	54
4.7 Cumulative Development Traffic	55
4.7.1 Cumulative Development Trip Generation	
4.7.2 Cumulative Development Trip Assignment	
4.8 Traffic Forecasts	55
4.9 Opening Year (2017) Conditions	63
4.10 Horizon Year (2035) Conditions	63
5.0 EXISTING PLUS PROJECT CONDITIONS	65
5.1 Existing Plus Project Traffic Volume Forecasts	65
5.2 Intersection Operations Analysis	65
5.3 Existing Plus Project Traffic Signal Warrant Analysis	70
6.0 OPENING YEAR (2017) TRAFFIC ANALYSIS	71
6.1 Roadway Improvements.....	71
6.2 EAP (2017) Traffic Volume Forecasts.....	71
6.3 EAPC (2017) Traffic Volume Forecasts	75
6.4 Intersection Operations Analysis for EAP (2017) Conditions	75
6.5 Intersection Operations Analysis for EAPC (2017) Conditions.....	80
6.6 Progression Analysis	80
6.6.1 EAP (2017) Conditions	
6.6.2 EAPC (2017) Conditions	
6.7 Traffic Signal Warrant Analysis.....	87
6.8 EAP (2017) Impacts and Mitigation Measures.....	87
6.9 EAPC (2017) Impacts and Recommended Improvements	89

TABLE OF CONTENTS (CONT.)

<u>Section</u>	<u>Page</u>
7.0 HORIZON YEAR (2035) TRAFFIC ANALYSIS	93
7.1 Roadway Improvements	93
7.2 Horizon Year (2035) Without Project Traffic Volume Forecasts	94
7.3 Horizon Year (2035) With Project Traffic Volume Forecasts	94
7.4 Intersection Operations Analysis	94
7.5 Traffic Signal Warrants Analysis	102
7.6 Horizon Year (2035) Impacts and Recommended Improvements	102
8.0 LOCAL CIRCULATION AND SITE ACCESS	107
8.1 On-Site Roadway Improvements	107
8.2 Non-Motorized Accommodations	107
8.3 Site Access Improvements	111
9.0 LOCAL AND REGIONAL FUNDING MECHANISMS	115
9.1 Transportation Uniform Mitigation Fee (TUMF) Program	115
9.2 Mira Loma Road and Bridge Benefit District (RBBD) Program	117
9.3 County of Riverside Development Impact Fee (DIF) Program	119
9.4 Fair Share Contribution	119

LIST OF APPENDICES

<u>Appendix</u>	<u>Page</u>
Traffic Count Data, February and May 2012.....	3.1
Existing (2012) Conditions Intersection Operations Analysis Worksheets	3.2
Existing (2012) Conditions Traffic Signal Warrant Analysis Worksheets	3.3
Cumulative Development Projects	4.1
Post-Processing Worksheets	4.2
Existing Plus Project Conditions Intersection Operations Analysis Worksheets	5.1
Existing Plus Project Conditions Traffic Signal Warrant Analysis Worksheets	5.2
EAP (2017) Conditions Intersection Operations Analysis Worksheets	6.1
EAPC (2017) Conditions Intersection Operations Analysis Worksheets	6.2
Limonite Avenue Planned Striping Modifications.....	6.3
EAP (2017) Conditions Progression Analysis Worksheets	6.4
EAPC (2017) Conditions Progression Analysis Worksheets.....	6.5
EAP (2017) Conditions Traffic Signal Warrant Analysis Worksheets	6.6
EAPC (2017) Conditions Traffic Signal Warrant Analysis Worksheets.....	6.7
EAP (2017) Conditions Intersection Operations Analysis Worksheets, with Improvements.....	6.8
EAPC (2017) Conditions Intersection Operations Analysis Worksheets, with Improvements	6.9
Horizon Year (2035) Without Project Conditions Intersection Operations Analysis Worksheets.....	7.1
Horizon Year (2035) With Project Conditions Intersection Operations Analysis Worksheets.....	7.2
Horizon Year (2035) Without Project Conditions Traffic Signal Warrant Analysis Worksheets	7.3
Horizon Year (2035) With Project Conditions Traffic Signal Warrant Analysis Worksheets	7.4
Horizon Year (2035) With Project Conditions Intersection Operations Analysis Worksheets, with Improvements.....	7.5

LIST OF EXHIBITS

<u>Exhibit</u>	<u>Page</u>
1-1 Site Plan.....	2
1-2 Location Map	5
1-3 Existing Plus Ambient Growth Plus Project (2017) Conditions Project Mitigation Measures....	8
1-4 Existing Plus Ambient Growth Plus Project Plus Cumulative (2017) Conditions Cumulative Mitigation Measures	11
1-5 Horizon Year (2035) With Project Conditions Cumulative Mitigation Measures	12
1-6 Site Adjacent Roadway Recommendations	15
1-7 Conceptual Striping Plan.....	17
1-8 Pedestrian Accommodations	20
1-9 Site Access and On-Site Circulation Recommendations	21
3-1 Existing Number Of Through Lanes and Intersection Controls	30
3-2 Riverside County General Plan Circulation Element.....	31
3-3 Riverside County General Plan Roadway Cross-Sections	32
3-4 Existing Transit Services: RTA Route 3	33
3-5 Existing Transit Services: RTA Route 29	34
3-6 Existing (2012) Average Daily Traffic (ADT).....	36
3-7 Existing (2012) AM Peak Hour Intersection Volumes	37
3-8 Existing (2012) PM Peak Hour Intersection Volumes	38
4-1 Project Opening Year (2017) Project Trip Distribution	45
4-2 Project Horizon Year (2035) Project Trip Distribution	46
4-3 Project Opening Year (2017) Average Daily Traffic (ADT)	47
4-4 Project Opening Year (2017) AM Peak Hour Intersection Volumes.....	48
4-5 Project Opening Year (2017) PM Peak Hour Intersection Volumes.....	49

LIST OF EXHIBITS (CONT.)

<u>Exhibit</u>	<u>Page</u>
4-6 Project Horizon Year (2035) Average Daily Traffic (ADT).....	50
4-7 Project Horizon Year (2035) AM Peak Hour Intersection Volumes	51
4-8 Project Horizon Year (2035) PM Peak Hour Intersection Volumes	52
4-9 Cumulative Development Location Map	56
4-10 Cumulative Development Average Daily Traffic (ADT)	57
4-11 Cumulative Development AM Peak Hour Intersection Volumes.....	58
4-12 Cumulative Development PM Peak Hour Intersection Volumes.....	59
5-1 Existing plus Project Average Daily Traffic (ADT)	66
5-2 Existing plus Project AM Peak Hour Intersection Volumes.....	67
5-3 Existing plus Project PM Peak Hour Intersection Volumes.....	68
6-1 Existing plus Ambient Growth Plus Project (2017) Average Daily Traffic (ADT).....	72
6-2 Existing plus Ambient Growth Plus Project (2017) AM Peak Hour Intersection Volumes	73
6-3 Existing plus Ambient Growth Plus Project (2017) PM Peak Hour Intersection Volumes	74
6-4 Existing plus Ambient Growth Plus Project Plus Cumulative (2017) Average Daily Traffic (ADT)	76
6-5 Existing plus Ambient Growth Plus Project Plus Cumulative (2017) AM Peak Hour Intersection Volumes.....	77
6-6 Existing Plus Ambient Growth Plus Project Plus Cumulative (2017) PM Peak Hour Intersection Volumes.....	78
7-1 Horizon Year (2035) Without Project Average Daily Traffic (ADT)	95
7-2 Horizon Year (2035) Without Project AM Peak Hour Intersection Volumes.....	96
7-3 Horizon Year (2035) Without Project PM Peak Hour Intersection Volumes.....	97
7-4 Horizon Year (2035) With Project Average Daily Traffic (ADT)	98
7-5 Horizon Year (2035) With Project AM Peak Hour Intersection Volumes.....	99

LIST OF EXHIBITS (CONT.)

<u>Exhibit</u>	<u>Page</u>
7-6 Horizon Year (2035) With Project PM Peak Hour Intersection Volumes.....	100
8-1 Site Adjacent Roadway Recommendations	108
8-2 Conceptual Striping at Wineville Avenue and 68 th Street.....	109
8-3 Pedestrian Accommodations	112
8-4 Site Access and On-Site Circulation Recommendations	114

LIST OF TABLES

<u>Table</u>	<u>Page</u>
1-1 Intersection Analysis Locations.....	6
1-2 Summary of Transportation Impact Fee Program Intersection Improvements	13
2-1 Signalized Intersection LOS Thresholds	24
2-2 Unsignalized Intersection LOS Thresholds	25
3-1 Intersection Analysis for Existing (2012) Baseline Conditions	39
4-1 Project Trip Generation Rates.....	42
4-2 Project Trip Generation Summary	43
4-3 Cumulative Development Trip Generation Rates.....	60
4-4 Cumulative Development Land Use and Trip Generation Summary.....	61
5-1 Intersection Analysis for Existing Plus Project Conditions	69
6-1 Intersection Analysis for Existing Plus Ambient Growth Plus Project (2017) Conditions.....	79
6-2 Intersection Analysis for Existing Plus Ambient Growth Plus Project Cumulative (2017) Conditions.....	81
6-3 Intersection Analysis for Existing Plus Ambient Growth Plus Project (2017) Conditions AM/PM Peak Hour Stacking Length Summary along Limonite Avenue.....	83
6-4 Intersection Analysis for Existing Plus Ambient Growth Plus Project Plus Cumulative (2017) Conditions, AM/PM Peak Hour Stacking Length Summary along Limonite Avenue	85
6-5 Intersection Analysis for Existing plus Ambient Growth Plus Project (2017) Conditions, With Improvements to Mitigate Project Impacts	88
6-6 Intersection Analysis for Existing Plus Ambient Growth Plus Project Plus Cumulative (2017) Conditions, With Improvements to Mitigate Project Impacts.....	90
7-1 Intersection Analysis for Horizon Year (2035) Conditions.....	101
7-2 Intersection Analysis for Horizon Year (2035) With Project Conditions With Improvements to Mitigate Cumulative Impacts	103
9-1 Summary of Transportation Impact Fee Program Intersection Improvements	116
9-2 Estimated Fee Obligation.....	118

LIST OF TABLES (CONT.)

<u>Table</u>	<u>Page</u>
9-3 Project Fair Share Calculation	120

TENTATIVE TRACT MAP No. 36391
TRAFFIC IMPACT ANALYSIS (REVISED)
CITY OF JURUPA VALLEY, CALIFORNIA

1.0 INTRODUCTION

This report presents the results of the traffic impact analysis (TIA) prepared for the proposed Tentative Tract Map No. 36391 (referred to as “Project”), which is generally located south of 68th Street and east of the I-15 Freeway in the City of Jurupa Valley (referred to as the “City”). A conceptual site plan is shown on Exhibit 1-1.

The purpose of this traffic impact analysis is to evaluate the potential impacts to traffic and circulation associated with the development of the proposed Project, and recommend improvements to mitigate impacts considered significant in comparison to established regulatory thresholds. This TIA has been prepared in accordance with the County of Riverside *Traffic Impact Analysis Preparation Guide* (most recently updated August of 2008). The City of Jurupa Valley uses the County of Riverside protocol for the preparation of TIAs. The trip generation and trip distribution utilized for the purposes of this analysis has been reviewed by and approved by City of Jurupa Valley staff.

1.1 PROJECT OVERVIEW

The Project includes the development of 466 detached single family residential dwelling units, a 5,000 square foot community facility site and a 10.0-acre community park. For the purposes of this traffic impact analysis, it is assumed that the Project will be constructed and at full occupancy by 2017.

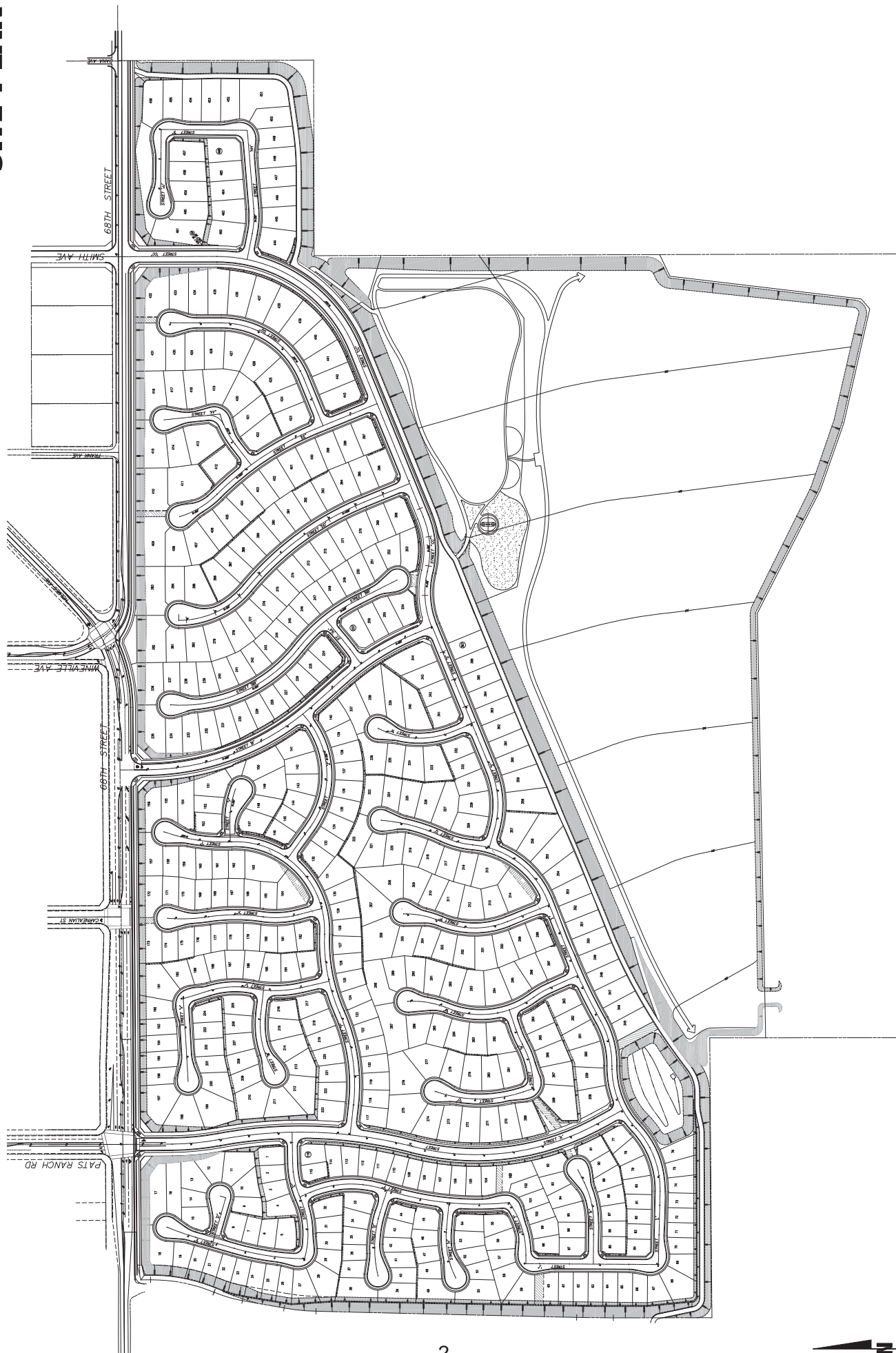
Trips generated by the Project’s proposed land uses have been estimated based on trip generation rates collected by the Institute of Transportation Engineers (ITE) and presented in ITE’s most recent edition of *Trip Generation* (8th Edition, 2008). The Project is estimated to generate a net total of approximately 4,476 trip-ends per day on a typical weekday with approximately 352 AM peak hour trips and 473 PM peak hour trips. The assumptions and methods used to estimate the Project’s trip generation characteristics are discussed in detail in Section 4.1 *Project Trip Generation* of this report.

1.2 ANALYSIS SCENARIOS

Consistent with the County of Riverside traffic study guidelines, potential impacts to traffic and circulation will be assessed for each of the following conditions:

- Existing (2012) Conditions (1 scenario)
- Existing plus Project (1 scenario) – For Informational Purposes Only
- Existing plus Ambient Growth plus Project Conditions (1 scenario) – ambient growth only plus Project traffic (EAP)

EXHIBIT 1-1 SITE PLAN



- Existing plus Ambient Growth plus Project plus Cumulative Conditions (1 scenario) – ambient growth and cumulative development projects plus Project traffic (EAPC)
- Horizon Year (2035), without and with Project (2 scenarios) –based on data from the Riverside County Transportation and Analysis Model (RivTAM)

1.2.1 EXISTING (2012) CONDITIONS

Information for existing year (2012) is disclosed to represent the baseline traffic conditions as they existed at the time this report was prepared.

1.2.2 EXISTING PLUS PROJECT CONDITIONS

The Existing (2012) plus project (E+P) analysis determines significant traffic impacts that would occur on the existing roadway system in the theoretical scenario of the Project being placed upon Existing conditions. The E+P scenario is presented for informational purposes only as the County's traffic study guidelines requires significant impacts to be identified through the analysis of EAP traffic conditions.

1.2.3 EXISTING PLUS AMBIENT GROWTH PLUS PROJECT (EAP) CONDITIONS

As dictated by County of Riverside traffic study guidelines, the EAP (2017) analysis scenario determines the project's direct impacts based on a comparison of the EAP (2017) traffic conditions to Existing (2012) conditions. The EAP (2017) conditions analysis uniquely identifies the specific traffic impacts associated with the development of the proposed Project projected to its "Opening Year". To account for background traffic during this time, a total ambient growth from Existing (2012) conditions of 10.41% (2% per year over 5 years, compounded annually) is included for EAP (2017) conditions. Cumulative development projects are not included as part of the EAP (2017) analysis. Consistent with the County of Riverside's traffic study guidelines, the EAP (2017) analysis is intended to identify the project-specific impacts associated solely with the development of the proposed Project based on the expected background growth within the project study area.

1.2.4 EXISTING PLUS AMBIENT GROWTH PLUS PROJECT PLUS CUMULATIVE (EAPC) CONDITIONS

The EAPC (2017) conditions analysis will be utilized to determine if improvements funded through local and regional transportation mitigation fee programs such as the Transportation Uniform Mitigation Fee (TUMF) program, Mira Loma Road and Bridge Benefit District (RBBD) program, or other approved funding mechanism (Community Facilities District, etc.) can accommodate the cumulative traffic at the target LOS identified in the County of Riverside General Plan. If the "funded" improvements can provide the target LOS, then the Project's payment into the TUMF and RBBD will be considered as cumulative mitigation through the conditions of approval. Other improvements needed beyond the "funded" improvements (such as localized improvements to non-TUMF or non-RBBD facilities) are

identified as such. To account for background traffic, thirty-two (32) other known cumulative development projects within or in close proximity to the study area were included in addition to 10.41% of ambient growth. This list was compiled through consultation with other near-by jurisdictions, such as the County of Riverside, City of Eastvale and City of Norco to identify pending development projects in close proximity to the site.

1.2.5 HORIZON YEAR (2035) CONDITIONS

Traffic projections for horizon year (2035) with Project conditions were derived from the Riverside County Transportation and Analysis Model (RivTAM) 2035 using accepted procedures for model forecast refinement and smoothing. The traffic forecasts reflect the area-wide growth anticipated between existing conditions and horizon year (2035) conditions. In most instances the zone structure of a regional or sub-regional travel demand model is not designed to provide accurate turning movements at intersections along arterial roadways unless refinement and reasonableness checking is performed. Therefore, the horizon year (2035) peak hour forecasts were refined using the model derived long-range forecasts, along with existing peak hour traffic count data collected at each analysis location in February 2012. Future estimated peak hour traffic data was used for new intersections and intersections with an anticipated change in travel patterns to further refine the horizon year (2035) peak hour forecasts. Lastly, horizon year (2035) turning volumes were compared to EAPC (2017) volumes in order to ensure a minimum growth of ten (10) percent as a part of the refinement process. The minimum ten (10) percent growth includes any additional growth between EAPC (2017) and horizon year (2035) traffic conditions that is not accounted for by the traffic generated by cumulative development projects and the ambient growth between existing and EAPC (2017) conditions.

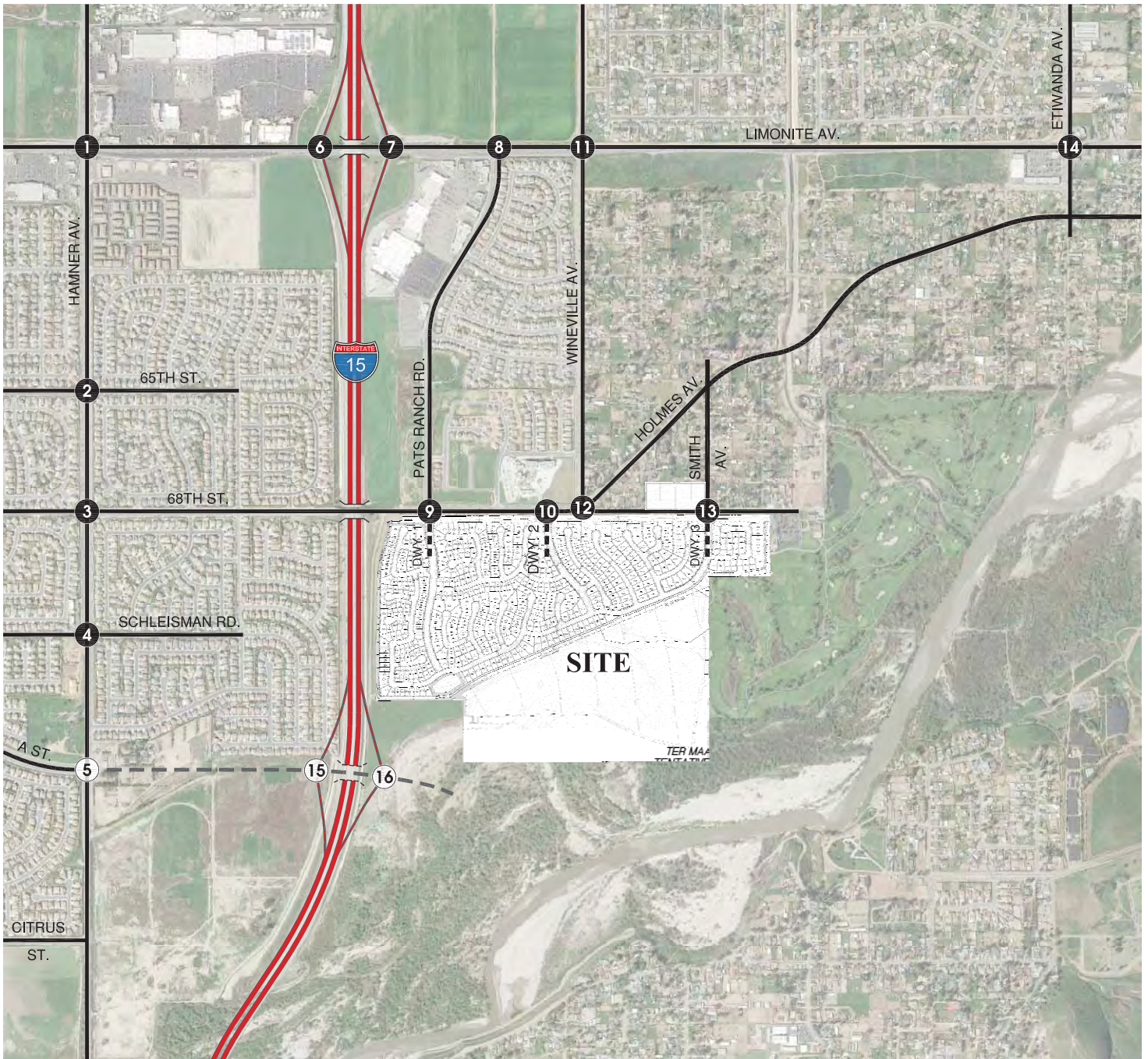
The initial estimate of the future horizon year (2035) with Project peak hour turning movements was then reviewed by Urban Crossroads for reasonableness at intersections where model results showed unreasonable turning movements. The initial raw model estimates were adjusted to achieve flow conservation, reasonable growth, and reasonable diversion between parallel routes.

1.3 STUDY AREA

The traffic impact study area was defined in conformance with the requirements of the County's TIA preparation guidelines. Based on these guidelines, the minimum area to be studied shall include any intersection of "Collector" or higher classification street, with "Collector" or higher classification streets, at which the proposed project will add 50 or more peak hour trips. Exhibit 1-2 presents the study area roadway network, intersection analysis locations, and freeway mainline segments.

The "50 peak hour trip" criteria utilized by the County of Riverside is consistent with the methodology employed by other jurisdictions throughout Southern California and generally represents a threshold of trips at which a typical intersection would have the potential to be impacted. Although each intersection

EXHIBIT 1-2 LOCATION MAP



LEGEND:

- 13** = INTERSECTION ANALYSIS LOCATION
- 14** = YEAR 2035 INTERSECTION ANALYSIS LOCATION
- = FUTURE ROADWAY



may have unique operating characteristics, this traffic engineering rule of thumb is a valid and proven way to establish a study area.

The following sixteen (16) Project study area intersection locations shown on Exhibit 1-2 and listed on Table 1-1 were selected for this TIA based on the County's TIA analysis methodology that requires analysis of intersection locations with 50 or more project-related peak-hour trips.

T I A L

ID	I L	L
1	Hamner Av. / Limonite Av.	Eastvale
2	Hamner Av. / 65 th Street	Eastvale
3	Hamner Av. / 68 th St.	Eastvale
4	Hamner Av. / Schleisman Rd.	Eastvale
5	<i>Hamner Av. / "A" St. – Horizon Year (2035) Analysis Location Only</i>	<i>Eastvale</i>
6	I-15 SB Ramps / Limonite Av.	Caltrans
7	I-15 NB Ramps / Limonite Av.	Caltrans
8	Pats Ranch Rd. / Limonite Av.	Jurupa Valley
9	Pats Ranch Rd. / 68 th St.	Jurupa Valley
10	Driveway 2 / 68 th St.	Jurupa Valley
11	Wineville Av. / Limonite Av.	Jurupa Valley
12	Wineville Av. / 68 th St.	Jurupa Valley
13	Smith Av. / 68 th St.	Jurupa Valley
14	Etiwanda Av. / Limonite Av.	Jurupa Valley
15	<i>I-15 SB Ramps / Schleisman Rd. – Horizon Year (2035) Analysis Location Only</i>	<i>Caltrans</i>
16	<i>I-15 NB Ramps / Schleisman Rd. – Horizon Year (2035) Analysis Location Only</i>	<i>Caltrans</i>

1.4 SUMMARY OF IMPACTS

Based on the analysis for EAP (2017) traffic conditions, the following intersections were found to be directly impacted by the Project:

ID	I L	L
9	Pats Ranch Rd. / 68 th St.	Jurupa Valley
14	Etiwanda Av. / Limonite Av.	Jurupa Valley

Recommended mitigation measures to address the Project's direct impacts are discussed subsequently.

Based on the analysis performed for EAPC (2017) traffic conditions, the following intersections are anticipated to be cumulatively impacted in addition to those previously identified for EAP (2017) traffic conditions:

ID	I L	L
1	Hamner Av. / Limonite Av.	Eastvale
6	I-15 SB Ramps / Limonite Av.	Caltrans
7	I-15 NB Ramps / Limonite Av.	Caltrans

The following additional intersections are anticipated to be cumulatively impacted based on the analysis performed for Horizon Year (2035) with Project traffic conditions, in addition to those identified under EAPC (2017) traffic conditions:

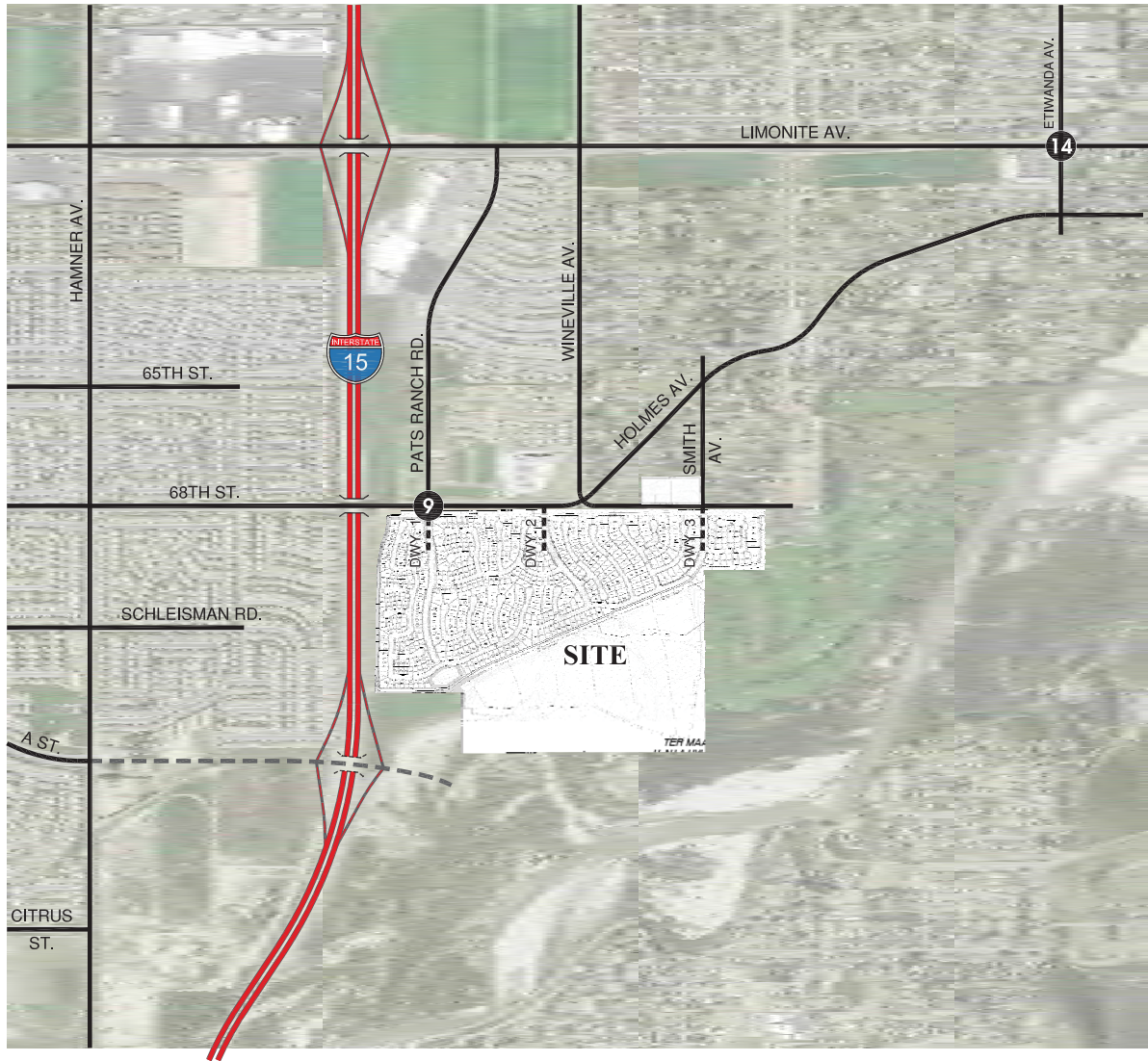
ID	I L	L
5	Hamner Av. / "A" St. – Horizon Year (2035) Analysis Location Only	Eastvale
8	Pats Ranch Rd. / Limonite Av.	Jurupa Valley
11	Wineville Av. / Limonite Av.	Jurupa Valley
15	I-15 SB Ramps / Schleisman Rd. – Horizon Year (2035) Analysis Location Only	Caltrans
16	I-15 NB Ramps / Schleisman Rd. – Horizon Year (2035) Analysis Location Only	Caltrans

Recommended improvements to reduce impacts to less-than-significant are discussed subsequently in Section 1.6 *Summary of Cumulative Impacts and Recommended Improvements* and in further detail in Section 6 *Opening Year (2017) Traffic Analysis* and Section 7 *Horizon Year (2035) Traffic Analysis* of this report.

1.5 SUMMARY OF PROJECT IMPACTS AND MITIGATION MEASURES

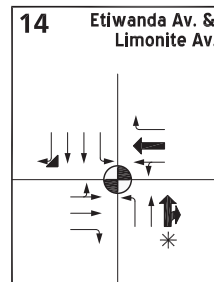
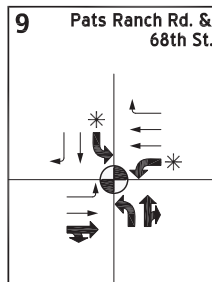
This section provides a summary of direct Project impacts and associated mitigation measures. Section 2 *Methodologies* provides information on the methodologies used in the analyses and Section 6 *Opening Year (2017) Traffic Analysis* includes the detailed analysis. The recommended mitigation measures necessary to reduce the direct project-related impacts to "less-than-significant" are discussed below. The recommended improvements necessary to achieve the requisite LOS threshold of LOS "D" or better at all study area intersections for EAP (2017) conditions have been illustrated on Exhibit 1-3.

EXISTING PLUS AMBIENT GROWTH PLUS PROJECT (2017) CONDITIONS PROJECT MITIGATION MEASURES



LEGEND:

-  = TRAFFIC SIGNAL
-  = EXISTING LANE
-  = LANE IMPROVEMENT
-  = FREE RIGHT TURN LANE
-  = IMPROVEMENT ONLY REQUIRES RE-STRIPING



Impact 1.1 – Pats Ranch Road / 68th Street (#9) – The intersection is currently operating at acceptable LOS (i.e., LOS “D” or better) during the peak hours under Existing (2012) traffic conditions, however, the addition of Project traffic (as measure by 50 or more peak hour trips) is anticipated to result in unacceptable LOS during the AM peak hour only (i.e., LOS “F”). Consistent with the County of Riverside’s significance criteria, as stated in their traffic study guidelines, the impact is considered **“significant”**.

Mitigation Measure 1.1 – The following improvements are necessary to reduce the Project’s direct impact to **“less-than-significant”**:

- Install a traffic signal.
- Construct the northbound leg with a left turn lane and shared through-right turn lane.
- Re-stripe the southbound lanes to provide a left turn lane (to be accommodated within the existing painted median), through lane and a right turn lane.
- Construct a 2nd eastbound through lane.
- Re-stripe the eastbound lanes to provide a left turn lane (to be accommodated within the existing painted median), two through lanes and right turn lane.

Impact 2.1 – Etiwanda Avenue / Limonite Avenue (#14) – Although the intersection is currently operating at unacceptable LOS (i.e., LOS “E” and LOS “F”) during the AM and PM peak hours under Existing (2012) traffic conditions, the addition of Project traffic (as measure by 50 or more peak hour trips) is anticipated to contribute to the deficiency at this intersection. Consistent with the County of Riverside’s significance criteria, as stated in their traffic study guidelines, the impact is considered **“significant”**.

Mitigation Measure 2.1 – The following improvement is necessary to reduce the Project’s direct impact to **“less-than-significant”**:

- Re-stripe the northbound right turn lane as a shared through-right turn lane.
- Construct a 2nd westbound through lane.

1.6 SUMMARY OF CUMULATIVE IMPACTS AND RECOMMENDED IMPROVEMENTS

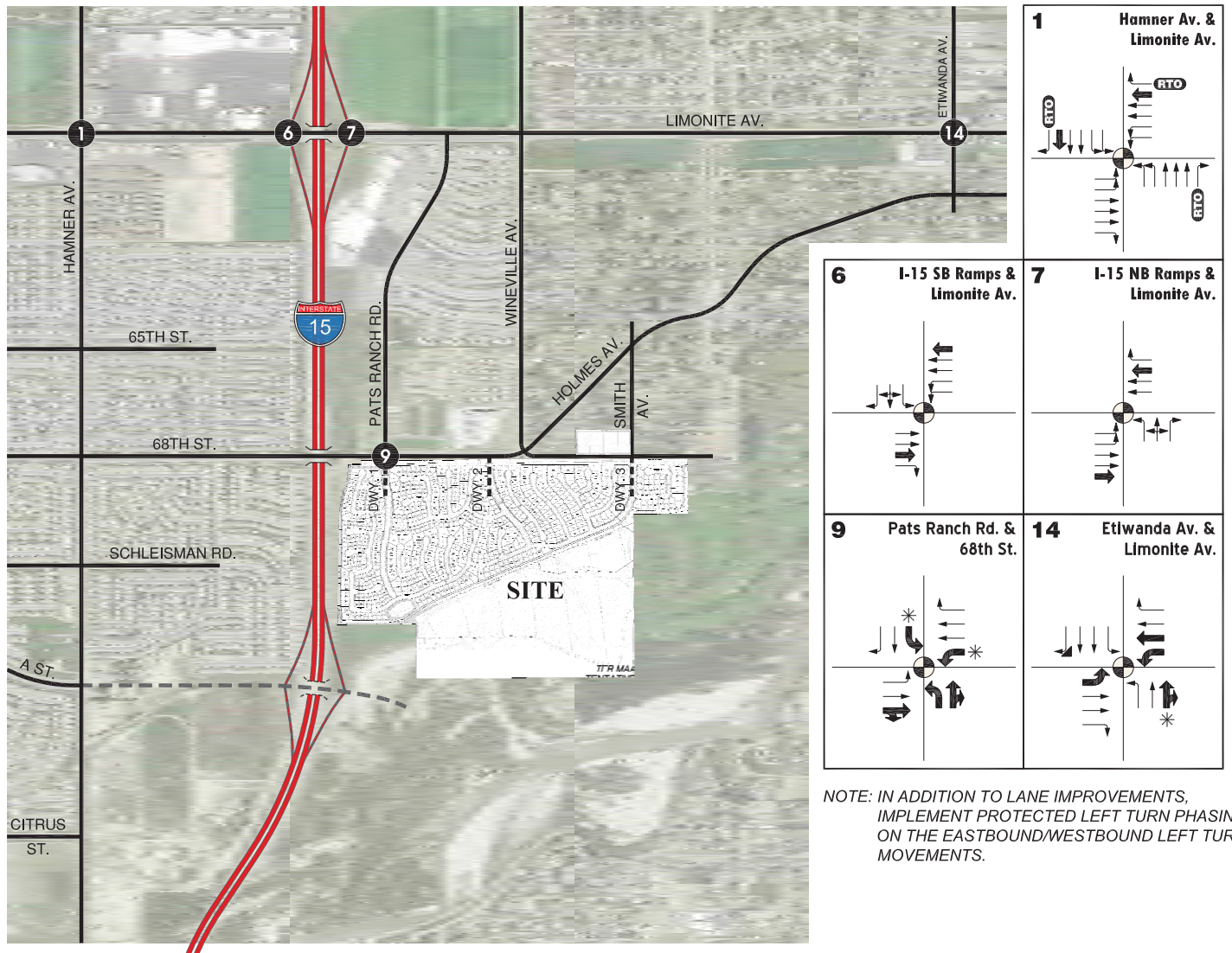
A summary of the cumulatively impacted study area intersections and recommended improvements to reduce cumulative impacts to less-than-significant are described in detail within Section 6 *Opening Year (2017) Traffic Analysis* and Section 7 *Horizon Year (2035) Traffic Analysis* of this report. Cumulative impacts are deficiencies in the transportation network’s LOS that would not be directly caused by the Project. The Project would, however, contribute traffic to these deficient facilities, resulting in a finding that the Project’s contribution to the cumulative impact is considered cumulatively considerable.

In 2002, the Transportation Uniform Mitigation Fee (TUMF) program was initiated in Western Riverside County. Under the TUMF, developers of residential, industrial and commercial property are required to pay a development fee to fund regional transportation projects, which mitigates cumulative impacts to the roadway segments and intersections included in the TUMF program. The TUMF funds both local and regional arterial projects. The applicant shall participate in the funding or construction of off-site improvements, including traffic signals that are needed to serve cumulative traffic conditions through the payment of required Western Riverside County TUMF, in addition to the Mira Loma Road and Bridge Benefit District (RBBD) fee program, County of Riverside Development Impact Fee (DIF) and other fair share contributions as directed by the City. These fees are collected as part of a funding mechanism aimed at ensuring that regional highways and arterial expansions keep pace with the projected vehicle trip increases.

Intersection improvements that were identified in the analysis in Section 6 *Opening Year (2017) Traffic Analysis* and Section 7 *Horizon Year (2035) Traffic Analysis* as necessary to maintain or improve the operational level of service of the street system in the vicinity of the Project site to address cumulative traffic impacts are shown on Exhibits 1-4 and 1-5. A summary of off-site improvements needed to address cumulative traffic impacts for Horizon Year (2035) traffic conditions is also included on Table 1-2. It is anticipated that the improvements required to maintain or to improve the LOS operations of transportation facilities in the vicinity of the project will be constructed through the City's local and regional transportation improvement programs, such as the City's adoption of the Transportation Uniform Mitigation Fee (TUMF), the Mira Loma Road and Bridge Benefit District (RBBD) and County of Riverside Development Impact Fee (DIF). The Project will be subject to County DIF, unless and until the City adopts its own DIF program. These fee programs utilize the fees collected from new development to fund the construction of new transportation facilities included in each of the funding programs. As development increases within the region, the amount of fees collected also increases thereby accelerating the construction of transportation facilities included in each funding program. Similarly, if development within the region experiences reduced growth, the amount of fees collected also is reduced. However, a slower growth cycle would likely result in a slower growth in traffic volumes, thereby lengthening the timeline necessary to complete transportation infrastructure improvements.

The Project's contribution to one of the aforementioned transportation impact fee programs or as a fair share contribution toward a cumulatively impacted facility not found to be covered by a pre-existing fee program should be considered sufficient to address the Project's fair share toward a mitigation measure or measures designed to alleviate the cumulative impact. In other words, the Project's contribution to a significant cumulative impact will be rendered less than cumulatively considerable and thus is not significant.

EXISTING PLUS AMBIENT GROWTH PLUS PROJECT PLUS CUMULATIVE (2017) CONDITIONS CUMULATIVE MITIGATION MEASURES



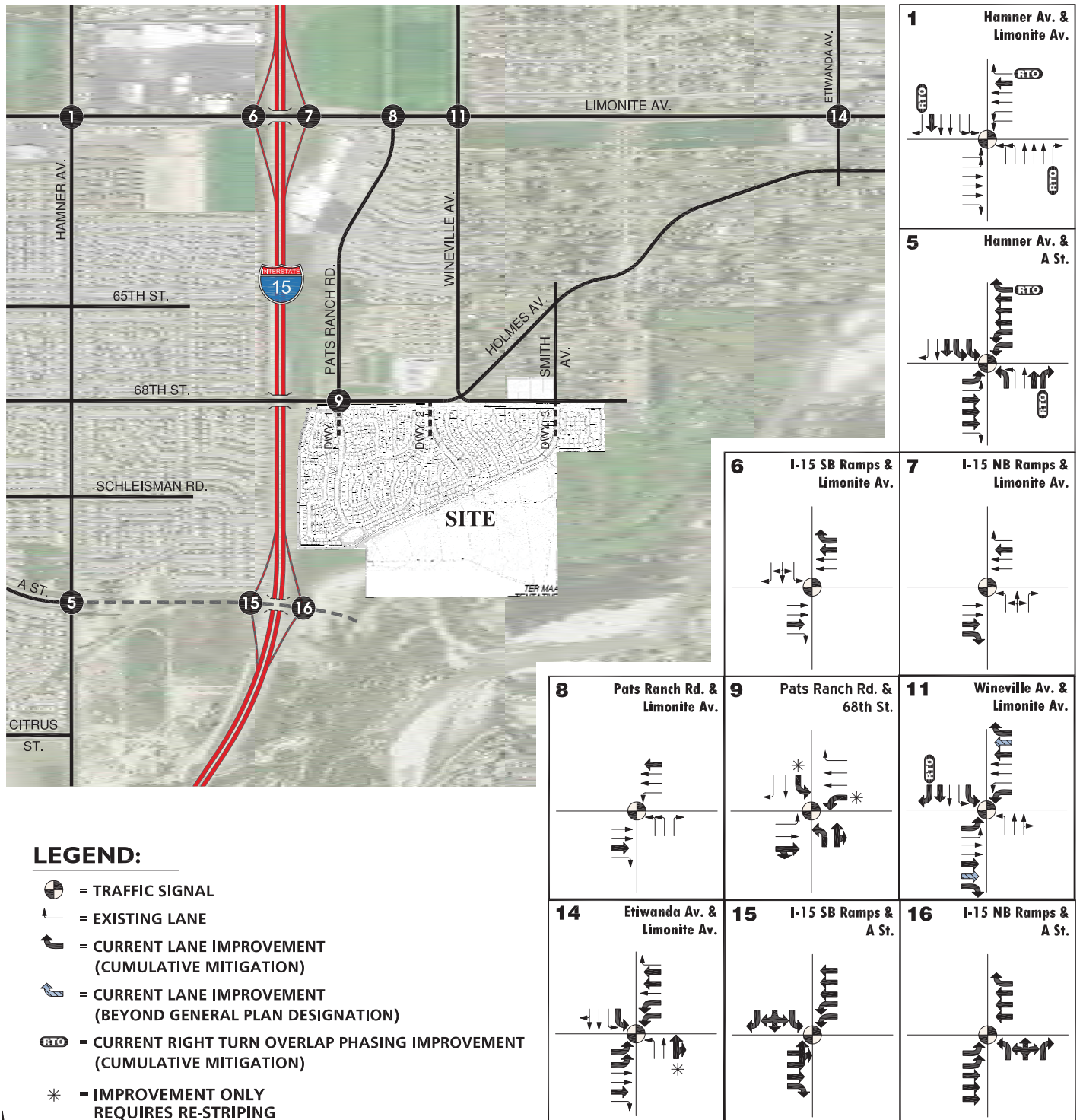
LEGEND:

- = TRAFFIC SIGNAL
- = EXISTING LANE
- = LANE IMPROVEMENT (CUMULATIVE MITIGATION)
- = FREE RIGHT TURN LANE
- = IMPROVEMENT ONLY REQUIRES RE-STRIPING

- DEF** = EXISTING DEFACTO RIGHT TURN LANE
- RTO** = CURRENT RIGHT TURN OVERLAP PHASING IMPROVEMENT (CUMULATIVE MITIGATION)




HORIZON YEAR (2035) WITH PROJECT CONDITIONS CUMULATIVE MITIGATION MEASURES



NOTE: IN ADDITION TO LANE IMPROVEMENTS, IMPLEMENT PROTECTED LEFT TURN PHASING ON THE EASTBOUND/WESTBOUND LEFT TURN MOVEMENTS.

S T I F P I I

#	Intersection Location	Recommended Improvements	Project Mitigation Requirements ²	EAPC (2017) Cumulative Improvement Needs		Horizon Year (2035) Cumulative Improvement Needs		Fair Share ³
				Program Improvements ^{1,2}	Non-Program Improvements	Program Improvements ^{1,2}	Non-Program Improvements	
1	Hamner Av. / Limonite Av.	Overlap phasing on NBR, 1.SBT, overlap phasing on SBR, 1.WBT, overlap phasing on WBR		Overlap phasing on NBR, 1.SBT, overlap phasing on SBR, 1.WBT, overlap phasing on WBR				--
5	Hamner Av. / "A" St.	Install Traffic Signal: 1.NBL, 1.NBT, 1.NBR w/ overlap phasing, 2.SBL, 1.SBT, 1.EBL, 3.EBT, 2.WBL, 3.WBT, 1.WBR w/ overlap phasing				Install Traffic Signal: 1.NBL, 1.NBT, 1.NBR w/ overlap phasing, 2.SBL, 1.SBT, 1.EBL, 3.EBT, 2.WBL, 3.WBT, 1.WBR w/ overlap phasing		--
6	I-15 SB Ramps / Limonite Av.	1.EBT, 1.WBT, 1.WBR		1.EBT, 1.WBT		1.WBR		--
7	I-15 NB Ramps / Limonite Av.	1.EBT, 1.EBR, 1.WBT		1.EBT, 1.WBT		1.EBR		--
8	Pats Ranch Rd. / Limonite Av.	1.EBT, 1.WBT				1.EBT, 1.WBT		--
9	Pats Ranch Rd. / 68th St.	Install Traffic Signal: 1.NBL, 1.NBT/R, 1.SBT, 1.EBT/R, 1.WBL	Install Traffic Signal: 1.NBL, 1.NBT/R, 1.SBT, 1.EBT/R, 1.WBL					--
	Wineville Av. / Limonite Av.	1.SBL, 1.SBT, 1.SBR w/ overlap phasing, 1.EBL, 2.EBT, 1.WBL, 2.WBT, 1.WBR, Implement protected NB/SB left turn phasing				1.SBL, 1.SBT, 1.SBR w/ overlap phasing, 1.EBL, 1.EBT, 1.WBL, 1.WBT, 1.WBR, Implement protected NB/SB left turn phasing	1.EBT, 1.WBT	1.6%
14	Etiwanda Av. / Limonite Av.	1.NBT, 1.SBL, 2.EBL, 1.EBT, 2.WBL, 1.WBT	1. NBT, 1.WBT	1.EBL, 1.WBL		1.SBL, 1.EBL, 1.EBT, 1.WB		--
15	I-15 SB Ramps / Schleisman Rd.	Install Traffic Signal: 1.SBL, 1.SBL/T/R, 1.SBR, 3.EBT, 1.EBR, 2.WBL, 3.WBT				Install Traffic Signal: 1.SBL, 1.SBL/T/R, 1.SBR, 3.EBT, 1.EBR, 2.WBL, 3.WBT		--
16	I-15 NB Ramps / Schleisman Rd.	Install Traffic Signal: 1.NBL, 1.NBL/T/R, 1.NBR, 2.EBL, 3.EBT, 3.WBT, 1.WBR				Install Traffic Signal: 1.NBL, 1.NBL/T/R, 1.NBR, 2.EBL, 3.EBT, 3.WBT, 1.WBR		--

¹ Improvements included in Mira Loma RBBB program (inclusive of TUMF and DIF) unless otherwise noted.

² Program improvements constructed by project may be eligible for fee credit. In-lieu fee payment is at discretion of City.

³ Fair Share percentage represents Project share of 2035 cumulative traffic growth at improvement location. Where City fees do not apply, a financial contribution may be required to mitigate impacts.

1.7 ON SITE ROADWAY AND SITE ACCESS IMPROVEMENTS

The Project is proposed to have access on 68th Street via an extension of Pats Ranch Road, Driveway 2, and an extension of Smith Avenue. All Project access points are proposed to be full-access. Regional access to the Project site will be provided by the I-15 Freeway (located to the northwest) via Limonite Avenue and by the I-15 Freeway via the future extension of Schleisman Road under Horizon Year (2035) traffic conditions.

As part of the development, the Project will construct improvements on the site adjacent roadway of 68th Street. Roadway improvements necessary to provide site access and on-site circulation are assumed to be constructed in conjunction with site development and are described below. These improvements should be in place prior to occupancy.

1.7.1 ON SITE ROADWAY IMPROVEMENTS

The recommended site-adjacent roadway improvements for the Project are described below. Exhibit 1-6 illustrates the site-adjacent roadway improvement recommendations.

68th Street – 68th Street is an east-west oriented roadway located along the Project's northern boundary. The Project shall construct 68th Street from the Project's western boundary to Wineville Avenue at its ultimate half-section width as a Major Highway (118-foot right-of-way) in compliance with the applicable County of Riverside standards. 68th Street is not classified as a General Plan roadway to the east of Wineville Avenue. However, 68th Street between Wineville Avenue and the Project's eastern boundary will be constructed as a collector street to accommodate a minimum of one travel lane in each direction of travel, on-street parking along the north side, and Class II bike lanes on both the north and south sides of the street within 44-feet of pavement.

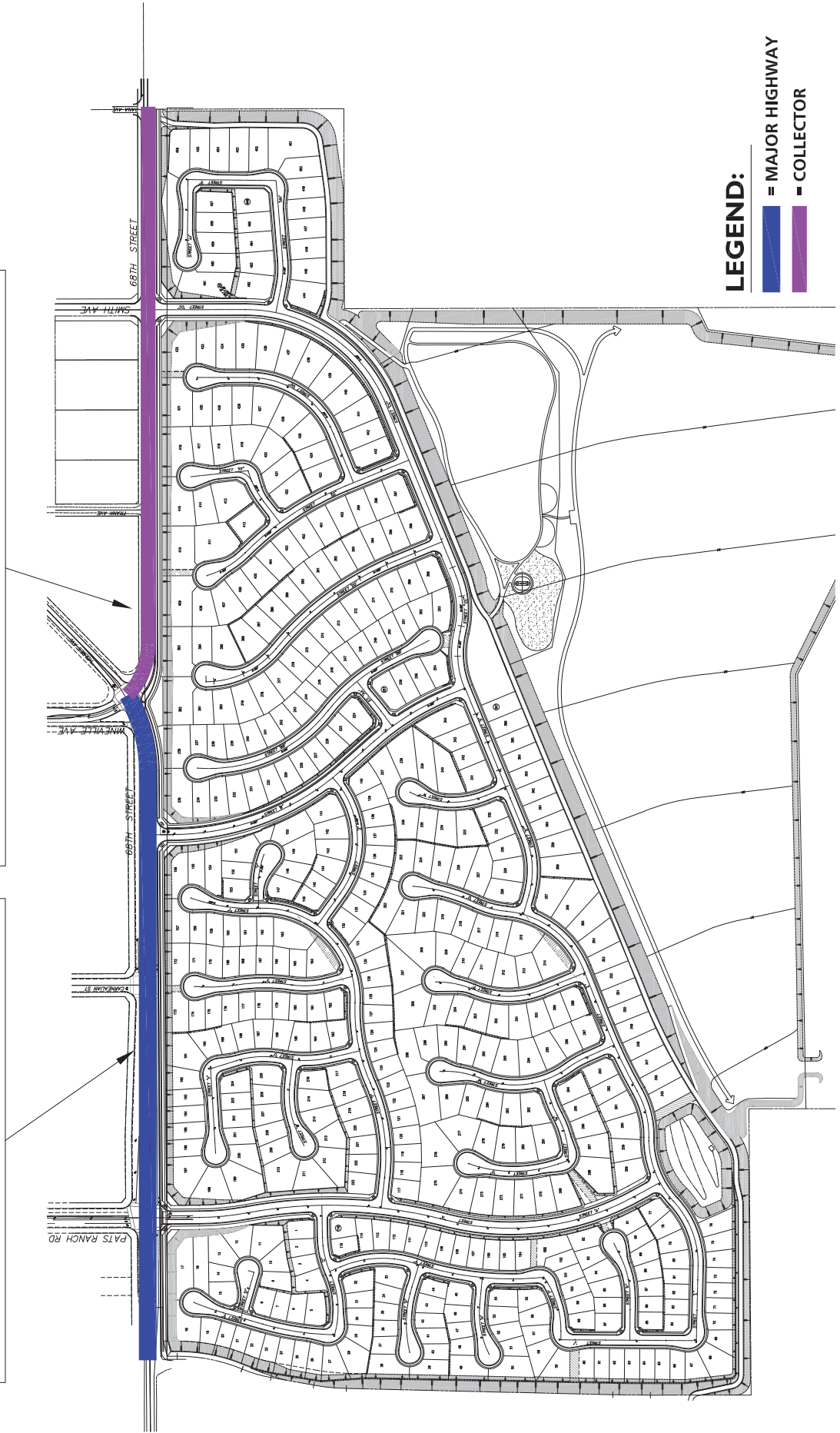
The intersection of Wineville Avenue at 68th Street/Holmes Avenue is currently skewed due to the intersecting alignment of Holmes Avenue at 68th Street. However, it is anticipated that the intersection would generally remain in its current configuration with minor modifications to lanes and crossings as shown on Exhibit 1-7. The improvements shown on Exhibit 1-7 include the existing and proposed school-zone crosswalk locations, proposed access points in relation to the existing roadway network, proposed turn lane striping modifications and the addition of a 2nd through lane along the Project's northern boundary (part of the half-section improvements).

Wherever necessary, roadways adjacent to the Project, site access points and site-adjacent intersections will be constructed to be consistent with or within the recommended roadway classifications and respective cross-sections in the County of Riverside General Plan Circulation Element.

EXHIBIT 1-6 SITE ADJACENT ROADWAY RECOMMENDATIONS

68TH STREET IS AN EAST-WEST ORIENTED ROADWAY LOCATED ALONG THE PROJECT'S NORTHERN BOUNDARY. CONSTRUCT 68TH STREET FROM THE PROJECT'S WESTERN BOUNDARY TO WINEVILLE AVENUE AT ITS ULTIMATE HALF-SECTION WIDTH AS A MAJOR HIGHWAY (118-FOOT RIGHT-OF-WAY) IN COMPLIANCE WITH THE APPLICABLE COUNTY OF RIVERSIDE STANDARDS.

68TH STREET IS NOT CLASSIFIED AS A GENERAL PLAN ROADWAY TO THE EAST OF WINEVILLE AVENUE. HOWEVER, 68TH STREET BETWEEN WINEVILLE AVENUE AND THE PROJECT'S EASTERN BOUNDARY WILL BE CONSTRUCTED AS A COLLECTOR STREET BY ACCOMMODATING A MINIMUM OF ONE TRAVEL LANE IN EACH DIRECTION OF TRAVEL, ON-STREET PARKING ALONG THE NORTHSIDE AND BIKE LANES ALONG BOTH THE NORTH AND SOUTH SIDES OF 68TH STREET.



LEGEND:

- = MAJOR HIGHWAY
- = COLLECTOR

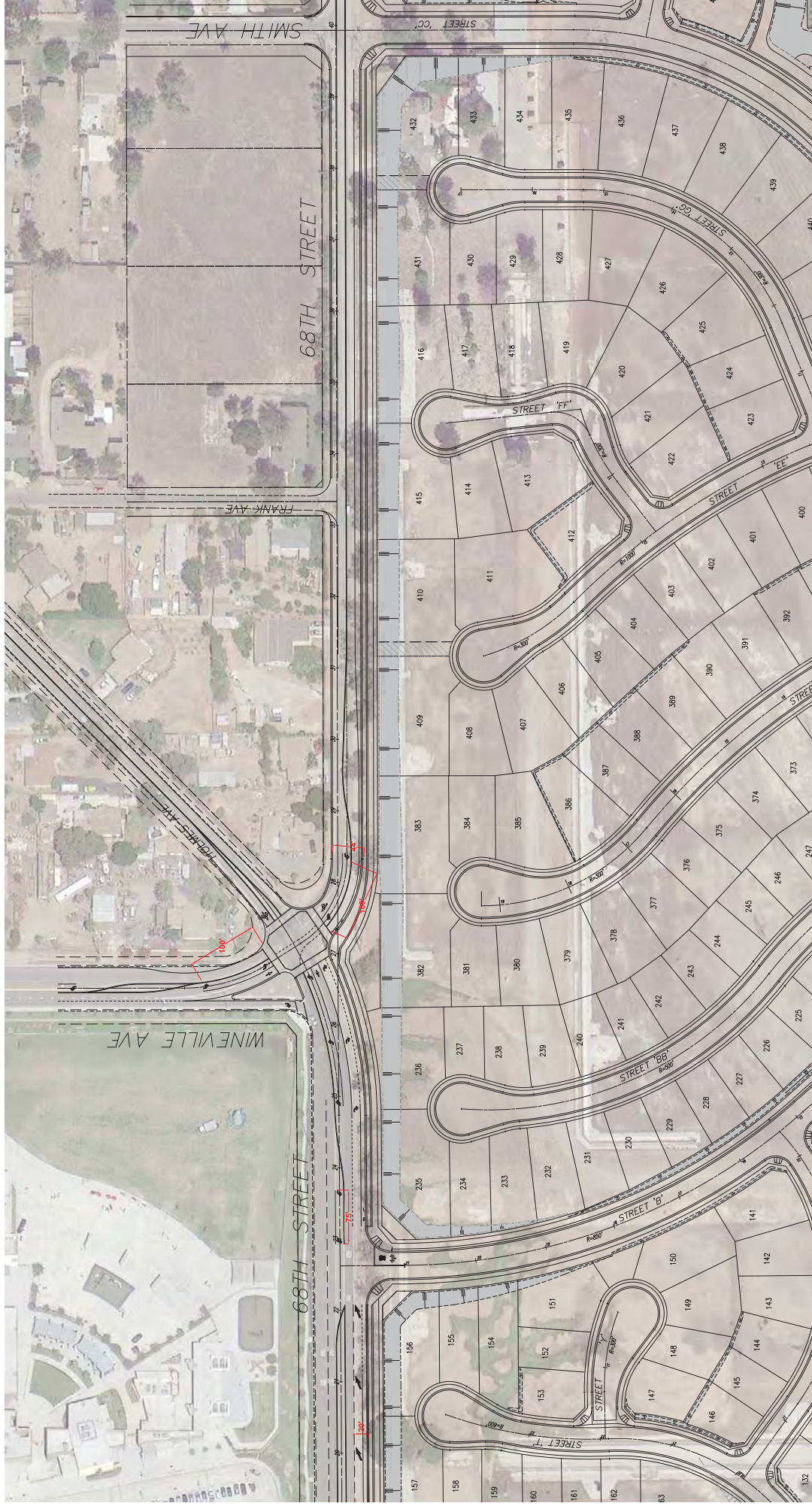
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EXHIBIT 1-7 (Page 1 of 2)

CONCEPTUAL STRIPING PLAN



EXHIBIT 1-7 (Page 2 of 2)
CONCEPTUAL STRIPING PLAN



1.7.2 NON MOTORIZED ACCOMMODATIONS

The plan of walkways and pedestrian paths for Project promotes pedestrian access to various elements of the Project and to existing and proposed pedestrian facilities adjacent to the Project. The routes include streets, sidewalks, paths, walkways and an equestrian trail that connect throughout the plan. In addition, the Project is located in close proximity to the existing Louis Vandermolen Fundamental Elementary School. As such, pedestrian accommodations include the provision of school-zone crossings at the Project access points along 68th Street. There is also an existing equestrian trail along the north side of the existing Goose Creek Golf Course. The Project proposes to provide connections to the existing equestrian trail through the Project towards the Santa Ana River corridor. The non-motorized accommodations and facilities are shown on Exhibit 1-8.

1.7.3 SITE ACCESS IMPROVEMENTS

The recommended site access driveway improvements for the Project are described below. Exhibit 1-9 illustrates the on-site and site adjacent recommended roadway lane improvements. Construction of on-site and site adjacent improvements shall occur in conjunction with adjacent Project development activity or as needed for Project access purposes.

Pats Ranch Road / 68th Street – Install a traffic signal and construct the intersection with the following geometrics:

Northbound Approach: One left turn lane with 100-feet of storage and one shared through-right turn lane.

Southbound Approach: One left turn lane with 250-feet of storage, one through lane and one right turn lane. The left turn lane should be striped within the existing painted median the existing left turn lane restriped as a through lane.

Eastbound Approach: One left turn lane with 195-feet of storage, one through lane and one shared through right turn lane.

Westbound Approach: One left turn lane with 100-feet of storage, two through lanes and one right turn lane with 220-feet of storage. The left turn lane should be striped within the existing painted median.

Driveway 2 / 68th Street – Install a stop control on the northbound approach and construct the intersection with the following:

Northbound Approach: One shared left-right turn lane.

Southbound Approach: N/A.

Eastbound Approach: One through lane and one shared through-right turn lane.

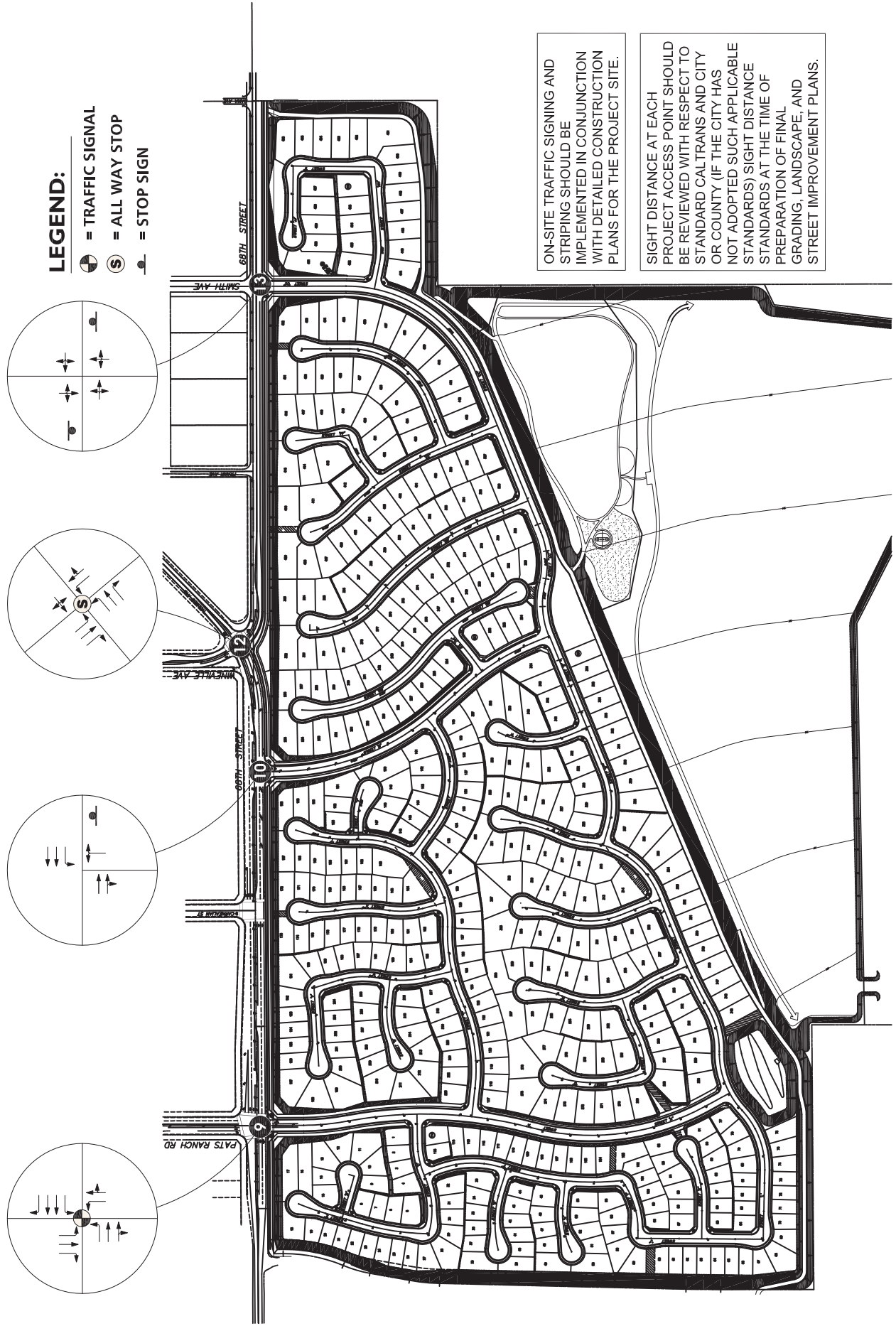
Westbound Approach: One left turn lane with 75-feet of storage and two through lanes.

PEDESTRIAN ACCOMMODATIONS

EXHIBIT 1-8



EXHIBIT 1-9 SITE ACCESS AND ON-SITE CIRCULATION RECOMMENDATIONS



Wineville Avenue / 68th Street – Maintain the existing four-way stop control and construct the intersection with the following:

Northbound Approach: One left turn lane with 100-feet of storage and one shared through-right turn lane.

Southbound Approach: One left turn lane with 100-feet of storage, one through lane and one right turn lane. The left turn lane should be striped within the existing painted median. The addition of a southbound through lane will require modifications to the existing island in order to accommodate the travel lane.

Eastbound Approach: One left turn lane with 200-feet of storage, one through lane and one right turn lane (lane drop from the 2nd eastbound through lane along the Project's frontage).

Westbound Approach: One shared left-through-right turn lane.

Smith Avenue / 68th Street – Install a stop control on the northbound approach and construct the intersection with the following geometrics:

Northbound Approach: One shared left-through-right turn lane.

Southbound Approach: One shared left-through-right turn lane.

Eastbound Approach: One shared left-through-right turn lane.

Westbound Approach: One shared left-through-right turn lane.

On-site traffic signing and striping should be implemented in conjunction with detailed construction plans for the Project site.

Sight distance at each project access point should be reviewed with respect to standard Caltrans and City or County (if the City has not adopted such applicable standards) sight distance standards at the time of preparation of final grading, landscape and street improvement plans.

2.0 METHODOLOGIES

This section documents the methodologies and assumptions used to perform this TIA.

2.1 LEVEL OF SERVICE

Traffic operations of roadway facilities are described using the term "Level of Service" (LOS). LOS is a qualitative description of traffic flow based on several factors such as speed, travel time, delay, and freedom to maneuver. Six levels are typically defined ranging from LOS "A", representing completely free-flow conditions, to LOS "F", representing breakdown in flow resulting in stop-and-go conditions. LOS "E" represents operations at or near capacity, an unstable level where vehicles are operating with the minimum spacing for maintaining uniform flow.

2.2 INTERSECTION CAPACITY ANALYSIS

The definitions of LOS for interrupted traffic flow (flow restrained by the existence of traffic signals and other traffic control devices) differ slightly depending on the type of traffic control. The LOS is typically dependent on the quality of traffic flow at the intersections along a roadway. The *Highway Capacity Manual* (HCM) (Transportation Research Board 2000) methodology expresses the LOS at an intersection in terms of delay time for the various intersection approaches. The HCM uses different procedures depending on the type of intersection control.

The intersection LOS analysis is based on the traffic volumes observed during the peak hour conditions using traffic count data collected in February and May 2012. The following peak hours were selected for analysis:

- Weekday AM Peak Hour (peak hour between 7:00 AM and 9:00 AM)
- Weekday PM Peak Hour (peak hour between 4:00 PM and 6:00 PM)

2.2.1 SIGNALIZED INTERSECTIONS

The County of Riverside traffic study guidelines require signalized intersection operations analysis based on the methodology described in Chapter 16 of the HCM. Intersection LOS operations are based on an intersection's average control delay. Control delay includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. For signalized intersections LOS is directly related to the average control delay per vehicle and is correlated to a LOS designation as described in Table 2-1. All signalized study area intersections have utilized the Traffix software (Version 8.0 R1, 2008), with the exception of the Caltrans freeway-to-arterial interchange locations which have been analyzed utilizing the Synchro software (Version 7 Build 759).

T 21 S I LOS T

L S	D	A D C (S)
A	Operations with very low delay occurring with favorable progression and/or short cycle length.	0 to 10.00
B	Operations with low delay occurring with good progression and/or short cycle lengths.	10.01 to 20.00
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.01 to 35.00
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.01 to 55.00
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.01 to 80.00
F	Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths	80.01 and up

Source: HCM 2000, Chapter 16

The peak hour traffic volumes have been adjusted using a peak hour factor (PHF) to reflect peak 15 minute volumes. Common practice for LOS analysis is to use a peak 15-minute rate of flow. However, flow rates are typically expressed in vehicles per hour. The PHF is the relationship between the peak 15-minute flow rate and the full hourly volume (e.g. $PHF = \frac{[Hourly Volume]}{[4 \times Peak\ 15\text{-minute Flow Rate}]}$). The use of a 15-minute PHF produces a more detailed analysis as compared to analyzing vehicles per hour. Existing PHFs have been used for the Existing (2012) and EAP (2017) analysis scenarios and at the three (3) Project driveways along 68th Street for all scenarios. A PHF of 0.95 or higher has been used for all the remaining study area intersections for the EAPC (2017) and Horizon Year (2035) analysis scenarios.

2.2.2 UNSIGNALIZED INTERSECTIONS

The County of Riverside traffic study guidelines require the operations of unsignalized intersections to be evaluated using the methodology described in Chapter 17 of the HCM. The LOS rating is based on the weighted average control delay expressed in seconds per vehicle (see Table 2-2).

At two-way or side-street stop-controlled intersections, LOS is calculated for each controlled movement and for the left turn movement from the major street, as well as for the intersection as a whole. For approaches composed of a single lane, the delay is computed as the average of all movements in that lane. For all-way stop controlled intersections, LOS is computed for the intersection as a whole. All unsignalized study area intersections have utilized the Traffix software (Version 8.0 R1, 2008).

T 2 2 U I L O S T

L S	D	A P V C (S)
A	Little or no delays.	0 to 10.00
B	Short traffic delays.	10.01 to 15.00
C	Average traffic delays.	15.01 to 25.00
D	Long traffic delays.	25.01 to 35.00
E	Very long traffic delays.	35.01 to 50.00
F	Extreme traffic delays with intersection capacity exceeded.	> 50.00

Source: HCM 2000, Chapter 17

2.3 TRAFFIC SIGNAL WARRANT ANALYSIS METHODOLOGY

The term "signal warrants" refers to the list of established criteria used by Caltrans and other public agencies to quantitatively justify or ascertain the potential need for installation of a traffic signal at an otherwise unsignalized intersection. This TIA uses the signal warrant criteria presented in the latest edition of the Federal Highway Administration's (FHWA) *Manual on Uniform Traffic Control Devices (MUTCD)*, as amended by the *2012 California MUTCD (CA MUTCD)*, for all study area intersections.

The signal warrant criteria for Existing (2012) conditions are based upon several factors, including volume of vehicular and pedestrian traffic, frequency of accidents, and location of school areas. Both the FHWA's *MUTCD* and the *2012 CA MUTCD* indicate that the installation of a traffic signal should be considered if one or more of the signal warrants are met. Specifically, this TIA utilizes the Peak Hour Volume-based Warrant 3 as the appropriate representative traffic signal warrant analysis for Existing traffic conditions. Warrant 3 criteria are basically identical for both the FHWA's *MUTCD* and the *2012 CA MUTCD*. Warrant 3 is appropriate to use for this TIA because it provides specialized warrant criteria for intersections with rural characteristics (e.g. located in communities with populations of less than 10,000 persons or with adjacent major streets operating at or above 40 miles per hour). For the purposes of this study, the speed limit was the basis for determining whether Urban or Rural warrants were used for a given intersection. It should be noted that pursuant to the County of Riverside's traffic study guidelines, the peak hour warrant has been utilized for Existing (2012) traffic conditions.

Unsignalized intersections have been assessed regarding the potential need for new traffic signals based on future average daily traffic (ADT) volumes, using the Caltrans planning level ADT-based signal warrant analysis worksheets for all future analysis scenarios.

Traffic signal warrant analyses were performed for all of the study area intersections, with the exception of the following locations which are currently signalized:

ID	I	L
5	Hamner Av. / "A" St.	Eastvale
9	Pats Ranch Rd. / 68 th St.	Jurupa Valley
10	Driveway 2 / 68 th St.	Jurupa Valley
12	Wineville Av. / 68 th St.	Jurupa Valley
13	Smith Av. / 68 th St.	Jurupa Valley
15	<i>I-15 SB Ramps / Schleisman Rd. – Horizon Year (2035) Analysis Location Only</i>	Caltrans
16	<i>I-15 NB Ramps / Schleisman Rd. – Horizon Year (2035) Analysis Location Only</i>	Caltrans

The Existing conditions traffic signal warrant analysis is presented in the subsequent section, Section 3 *Area Conditions* of this report. The traffic signal warrant analysis for future conditions is presented in Section 5 *Existing Plus Project Traffic Analysis*, Section 6 *Opening Year (2017) Traffic Analysis* and Section 7 *Horizon Year (2035) Traffic Analysis* of this report.

It is important to note that a signal warrant defines the minimum condition under which the installation of a traffic signal might be warranted. Meeting this threshold condition does not require that a traffic control signal be installed at a particular location, but rather, that other traffic factors and conditions be evaluated in order to determine whether the signal is truly justified. It should also be noted that signal warrants do not necessarily correlate with level of service. An intersection may satisfy a signal warrant condition and operate at or above LOS "C" or operate below LOS "C" and not meet a signal warrant.

2.4 LOS CRITERIA

The City of Jurupa Valley has adopted the Riverside County General Plan as it applies to property located within the City's jurisdiction; therefore, the County's General Plan policies are applicable to this Project. Riverside County General Plan Policy C 2.1 states that the County will maintain the following County-wide target level of service (LOS): LOS "C" on all County-maintained roads and conventional State Highways. As an exception, LOS "D" may be allowed in Community Development areas at intersections of any combination of Secondary Highways, Major Highways, Arterial Highways, Urban Arterial Highways, Expressways or conventional State Highways. LOS "E" may be allowed in designated Community Centers to the extent that it would support transit-oriented development and pedestrian communities. Because the Project site is located in a Community Development Area, LOS "D" has been considered acceptable at any intersection within the City of Jurupa Valley, with the exception of Driveway 2 on 68th Street. Driveway 2 on 68th Street is assumed to have an LOS standard of "C".

The City of Eastvale has also established an LOS standard of LOS "D".

Regarding Caltrans' ramp to arterial intersections and other Caltrans maintained facilities, the published Caltrans traffic study guidelines (December 2002) states the following:

"Caltrans endeavors to maintain a target LOS at the transition between LOS "C" and LOS "D" on State highway facilities, however, Caltrans acknowledges that this may not be always feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS."

Caltrans has worked with the County of Riverside to establish a local threshold for freeway-to-arterial interchange intersections of LOS "D", consistent with the County's stated threshold. The City of Jurupa Valley utilizes the County's thresholds. As such, LOS "D" is considered to be the limit of acceptable traffic operations during the peak hour at the freeway-to-arterial interchange intersections maintained by Caltrans.

2.5 THRESHOLDS OF SIGNIFICANCE

This section outlines the significance criteria used in this analysis relating to roadway system impacts. The Criteria are based on California Environmental Quality Act (CEQA).

According to CEQA guidelines, a project is considered to cause a significant impact to the transportation system if it:

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths and mass transit.
- Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the County congestion management agency for designated roadway or highways.
- Conflicts with adopted policies or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

The City of Jurupa Valley uses the County of Riverside protocol for determining the significance of traffic impacts. Based on the County of Riverside traffic study guidelines, a "significant" direct traffic impact under CEQA occurs when the addition of project traffic as defined by the EAP (2017) scenario causes an intersection that operates at an acceptable level of service under Existing (2012) traffic conditions (i.e., LOS "D" or better) to fall to an unacceptable level of service (i.e., LOS "E" or "F"). Therefore, EAP (2017) traffic conditions are compared to Existing (2012) traffic conditions to identify significant project-related impacts according to the following criteria:

- If an intersection is projected to operate at an acceptable level of service (i.e., LOS “D” or better) under Existing (2012) traffic conditions and the addition of project traffic, as measured by 50 or more peak hour trips, is expected to cause the intersection to operate at an unacceptable level of service (i.e., LOS “E” or “F”), the impact is considered a significant direct impact.
- If an intersection is projected to operate at an unacceptable level of service (i.e., LOS “E” or “F”) without the project, and the project contributes 50 or more peak hour trips, the impact is considered a significant direct impact.

As noted previously, the E+P analysis has been provided for informational purposes only; therefore, improvements have not been provided for the E+P analysis scenario. However, the E+P results can also be utilized to also assess significant project-related impacts. It is important to note that the analysis results for E+P traffic conditions are similar to the findings for EAP (2017) traffic conditions.

A significant cumulative impact is identified when a facility is projected to operate below the level of service standards due to cumulative future traffic AND a project-related traffic increase as measured by 50 or more peak hour trips. Cumulative traffic impacts are created as a result of a combination of the proposed project together with other future developments contributing to the overall traffic impacts requiring additional improvements to maintain acceptable level of service operations with or without the project.

A project’s contribution to a cumulatively significant impact can be reduced to less-than-significant if the Project is required to implement or fund improvements designed to alleviate the potential cumulative impact. If full funding of future cumulative improvements is not reasonably assured, a temporary unmitigated cumulative impact may occur until the needed improvement is fully funded and constructed.

2.6 PROJECT FAIR SHARE CALCULATION METHODOLOGY

In cases where this TIA identifies that the proposed Project would have a significant cumulative impact to a roadway facility, and the recommended mitigation measure is a fair share monetary contribution, the following methodology was applied to determine the fair share contribution. A project’s fair share contribution at an off-site study area intersection is determined based on the following equation, which is the ratio of project traffic to new traffic, and new traffic is total future traffic subtracts existing traffic:

$$\text{Project Fair Share \%} = \text{Project Traffic} / (\text{Total Traffic} - \text{Existing Traffic})$$

The project fair share contribution calculations are presented in Section 9 *Local and Regional Funding Mechanisms* of this TIA.

3.0 AREA CONDITIONS

This section provides a summary of the existing circulation network, the County of Riverside General Plan Circulation Network, and a review of existing peak hour intersection operations analysis and traffic signal warrants.

3.1 EXISTING CIRCULATION NETWORK

The study area includes a total of sixteen (16) existing and future intersections as shown on Exhibit 1-2. Of these sixteen (16) intersections, the existing study area circulation network includes thirteen (13) intersections analysis locations shown on Table 1-1; however, the intersection of Hamner Avenue at “A” Street was analyzed for Horizon Year (2035) traffic conditions only. As such, a total of twelve (12) existing study area intersections were analyzed for Existing (2012) traffic conditions. The remaining three (3) intersections in the study area are future planned intersections (future interchange at the I-15 Freeway and Schleisman Road and a Project driveway) that do not currently exist.

Exhibit 3-1 illustrates the study area intersections located near the proposed Project and identifies the number of through traffic lanes for existing roadways and intersection traffic controls.

3.2 COUNTY OF RIVERSIDE GENERAL PLAN CIRCULATION ELEMENT

As previously noted, the Project site is located within the City. However, the City has not yet adopted a General Plan. As such, the County of Riverside’s General Plan Circulation Element has been utilized for the purposes of this analysis. Exhibit 3-2 shows the County of Riverside General Plan Circulation Element, and Exhibit 3-3 illustrates the County of Riverside General Plan roadway cross-sections.

3.3 TRANSIT SERVICE

The study area is currently served by the Riverside Transit Agency (RTA) with bus services along Hamner Avenue, Limonite Avenue, Pats Ranch Road, 68th Street and Citrus Street via Route 3. The transit service for Route 3 is illustrated on Exhibit 3-4. There is currently a transfer point on 68th Street at Pats Ranch Road for Route 3. Route 29, which provides bus service along Hamner Avenue, Limonite Avenue, 68th Street and Pats Ranch Road is illustrated on Exhibit 3-5. There is currently a transfer point for Route 29 located at Pats Ranch Road at 65th Street in close proximity to the proposed Project. Both of these existing RTA routes could potentially serve future residents within the Project.

3.4 EXISTING TRAFFIC COUNTS

The AM peak hour traffic volumes were determined by counting traffic volumes in the two hour period between 7:00 and 9:00 AM on February 8, 2012 and May 17, 2012. Similarly, the PM peak hour traffic

EXISTING NUMBER OF THROUGH LANES AND INTERSECTION CONTROLS

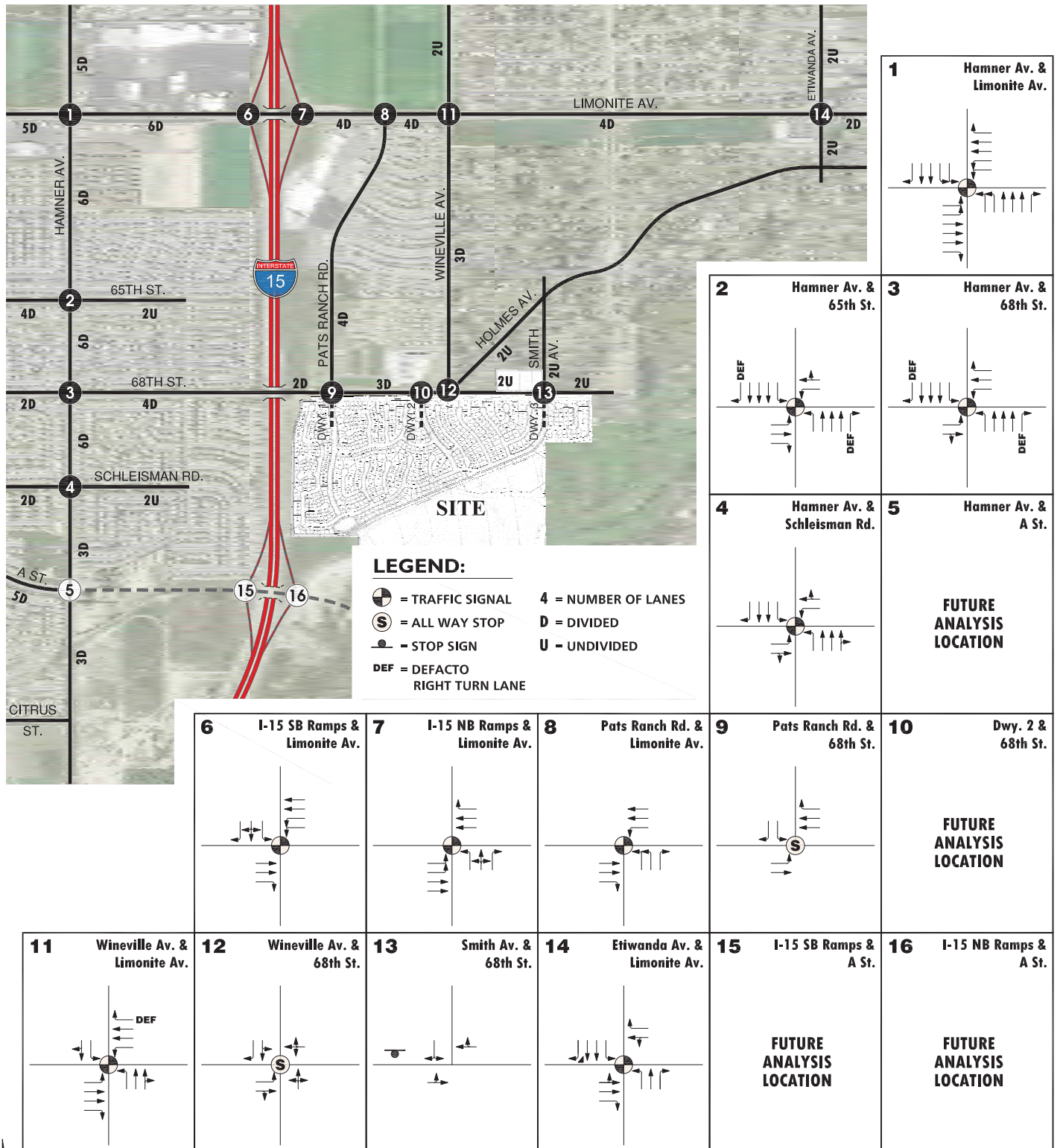
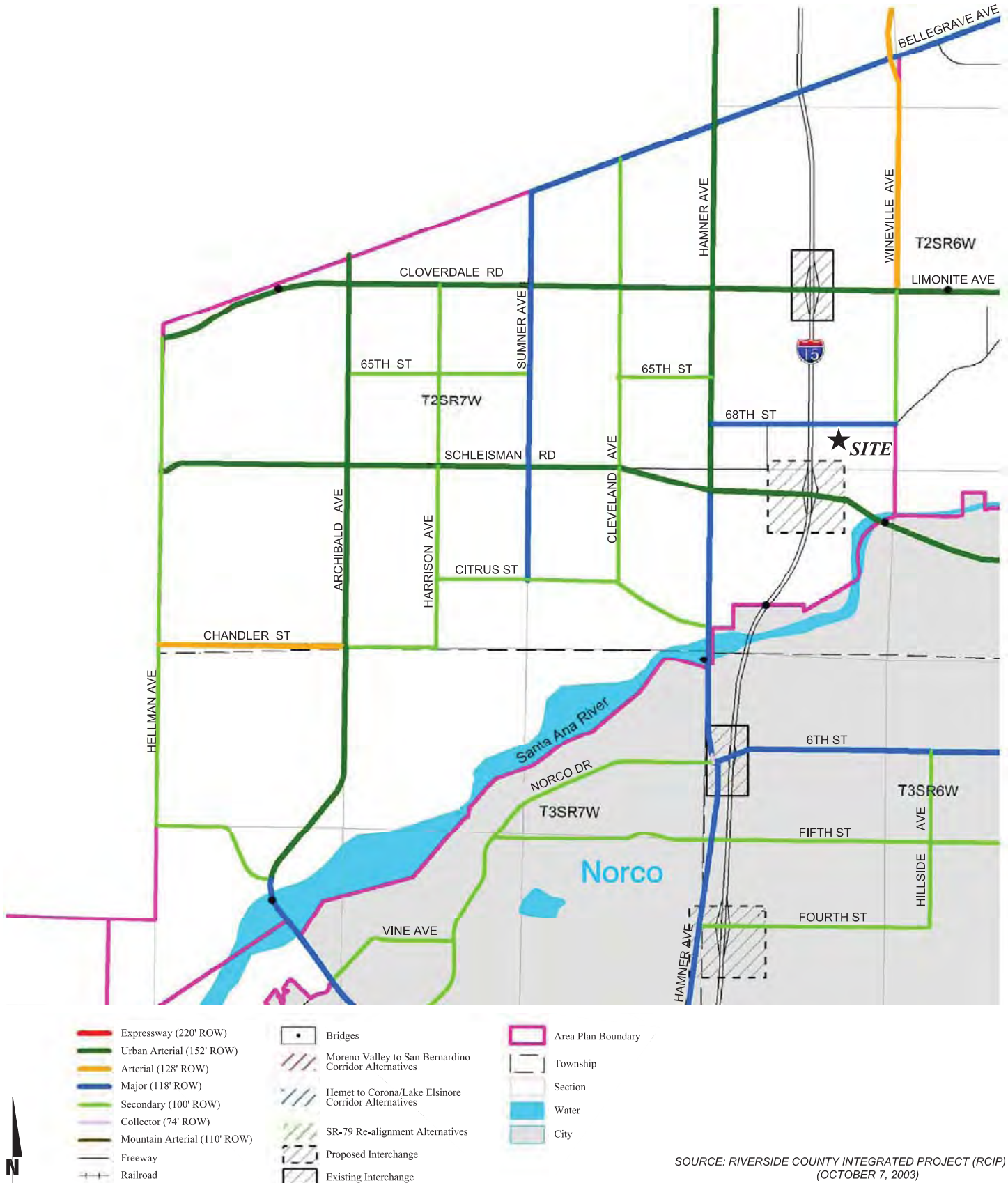


EXHIBIT 3-2

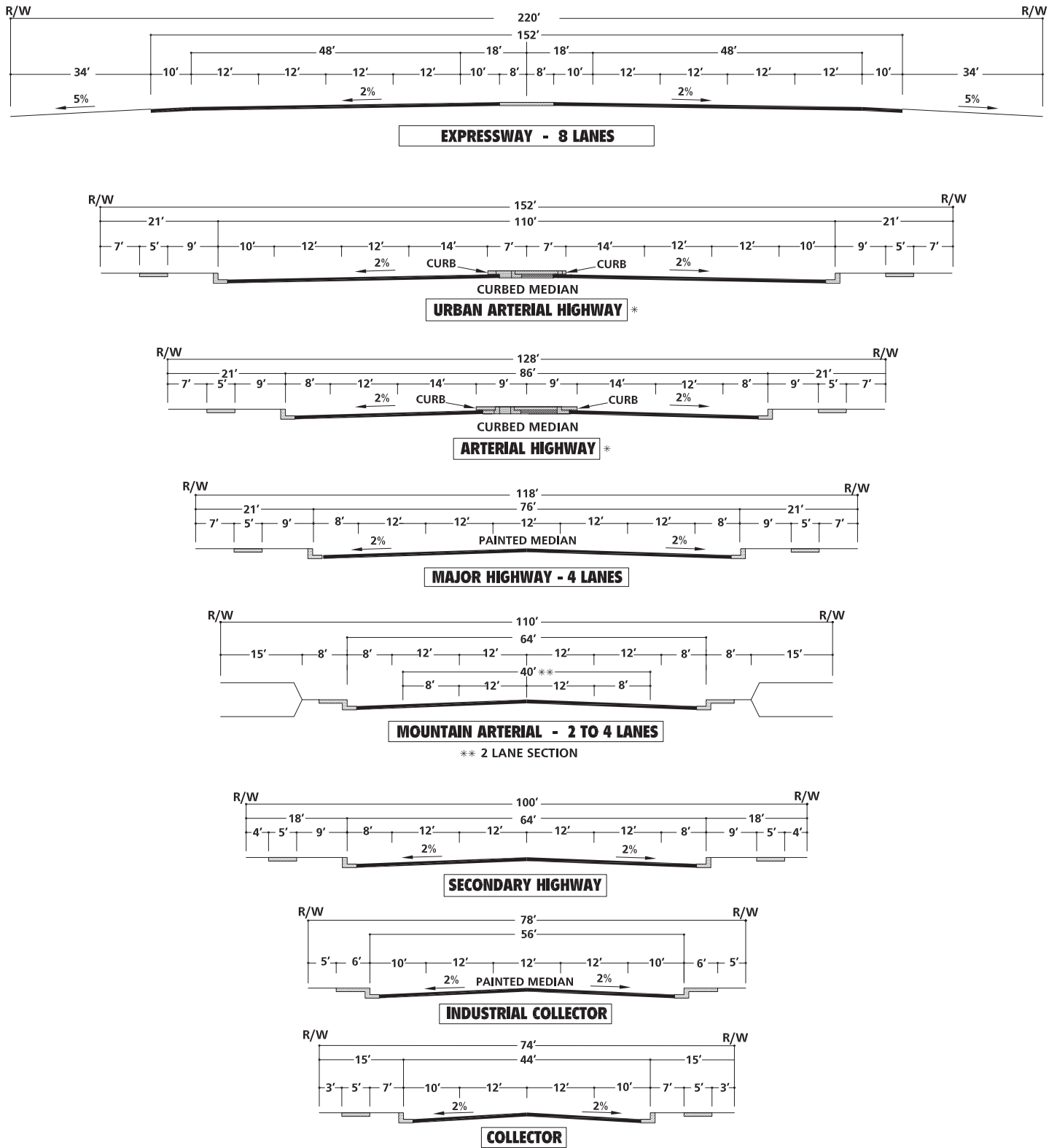
RIVERSIDE COUNTY GENERAL PLAN CIRCULATION ELEMENT



SOURCE: RIVERSIDE COUNTY INTEGRATED PROJECT (RCIP)
(OCTOBER 7, 2003)

EXHIBIT 3-3

RIVERSIDE COUNTY GENERAL PLAN ROADWAY CROSS-SECTIONS

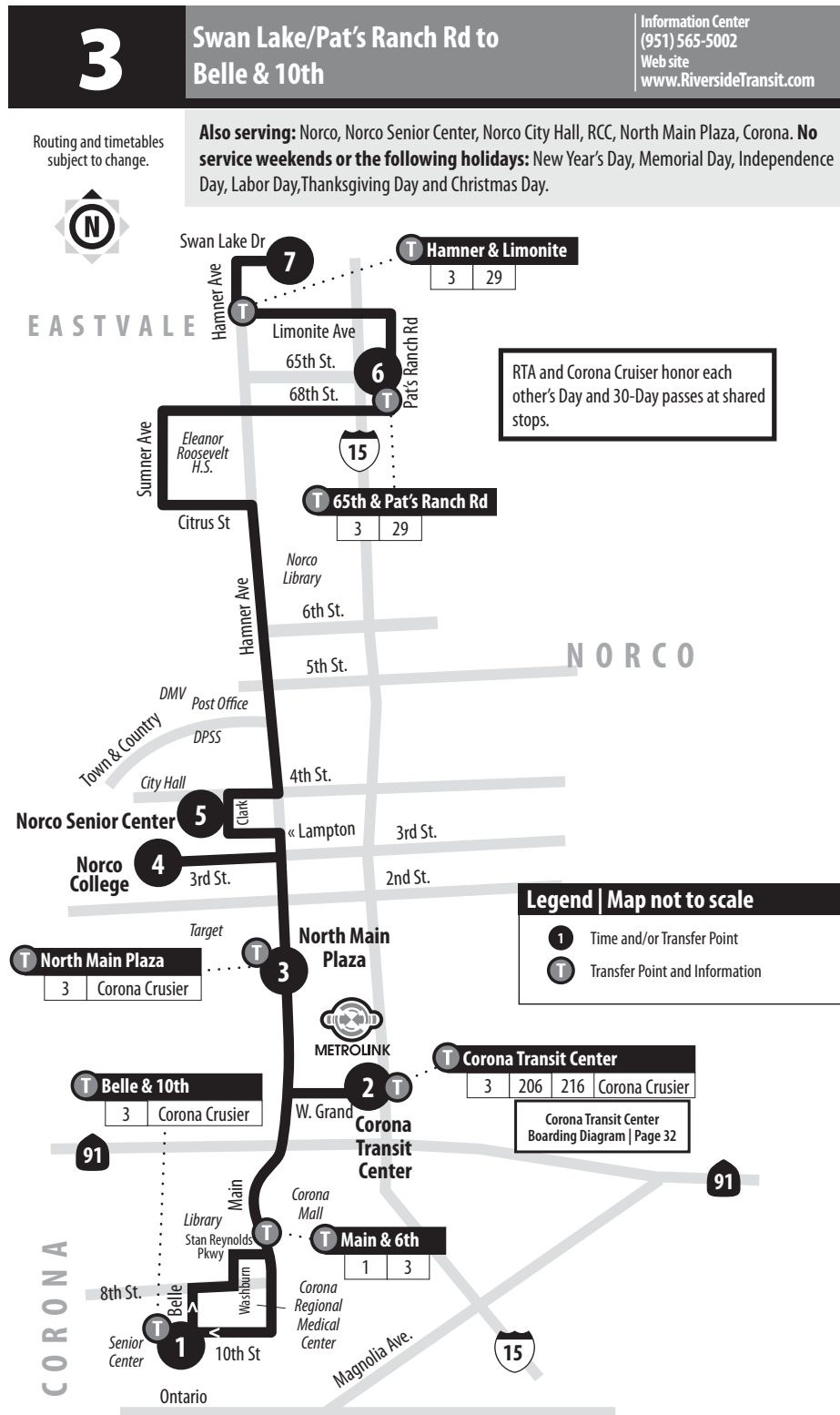


* IMPROVEMENTS MAY BE RECONFIGURED TO ACCOMMODATE EXCLUSIVE TRANSIT LANES OR ALTERNATIVE LANE ARRANGEMENTS. ADDITIONAL RIGHT OF WAY MAY BE REQUIRED AT INTERSECTIONS TO ACCOMMODATE ULTIMATE IMPROVEMENTS FOR STATE HIGHWAYS. SHALL CONFORM TO CALTRANS DESIGN STANDARDS.

NOT TO SCALE

SOURCE: COUNTY OF RIVERSIDE

EXISTING TRANSIT SERVICES: RTA ROUTE 3



EXISTING TRANSIT SERVICES: RTA ROUTE 29

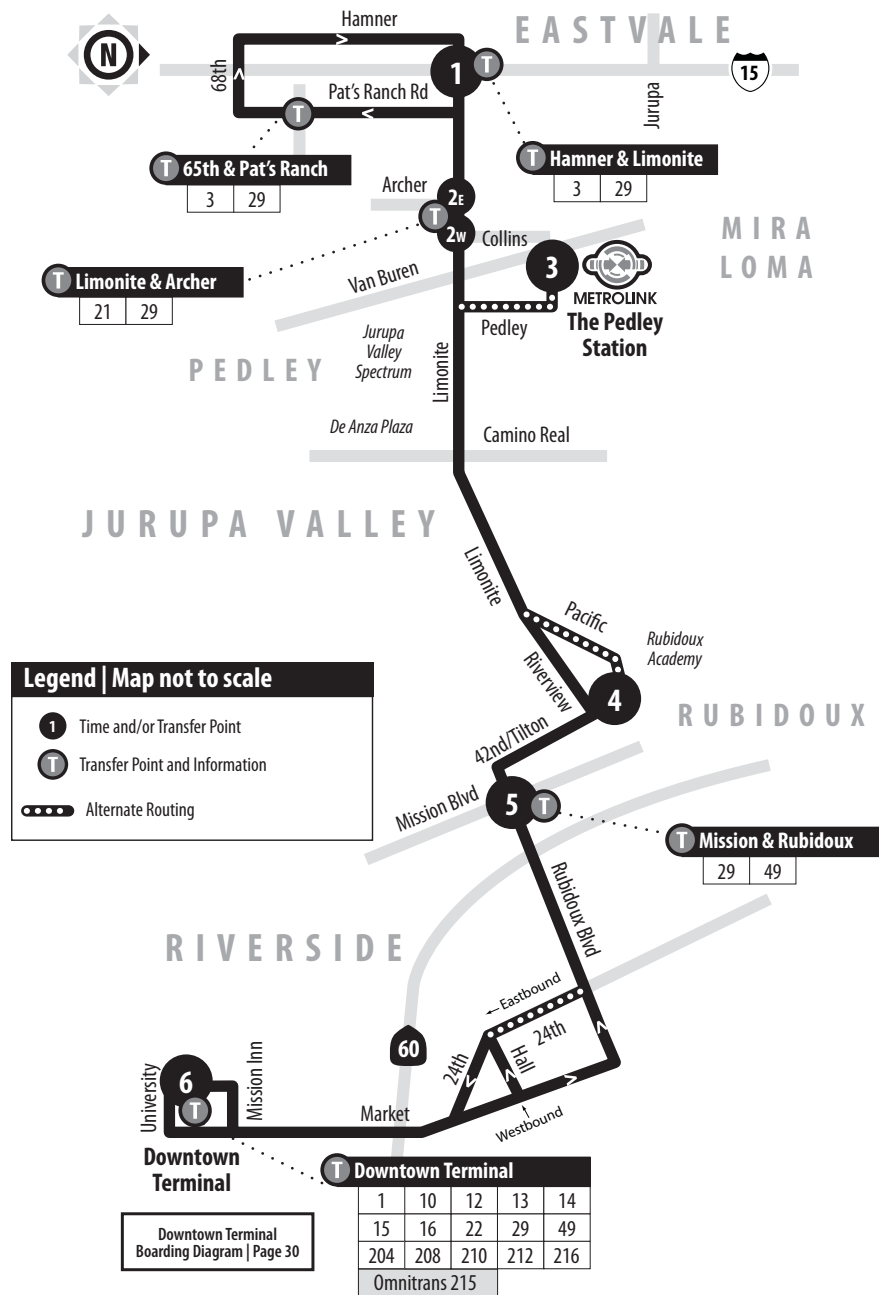
29

Downtown Terminal to Hamner & Limonite

Information Center
(951) 565-5002
Web site
www.RiversideTransit.com

Routing and timetables subject to change.

Also serving: Belltown, Downtown Rubidoux, Rubidoux Academy, De Anza Plaza, Vons Shopping Center. **No service on:** New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day and Christmas Day.



volumes were identified by counting traffic volumes in the two hour period from 4:00 to 6:00 PM on February 8, 2012 and May 17, 2012. The February 8, 2012 (Wednesday) and May 17, 2012 (Thursday) count data are representative of typical weekday peak hour traffic conditions in the study area. There were no observations made in the field that would indicate atypical traffic conditions on this date, such as construction activity or detour routes. It should be noted that schools were also in session and operating on normal schedules at the time these counts were conducted. The raw manual peak hour turning movement traffic count data sheets are included in Appendix “3.1”.

Existing (2012) average daily traffic (ADT) volumes on arterial highways throughout the study area are shown on Exhibit 3-6. Existing (2012) ADT volumes are based upon factored intersection peak hour counts collected by Urban Crossroads, Inc. using the following formula for each intersection leg:

$$\text{PM Peak Hour (Approach Volume + Exit Volume)} \times 12 = \text{Leg Volume}$$

Existing (2012) AM and PM peak hour intersection volumes are shown on Exhibits 3-7 and 3-8, respectively.

3.5 EXISTING CONDITIONS INTERSECTION OPERATIONS ANALYSIS

Existing (2012) peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2.2 *Intersection Capacity Analysis* of this report. The intersection operations analysis results are summarized in Table 3-1. The Existing (2012) conditions operations analysis show that the following intersection location experiences unacceptable LOS (i.e., LOS “E” or LOS “F”) during one of the peak hours:

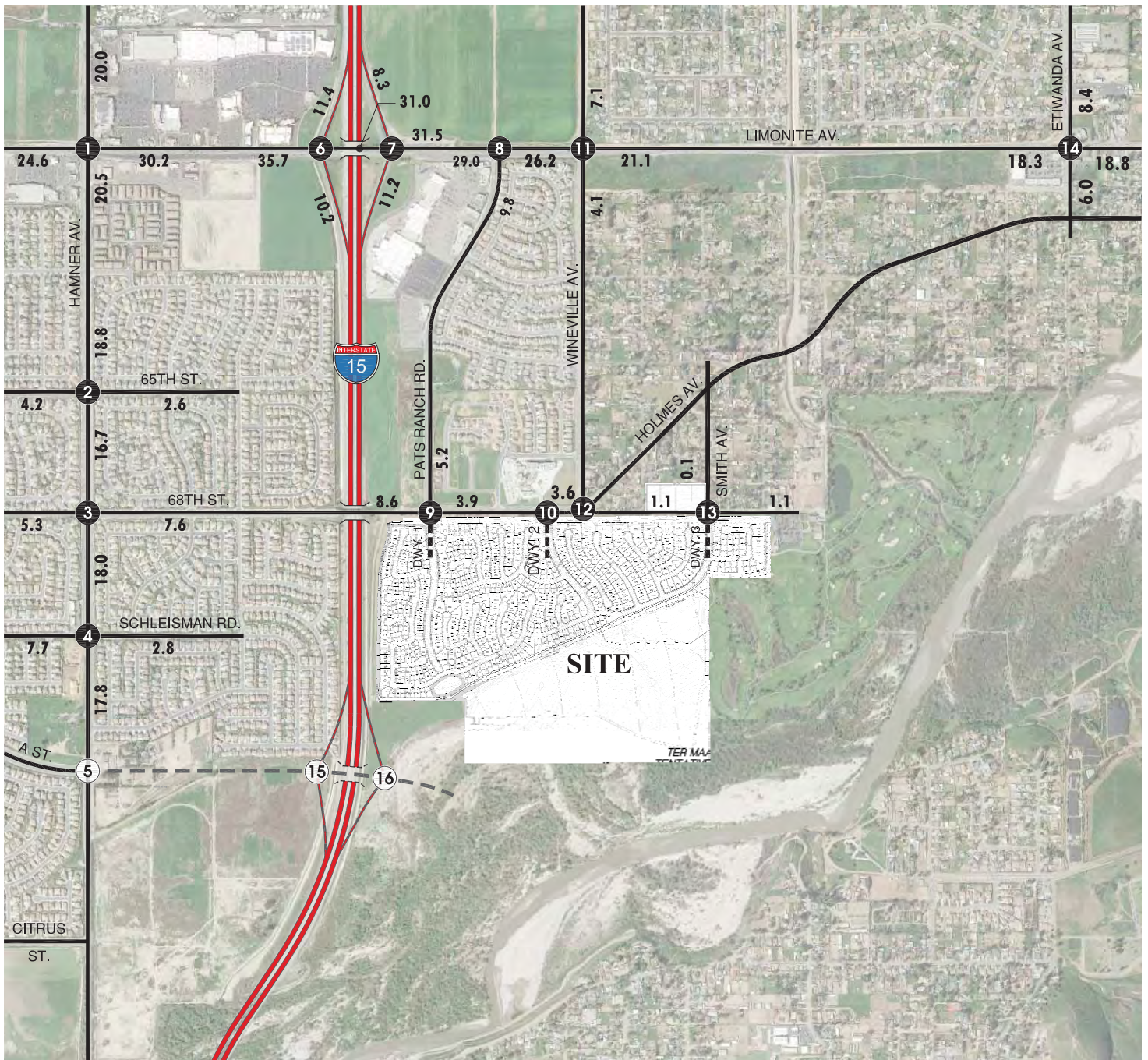
ID	I L	L
14	Etiwanda Av. / Limonite Av. – LOS “F” AM Peak Hour; LOS “E” PM Peak Hour	Jurupa Valley

The intersection operations analysis worksheets are included in Appendix “3.2” of this TIA.

3.6 EXISTING CONDITIONS TRAFFIC SIGNAL WARRANTS ANALYSIS

Traffic signal warrants for Existing traffic conditions are based on existing peak hour intersection volumes. For Existing conditions, a traffic signal does not appear to be warranted at any of the unsignalized study area intersections (see Appendix “3.3”).

EXHIBIT 3-6
EXISTING (2012)
AVERAGE DAILY TRAFFIC (ADT)



LEGEND:

10.0 = VEHICLES PER DAY (1000's)



EXHIBIT 3-7

EXISTING (2012)

AM PEAK HOUR INTERSECTION VOLUMES

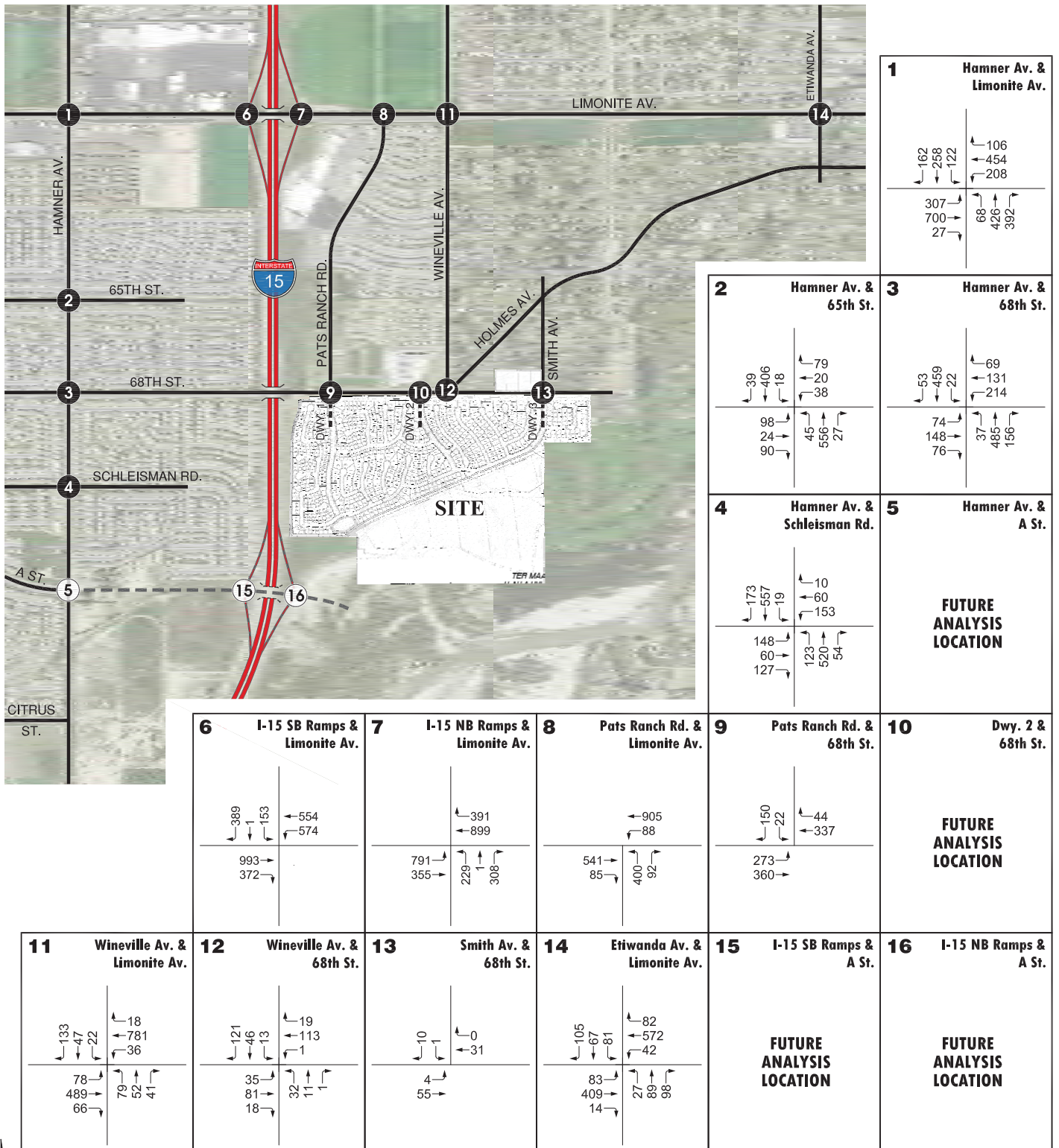
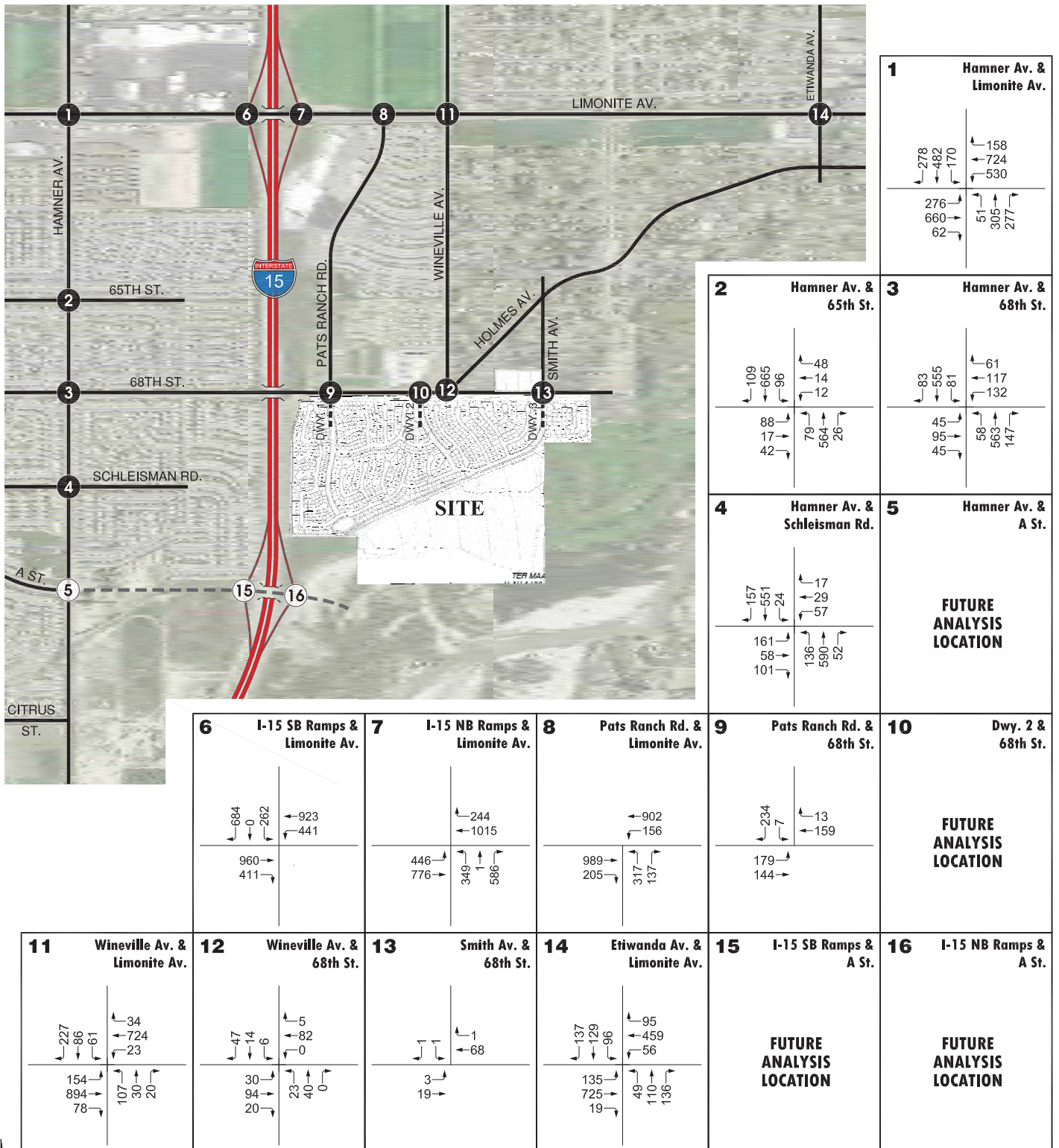


EXHIBIT 3-8

EXISTING (2012)

PM PEAK HOUR INTERSECTION VOLUMES



#	Intersection	Traffic Control ³	Intersection Approach Lanes ¹												Delay ² (secs.)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
1	Hamner Av. / Limonite Av.	TS	2	3	1	2	2	1	2	3	1	2	2	1	35.5	40.2	D	D
2	Hamner Av. / 65th St.	TS	1	3	d	1	3	d	1	1	1	1	1	0	29.9	30.6	C	C
3	Hamner Av. / 68th St.	TS	1	3	d	1	3	d	1	1	0	1	1	1	35.1	30.4	D	C
4	Hamner Av. / Schleisman Rd.	TS	1	3	0	1	2	1	1	1	0	1	1	0	38.3	35.9	D	D
5	Hamner Av. / "A" St.		Future Analysis Location															
6	I-15 SB Ramps / Limonite Av.	TS	0	0	0	1	1	1	0	2	1	2	2	0	21.7	21.6	C	C
7	I-15 NB Ramps / Limonite Av.	TS	1	1	1	0	0	0	2	2	0	0	2	1	35.0	25.6	D	C
8	Pats Ranch Rd. / Limonite Av.	TS	2	0	1	0	0	0	0	2	1	1	2	0	12.9	12.9	B	B
9	Pats Ranch Rd. / 68th St.	AWS	0	0	0	1	0	1	1	1	0	0	2	1	28.3	10.7	D	B
10	Driveway 2 / 68th St.		Future Analysis Location															
11	Wineville Av. / Limonite Av.	TS	1	2	0	1	1	0	1	2	1	1	2	d	31.7	35.5	D	D
12	Wineville Av. / 68th St.	AWS	0	1	0	0	1	1	1	1	0	0	1	0	10.1	8.5	B	A
13	Smith Av. / 68th St.	CSS	0	0	0	0	1	0	0	1	0	0	1	0	8.6	8.8	A	A
14	Etiwanda Av. / Limonite Av.	TS	1	1	1	1	2	1>>	0	2	1	0	1	1	80.3	56.2	F	E
15	I-15 SB Ramps / Schleisman Rd.		Future Analysis Location															
16	I-15 NB Ramps / Schleisman Rd.		Future Analysis Location															

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 Phasing; >> = Free-Right Turn Lane; d= Defacto Right Turn Lane

² Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. The I-15 Ramp Locations have been analyzed utilizing the Synchro software.

³ TS = Traffic Signal; AWS = All Way Stop; CSS = Cross-street Stop

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4.0 PROJECTED FUTURE TRAFFIC

This section presents the traffic volumes estimated to be generated by the Project, as well as the Project's trip assignment onto the study area roadway network. The Project is located south of 68th Street between the I-15 Freeway and Dana Avenue in the recently incorporated City of Jurupa Valley, and is proposed to consist of 466 detached single family residential dwelling units, a 5,000 square foot community facility site and a 10.0-acre community park. For the purposes of this traffic study, the Project is assumed to be built and fully occupied by Year 2017.

The Project is proposed to have access on 68th Street via an extension of Pats Ranch Road, Driveway 2, and an extension of Smith Avenue. All Project access points are proposed to be full-access. Regional access to the Project site will be provided by the I-15 Freeway (located to the northwest) via Limonite Avenue and by the I-15 Freeway via the future extension of Schleisman Road under Horizon Year (2035) traffic conditions.

4.1 PROJECT TRIP GENERATION

Trip generation represents the amount of traffic which is both attracted to and produced by a development. Determining traffic generation for a specific project is therefore based upon forecasting the amount of traffic that is expected to be both attracted to and produced by the specific land uses being proposed for a given development.

Trip generation rates used to estimate Project traffic are shown in Table 4-1 and a summary of the Project's trip generation is shown in Table 4-2. The trip generation rates are based upon data collected by the Institute of Transportation Engineers (ITE) and presented in ITE's most recent edition of *Trip Generation*, (8th Edition, 2008).

Project daily and peak hour trip generation is shown in Table 4-2. The Project is anticipated to generate a net total of approximately 4,476 trip-ends per day with 352 AM peak hour trips and 473 PM peak hour trips.

4.2 PROJECT TRIP DISTRIBUTION

Trip distribution is the process of identifying the probable destinations, directions or traffic routes that will be utilized by Project traffic. The potential interaction between the planned land uses and surrounding regional access routes are considered, to identify the route where the Project traffic would distribute. The Opening Year (2017) Project trip distribution was developed based on anticipated travel patterns to and from the Project site for the traffic associated with the proposed residential use. The future Horizon Year (2035) Project trip distribution was developed based on a "select zone" model run from the Riverside County Transportation and Analysis Model (RivTAM) 2035. The total volume on each roadway was divided by the

T 41
P T G R 1

Land Use	Units ²	ITE LU Code	AM Peak Hour			PM Peak Hour			Daily
			Inbound	Outbound	Total	Inbound	Outbound	Total	
Single Family Detached	DU	210	0.19	0.56	0.75	0.64	0.37	1.01	9.57
Community Facility	TSF	495	0.99	0.63	1.62	0.54	0.91	1.45	22.88
Passive Park ³	AC	-- ³	0.10	0.10	0.21	0.07	0.07	0.14	1.59

¹ Trip Generation Source: Institute of Transportation Engineers (ITE), Trip Generation Manual, Eighth Edition (2008) (Average Rates).

² DU = Dwelling Units; TSF = Thousand Square Feet; AC = Acres.

³ Source for AM and PM peak hour percentages of daily and AM/PM in and out splits: (Not So) Brief Guide of Vehicular Traffic Generation Rates for the San Diego Region, April 2002. Daily trip rate is per the ITE Trip Generation Manual.

T 42
P T G S

Land Use	Quantity	Units ¹	AM Peak Hour			PM Peak Hour			Daily
			Inbound	Outbound	Total	Inbound	Outbound	Total	
Single Family Detached	466	DU	89	261	350	298	172	471	4,460
Community Facility	5.0	TSF	5	3	8	3	5	7	114
Park	10.0	AC	1	1	2	1	1	2	16
AL			90	262	352	299	173	473	4,476

¹ DU = Dwelling Units; TSF = Thousand Square feet; AC = Acres.

total site traffic generation to indicate the percentage of Project traffic that would use each component of the regional roadway system in each relevant direction.

The Project Opening Year (2017) trip distribution pattern is graphically depicted on Exhibit 4-1 and the Project Horizon Year (2035) trip distribution is shown on Exhibit 4-2.

4.3 MODAL SPLIT

The traffic reducing potential of public transit, walking or bicycling have not been considered in this TIA. Essentially, the traffic projections are "conservative" in that these alternative travel modes might be able to reduce the forecasted traffic volumes.

4.4 PROJECT TRIP ASSIGNMENT

The assignment of traffic from the Project area to the adjoining roadway system is based upon the Project trip generation, trip distribution, and the arterial highway and local street system improvements that would be in place by the time of initial occupancy of the Project.

Based on the identified Project traffic generation and Opening Year (2017) trip distribution patterns, Project Opening Year (2017) average daily traffic (ADT) volumes for the weekday are shown on Exhibit 4-3. Project Opening Year (2017) AM and PM peak hour volumes are shown on Exhibits 4-4 and 4-5. Similarly, based on the identified Project traffic generation and Horizon Year (2035) trip distribution patterns, Project Horizon Year (2035) average daily traffic (ADT) volumes for the weekday are shown on Exhibit 4-6. Project Horizon Year (2035) AM and PM peak hour volumes are shown on Exhibits 4-7 and 4-8.

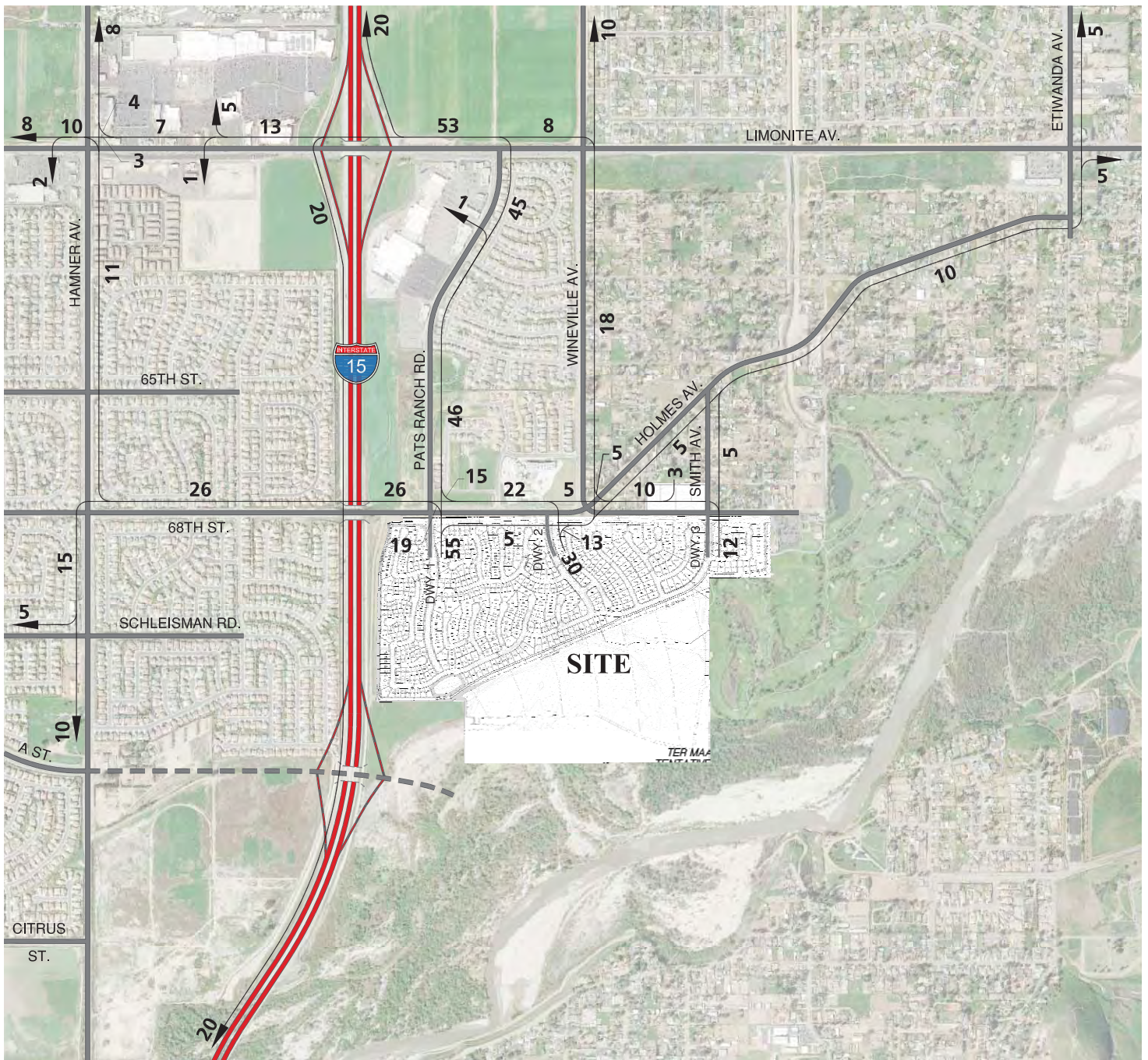
4.5 CONSTRUCTION TRAFFIC

Project construction activities are expected to occur from summer 2012 through 2017. Construction activity will begin with import of soil which will commence in Summer 2012 and last through June 2014. Grading activities are expected to occur from June 2013 through June 2014, Infrastructure construction is expected to occur from June 2014 and last through December 2014, Paving, Walls and Landscaping is expected to occur from January 2015 through September 2015, Building Construction and Painting is expected to occur from March 2015 through 2017.

Traffic operations during the proposed construction phase of the project may potentially result in traffic impacts related to construction employees, soil import, and import of construction materials, etc. It is anticipated that the following construction-related activities would generate traffic and may potentially result in construction-related traffic impacts:

- Employee trips

EXHIBIT 4-1
PROJECT OPENING YEAR (2017)
PROJECT TRIP DISTRIBUTION



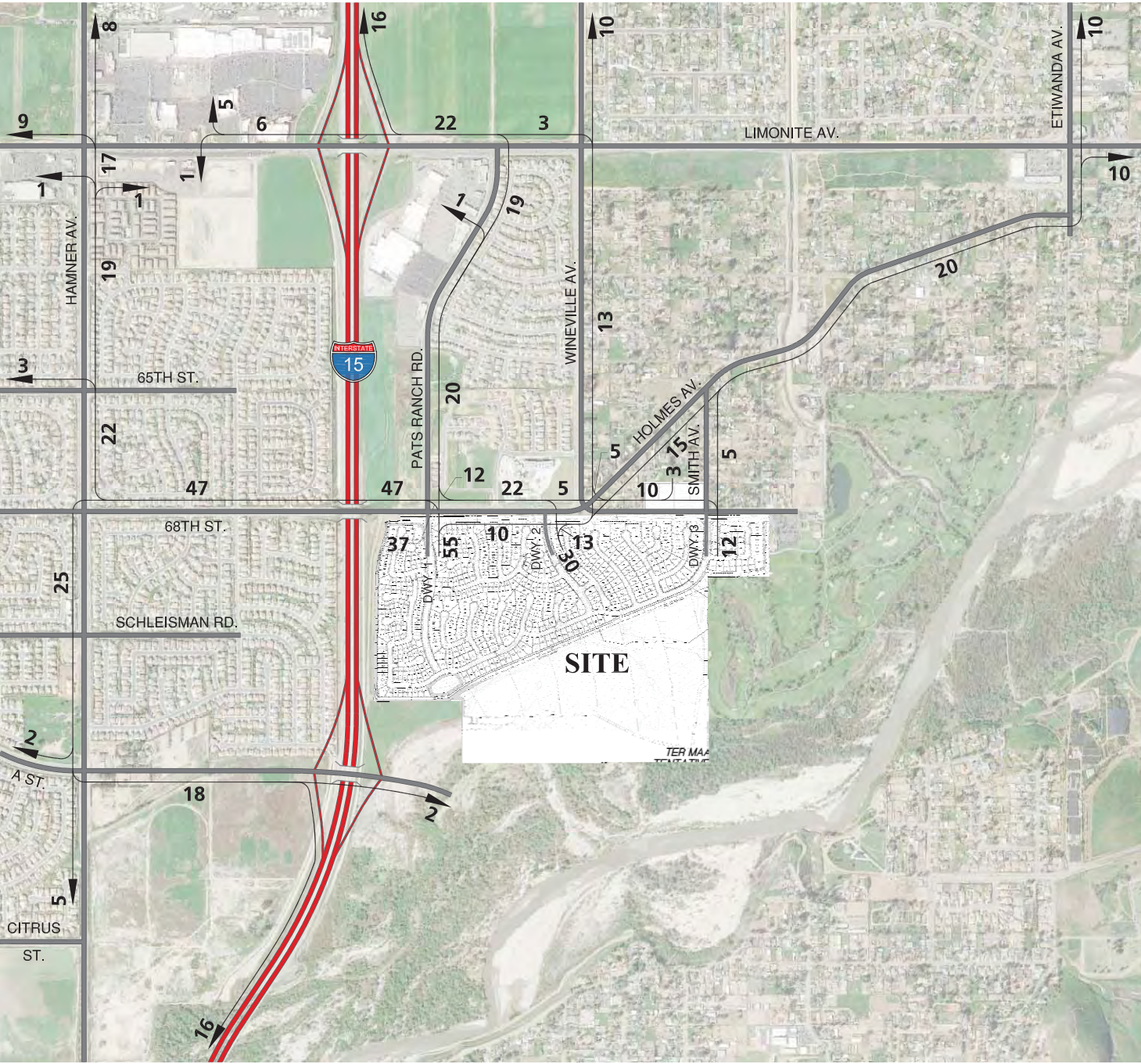
LEGEND:

10 = PERCENT TO/FROM PROJECT



EXHIBIT 4-2

PROJECT HORIZON YEAR (2035) PROJECT TRIP DISTRIBUTION



LEGEND:

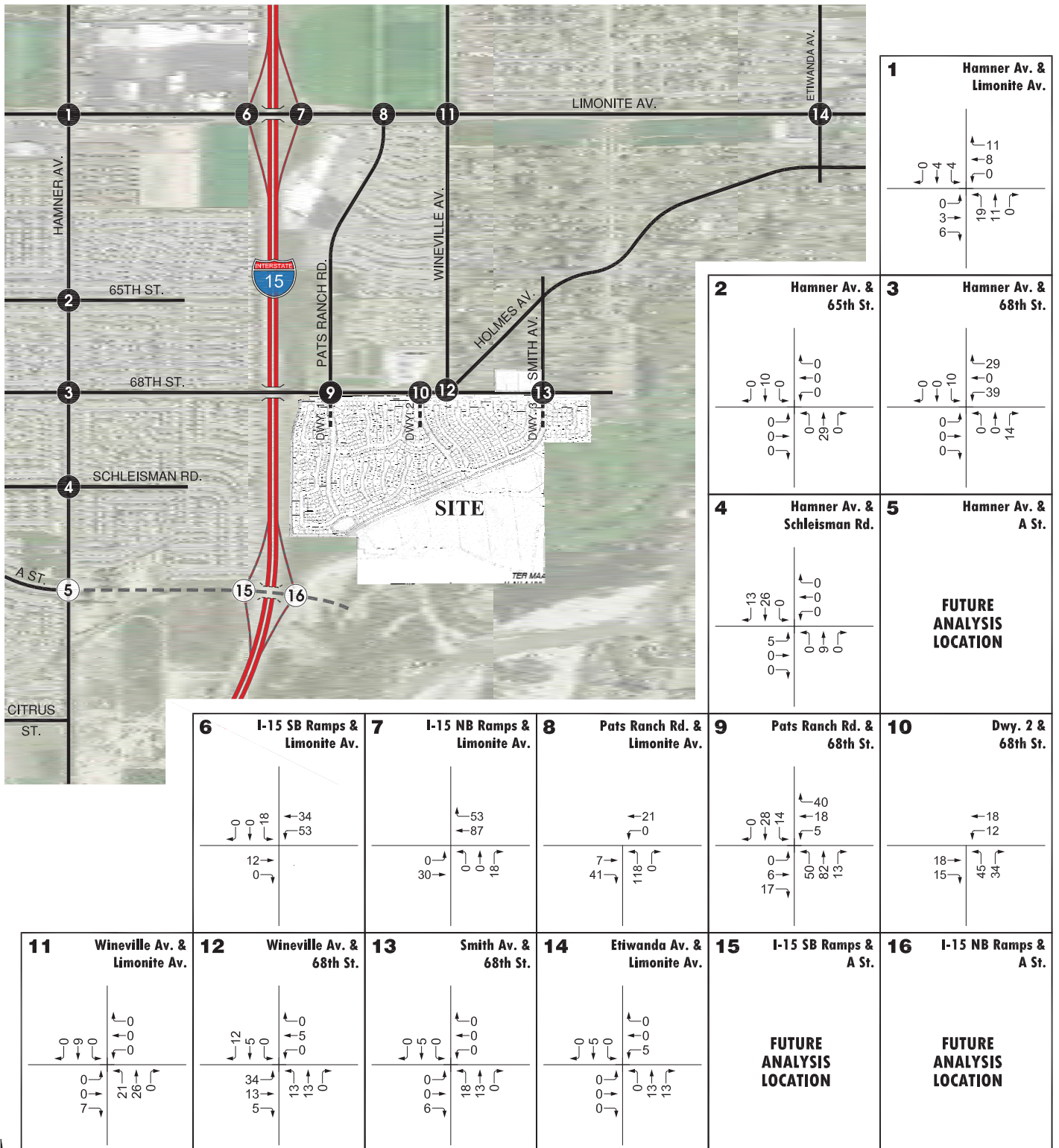
10 = PERCENT TO/FROM PROJECT



10.0 = VEHICLES PER DAY (1000's)



PROJECT OPENING YEAR (2017) AM PEAK HOUR INTERSECTION VOLUMES



PROJECT OPENING YEAR (2017) PM PEAK HOUR INTERSECTION VOLUMES

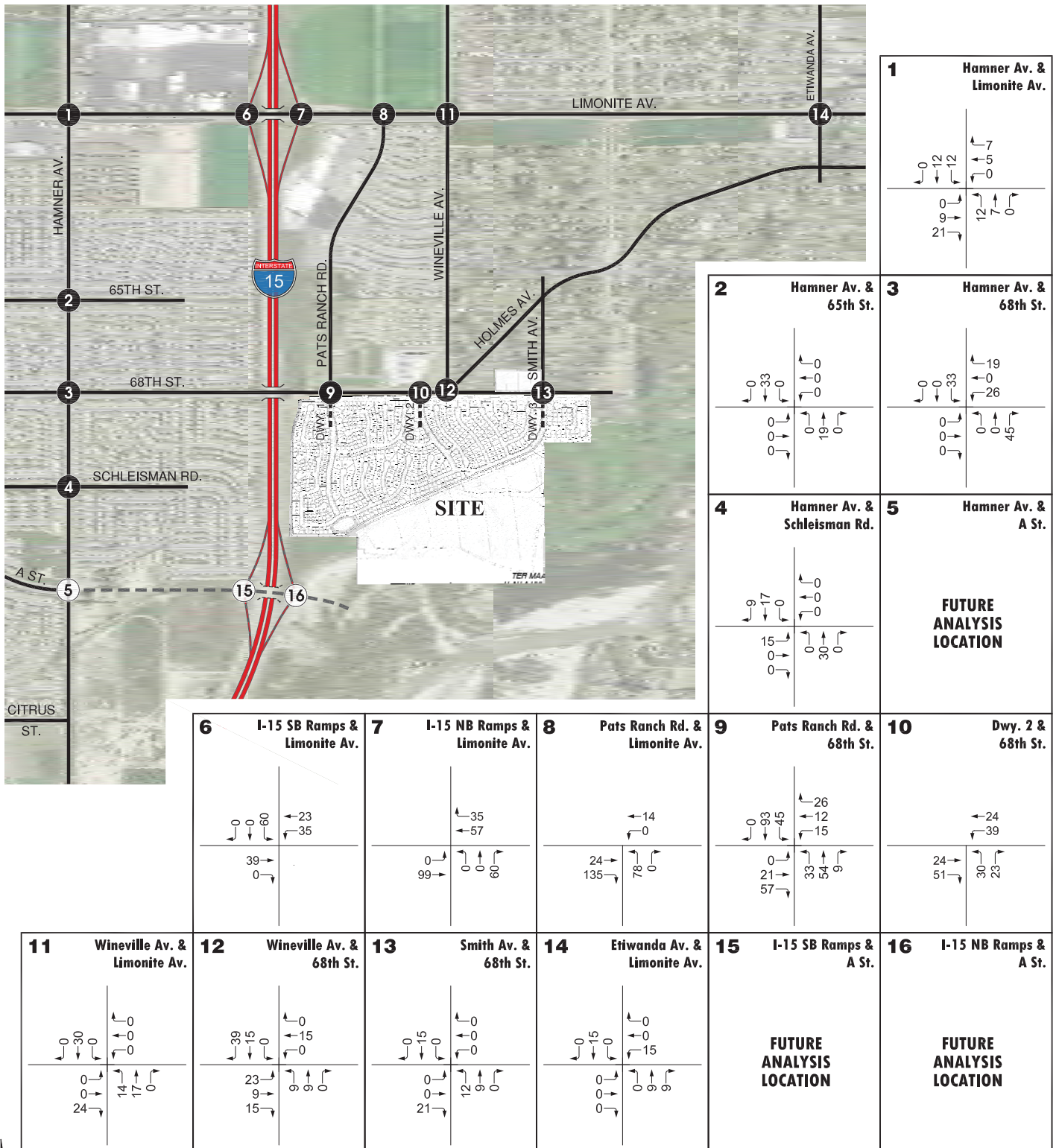
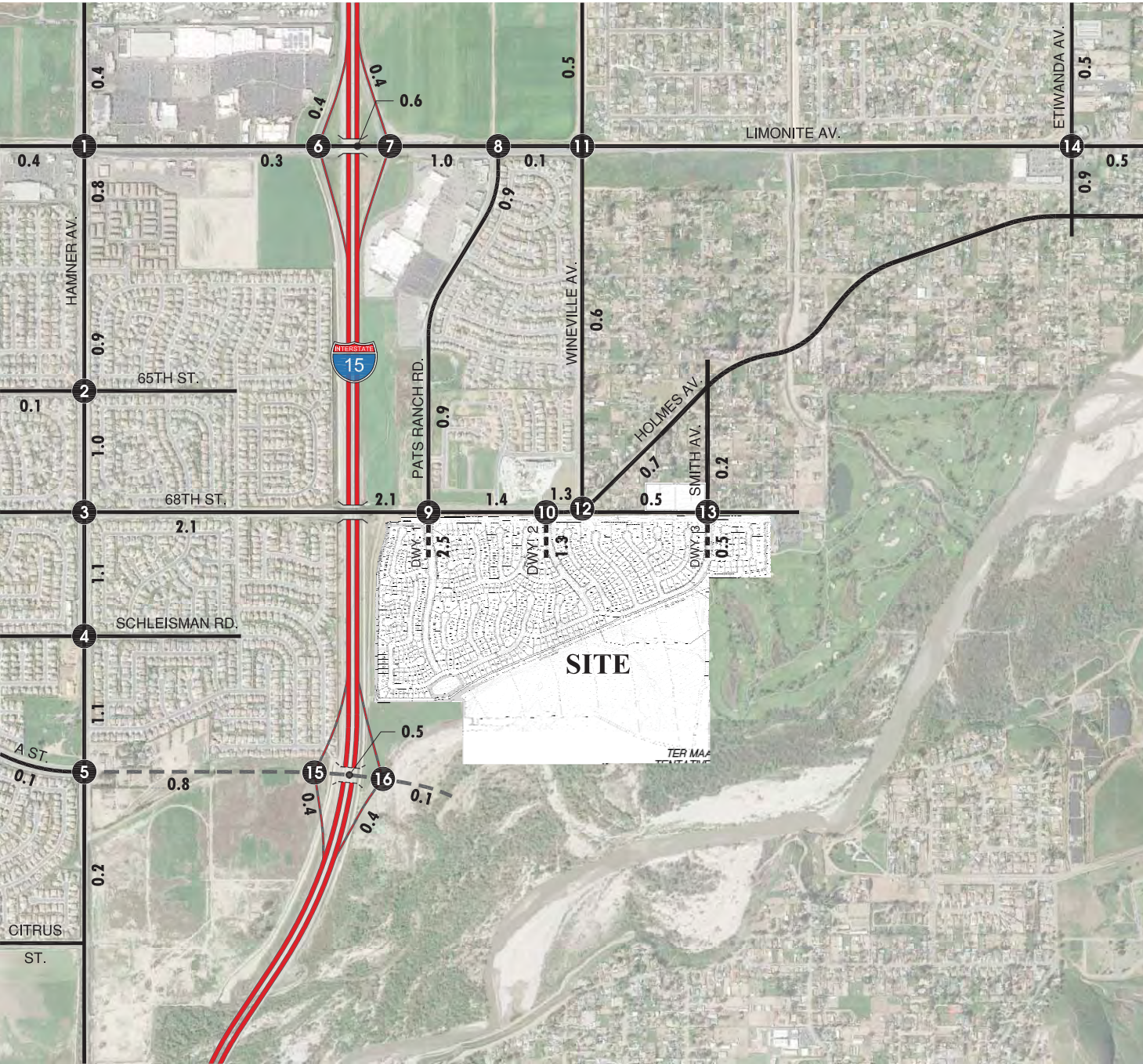


EXHIBIT 4-6

PROJECT HORIZON YEAR (2035)

AVERAGE DAILY TRAFFIC (ADT)



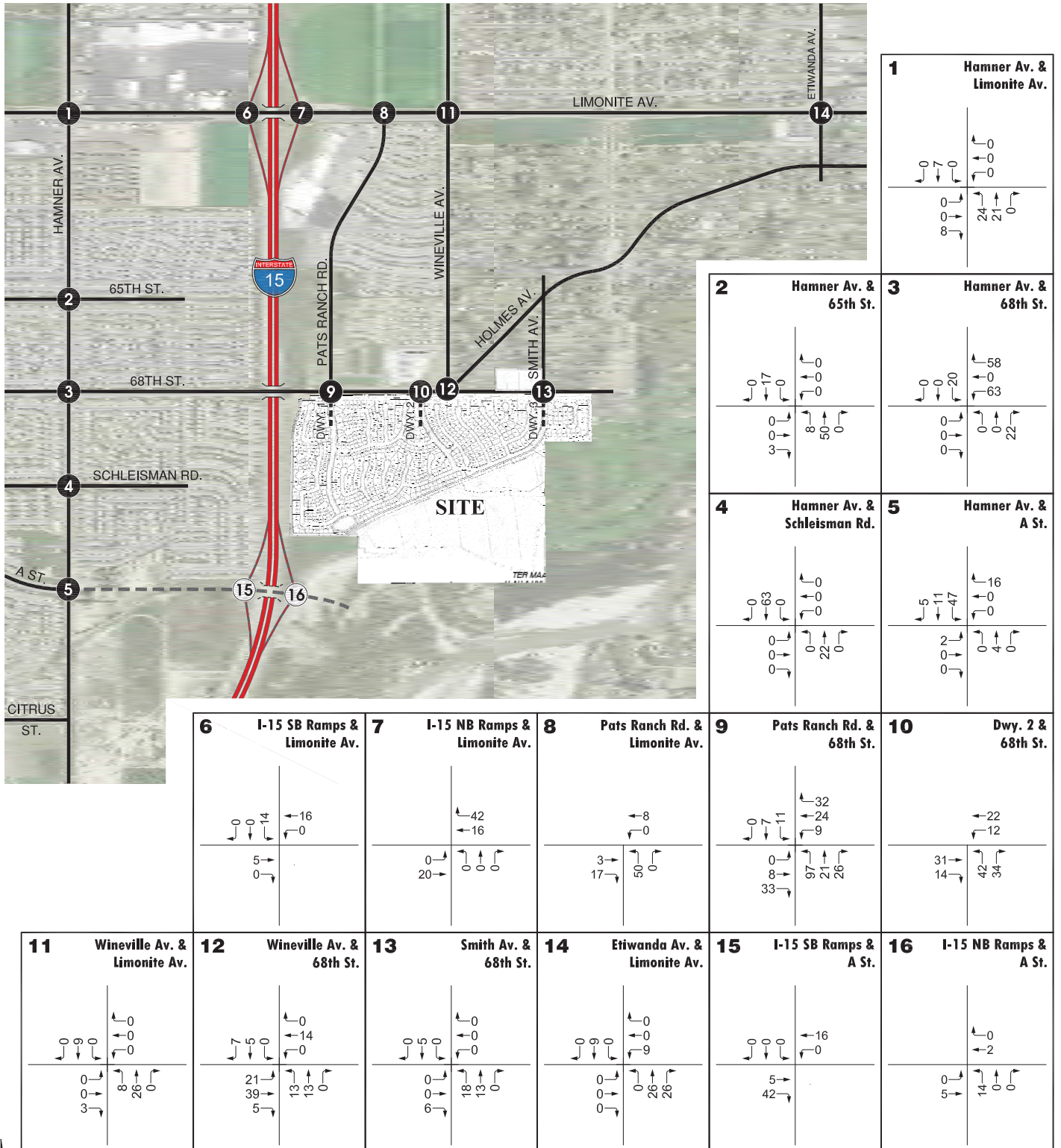
LEGEND:

10.0 = VEHICLES PER DAY (1000's)

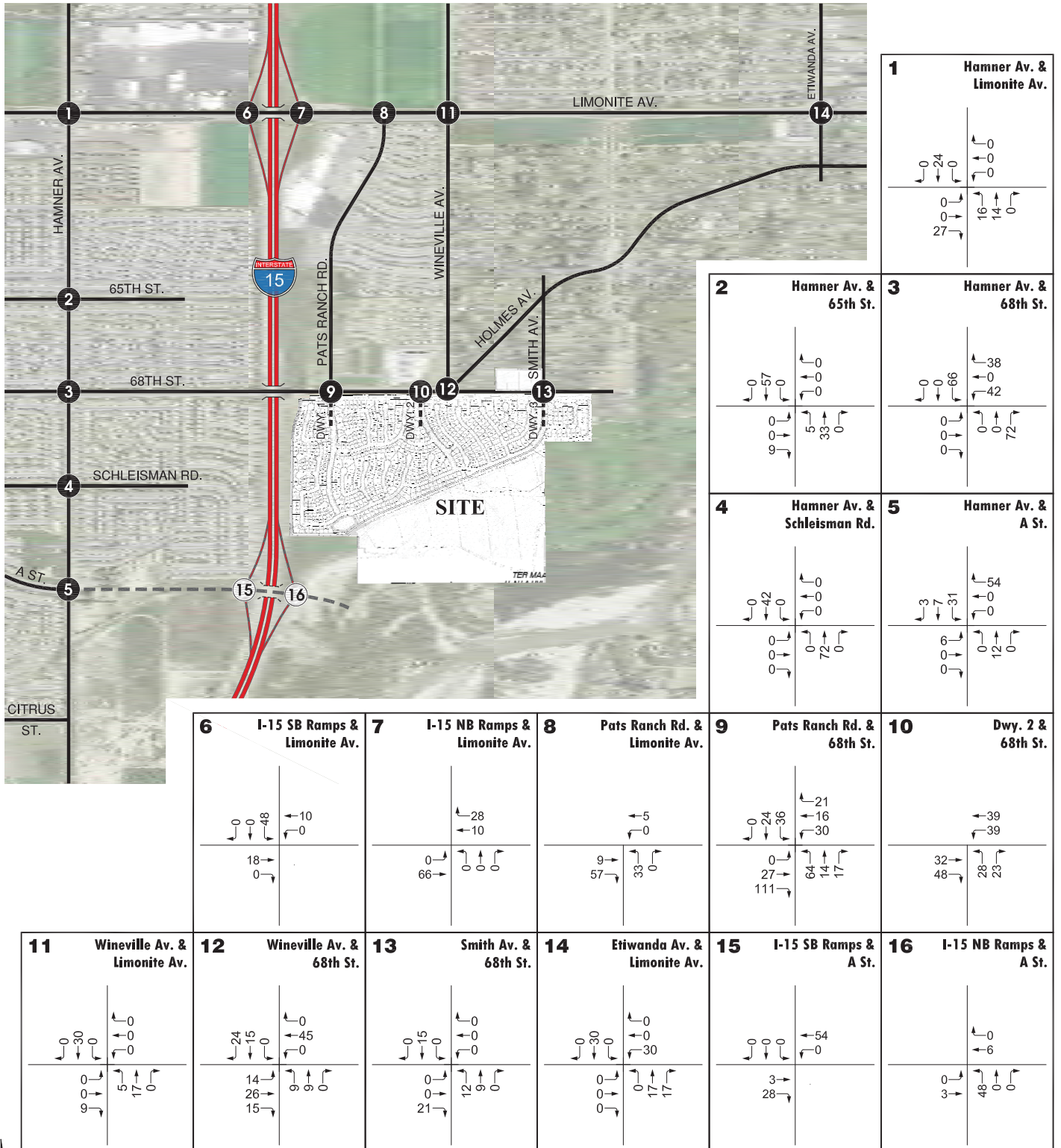
NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY

EXHIBIT 4-7

PROJECT HORIZON YEAR (2035) AM PEAK HOUR INTERSECTION VOLUMES



PROJECT HORIZON YEAR (2035) PM PEAK HOUR INTERSECTION VOLUMES



- Soil import
- Import of construction materials
- Use of heavy equipment

Each of the traffic generating activities listed above is discussed thoroughly in the subsequent sections. It has been assumed that construction activity will occur during the hours of 6:00 AM and 4:00 PM.

Traffic impacts from construction activity typically occur only when there are significant amounts of import/export of material that require a consistent flow of heavy trucks on a daily basis. To minimize potential traffic impacts the project has developed an import schedule to reduce the frequency and number of truck trips needed to bring necessary import material to the site on a daily basis. With the recommendations included in this construction traffic assessment, the potential traffic impacts resulting from employee trips, import of soil and construction materials, and heavy equipment delivery/pickup are “less-than-significant”.

4.5.1 EMPLOYEE TRIPS

Employee trips are estimated based on the number of employees estimated to be on-site throughout the various stages of construction. Each employee is assumed to drive to and from the construction site each day. It has been assumed that employees will arrive up to 30 minutes prior to the workday and will leave up to 30 minutes after the workday ends. It is estimated that approximately 10 to 34 employees will be expected during the various phases of construction activity. Initially, parking for employees and non-employee vehicles can be accommodated on-site near the construction staging area. Once the internal roadway network is constructed, employee parking can be accommodated curbside on-site.

It is anticipated that the majority of employees would arrive and depart from the site adjacent to the peak commute traffic periods (i.e., 7:00 AM – 9:00 AM and 4:00 PM – 6:00 PM) with a period of overlap. Employee trips are based on the number of employees estimated to be on site during different points throughout the project. The potential impacts resulting from construction-related parking and employee trips are considered less-than-significant.

4.5.2 SOIL AND IMPORT OF CONSTRUCTION MATERIALS

Construction of the Project will require the import of approximately 500,000 cubic yards of soil. It is estimated that 31 haul truck loads will be required per day for the duration of soil import activities. Each truck will generate one (1) inbound and one (1) outbound trip, accounting for a total of two (2) truck trips per load of material imported. Thus, a total of 62 haul trips (two-way) per day will be generated, which translates to less than 8 haul trips (two-way) per hour. In addition to soil import, there will be import of construction materials to and from the site. Import of construction materials is anticipated to consist of the importation of raw building materials, concrete, asphalt, etc

In order to minimize the impact of construction truck traffic to the surrounding roadway network, it is recommended that trucks utilize the most direct route between the site and the I-15 Freeway via Wineville Avenue to Limonite Avenue (for trips anticipated from the north) or Hamner Avenue to Limonite Avenue (for trips anticipated from the south). It is anticipated that the construction staging will be located off of 68th Street toward the westerly portion of the site. As such, the proposed construction access on 68th Street will provide the most direct access.

It is recommended that a construction traffic management plan be implemented for the duration of the construction phase. If such measures are imposed, it can be assumed that truck traffic impacts associated with the import of soil could be considered less-than-significant because the Project has developed an import schedule which reduces the frequency and number of truck trips needed to bring import material to the site on a daily basis.

4.5.3 HEAVY EQUIPMENT

Heavy equipment to be utilized on-site during construction include, but is not limited to: flat beds, dozers, scrapers, graders, track hoes, dump trucks, forklifts, cranes, cement trucks, pavers, rollers, water trucks, rolling container trucks and bobcats. Heavy equipment will be delivered and removed from the site throughout the construction phase. As most heavy equipment is typically not an authorized vehicle to be driven on a public roadway, most of the equipment will be delivered and removed from the site via large flatbed trucks. It is anticipated that delivery of heavy equipment would not occur on a daily basis, but rather periodically throughout the construction phase based on need.

The delivery and removal of heavy equipment is recommended to occur outside of the morning and evening peak hours in order to have nominal impacts to traffic and circulation near the vicinity of the project. If this measure is applied, it is anticipated that traffic impacts associated with the delivery and removal of heavy equipment are less-than-significant.

4.6 BACKGROUND GROUND TRAFFIC

Future year traffic forecasts have been based upon four (4) years of background (ambient) growth at 2% per year for 2017 traffic conditions. The ambient growth factor is intended to approximate regional traffic growth. The total ambient growth is 10.41% for 2017 traffic conditions (compounded growth of two percent per year over five years or 1.02^5 years). This ambient growth rate is added to existing traffic volumes to account for area-wide growth not reflected by cumulative development projects. Ambient growth has been added to daily and peak hour traffic volumes on surrounding roadways, in addition to traffic generated by the development of future projects, located within or in close proximity to the study area, that have been approved but not yet built and/or for which development applications have been filed and are under consideration by governing agencies.

According to information published by the Riverside County Center for Demographic Research (RCCDR) and used as the basis for completing the Western Riverside Council of Governments (WRCOG) TUMF Nexus Study – 2009 Program Update, the population of Western Riverside County is projected to increase by 62% in the period between 2007 and 2035, a compounded rate of approximately 1.73% annually. During the same period, employment in Western Riverside County is expected to increase by 111% or 2.71% annually. Therefore, the use of an annual growth rate of 2.0 percent would appear to conservatively approximate the anticipated regional growth in traffic volumes in the City of Jurupa Valley, especially when considered along with the addition of project-related traffic and traffic generated by other known development projects.

4.7 CUMULATIVE DEVELOPMENT TRAFFIC

CEQA guidelines require that other reasonably foreseeable development projects which are either approved or being processed concurrently in the study area also be included as part of a cumulative analysis scenario. A cumulative project list was developed for the purposes of this analysis through consultation with staff from near-by jurisdictions, such as the County of Riverside, City of Eastvale and City of Norco. Exhibit 4-9 illustrates the cumulative development location map. Appendix “4.1” contains the cumulative projects provided by each of the jurisdictions above.

4.7.1 CUMULATIVE DEVELOPMENT TRIP GENERATION

Cumulative development trip generation rates and associated trip generation summary are shown on Tables 4-3 and 4-4. The cumulative development projects assumed in this traffic analysis are estimated to generate 120,989 trip-ends per day during a typical weekday with approximately 8,747 vehicle trips during the AM peak hour and 12,595 vehicle trips during the PM peak hour.

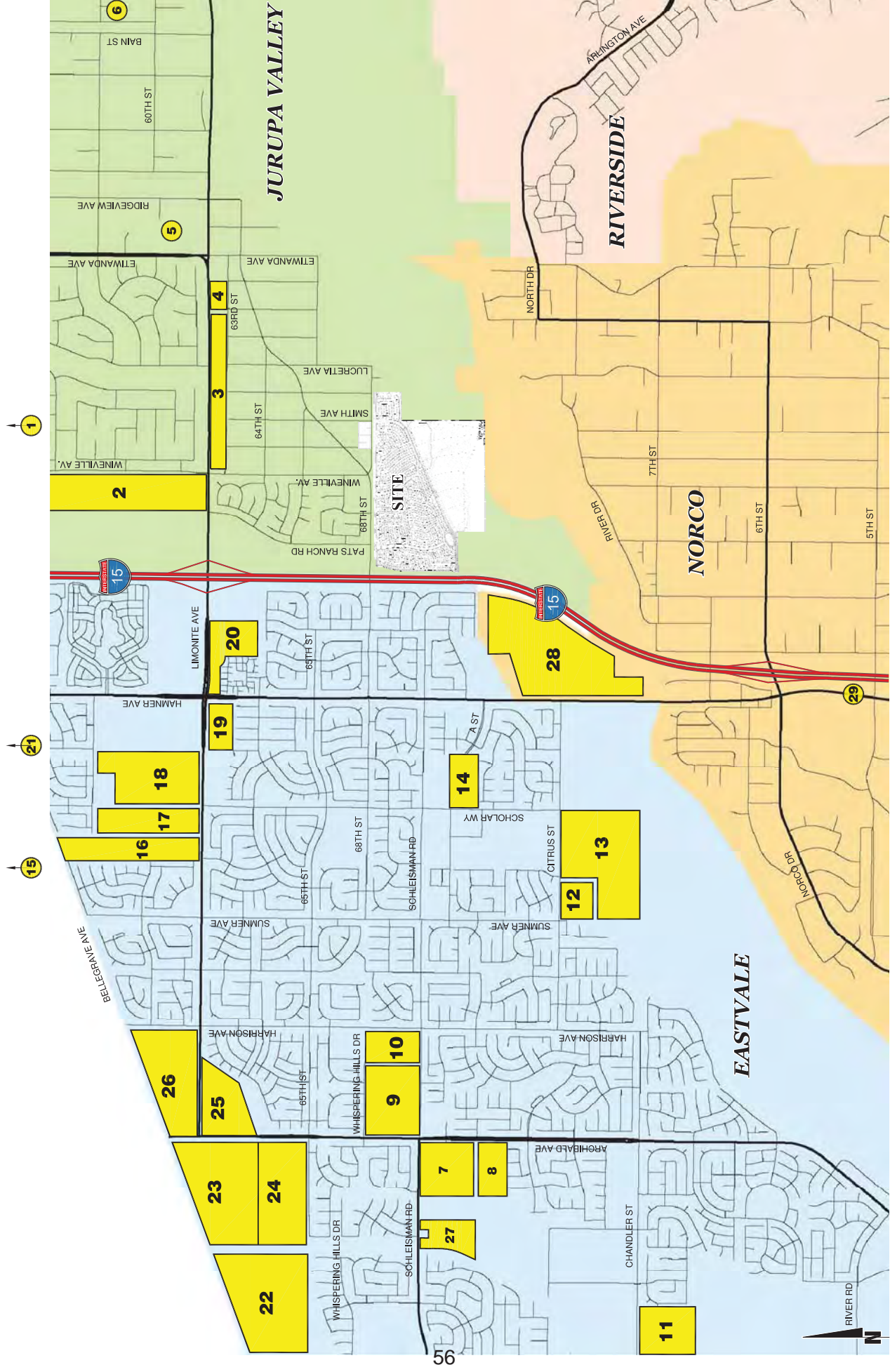
4.7.2 CUMULATIVE DEVELOPMENT TRIP ASSIGNMENT

Based on the identified trip distribution patterns for the cumulative development projects on arterial highways throughout the study area for future conditions, cumulative development ADT volumes, AM peak hour and PM peak hour intersection turning movement volumes are shown on Exhibits 4-10, 4-11 and 4-12, respectively.

4.8 TRAFFIC FORECASTS

To provide a comprehensive assessment of the potential project-related and cumulative traffic impacts, two types of analyses, “buildup” and “buildout”, were performed in support of this work effort. The buildup method was used to approximate the EAP traffic conditions for the study year of 2017, and is intended to identify the direct project-related impacts on both the existing and planned near-term circulation system. The EAP (2017) traffic condition includes background traffic in addition to the traffic generated by the proposed Project. The buildup method was also utilized to approximate the EAPC conditions for the study

EXHIBIT 4-9 CUMULATIVE DEVELOPMENT LOCATION MAP



NOM = NOMINAL, LESS THAN 50 VEHICLES PER DAY



EXHIBIT 4-11

CUMULATIVE DEVELOPMENT AM PEAK HOUR INTERSECTION VOLUMES

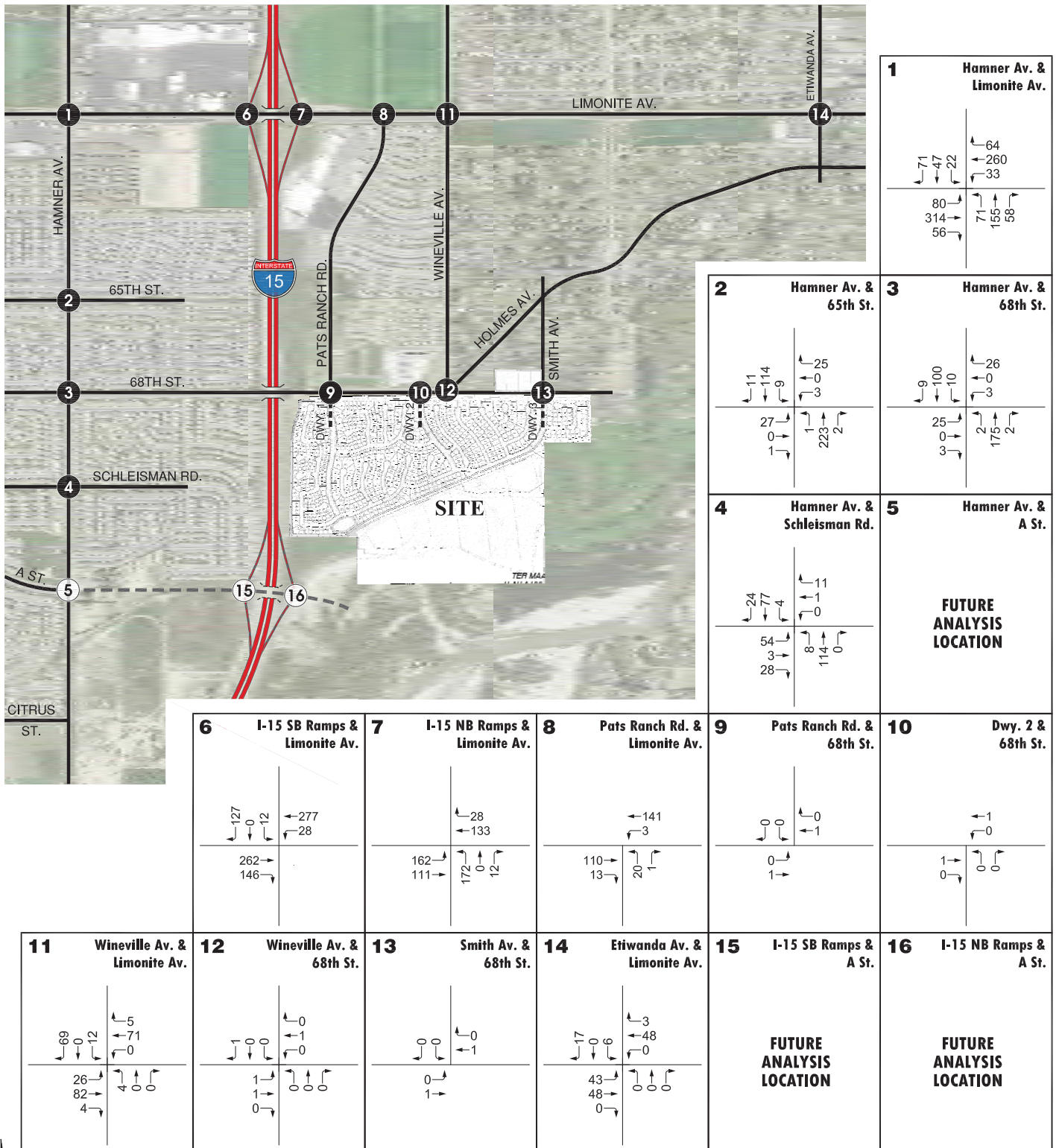
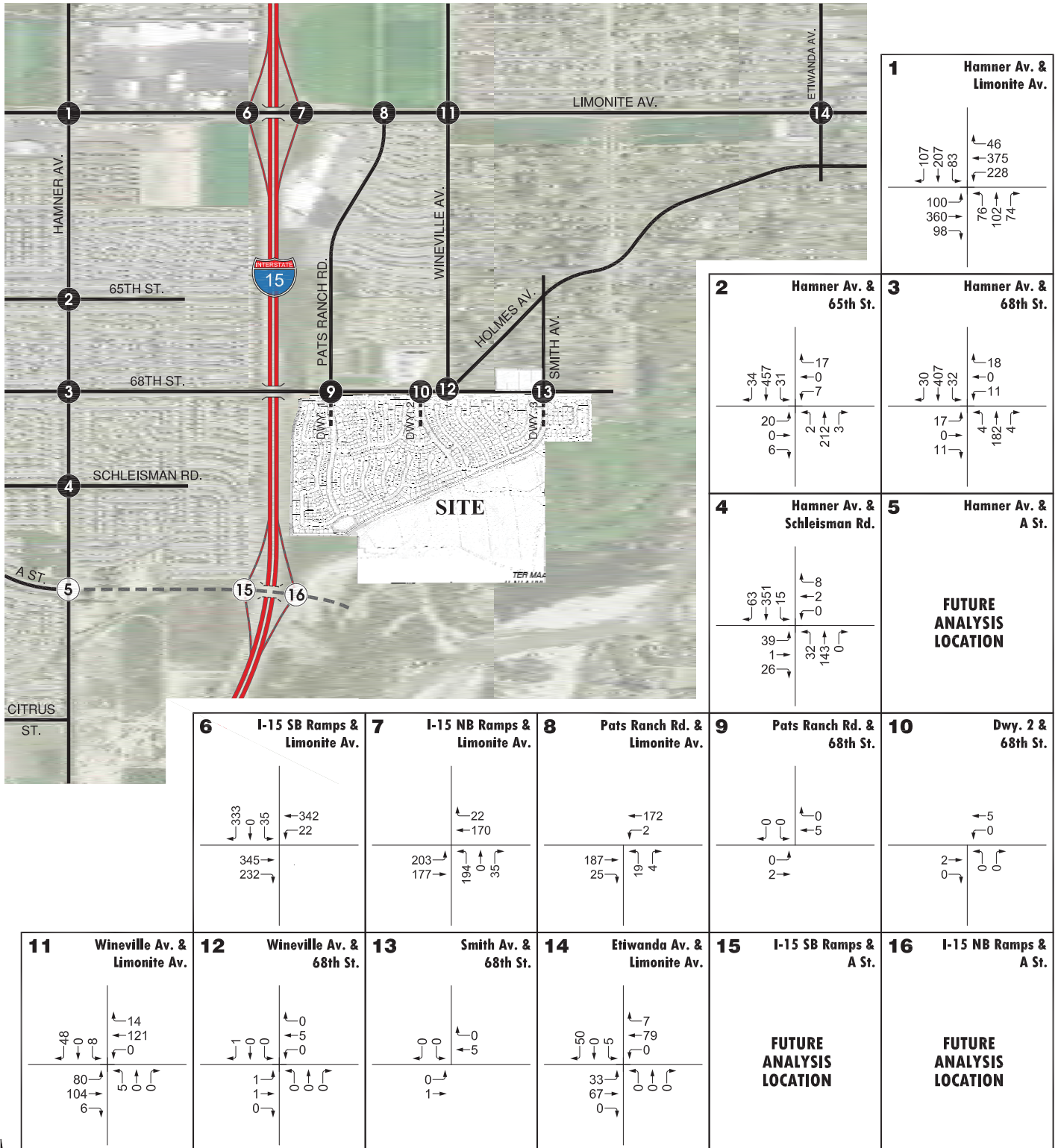


EXHIBIT 4-12

CUMULATIVE DEVELOPMENT PM PEAK HOUR INTERSECTION VOLUMES



Cumulative Development Trip Generation Rates¹

Land Use ¹	I E Code	Units ²	AM Peak Hour			PM Peak Hour			Total
			In	Out	Total	In	Out	Total	
Gen. Lt. Industrial	110	TSF	0.81	0.11	0.92	0.12	0.85	0.97	6.97
Mini Warehouse	151	TSF	0.09	0.06	0.15	0.13	0.13	0.26	2.50
High-Cube Warehouse	152	TSF	0.06	0.03	0.09	0.03	0.07	0.10	1.44
Single Fam. Detached	210	DU	0.19	0.56	0.75	0.64	0.37	1.01	9.57
Apartment	220	DU	0.10	0.41	0.51	0.40	0.22	0.62	6.65
Residential Condo/Townhouse	230	DU	0.07	0.37	0.44	0.35	0.17	0.52	5.81
Hotel	310	RM	0.34	0.22	0.56	0.31	0.28	0.59	8.17
Health/Fitness Club	492	TSF	0.62	0.76	1.38	2.01	1.52	3.53	32.93
Recreational Community Center	495	TSF	0.99	0.63	1.62	0.54	0.91	1.45	22.88
Day Care Center	565	TSF	6.50	5.76	12.26	5.86	6.60	12.46	79.26
General Office	710	TSF	1.36	0.19	1.55	0.25	1.24	1.49	11.01
Medical-Dental Office	720	TSF	1.82	0.48	2.30	0.93	2.53	3.46	36.13
Business Park	770	TSF	1.20	0.23	1.43	0.30	0.99	1.29	12.76
Shopping Center	820	TSF	0.61	0.39	1.00	1.83	1.90	3.73	42.94
High Turnover (Sit-Down) Restaurant	932	TSF	5.99	5.53	11.52	6.58	4.57	11.15	127.15
Fast Food w/o Drive Thru	933	TSF	26.32	17.55	43.87	13.34	12.81	26.15	716.00
Fast Food w/ Drive Thru	934	TSF	25.17	24.18	49.35	17.60	16.24	33.84	496.12
Coffee/Donut Shop with Drive Thru	937	TSF	56.48	54.27	110.75	21.47	21.46	42.93	818.58
Soccerfield ⁴		Fields	N/A	N/A	N/A	67.5	6.75	74.25	148.50
Equestrian Facility ⁴		Stalls	N/A	N/A	N/A	0.113	0.112	0.225	2.071

¹ Source: ITE (Institute of Transportation Engineers) Trip Generation Manual, 8th Edition, 2008.

² SFDR - Single Family Detached Residential

³ AC - Acreage; TSF - Thousand Square Feet; DU - Dwelling Units; RM - Room

⁴ Source: Silverlakes TIA (Revised), Urban Associates, 09/25/2008.

Cumulative Development Land Use and Trip Generation Summary

A					AM Peak Hour			PM Peak Hour			Total
	Project Name	Land Use ¹	Quantity	Units ²	In	Out	Total	In	Out	Total	
CITY OF RIVERSIDE											
1	TR 31644	SFDR	213	DU	40	119	160	136	79	215	2,038
	TR 31768	SFDR	95	DU	18	53	71	61	35	96	909
	TR 31778	SFDR	64	DU	12	36	48	41	24	65	612
	TR 33461	SFDR	102	DU	19	57	77	65	38	103	976
	Subtotal A 1				0	25	35	303	175	7	,53
2	TR 33428	SFDR	338	DU	64	189	254	216	125	341	3,235
3	TR 33258	SFDR	45	DU	9	25	34	29	17	45	431
4	CUP 03555	Mini-Warehouse	141.460	TSF	13	8	21	18	18	37	354
5	CUP 03488 (Self-Storage)	Mini-Warehouse	89.642	TSF	8	5	13	12	12	23	224
6	TR 35655	SFDR	9	DU	2	5	7	6	3	9	86
CITY OF FEASIBLE											
7	The Marketplace at Enclave	Coffee/Donut Shop w/ Drive Thru	1.600	TSF	90	87	177	34	34	69	1,310
		Fast Food w/ Drive Thru	3.500	TSF	88	85	173	62	57	118	1,736
		Shopping Center	82.671	TSF	50	32	83	151	157	308	3,550
		Pass-by Reduction			-45	-43	-87	-62	-62	-124	-1,649
	Subtotal A 7				1	11	35	15	1	372	, 7
8	TR 30896	SFDR	73	DU	14	41	55	47	27	74	699
9	TR 31492	SFDR	175	DU	33	98	131	112	65	177	1,675
10	PP24626	Recreational Community Center	34.000	TSF	34	21	55	18	31	49	778
11	TR 29997	SFDR	122	DU	23	68	92	78	45	123	1,168
		Shopping Center (11.420 AC, FAR 25%)	124.364	TSF	76	49	124	228	236	464	5,340
		Internal Capture Pass-by Reduction			-10	-12	-22	-99	-91	-191	-2,115
	Subtotal A 11					105	1	20	10	3	,3 3
12	TM 36373	SFDR	52	DU	10	29	39	33	19	53	498
13	TT 36382	SFDR	146	DU	28	82	110	93	54	147	1,397
14	TR 34014	Condo/Townhouse	224	DU	16	83	99	78	38	116	1,301
15	CUP 03482	Shopping Center	75.759	TSF	46	30	76	139	144	283	3,253
		Pass-by Reduction			--	--	--	-35	-36	-71	-813
	Subtotal A 15					30	7	10	10	212	2, 0
16	TR 31252	SFDR	205	DU	39	115	154	131	76	207	1,962
17	TR 32821	Condo/Townhouse	350	DU	25	130	154	123	60	182	2,034
18	TR 32909	SFDR	140	DU	27	78	105	90	52	141	1,340
19	Cloverdale Marketplace - Phase 2	Shopping Center	21.500	TSF	13	8	22	39	41	80	923
		Day Care Center	8.915	TSF	58	51	109	52	59	111	707
		Fast Food w/ Drive Thru	2.815	TSF	71	68	139	50	46	95	1,397
		Internal Capture Pass-by Reduction			-43	-40	-83	-46	-47	-93	-984
	Subtotal A 1						17	5		13	2,0 3

Cumulative Development Land Use and Trip Generation Summary

A					AM Peak Hour			PM Peak Hour			Total
	Project Name	Land Use ¹	Quantity	Units ²	In	Out	Total	In	Out	Total	
20	Eastvale Gateway South	Fast Food w/o Drive Thru	3.457	TSF	91	61	152	46	44	90	2,475
		Health/Fitness Club	43.009	TSF	27	33	59	86	65	152	1,416
		Shopping Center	20.132	TSF	12	8	20	37	38	75	864
		Medical-Dental Office	70.000	TSF	127	34	161	65	177	242	2,529
		Apartments	300	DU	30	123	153	120	66	186	1,995
		Internal Capture - Pass-by Reduction				-49	-39	-89	-54	-58	-112
	Sub total A 20				23	21	57	300	333	3	7,011
21	Eastvale Commerce Center	Shopping Center	544.500	TSF	332	212	545	996	1,035	2,031	23,381
		General Office	326.700	TSF	444	62	506	82	405	487	3,597
		High-Cube Warehouse	1,306.800	TSF	78	39	118	39	91	131	1,882
		General Light Industrial	1,045.440	TSF	847	115	962	125	889	1,014	7,287
		Internal Capture - Pass-by Reduction				-170	-43	-213	-348	-475	-823
	Sub total A 21				1,532	3	1,177		1,555	2,337	27,271
22	SP 00358 (The Ranch at Eastvale)	Shopping Center	267.200	TSF	163	104	267	489	508	997	11,474
		General Light Industrial	801.500	TSF	649	88	737	96	681	777	5,586
		Business Park	1,121.100	TSF	1,345	258	1,603	336	1,110	1,446	14,305
		Internal Capture - Pass-by Reduction				-216	-45	-261	-202	-344	-546
	Sub total A 22				1,532	305	2,337	711	1,555	2,337	25,777
23	PP 23219 (PM 35865)	General Light Industrial	738.430	TSF	598	81	679	89	628	716	5,147
24	Residential Project - Archibald Av. / 65th St.	SFDR	250	DU	48	140	188	160	93	253	2,393
25	Shopping Center - Archibald Av. / Limonite Av.	Shopping Center	197.192	TSF	221	186	407	448	459	907	10,827
26	TR 32797	SFDR	119	DU	23	67	89	76	44	120	1,139
27	TR 35751	Condo/Townhouse	243	DU	17	90	107	85	41	126	1,412
CITY FUTURE											
28	Silverlakes ³	Soccer Fields	10	Fields	N/A	N/A	N/A	675	68	743	1,485
		Equestrian Facility	400	Stalls	N/A	N/A	N/A	45	45	90	828
	Sub total A 2				N/A	N/A	N/A	720	112	33	2,313
29	Fairfield Inn Hotel	Hotel	96	RM	33	21	54	30	27	57	784
		High-Turnover (Sit-Down) Restaurant	10.000	TSF	60	55	115	66	46	112	1,272
	Sub total A 2				3	7	1		73	1	2,05
Grand total					5,53	3,20	7,77	5,523	7,073	12,555	120,000

¹ SFDR - Single Family Detached Residential

² AC - Acreage; TSF - Thousand Square Feet; DU - Dwelling Units; RM - Room

³ Source: Silverlakes TIA (Revised), Urban Associates, 09/25/2008.

year of 2017, and is intended to identify the cumulative impacts on both the existing and planned near-term circulation system. The EAPC (2017) traffic condition includes background traffic, traffic generated by other cumulative development projects within the study area and the traffic generated by the proposed Project. The buildout approach is used to forecast the long-range Horizon Year (2035) conditions.

4.9 OPENING YEAR (2017) CONDITIONS

The buildup approach combines existing traffic counts with a background ambient growth factor to forecast the Opening Year 2017 traffic conditions. An ambient growth factor of 10.41% accounts for background (area-wide) traffic increases that occur over time up to the year 2017 from the year 2012 (compounded two percent per year growth over a five year period). Traffic volumes generated by the Project are then added to assess the EAP (2017) traffic conditions. The 2017 roadway network is similar to the Existing conditions roadway network, with the exception of future roadways proposed to be developed by the Project.

The Opening Year traffic analysis includes the following traffic conditions, with the various traffic components:

- Existing Plus Ambient Growth Plus Project (EAP)
 - Existing 2012 counts
 - Ambient growth traffic (10.41%)
 - Project traffic
- Existing Plus Ambient Growth Plus Project Plus Cumulative (EAPC)
 - Existing 2012 counts
 - Ambient growth traffic (10.41%)
 - Cumulative Development Project traffic
 - Project traffic

4.10 HORIZON YEAR (2035) CONDITIONS

The Horizon Year (2035) with Project traffic volumes have been derived from the Riverside County Transportation and Analysis Model (RivTAM) using accepted procedures for model forecast refinement and smoothing. The traffic forecasts reflect the area-wide growth anticipated between existing (2012) conditions and Horizon Year (2035) conditions. It should be noted that the Horizon Year (2035) traffic forecasts from the RivTAM model accounted for approximately 66 residential dwelling units within the TAZ contained by the Project. The initial Horizon Year (2035) traffic forecasts from the RivTAM model were utilized for “without Project” traffic conditions. To determine Horizon Year (2035) with Project traffic forecasts, approximately 85 percent (traffic associated with approximately 402 dwelling units) was manually added to the Horizon Year (2035) without Project traffic forecasts. As such, Horizon Year (2035) without Project traffic forecasts were not obtained by simply subtracting the Project volumes shown previously on

Exhibits 4-7 and 4-8 from the Horizon Year (2035) with Project traffic forecasts. The comparison of analysis results for the Horizon Year (2035) without and with Project traffic conditions will show a plan-to-plan comparison as opposed to a comparison of the proposed Project to “no-build” traffic conditions. However, it is important to note that 100 percent of the Project traffic entering and exiting the Project along 68th Street was included for the purposes of determining the appropriate intersection controls and minimum lane geometric requirements at the Project driveways.

In most instances the traffic model zone structure is not designed to provide accurate turning movements along arterial roadways unless refinement and reasonableness checking is performed. Therefore, the Horizon Year (2035) peak hour forecasts were refined using the model derived long-range forecasts, along with existing peak hour traffic count data collected at each analysis location in February 2012. Future estimated peak hour traffic data was used for new intersections and intersections with an anticipated change in travel patterns to further refine the Horizon Year (2035) peak hour forecasts. Lastly, Horizon Year (2035) turning volumes were compared to EAPC (2017) volumes in order to ensure a minimum growth of ten (10) percent as a part of the refinement process. The minimum ten (10) percent growth includes any additional growth between EAPC (2017) and Horizon Year (2035) traffic conditions that is not accounted for by the traffic generated by cumulative development projects and the ambient growth between Existing (2012) and EAPC (2017) conditions.

Flow conservation checks and forecast adjustments were performed as necessary to ensure that all future EAPC (2017) and Horizon Year (2035) traffic volume forecasts are reasonable. Flow conservation checks have been performed in an effort to ensure the flow of traffic volumes between closely spaced intersections is maintained. In other words, traffic flow between two closely spaced intersections, such as two freeway ramp locations, is verified in order to make certain that vehicles leaving one intersection are entering the adjacent intersection and that there are no unexplained loss of vehicles. The result of this traffic forecasting procedure is a series of traffic volumes which are suitable for traffic operations analysis.

Post-processing volume worksheets for Horizon Year (2035) with Project conditions are provided in Appendix “4.2”.

5.0 EXISTING PLUS PROJECT CONDITIONS

Although not required by the lead jurisdiction's traffic impact analysis guidelines, for purposes of full disclosure, an analysis of existing traffic volumes plus traffic generated by the proposed Project (E+P) has been included in this analysis. The reason this particular analysis scenario is provided for informational purposes only, and why most traffic impact study guidelines published by local jurisdictions throughout California do not typically require analysis of the "E+P" scenario, is that it rarely materializes as an actual scenario in the real world. In fact, the time period between the date a Notice of Preparation is issued and the date project buildout occurs can often be a period of several years or more. During this time period, other projects are being constructed, the transportation network is evolving and traffic patterns are changing. Therefore, the "E+P" scenario never materializes in real world conditions and thus does not accurately describe the environment that exists when a particular project is constructed and becomes operational.

In addition, unlike other areas of CEQA inquiry, such as the construction of a building where none currently exists, which in the context of a habitat corridor there is true utility to performing an "E+P" analysis. However, in the context of traffic impacts that are derivative of a development project, traffic is virtually always a cumulative issue. By their very nature, traffic impacts are very fluid and are influenced by other growth and projects that are occurring throughout the transportation network. In other words, because normal increases in traffic occur over time, background traffic levels that occur at the time the Project is actually constructed is a more accurate representation of the Existing baseline against which to measure the true impacts of a proposed Project. Nevertheless, Urban Crossroads has conducted level of service calculations for study intersections to evaluate their operations under hypothetical E+P traffic conditions for buildout of the proposed Project.

This section discusses the traffic forecasts for Existing plus Project (E+P) conditions and the resulting intersection operations. As noted previously, this scenario is presented for informational purposes only.

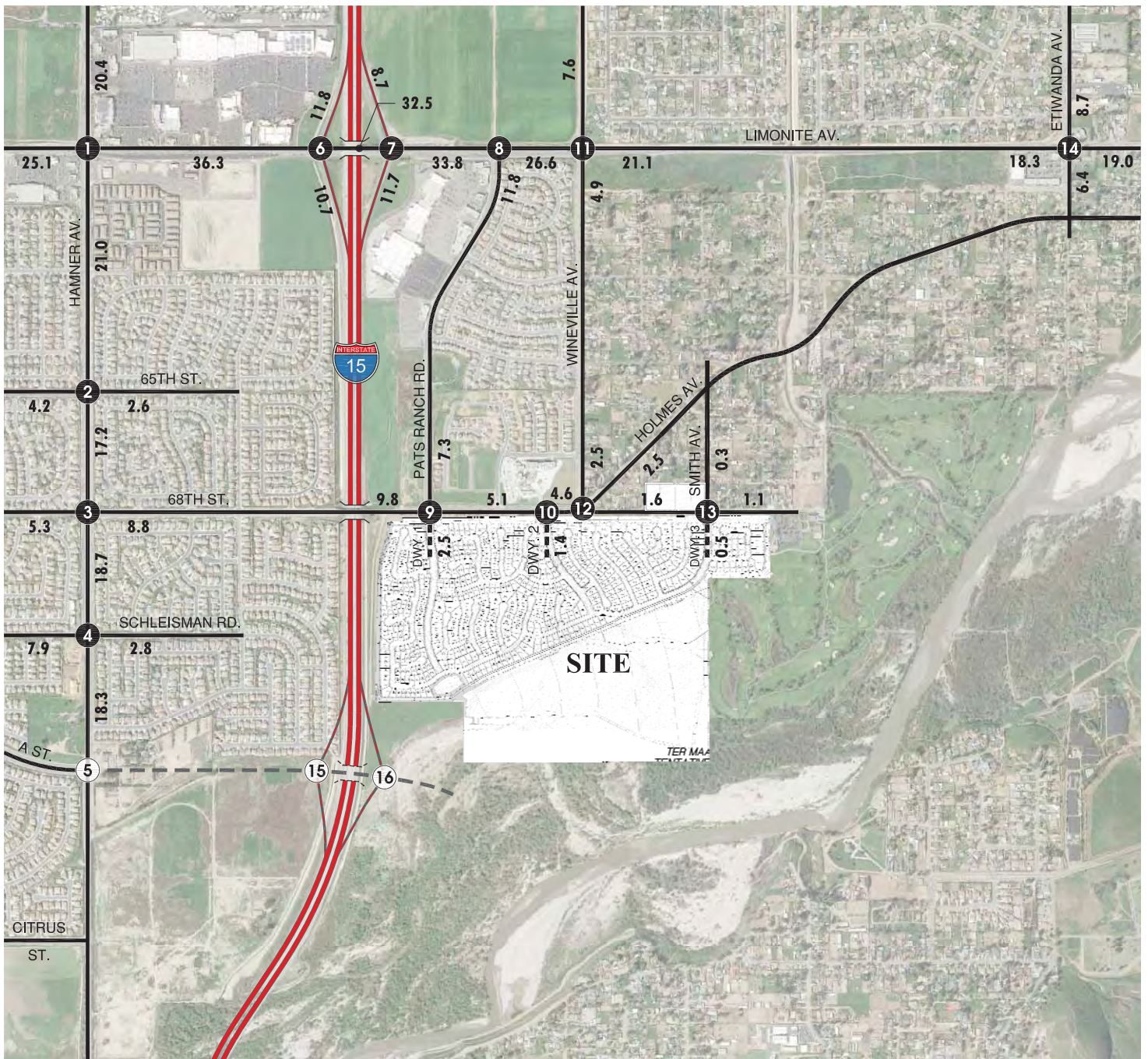
5.1 EXISTING PLUS PROJECT TRAFFIC VOLUME FORECASTS

This scenario includes Existing (2012) traffic volumes plus Project traffic. Exhibit 5-1 shows the ADT volumes which can be expected for E+P traffic conditions. E+P AM and PM peak hour intersection turning movement volumes are shown on Exhibits 5-2 and 5-3, respectively.

5.2 INTERSECTION OPERATIONS ANALYSIS

E+P peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 2 *Methodologies* of this TIA. The intersection analysis results are summarized in Table 5-1. The following intersections were found to operate at an unacceptable LOS during either AM peak hour, PM peak hour or both:

EXHIBIT 5-1 **EXISTING PLUS PROJECT** **AVERAGE DAILY TRAFFIC (ADT)**



LEGEND:

10.0 = VEHICLES PER DAY (1000's)



EXHIBIT 5-2

EXISTING PLUS PROJECT AM PEAK HOUR INTERSECTION VOLUMES

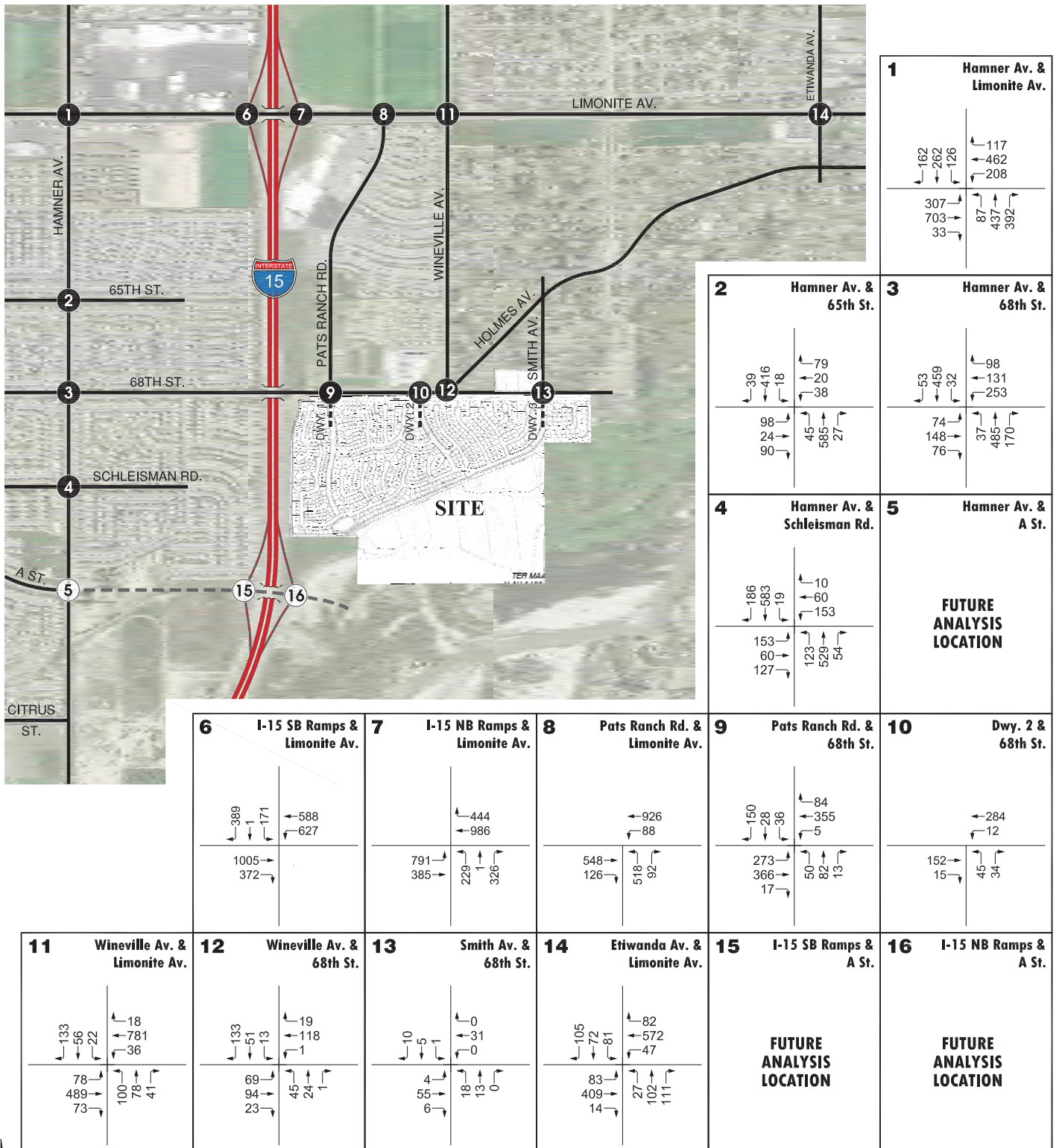
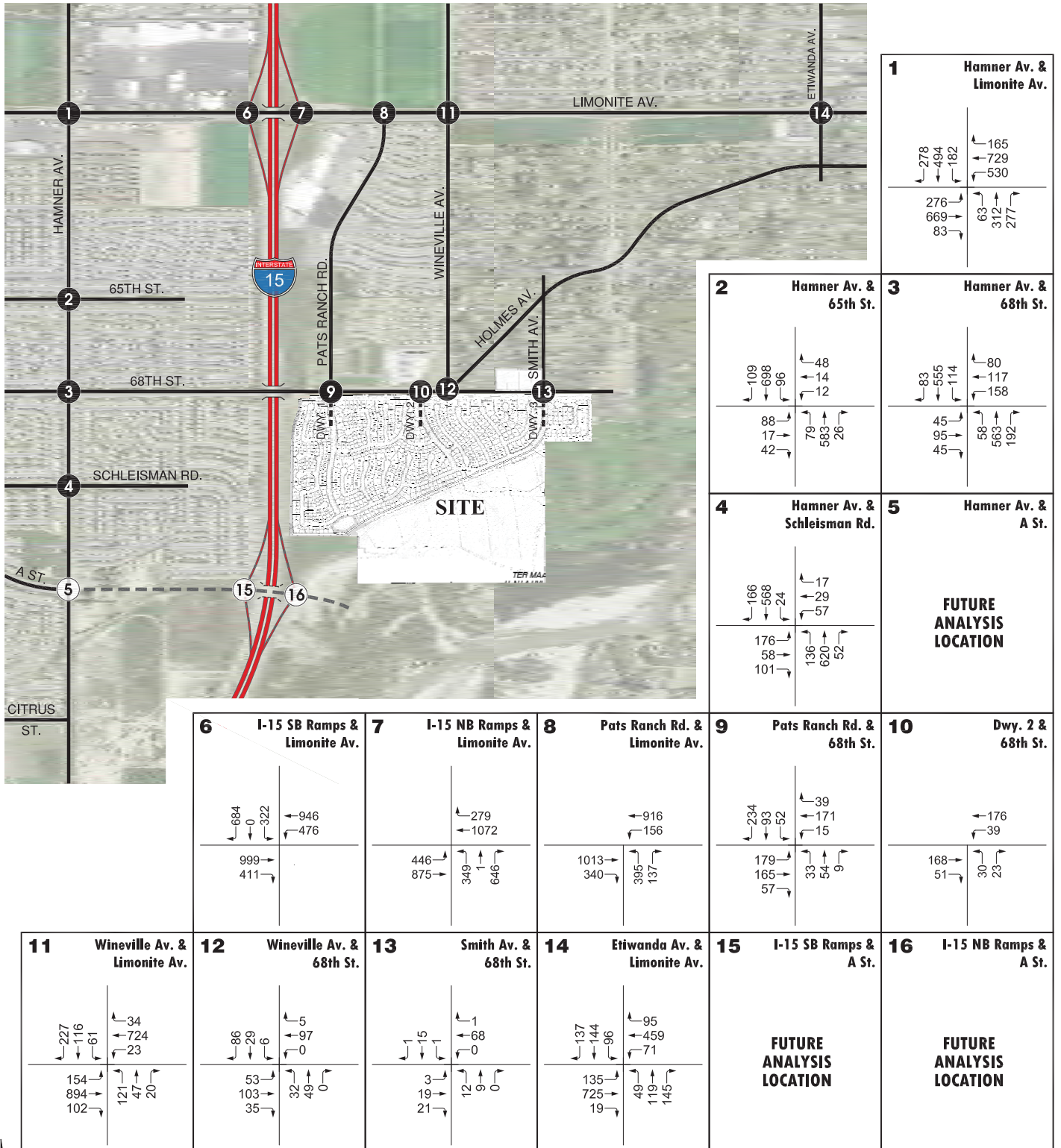


EXHIBIT 5-3

EXISTING PLUS PROJECT PM PEAK HOUR INTERSECTION VOLUMES



I A E P P C

#	Intersection	Traffic Control ³	Intersection Approach Lanes ¹												Existing (2012)				E+P			
			Northbound				Southbound				Eastbound				Delay ² (secs.)		Level of Service		Delay ² (secs.)		Level of Service	
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM	AM	PM	AM	PM
1	Hamner Av. / Limonite Av.	TS	2	3	1	2	2	1	2	3	1	2	2	1	35.5	40.2	D	D	35.6	40.4	D	D
2	Hamner Av. / 65th St.	TS	1	3	d	1	3	d	1	1	1	1	1	0	29.9	30.6	C	C	30.0	30.8	C	C
3	Hamner Av. / 68th St.	TS	1	3	d	1	3	d	1	1	0	1	1	1	35.1	30.4	D	C	36.6	32.1	D	C
4	Hamner Av. / Schleisman Rd.	TS	1	3	0	1	2	1	1	1	0	1	1	0	38.3	35.9	D	D	39.0	36.8	D	D
5	Hamner Av. / "A" St.		Future Analysis Location																			
6	I-15 SB Ramps / Limonite Av.	TS	0	0	0	1	1	1	0	2	1	2	2	0	21.7	21.6	C	C	20.9	23.0	C	C
7	I-15 NB Ramps / Limonite Av.	TS	1	1	1	0	0	0	2	2	0	0	2	1	35.0	25.6	D	C	41.1	26.5	D	C
8	Pats Ranch Rd. / Limonite Av.	TS	2	0	1	0	0	0	0	2	1	1	2	0	12.9	12.9	B	B	14.4	13.7	B	B
9	Pats Ranch Rd. / 68th St.	AWS	1	1	0	1	1	1	1	2	0	1	2	1	28.3	10.7	D	B	40.8	12.7	F⁴	B
10	Driveway 2 / 68th St.	CSS	0	1	0	0	0	0	0	2	0	1	2	0	Not Applicable				12.4	10.9	B	B
11	Wineville Av. / Limonite Av.	TS	1	2	0	1	1	0	1	2	1	1	2	d	31.7	35.5	D	D	32.2	36.5	C	D
12	Wineville Av. / 68th St.	AWS	1	1	0	1	1	1	1	1	1	0	1	0	10.1	8.5	B	A	10.9	8.9	B	A
13	Smith Av. / 68th St.	CSS	0	0	0	0	1	0	0	1	0	0	1	0	8.6	8.8	A	A	10.0	9.7	B	A
14	Etiwanda Av. / Limonite Av.	TS	1	1	1	1	2	1>>	0	2	1	0	1	1	80.3	56.2	F	E	81.4	58.2	F	E
15	I-15 SB Ramps / Schleisman Rd.		Future Analysis Location																			
16	I-15 NB Ramps / Schleisman Rd.		Future Analysis Location																			

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 Phasing; >> = Free-Right Turn Lane; d= Defacto Right Turn Lane

² Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. The I-15 Ramp Locations have been analyzed utilizing the Synchro software.

³ TS = Traffic Signal; AWS = All Way Stop; CSS = Cross-street Stop

⁴ Volume-to-capacity ratio is greater than 1.00; Intersection unstable; Level of Service "F".

BOLD = Unsatisfactory level of service.

ID	I L	L
9	Pats Ranch Rd. / 68 th St. – LOS “F” AM Peak Hour Only	Jurupa Valley
14	Etiwanda Av. / Limonite Av. – LOS “F” AM Peak Hour; LOS “E” PM Peak Hour	Jurupa Valley

The intersection operations analysis worksheets for E+P traffic conditions are included in Appendix “5.1” of this TIA.

5.3 EXISTING PLUS PROJECT TRAFFIC SIGNAL WARRANTS ANALYSIS

Traffic signal warrants for E+P traffic conditions are based on E+P ADT volumes. Consistent with the traffic signal warrant analysis for Existing (2012) traffic conditions, traffic signals are not anticipated to be warranted at any of the unsignalized study area intersections for E+P traffic conditions (see Appendix “5.2”).

6.0 OPENING YEAR (2017) TRAFFIC ANALYSIS

This section discusses the methods used to develop Opening Year (2017) traffic forecasts for EAP and EAPC traffic conditions, and the resulting intersection operations. Consistent with the County of Riverside traffic study guidelines, direct Project impacts and mitigation requirements are identified through the analysis of EAP (2017) traffic conditions while cumulative traffic impacts are identified through the analysis of EAPC (2017) traffic conditions.

6.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for both EAP (2017) and EAPC (2017) traffic conditions are consistent with those shown previously on Exhibit 3-1, with the exception of Project driveways and those facilities assumed to be constructed by the Project to provide site access are also assumed to be in place.

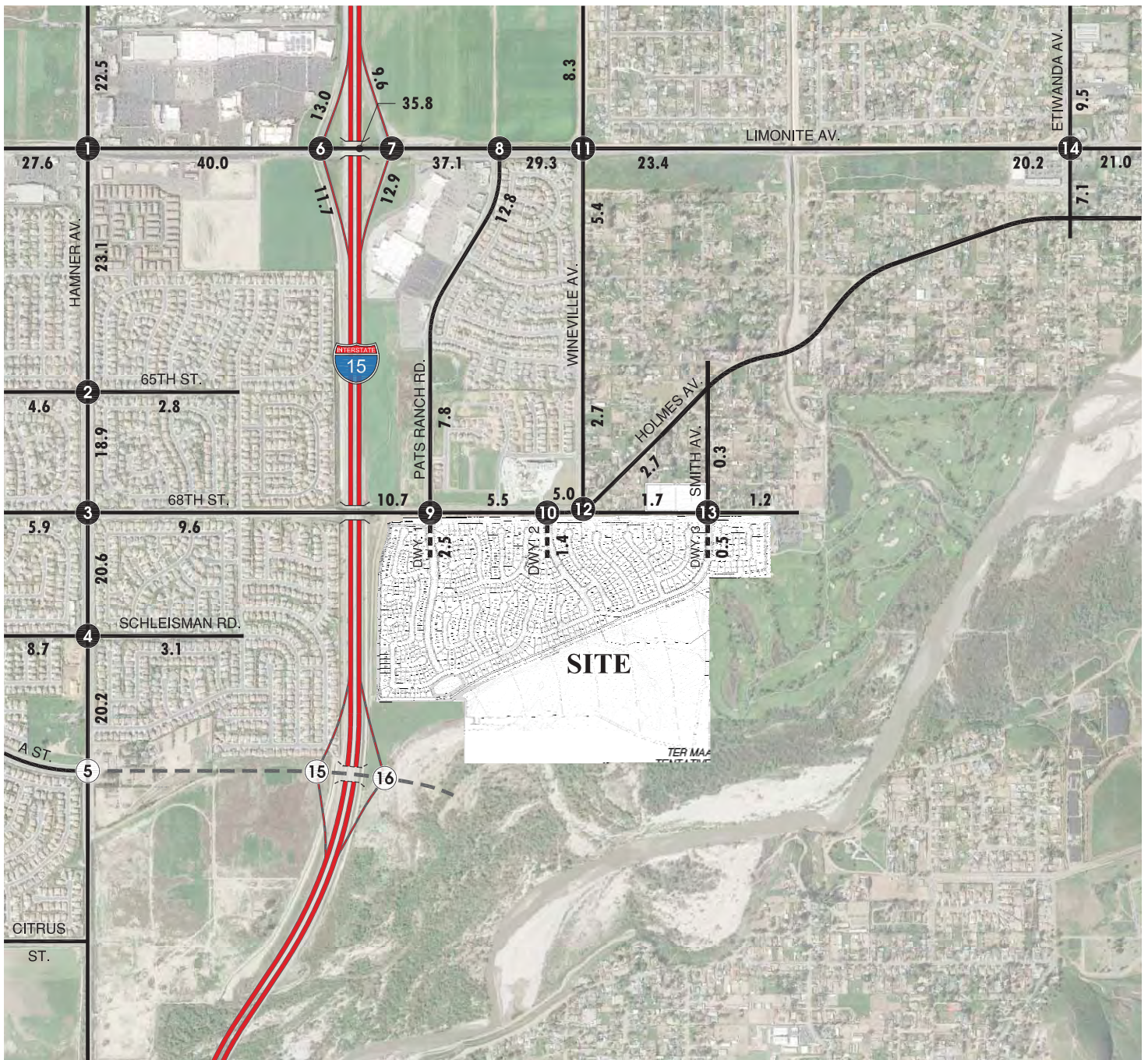
It should be noted that a future interchange is proposed at the I-15 Freeway and future Schleisman Road extension. However, timing and funding related to his proposed future freeway connection is unclear. As such, the future interchange at Schleisman Road and the I-15 Freeway has only been assumed for Horizon Year (2035) traffic conditions.

It is our understanding that Caltrans, in conjunction with surrounding jurisdictions, is in the process of conducting a Project Initiation Document (PID) for the I-15 Freeway at Limonite Avenue interchange. Although a formal design was not available at the time this report was prepared, it is our understanding that the improvements at this interchange are proposed to include widening Limonite Avenue to provide three through lanes in each direction of travel in conjunction with the construction of I-15 Northbound and I-15 Southbound loop ramps, which would eliminate left-turns onto the I-15 Freeway. It is unclear when these improvements would be constructed as a formal schedule on the interchange improvements is not yet available. As such, these improvements have been assumed at the I-15 Freeway at Limonite Avenue interchange for Horizon Year (2035) traffic conditions, with improvements only.

6.2 EAP (2017) TRAFFIC VOLUME FORECASTS

This scenario includes Existing (2012) traffic volumes plus an ambient growth factor of 10.41% and the addition of project traffic. The weekday ADT volumes which can be expected for EAP (2017) traffic conditions are shown on Exhibit 6-1. Exhibits 6-2 and 6-3 show the AM and PM peak hour intersection turning movement volumes for EAP (2017) traffic conditions.

EXISTING PLUS AMBIENT GROWTH PLUS PROJECT (2017) AVERAGE DAILY TRAFFIC (ADT)

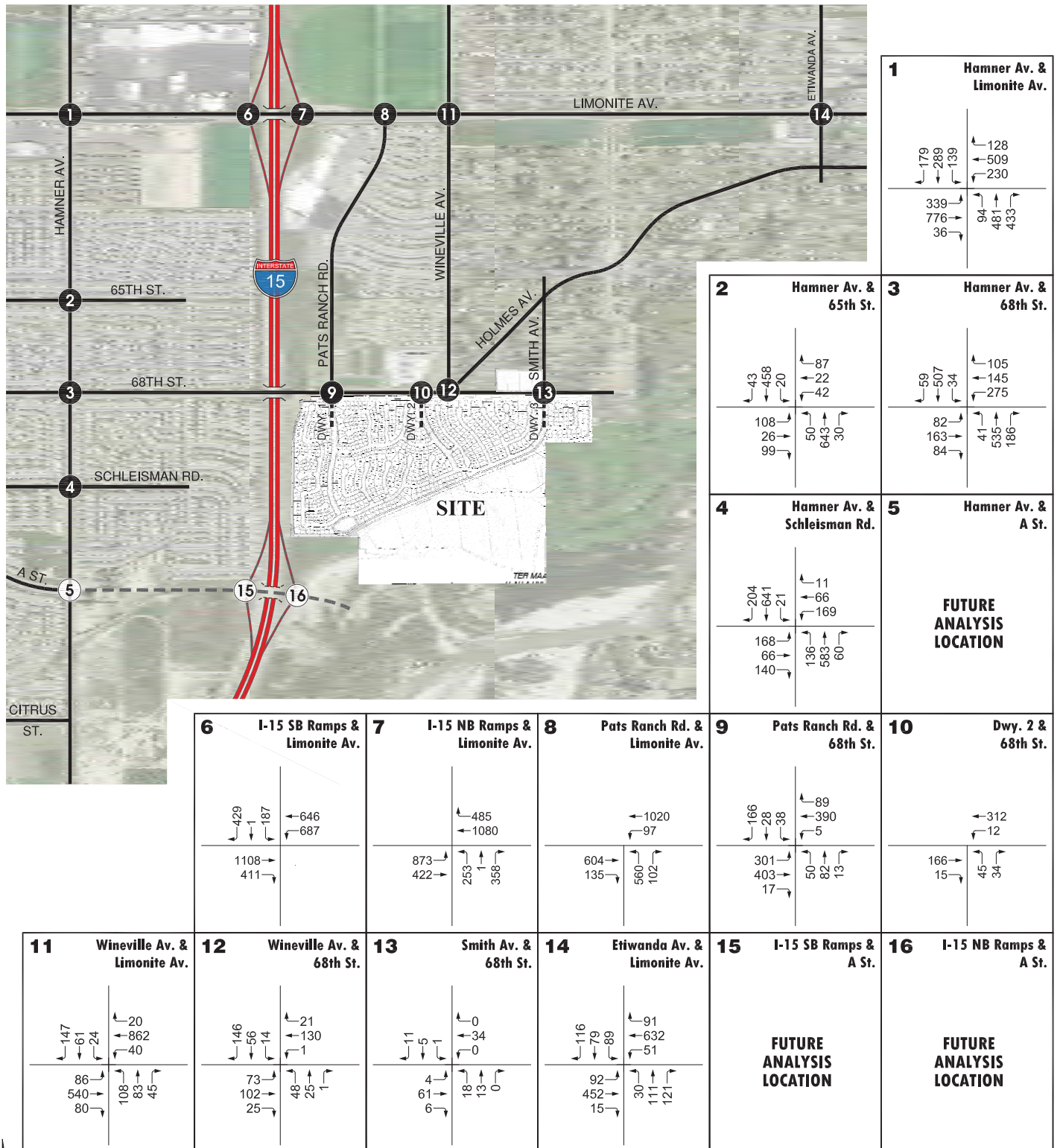


LEGEND:

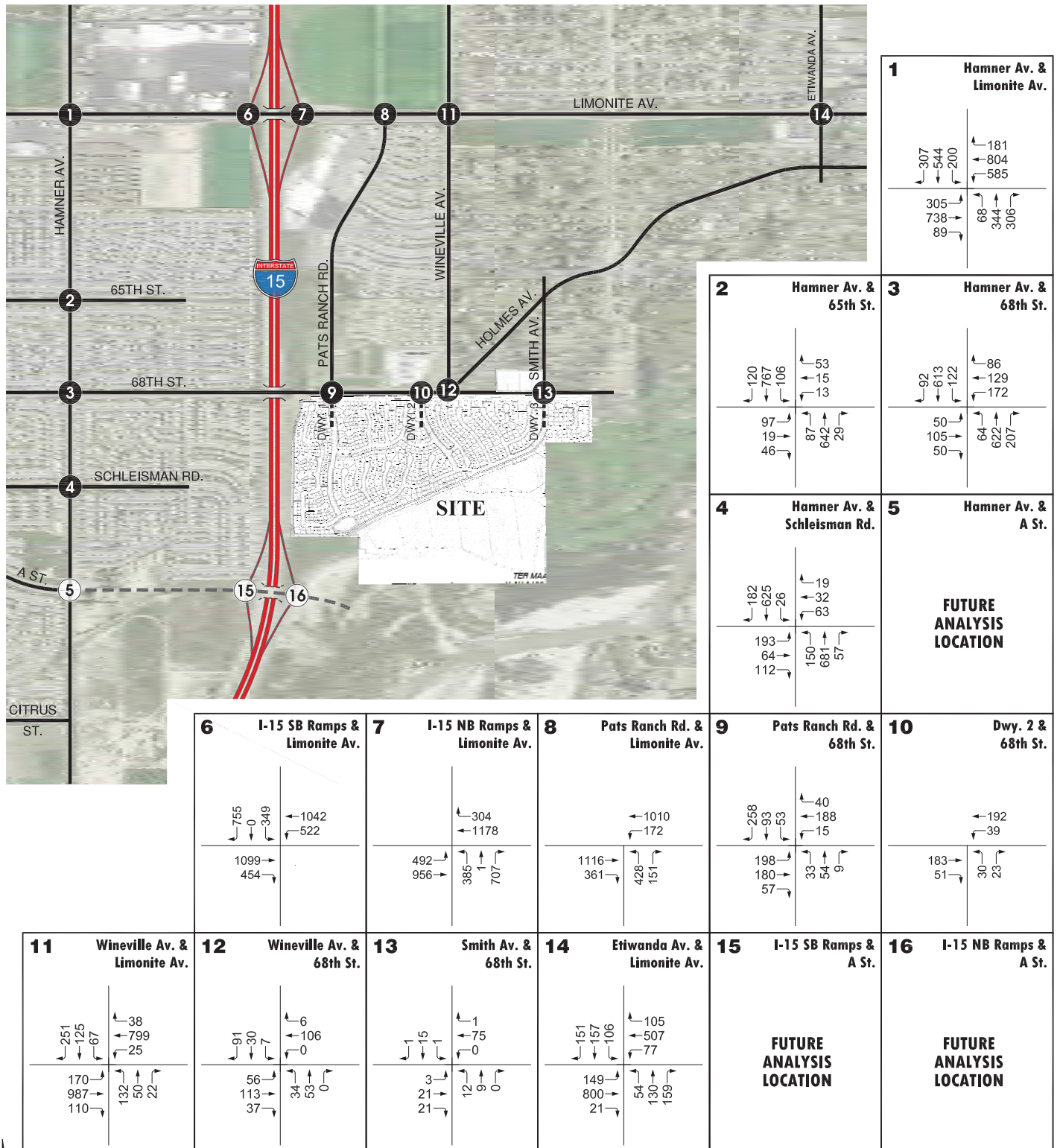
10.0 = VEHICLES PER DAY (1000's)



EXISTING PLUS AMBIENT GROWTH PLUS PROJECT (2017) AM PEAK HOUR INTERSECTION VOLUMES



EXISTING PLUS AMBIENT GROWTH PLUS PROJECT (2017) PM PEAK HOUR INTERSECTION VOLUMES



6.3 EAPC (2017) TRAFFIC VOLUME FORECASTS

This scenario includes Existing (2012) traffic volumes, an ambient growth factor of 10.41%, traffic from pending and approved but not yet constructed known development projects in the area and the addition of Project traffic. The ADT volumes which can be expected for EAPC (2017) traffic conditions are shown on Exhibit 6-4. Exhibits 6-5 and 6-6 show the AM and PM peak hour intersection turning movement volumes for Opening Year Cumulative (2017) with Project traffic conditions.

6.4 INTERSECTION OPERATIONS ANALYSIS FOR EAP (2017) CONDITIONS

Level of service calculations were conducted for the study intersections to evaluate their operations under EAP (2017) conditions with existing roadway and intersection geometrics consistent with Exhibit 3-1. The intersection analysis results are summarized in Table 6-1 which indicates that the following intersections are anticipated to experience unacceptable LOS (i.e., LOS “E” or LOS “F”) during one or both of the peak hours:

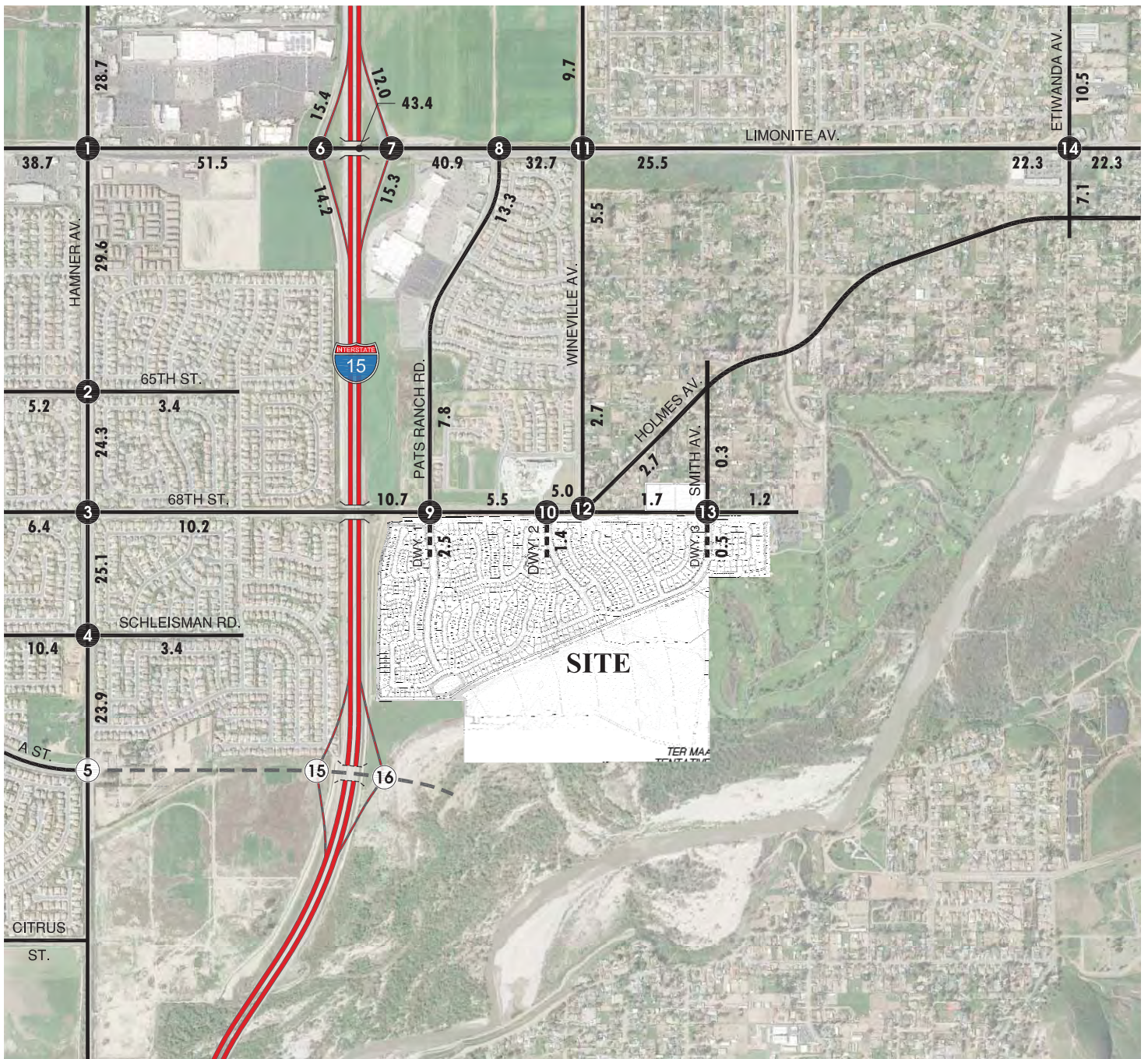
ID	I L	L
9	Pats Ranch Rd. / 68 th St. – LOS “F” AM Peak Hour Only	Jurupa Valley
14	Etiwanda Av. / Limonite Av. – LOS “F” AM Peak Hour; LOS “E” PM Peak Hour	Jurupa Valley

The intersection operations analysis worksheets for EAP (2017) traffic conditions are included in Appendix “6.1” of this TIA.

As shown on Table 6-1, the addition of Project traffic has the potential to worsen the peak hour operations of the following intersection, potentially resulting in a significant impact:

Pats Ranch Road / 68th Street (#9) –The intersection of Pats Ranch Road at 68th Street, in addition to the other site access driveways located on 68th Street are located in close proximity (750-feet) to the existing Louis Vandermolen Fundamental Elementary School. As shown in the AM peak period traffic counts conducted for this traffic study, the heaviest traffic flow occurs during a 20 minute interval between 7:20 AM and 7:40 AM as parents drop their children off at school before the first bell (7:45 AM). The peak traffic flows that occur within this short 20 minute window represent approximately 50% of the total 2-hour morning peak period traffic. In other words, the near-by school’s influence on the traffic flows during the AM peak hour is substantial. The school’s impact during this morning peak hour is limited to the brief 20 minute period and is not an uncommon occurrence for any intersection near-by/adjacent to a school. The addition of Project traffic (as measured by 50 or more peak hour trips) is anticipated to result in unacceptable peak hour operations. As such, the Project’s potential impact is considered ***“significant” (Impact 1.1)***.

EXISTING PLUS AMBIENT GROWTH PLUS PROJECT PLUS CUMULATIVE (2017) AVERAGE DAILY TRAFFIC (ADT)

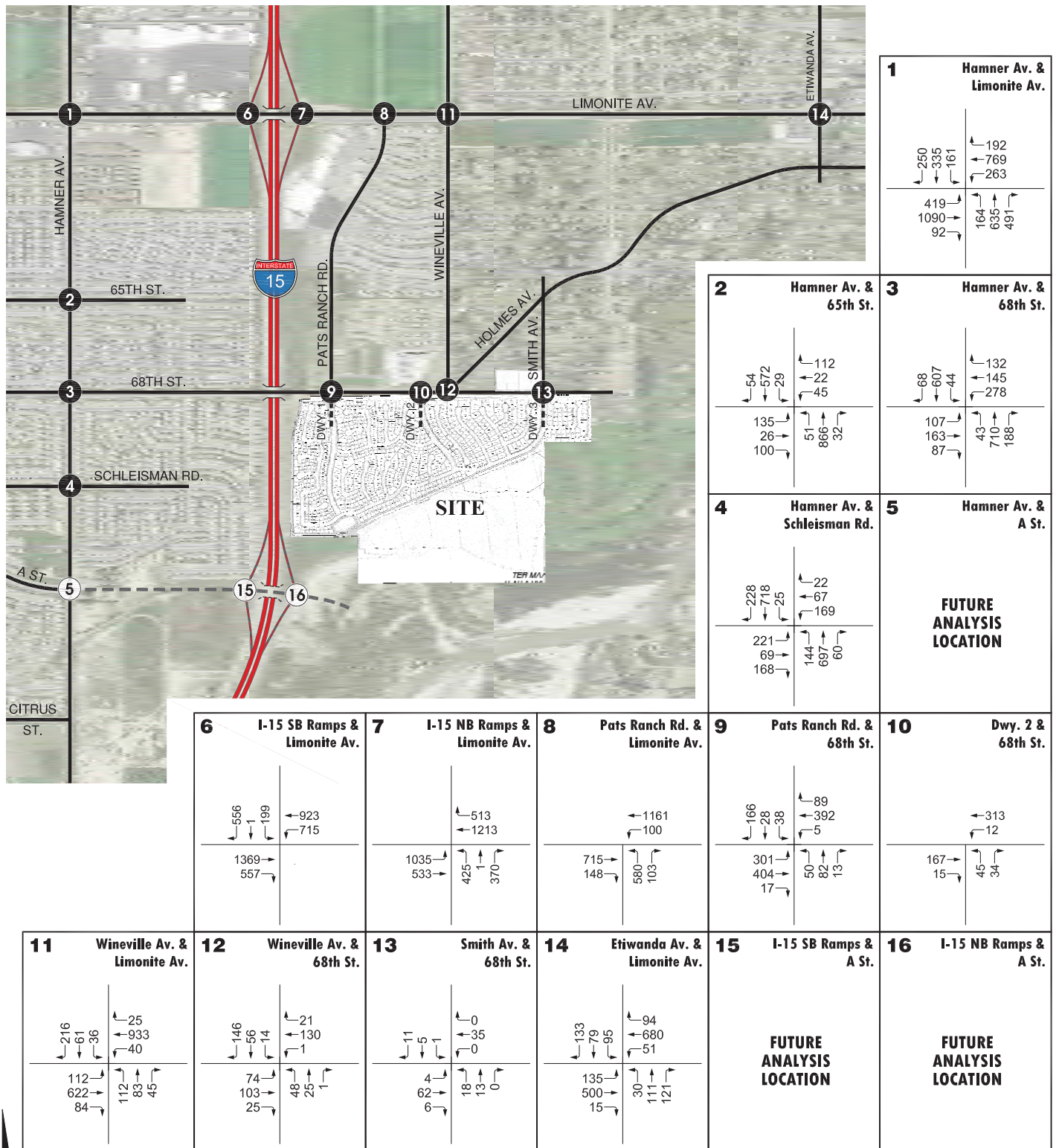


LEGEND:

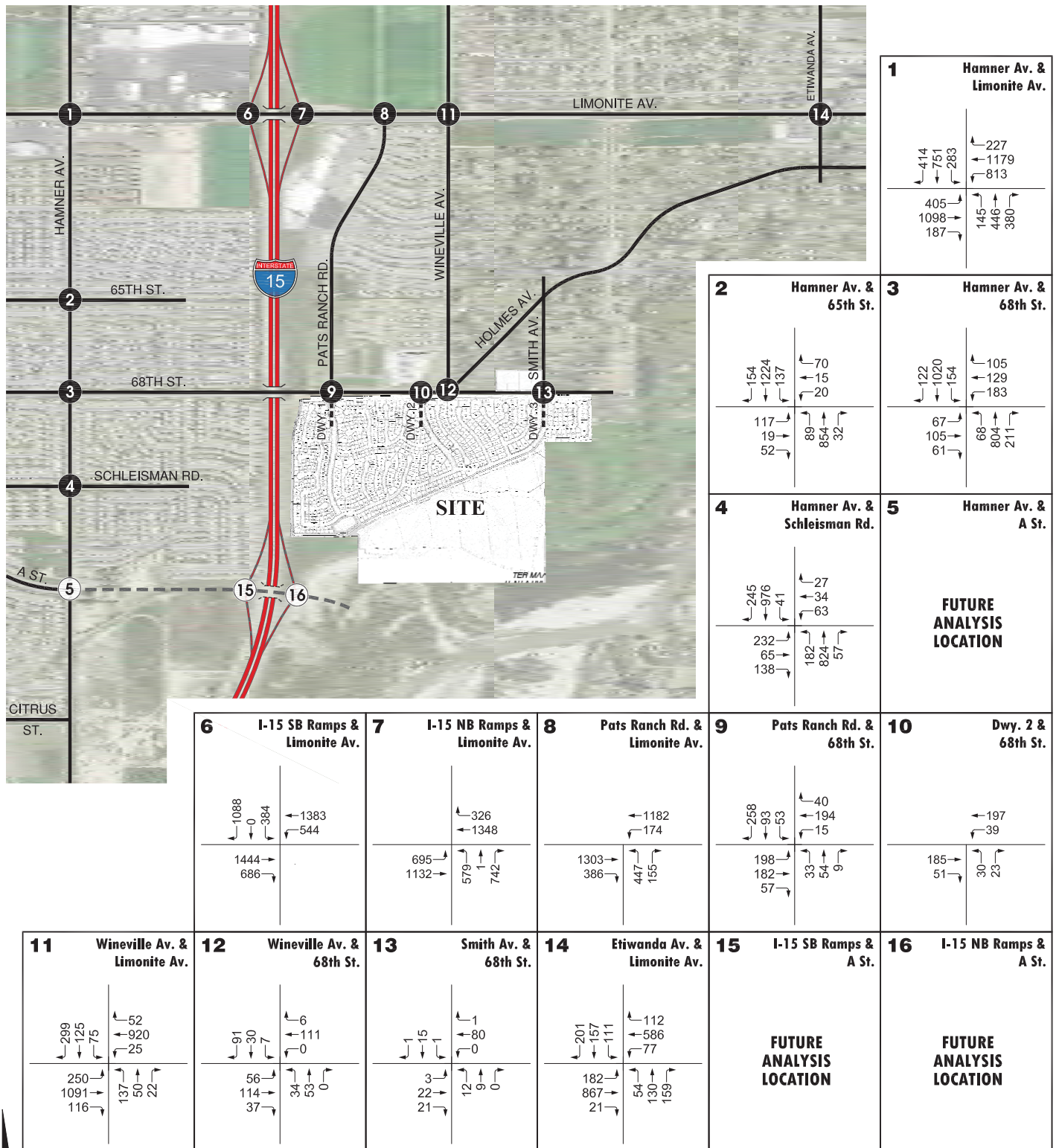
10.0 = VEHICLES PER DAY (1000's)



EXISTING PLUS AMBIENT GROWTH PLUS PROJECT PLUS CUMULATIVE (2017) AM PEAK HOUR INTERSECTION VOLUMES



EXISTING PLUS AMBIENT GROWTH PLUS PROJECT PLUS CUMULATIVE (2017) PM PEAK HOUR INTERSECTION VOLUMES



I A E P A G P P (2017) C

#	Intersection	Traffic Control ³	Intersection Approach Lanes ¹												Existing (2012)				EAP (2017)			
			Northbound				Southbound				Eastbound				Delay ² (secs.)		Level of Service		Delay ² (secs.)		Level of Service	
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM	AM	PM	AM	PM
1	Hamner Av. / Limonite Av.	TS	2	3	1	2	2	1	2	3	1	2	2	1	35.5	40.2	D	D	38.1	43.4	D	D
2	Hamner Av. / 65th St.	TS	1	3	d	1	3	d	1	1	1	1	1	0	29.9	30.6	C	C	30.7	31.3	C	C
3	Hamner Av. / 68th St.	TS	1	3	d	1	3	d	1	1	0	1	1	1	35.1	30.4	D	C	38.4	33.1	D	C
4	Hamner Av. / Schleisman Rd.	TS	1	3	0	1	2	1	1	1	0	1	1	0	38.3	35.9	D	D	41.7	38.8	D	D
5	Hamner Av. / "A" St.		Future Analysis Location																			
6	I-15 SB Ramps / Limonite Av.	TS	0	0	0	1	1	1	0	2	1	2	2	0	21.7	21.6	C	C	27.6	31.5	C	C
7	I-15 NB Ramps / Limonite Av.	TS	1	1	1	0	0	0	2	2	0	0	2	1	35.0	25.6	D	C	54.5	30.5	D	C
8	Pats Ranch Rd. / Limonite Av.	TS	2	0	1	0	0	0	0	2	1	1	2	0	12.9	12.9	B	B	15.0	14.7	B	B
9	Pats Ranch Rd. / 68th St.	AWS	1	1	0	1	1	1	1	2	0	1	2	1	28.3	10.7	D	B	60.9	13.8	F	B
10	Driveway 2 / 68th St.	CSS	0	1	0	0	0	0	0	2	0	1	2	0	Not Applicable				12.9	11.1	B	B
11	Wineville Av. / Limonite Av.	TS	1	2	0	1	1	0	1	2	1	1	2	d	31.7	35.5	D	D	33.5	39.3	C	D
12	Wineville Av. / 68th St.	AWS	1	1	0	1	1	1	1	1	1	0	1	0	10.1	8.5	B	A	11.6	9.0	B	A
13	Smith Av. / 68th St.	CSS	0	0	0	0	1	0	0	1	0	0	1	0	8.6	8.8	A	A	10.2	9.8	B	A
14	Etiwanda Av. / Limonite Av.	TS	1	1	1	1	2	1>>	0	2	1	0	1	1	80.3	56.2	F	E	100	72.6	F	E
15	I-15 SB Ramps / Schleisman Rd.		Future Analysis Location																			
16	I-15 NB Ramps / Schleisman Rd.		Future Analysis Location																			

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 Phasing; >> = Free-Right Turn Lane; d= Defacto Right Turn Lane

² Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. The I-15 Ramp Locations have been analyzed utilizing the Synchro software.

³ TS = Traffic Signal; AWS = All Way Stop; CSS = Cross-street Stop

BOLD = Unsatisfactory level of service.

Etiwanda Avenue / Limonite Avenue (#14) – Although the intersection is currently operating at unacceptable LOS (i.e., LOS “E” and LOS “F”) during the peak hours under Existing (2012) traffic conditions, the addition of Project traffic (as measure by 50 or more peak hour trips) is anticipated to contribute to the deficiency at this intersection. Based on the stated significance threshold for intersections already operating at LOS “E” or LOS “F” under pre-project conditions, the impact is considered “**significant**” (**Impact 2.1**).

Measures to address Project impacts for EAP (2017) traffic conditions are discussed in Section 6.8 *EAP (2017) Impacts and Mitigation Measures*.

6.5 INTERSECTION OPERATIONS ANALYSIS FOR EAPC (2017) CONDITIONS

LOS calculations were conducted for the study intersections to evaluate their operations under EAPC (2017) conditions with existing roadway and intersection geometrics consistent with Exhibit 3-1. The intersection analysis results are summarized in Table 6-2 which indicates that the following intersection locations will experience unacceptable LOS (i.e., LOS “E” or LOS “F”) during one or both of the peak hours in addition to those previously identified under EAP (2017) traffic conditions:

ID	I L	L
1	Hamner Av. / Limonite Av. – LOS “E” PM Peak Hour Only	Eastvale
6	I-15 SB Ramps / Limonite Av. – LOS “E” AM Peak Hour; LOS “F” PM Peak Hour	Caltrans
7	I-15 NB Ramps / Limonite Av. –LOS “F” AM and PM Peak Hours	Caltrans

The intersection operations analysis worksheets for EAPC (2017) conditions are included in Appendix “6.2” of this TIA.

Measures to address EAPC (2017) impacts are discussed in Section 6.9 *EAPC (2017) Impacts and Recommended Improvements*.

6.6 PROGRESSION ANALYSIS

Pursuant to the request of City staff, a progression analysis has been performed for the peak hours for both EAP (2017) and EAPC (2017) traffic conditions along Limonite Avenue between the I-15 Freeway and Wineville Avenue. The progression of vehicles has been assessed to determine potential peak hour queues along Limonite Avenue between the I-15 Freeway and Wineville Avenue. The analysis assumes the striping modifications proposed by the joint City and County resurfacing project. These striping plans have been provided by City staff and are included in Appendix “6.3”.

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E P A G P P P C (2017) C

#	Intersection	Traffic Control ³	Intersection Approach Lanes ¹												EAPC (2017)			
			Northbound				Southbound				Eastbound				Delay ² (secs.)		Level of Service	
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM
1	Hamner Av. / Limonite Av.	TS	2	3	1	2	2	1	2	3	1	2	2	1	42.9	68.8	D	E
2	Hamner Av. / 65th St.	TS	1	3	d	1	3	d	1	1	1	1	1	0	32.0	33.5	C	C
3	Hamner Av. / 68th St.	TS	1	3	d	1	3	d	1	1	0	1	1	1	36.3	36.1	D	D
4	Hamner Av. / Schleisman Rd.	TS	1	3	0	1	2	1	1	1	0	1	1	0	40.8	46.0	D	D
5	Hamner Av. / "A" St.		Future Analysis Location															
6	I-15 SB Ramps / Limonite Av.	TS	0	0	0	1	1	1	0	2	1	2	2	0	55.1	100	E	F
7	I-15 NB Ramps / Limonite Av.	TS	1	1	1	0	0	0	2	2	0	0	2	1	83.4	66.4	F	F⁴
8	Pats Ranch Rd. / Limonite Av.	TS	2	0	1	0	0	0	0	2	1	1	2	0	15.1	15.8	B	B
9	Pats Ranch Rd. / 68th St.	AWS	1	1	0	1	1	1	1	2	0	1	2	1	61.4	13.9	F	B
10	Driveway 2 / 68th St.	CSS	0	<u>1</u>	0	0	0	0	0	<u>2</u>	0	<u>1</u>	2	0	12.9	11.1	B	B
11	Wineville Av. / Limonite Av.	TS	1	2	0	1	1	0	1	2	1	1	2	d	35.4	47.4	C	D
12	Wineville Av. / 68th St.	AWS	<u>1</u>	1	0	<u>1</u>	1	1	1	1	<u>1</u>	0	1	0	11.6	9.0	B	A
13	Smith Av. / 68th St.	CSS	0	0	0	0	1	0	0	1	0	0	1	0	10.2	9.8	B	A
14	Etiwanda Av. / Limonite Av.	TS	1	1	1	1	2	1>>	0	2	1	0	1	1	100	100	F	F
15	I-15 SB Ramps / Schleisman Rd.		Future Analysis Location															
16	I-15 NB Ramps / Schleisman Rd.		Future Analysis Location															

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 Phasing; >> = Free-Right Turn Lane; d= Defacto Right Turn Lane

² Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. The I-15 Ramp Locations have been analyzed utilizing the Synchro software.

³ TS = Traffic Signal; AWS = All Way Stop; CSS = Cross-street Stop

⁴ Volume-to-capacity ratio is greater than 1.00; Intersection unstable; Level of Service "F".

BOLD = Unsatisfactory level of service.

The traffic progression analysis tool and HCM intersection analysis program, Synchro, has been used to assess the potential needs of the intersections with traffic added from the proposed Project. Queues reported are based upon the 95th percentile queues resulting from the Synchro progression analysis. The 95th percentile queue is the maximum back of queue with 95th percentile traffic volumes. The queue length reported is for the lane with the highest queue in the lane group.

There are two footnotes which appear on the Synchro outputs. One footnote indicates if the 95th percentile cycle exceeds capacity. Traffic is simulated for two complete cycles of the 95th percentile traffic in Synchro in order to account for the effects of spillover between cycles. In practice, the 95th percentile queue shown will rarely be exceeded and the queues shown with the footnote are acceptable for the design of storage bays. The other footnote indicates whether or not the volume for the 95th percentile queue is metered by an upstream signal. In many cases, the 95th percentile queue will not be experienced and may potentially be less than the 50th percentile queue due to upstream metering. If the upstream intersection is at or near capacity, the 50th percentile queue represents the maximum queue experienced.

The 95th percentile queue is the maximum back of queue with 95th percentile traffic volumes during the peak hour. In other words, if traffic were observed for 100 cycles, the 95th percentile queue would be the queue experienced with the 95th busiest cycle (or 5% of the time). The 95th percentile queue is derived from the average queue plus 1.65 standard deviations. The 95th percentile queue is not necessarily ever observed, it is simply based on statistical calculations.

6.6.1 EAP (2017) CONDITIONS

Progression analysis findings are presented in Table 6-3 for EAP (2017) traffic conditions. As shown on Table 6-3, the following movements may potentially experience queuing issues during peak 95th percentile traffic flows under EAP (2017) traffic conditions:

I	L	M
I-15 Southbound Ramps / Limonite Avenue		- Eastbound Right: may not provide adequate storage to accommodate 95 th percentile EAP (2017) vehicle queues during the PM peak hour only. Could potentially result in vehicles spilling back into the adjacent eastbound through lane towards the west. However, it should be noted that this spill-back is anticipated to be nominal as there is sufficient storage in the adjacent eastbound through lane to accommodate any potential spill-back from the eastbound right turn lane without resulting in any adverse affects at the upstream intersections during the PM peak hour.

E P A G P P (2017) C
AM PM P H S L S L A

Intersection	Movement	Stacking Distance (Feet)	95 th Percentile Stacking Distance Required (Feet)		Acceptable? ¹	
			AM	PM	AM	PM
I-15 SB Ramps / Limonite Avenue	SBL	400	205 ²	296	Yes	Yes
	SBT	1,285	93	402 ²	Yes	Yes
	SBR	400	71	367 ²	Yes	Yes
	EBT	1,120	423	440	Yes	Yes
	EBR	150	134	171	Yes	N
	WBL	275	142 ³	167 ³	Yes	Yes
	WBT	620	14 ³	158	Yes	Yes
I-15 NB Ramps / Limonite Avenue	NBL	450	281 ²	368 ²	Yes	Yes
	NBT	1,230	110	318 ²	Yes	Yes
	NBR	450	65	301 ²	Yes	Yes
	EBL	300	386 ²	222 ²	N	Yes
	EBT	620	6	211	Yes	Yes
	WBT	1,080	350	323	Yes	Yes
	WBR	150	102	0	Yes	Yes
Pats Ranch Road / Limonite Avenue	NBL	200	214	193	Yes	Yes
	NBR	685	37	53	Yes	Yes
	EBT	1,080	220	282	Yes	Yes
	EBR	200	39	32 ³	Yes	Yes
	WBL	165	94	154	Yes	Yes
	WBT	825	86	64 ³	Yes	Yes
Wineville Avenue / Limonite Avenue	NBL	185	157 ²	206 ²	Yes	N
	NBT	1,260	38	28	Yes	Yes
	SBL	100	43	91	Yes	Yes
	SBT	590	99	267	Yes	Yes
	EBL	250	131 ²	215 ²	Yes	Yes
	EBT	825	57	151	Yes	Yes
	EBR	360	1	1 ³	Yes	Yes
	WBL	250	61	45	Yes	Yes
	WBT	2,480	348	350 ²	Yes	Yes
	WBR	100	21	34	Yes	Yes

¹ Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 15 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

² 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

³ Volume for 95th percentile queue is metered by upstream signal.

I	L	M
	I-15 Northbound Ramps / Limonite Avenue	- Eastbound Left: may not provide adequate storage to accommodate 95 th percentile EAP (2017) vehicle queues during the AM peak hour only. Could potentially result in vehicles spilling back into the adjacent eastbound through lane and may affect peak hour operations at the I-15 Southbound Ramps. However, it should be noted that this spill-back is anticipated to be nominal as there is sufficient storage in the adjacent eastbound through lane to accommodate any potential spill-back from the eastbound left turn lane without resulting in any adverse affects at the I-15 Southbound Ramps during the AM peak hour.
	Wineville Avenue / Limonite Avenue	- Northbound Left: may not provide adequate storage to accommodate 95 th percentile EAP (2017) vehicle queues during the PM peak hour only. Potential queuing issue does not affect the progression of vehicles along Limonite Avenue.

The 95th percentile EAP (2017) vehicle queues are anticipated to result in periodic (approximately 5 percent of the time) spill-back through the I-15 Freeway interchange area along Limonite Avenue. It should be noted that this is a near-term condition only as future plans for the I-15 Freeway at Limonite Avenue include an interchange project to implement a partial-cloverleaf design. Worksheets for EAP (2017) conditions queuing analysis is provided in Appendix “6.4”.

6.6.2 EAPC (2017) CONDITIONS

Progression analysis findings are presented in Table 6-4 for EAPC (2017) traffic conditions. As shown on Table 6-4, the following movements may potentially experience queuing issues during peak 95th percentile traffic flows under EAPC (2017) traffic conditions:

I	L	M
	I-15 Southbound Ramps / Limonite Avenue	<ul style="list-style-type: none"> - Southbound Right: may not provide adequate storage to accommodate 95th percentile EAPC (2017) vehicle queues during the PM peak hour only. Potential queuing issue does not affect the progression of vehicles along Limonite Avenue. - Eastbound Right: may not provide adequate storage to accommodate 95th percentile EAPC (2017) vehicle queues during the peak hours. It should be noted that any potential spill-back is anticipated to be nominal as there is sufficient storage in the adjacent eastbound through lane to accommodate any potential spill-back from the eastbound right turn lane without resulting in any adverse affects at the upstream intersections during the peak hours.

E P A G P P P C (2017) C
 AM PM P H S L S L A

Intersection	Movement	Stacking Distance (Feet)	95 th Percentile Stacking Distance Required (Feet)		Acceptable? ¹	
			AM	PM	AM	PM
I-15 SB Ramps / Limonite Avenue	SBL	400	225 ²	317	Yes	Yes
	SBT	1,285	209 ²	723 ²	Yes	Yes
	SBR	400	195 ²	688²	Yes	N
	EBT	1,120	527	701 ²	Yes	Yes
	EBR	150	208	448²	N	N
	WBL	275	141 ³	190 ^{2,3}	Yes	Yes
	WBT	620	14 ³	192 ³	Yes	Yes
I-15 NB Ramps / Limonite Avenue	NBL	450	378 ²	547²	Yes	N
	NBT	1,230	357 ²	468 ²	Yes	Yes
	NBR	450	73	425 ²	Yes	Yes
	EBL	300	492²	198 ³	N	Yes
	EBT	620	16 ³	273 ³	Yes	Yes
	WBT	1,080	542 ²	619 ²	Yes	Yes
	WBR	150	136	91	Yes	Yes
Pats Ranch Road / Limonite Avenue	NBL	200	222	200	N	Yes
	NBR	685	38	54	Yes	Yes
	EBT	1,080	239 ³	282 ³	Yes	Yes
	EBR	200	28 ³	19 ³	Yes	Yes
	WBL	165	86	137	Yes	Yes
	WBT	825	63	63 ³	Yes	Yes
Wineville Avenue / Limonite Avenue	NBL	185	176 ²	220²	Yes	N
	NBT	1,260	40	27	Yes	Yes
	SBL	100	57	117²	Yes	N
	SBT	590	116	297	Yes	Yes
	EBL	250	177 ²	283²	Yes	N
	EBT	825	36	412 ²	Yes	Yes
	EBR	360	0	7 ³	Yes	Yes
	WBL	250	61	44	Yes	Yes
	WBT	2,480	379	470 ²	Yes	Yes
	WBR	100	23	43	Yes	Yes

¹ Stacking Distance is acceptable if the required stacking distance is less than or equal to the stacking distance provided. An additional 15 feet of stacking which is assumed to be provided in the transition for turn pockets is reflected in the stacking distance shown on this table, where applicable.

² 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

³ Volume for 95th percentile queue is metered by upstream signal.

I	L	M
	<p>I-15 Northbound Ramps / Limonite Avenue</p>	<ul style="list-style-type: none"> - Northbound Left: may not provide adequate storage to accommodate 95th percentile EAPC (2017) vehicle queues during the PM peak hour only. Potential queuing issue does not affect the progression of vehicles along Limonite Avenue. - Eastbound Left: may not provide adequate storage to accommodate 95th percentile EAPC (2017) vehicle queues during the AM peak hour only. It should be noted that any potential spill-back is anticipated to be nominal as there is sufficient storage in the adjacent eastbound through lane to accommodate any potential spill-back from the eastbound left turn lane without resulting in any adverse affects at the I-15 Southbound Ramps during the AM peak hour.
	<p>Pats Ranch Road / Limonite Avenue</p>	<ul style="list-style-type: none"> - Northbound Left: may not provide adequate storage to accommodate 95th percentile EAPC (2017) vehicle queues during the AM peak hour only. Potential queuing issue does not affect the progression of vehicles along Limonite Avenue.
	<p>Wineville Avenue / Limonite Avenue</p>	<ul style="list-style-type: none"> - Northbound Left: may not provide adequate storage to accommodate 95th percentile EAPC (2017) vehicle queues during the PM peak hour only. Potential queuing issue does not affect the progression of vehicles along Limonite Avenue. - Southbound Left: may not provide adequate storage to accommodate 95th percentile EAPC (2017) vehicle queues during the PM peak hour only. Potential queuing issue does not affect the progression of vehicles along Limonite Avenue. - Eastbound Left: may not provide adequate storage to accommodate 95th percentile EAPC (2017) vehicle queues during the PM peak hour only. It should be noted that any potential spill-back is anticipated to be nominal as there is sufficient storage in the adjacent eastbound through lane to accommodate any potential spill-back from the eastbound left turn lane without resulting in any adverse affects at the I-15 Southbound Ramps during the PM peak hour.

The 95th percentile EAPC (2017) vehicle queues are anticipated to result in periodic (approximately 5 percent of the time) spill-back through the I-15 Freeway interchange area along Limonite Avenue. As noted previously, this is a near-term condition only as future plans for the I-15 Freeway at Limonite Avenue include an interchange project to implement a partial-cloverleaf design. Worksheets for EAPC (2017) conditions queuing analysis is provided in Appendix “6.5”.

6.7 TRAFFIC SIGNAL WARRANTS ANALYSIS

For EAP (2017) traffic conditions, a traffic signal appears to be warranted based on the Caltrans planning-level ADT warrant being met at the following intersection (see Appendix “6.6”):

ID	I	L
9	Pats Ranch Rd. / 68 th St.	Jurupa Valley

For EAPC (2017) traffic conditions, no additional traffic signals appear to be warranted in addition to those warranted under EAP (2017) traffic conditions (see Appendix “6.7”).

6.8 EAP (2017) IMPACTS AND MITIGATION MEASURES

Mitigation strategies have been recommended to address study area intersections found to be significantly impacted by the Project. Mitigation measures have been recommended that are necessary to reduce each location’s peak hour delay and associated LOS grade back to acceptable levels, thus reducing the impact to “less-than-significant”. The effectiveness of the proposed mitigation measure is presented in Table 6-5.

The following mitigation measure is recommended to reduce EAP (2017) impacts to “less-than-significant”:

Mitigation Measure 1.1 – Pats Ranch Road / 68th Street (#9) – The following improvements (shown in) are necessary to reduce the impact to less-than-significant:

I

Northbound: ○

Southbound: Re-stripe to provide , one through lane and one right turn lane.

Eastbound: One left turn lane, one through lane and

Westbound: Re-strip to provide , two through lanes and one right turn lane.

Mitigation Measure 2.1 – Etiwanda Avenue / Limonite Avenue (#14) – The following improvements (shown in) are necessary to reduce the impact to less-than-significant:

Northbound: Re-stripe to provide one left turn lane, one through lane and

Southbound: One left turn lane, two through lanes and a free-right turn lane.

Eastbound: One shared left-through lane, one through lane and one right turn lane.

Westbound: One shared left-through lane, and one right turn lane.

T 65

I A E P A G P P (2017) C W I M P I

#	Intersection	Traffic Control ³	Intersection Approach Lanes ¹												Delay ² (secs.)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound			AM	PM	AM	PM
			L	T	R	L	T	R	L	T	R	L	T	R				
9	Pats Ranch Rd. / 68th St.																	
	- Without Improvements	AWS	<u>1</u>	<u>1</u>	0	1	<u>1</u>	1	1	<u>2</u>	0	<u>1</u>	2	1	60.9	13.8	F	B
	- With Mitigation Measure 1.1	<u>TS</u>	<u>1</u>	<u>1</u>	0	1	<u>1</u>	1	1	<u>2</u>	0	<u>1</u>	2	1	35.9	29.4	D	C
14	Etiwanda Av. / Limonite Av.																	
	- Without Improvements	TS	1	1	1	1	2	1>>	0	2	1	0	1	1	100	72.6	F	E
	- With Mitigation Measure 2.1	TS	1	<u>2</u>	<u>0</u>	1	2	1>>	0	2	1	0	<u>2</u>	1	41.2	51.4	D	D

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 Phasing; >> = Free-Right Turn Lane; d= Defacto Right Turn Lane; 1 = Improvement

² Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. The I-15 Ramp Locations have been analyzed utilizing the Synchro software.

³ TS = Traffic Signal; AWS = All Way Stop; CSS = Cross-street Stop

BOLD = Unsatisfactory level of service.

As noted previously, with this intersection mitigation measure there are no impacts anticipated to the study area intersections. Worksheets for EAP (2017) traffic conditions, with improvements, HCM calculations are provided in Appendix “6.8”.

6.9 EAPC (2017) IMPACTS AND RECOMMENDED IMPROVEMENTS

Improvement strategies have been recommended at intersections that have been identified as cumulatively impacted to reduce each location’s peak hour delay and improve the associated LOS grade to LOS “D” or better. The effectiveness of the recommended improvement strategies discussed below to address EAPC (2017) impacts are presented in Table 6-6.

The following recommended improvements are recommended to reduce EAPC (2017) impacts to “less-than-significant”:

Recommended Improvement – amner Avenue / Limonite Avenue (#1) – The following improvements (shown in) are necessary to reduce the impact to less-than-significant:

Northbound: Two left turn lanes, three through lanes and one right turn lane with .

Southbound: Two left turn lanes, and one right turn lane with .

Eastbound: Two left turn lanes, three through lanes and one right turn lane.

Westbound: Two left turn lanes, and one right turn lane with .

R ().

Recommended Improvement – I-1 South ound Ramps / Limonite Avenue (#6) – The following improvements (shown in) are necessary to reduce the impact to less-than-significant:

Northbound: N/A

Southbound: One left turn lane, one shared left-through-right turn lane and one right turn lane.

Eastbound: **T** and one right turn lane.

Westbound: Two left turn lanes and .

Recommended Improvement – I-1 orth ound Ramps / Limonite Avenue (#) – The following improvements (shown in) are necessary to reduce the impact to less-than-significant:

Northbound: One left turn lane, one shared left-through-right turn lane and one right turn lane.

Southbound: N/A

Eastbound: Two left turn lanes and .

Westbound: **T** and one right turn lane.

Recommended Improvement – Pats Ranch Road / 68th Street (#9) – Mitigation Measure 1.1 shall apply; no additional mitigation would be required.

I A E P A G P P P C (2017) C
W I M C I

#	Intersection	Traffic Control ³	Intersection Approach Lanes ¹												Delay ² (secs.)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound			AM	PM	AM	PM
			L	T	R	L	T	R	L	T	R	L	T	R				
1	Hamner Av. / Limonite Av.																	
	- Without Improvements	TS	2	3	1	2	2	1	2	3	1	2	2	1	42.9	68.8	D	E
	- With Improvements ⁵	TS	2	3	<u>1</u>	2	<u>3</u>	<u>1</u>	2	3	1	2	<u>3</u>	<u>1</u>	35.9	54.5	D	D
6	I-15 SB Ramps / Limonite Av.																	
	- Without Improvements	TS	0	0	0	1	1	1	0	2	1	2	2	0	55.1	100	E	F
	- With Improvements	TS	0	0	0	1	1	1	0	<u>3</u>	1	2	<u>3</u>	0	18.9	40.7	B	D
7	I-15 NB Ramps / Limonite Av.																	
	- Without Improvements	TS	1	1	1	0	0	0	2	2	0	0	2	1	83.4	66.4	F	F ⁴
	- With Improvements	TS	1	1	1	0	0	0	2	<u>3</u>	0	0	<u>3</u>	1	28.6	33.5	C	C
9	Pats Ranch Rd. / 68th St.																	
	- Without Improvements	AWS	<u>1</u>	<u>1</u>	0	1	<u>1</u>	1	1	<u>2</u>	0	<u>1</u>	2	1	61.4	13.9	F	B
	- With Improvements	TS	<u>1</u>	<u>1</u>	0	1	<u>1</u>	1	1	<u>2</u>	0	<u>1</u>	2	1	35.9	29.4	D	C
14	Etiwanda Av. / Limonite Av.																	
	- Without Improvements	TS	1	1	1	1	2	1>>	0	2	1	0	1	1	100	100	F	F
	- With Improvements ⁶	TS	1	<u>2</u>	<u>0</u>	1	2	1>>	<u>1</u>	2	1	<u>1</u>	<u>2</u>	1	29.5	33.1	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 Phasing; >> = Free-Right Turn Lane; d= Defacto Right Turn Lane; 1 = Improvement

² Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. The I-15 Ramp Locations have been analyzed utilizing the Synchro software.

³ TS = Traffic Signal; AWS = All Way Stop; CSS = Cross-street Stop

⁴ Volume-to-capacity ratio is greater than 1.00; Intersection unstable; Level of Service "F".

⁵ Eliminate crosswalk on the east leg (northbound approach)

⁶ In addition to lane improvement shown, implement protected left-turn phasing on the eastbound/westbound left turning movements.

BOLD = Unsatisfactory level of service.

Recommended Improvement – Etiwanda Avenue / Limonite Avenue (#14) – The following improvements (shown in) are necessary to reduce the impact to less-than-significant:

Northbound: Re-stripe to provide one left turn lane, one through lane and

Southbound: One left turn lane, two through lanes and a free-right turn lane.

Eastbound: ○ , two through lanes and one right turn lane.

Westbound: ○ , and one right turn lane.

The applicant shall participate in the funding or construction of off-site improvements, including traffic signals that are needed to serve cumulative traffic conditions through the payment of Western Riverside County Transportation Uniform Mitigation Fees (TUMF), Mira Loma Road and Bridge Benefit District (RBBD) fees, County of Riverside Development Impact Fees (DIF) or a fair share contribution as directed by the City. These fees are collected as part of a funding mechanism aimed at ensuring that regional highways and arterial expansions keep pace with the projected population increases.

Worksheets for EAPC (2017) with Project conditions, with improvements, HCM calculations are provided in Appendix “6.9”.

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7.0 HORIZON YEAR (2035) TRAFFIC ANALYSIS

This section discusses the methods used to develop Horizon Year (2035) traffic forecasts for without and with Project conditions and the resulting intersection operations.

The proposed Project is anticipated to have different travel patterns under Horizon Year (2035) traffic conditions, utilizing new facilities that do not currently exist (e.g., I-15 Freeway interchange at Schleisman Road). As such, three (3) additional intersection analysis locations have been included for the Horizon Year (2035) analyses only (i.e., Hamner Avenue at “A” Street and I-15 Southbound and Northbound Ramps at Schleisman Road). The following intersections have been analyzed for Horizon Year (2035) without and with Project conditions:

ID	I	L
1	Hamner Av. / Limonite Av.	Eastvale
2	Hamner Av. / 65 th Street	Eastvale
3	Hamner Av. / 68 th St.	Eastvale
4	Hamner Av. / Schleisman Rd.	Eastvale
5	Hamner Av. / “A” St.	Eastvale
6	I-15 SB Ramps / Limonite Av.	Caltrans
7	I-15 NB Ramps / Limonite Av.	Caltrans
8	Pats Ranch Rd. / Limonite Av.	Jurupa Valley
9	Pats Ranch Rd. / 68 th St.	Jurupa Valley
10	Driveway 2 / 68 th St.	Jurupa Valley
11	Wineville Av. / Limonite Av.	Jurupa Valley
12	Wineville Av. / 68 th St.	Jurupa Valley
13	Smith Av. / 68 th St.	Jurupa Valley
14	Etiwanda Av. / Limonite Av.	Jurupa Valley
15	I-15 SB Ramps / Schleisman Rd.	Caltrans
16	I-15 NB Ramps / Schleisman Rd.	Caltrans

Assessment of Horizon Year (2035) without and with Project traffic conditions will determine if the County of Riverside Circulation Element is adequate to accommodate future traffic at the target LOS, or if additional mitigation is necessary.

7.1 ROADWAY IMPROVEMENTS

The lane configurations and traffic controls assumed to be in place for Horizon Year (2035) without and with Project conditions are consistent with those shown previously on Exhibit 3-1, with the exception of the Schleisman Road extension to east of the I-15 Freeway. Project driveways and those facilities

assumed to be constructed by the Project or cumulative development projects to provide site access are also assumed to be in place for Horizon Year (2035) with Project traffic conditions.

It is our understanding that Caltrans, in conjunction with surrounding jurisdictions, is in the process of conducting a Project Initiation Document (PID) for the I-15 Freeway at Limonite Avenue interchange. Although a formal design was not available at the time this report was prepared, it is our understanding that the improvements at this interchange are proposed to include widening Limonite Avenue to provide three through lanes in each direction of travel in conjunction with the construction of I-15 Northbound and I-15 Southbound loop ramps, which would eliminate left-turns onto the I-15 Freeway. It is unclear when these improvements would be constructed as a formal schedule on the interchange improvements is not yet available. As such, these improvements have been assumed at the I-15 Freeway at Limonite Avenue interchange for Horizon Year (2035) traffic conditions, with improvements only.

7.2 HORIZON YEAR (2035) WITHOUT PROJECT TRAFFIC VOLUME FORECASTS

This scenario includes the refined post-processed volumes obtained from the Riverside County Transportation and Analysis Model (RivTAM) (see Section 4.9 *Horizon Year (2035) Conditions* of this TIA for a detailed discussion on the post-processing methodology). The weekday ADT volumes which can be expected for Horizon Year (2035) without Project traffic conditions are shown on Exhibit 7-1. Exhibits 7-2 and 7-3 show the AM and PM peak hour intersection turning movement volumes for Horizon Year (2035) without Project traffic conditions.

7.3 HORIZON YEAR (2035) WITH PROJECT TRAFFIC VOLUME FORECASTS

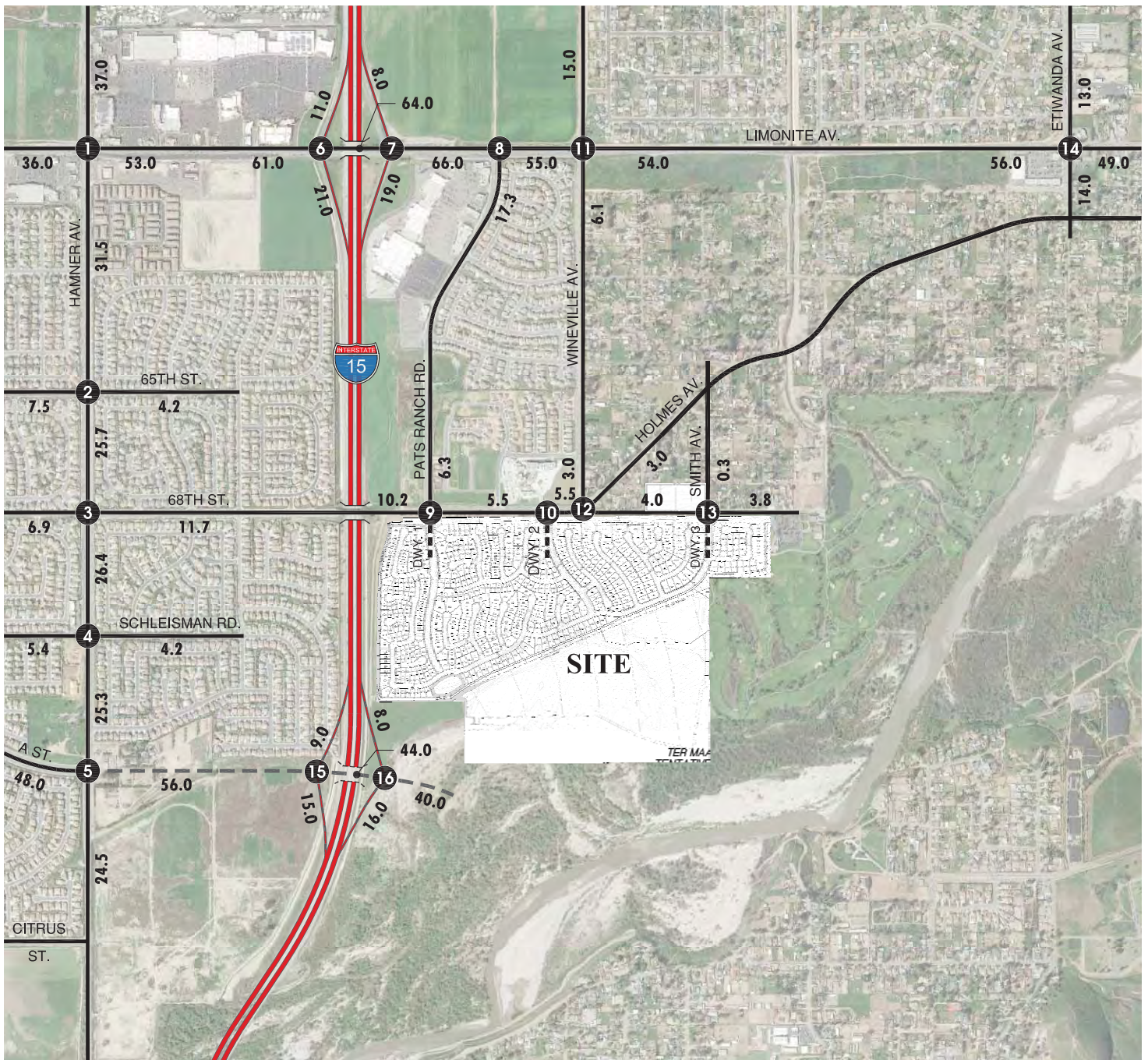
This scenario includes the refined post-processed volumes obtained from the RivTAM (see Section 4.9 *Horizon Year (2035) Conditions* of this TIA for a detailed discussion on the post-processing methodology). The weekday ADT volumes which can be expected for Horizon Year (2035) with Project traffic conditions are shown on Exhibit 7-4. Exhibits 7-5 and 7-6 show the AM and PM peak hour intersection turning movement volumes for Horizon Year (2035) with Project traffic conditions.

7.4 INTERSECTION OPERATIONS ANALYSIS

LOS calculations were conducted for the study intersections to evaluate their operations under Horizon Year (2035) without and with Project conditions with Existing (2012) baseline intersection geometrics, consistent with Exhibit 3-1. The intersection analysis results for Horizon Year (2035) without and with Project traffic conditions are summarized in Table 7-1 which indicates that the following intersection locations would experience unacceptable LOS (i.e., LOS “E” or LOS “F”) during one or both of the peak hours:

EXHIBIT 7-1

HORIZON YEAR (2035) WITHOUT PROJECT AVERAGE DAILY TRAFFIC (ADT)

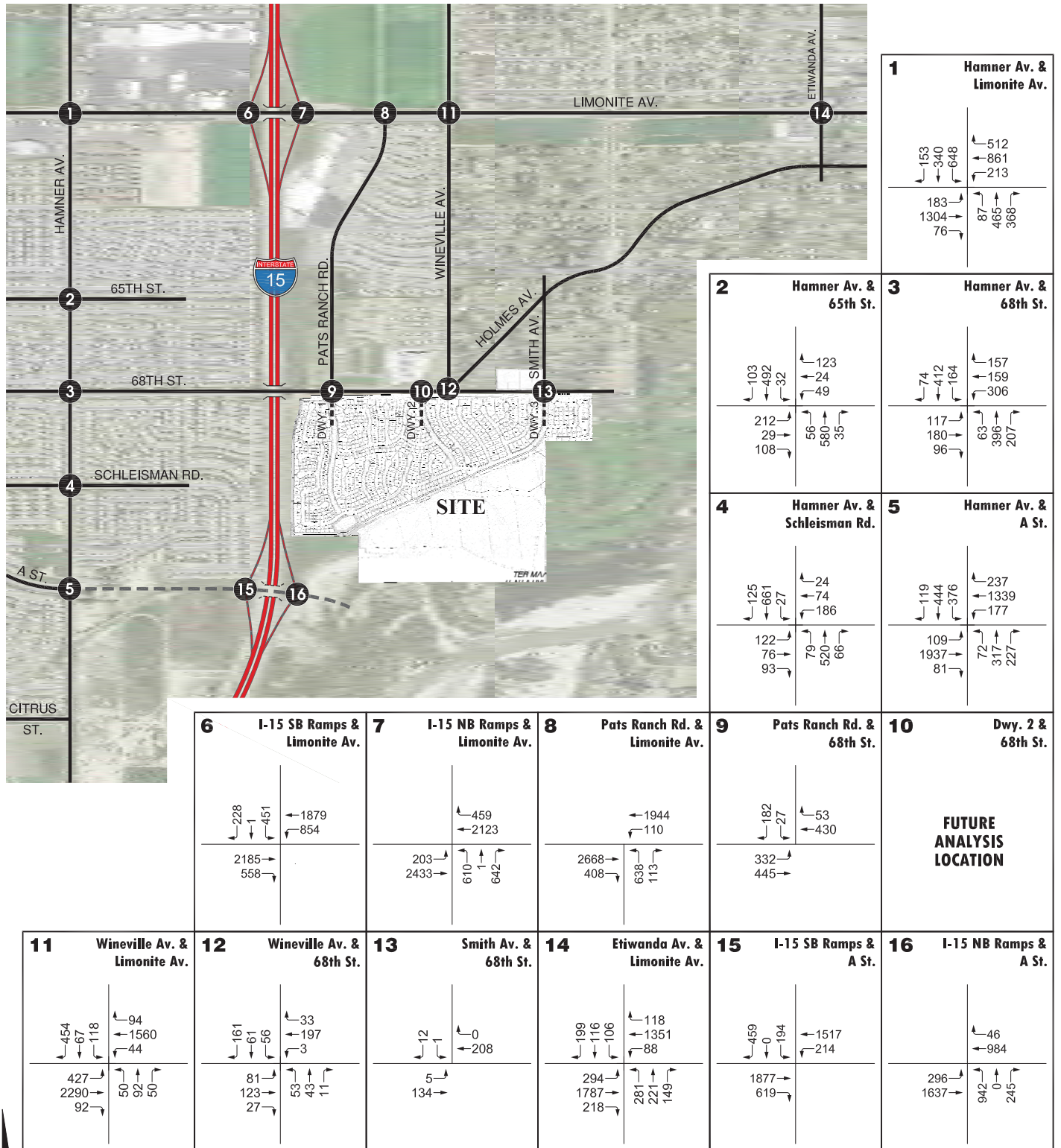


LEGEND:

10.0 = VEHICLES PER DAY (1000's)



HORIZON YEAR (2035) WITHOUT PROJECT AM PEAK HOUR INTERSECTION VOLUMES



HORIZON YEAR (2035) WITHOUT PROJECT PM PEAK HOUR INTERSECTION VOLUMES

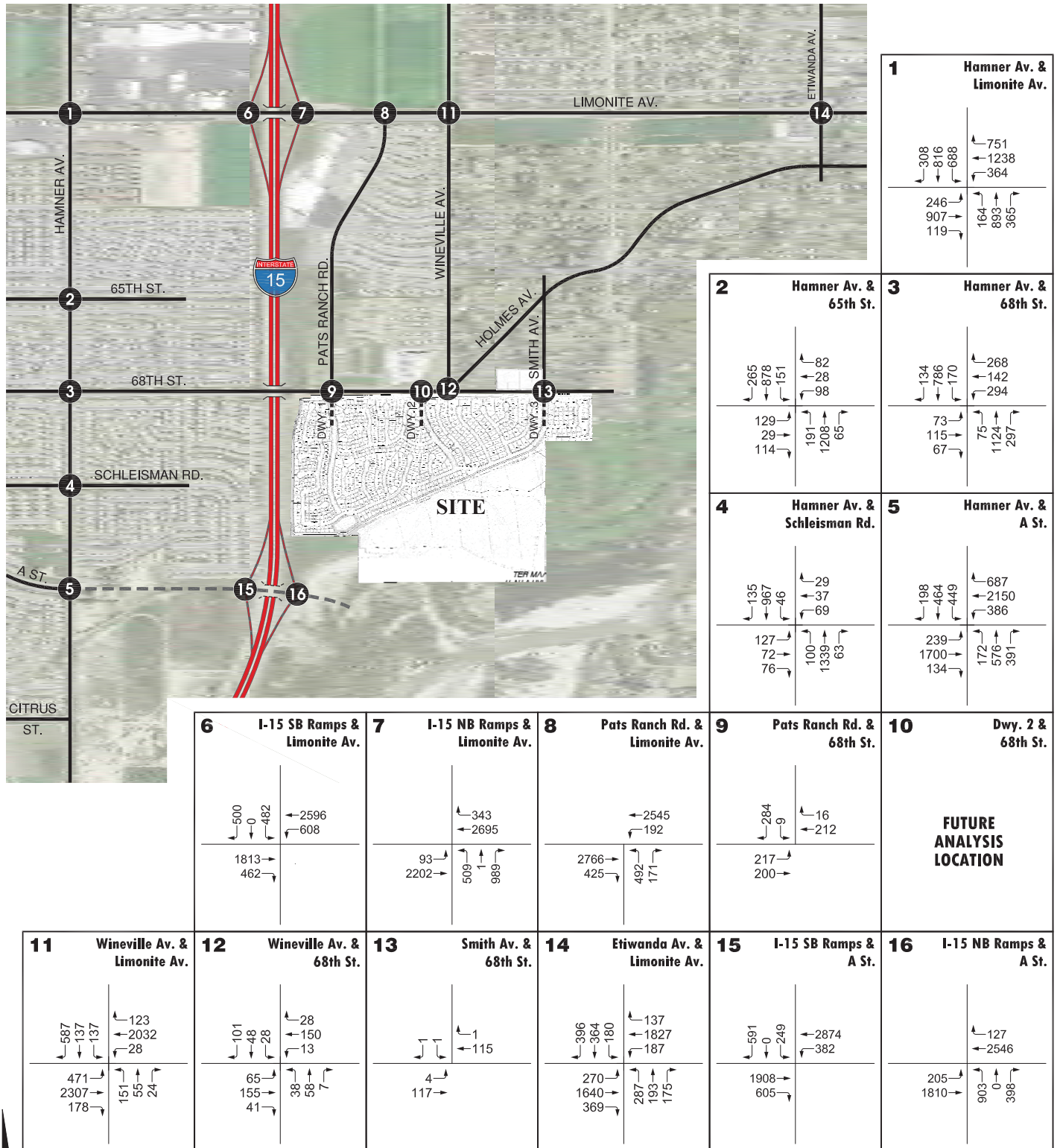


EXHIBIT 7-5

HORIZON YEAR (2035) WITH PROJECT AM PEAK HOUR INTERSECTION VOLUMES

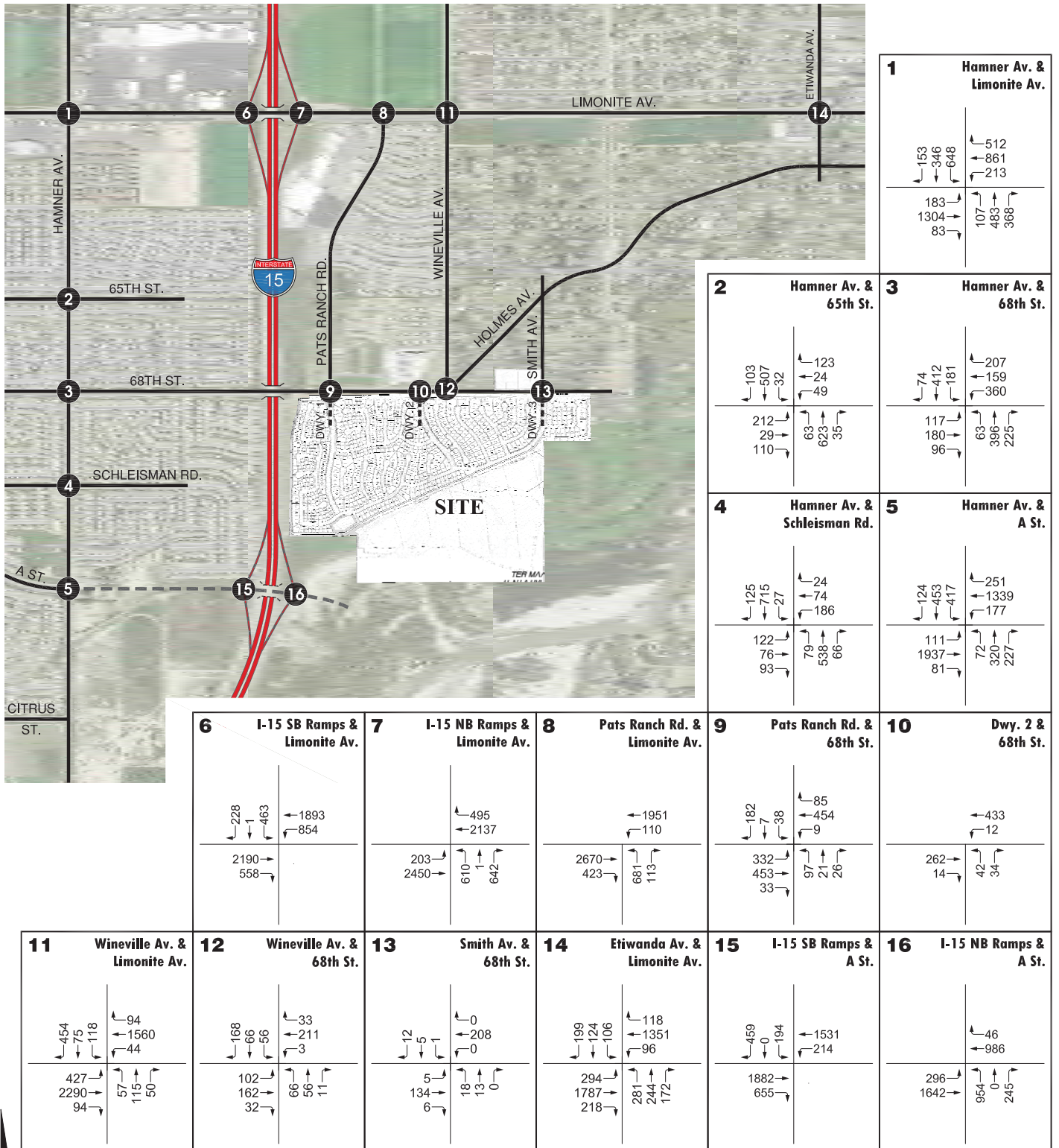
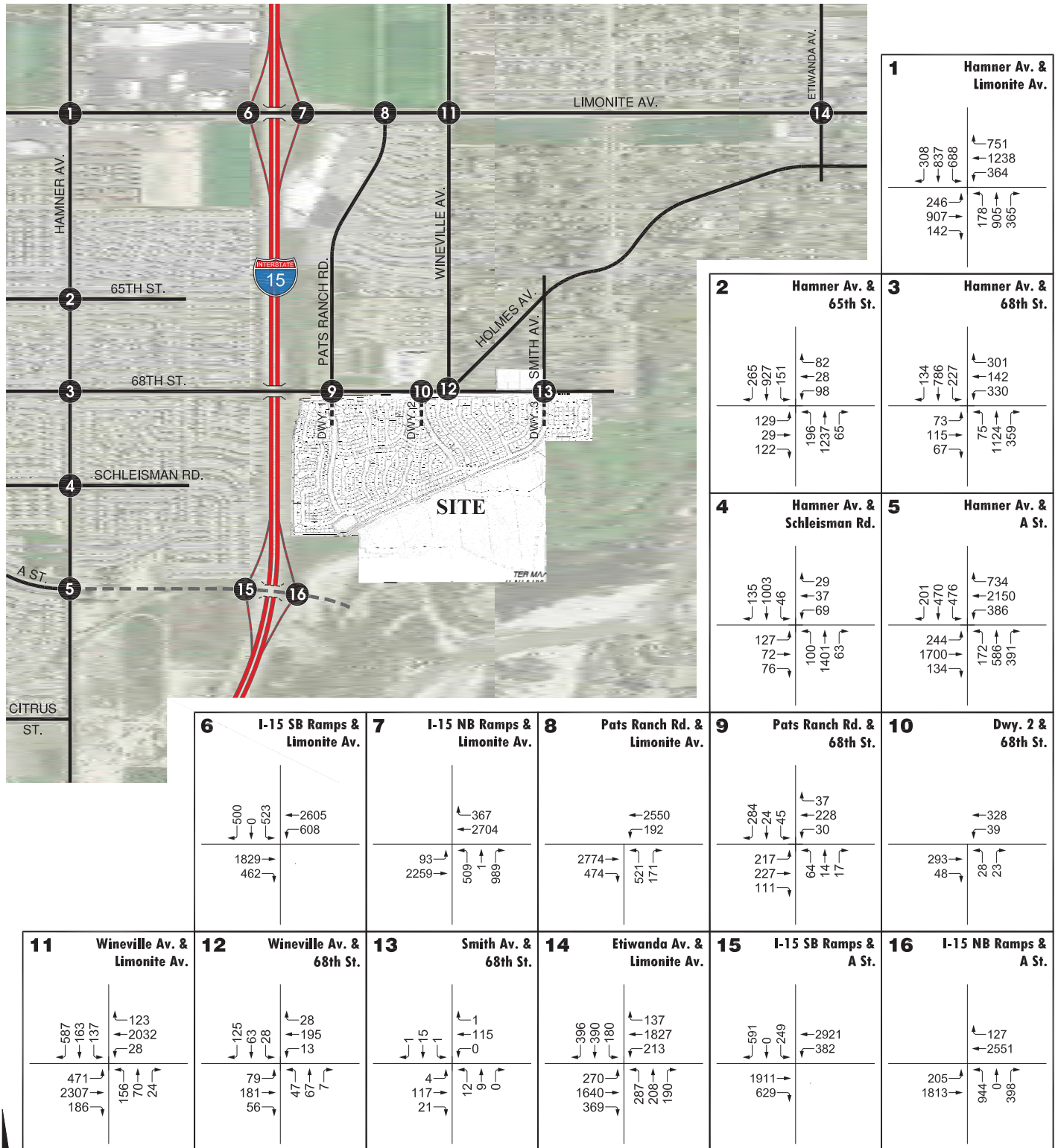


EXHIBIT 7-6

HORIZON YEAR (2035) WITH PROJECT PM PEAK HOUR INTERSECTION VOLUMES



T 71

I A H Y (2035) C

#	Intersection	Traffic Control ²	Intersection Approach Lanes ¹												2035 Without Project				2035 With Project			
			Northbound				Southbound				Eastbound				Delay ¹ (secs.)		Level of Service		Delay ¹ (secs.)		Level of Service	
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM	AM	PM	AM	PM
1	Hamner Av. / Limonite Av.	TS	2	3	1	2	2	1	2	3	1	2	2	1	58.3	95.3	E	F	58.1	94.8	E	F
2	Hamner Av. / 65th St.	TS	1	3	d	1	3	d	1	1	1	1	1	0	33.5	37.5	C	D	33.7	37.9	C	D
3	Hamner Av. / 68th St.	TS	1	3	d	1	3	d	1	1	0	1	1	1	39.8	44.3	D	D	43.4	53.2	D	D
4	Hamner Av. / Schleisman Rd.	TS	1	3	0	1	2	1	1	1	0	1	1	0	32.9	35.8	C	D	33.4	35.3	C	D
5	Hamner Av. / "A" St.	CSS	1	1	0	0	1	1	1	0	1	0	0	0	100	100	F	F	100	100	F	F
6	I-15 SB Ramps / Limonite Av.	TS	0	0	0	1	1	1	0	2	1	2	2	0	100	100	F	F	100	100	F	F
7	I-15 NB Ramps / Limonite Av.	TS	1	1	1	0	0	0	2	2	0	0	2	1	100	100	F	F	100	100	F	F
8	Pats Ranch Rd. / Limonite Av.	TS	2	0	1	0	0	0	0	2	1	1	2	0	72.7	72.7	F⁴	F⁴	77.5	76.0	F⁴	F⁴
9	Pats Ranch Rd. / 68th St.	AWS	1	1	0	1	1	1	1	2	0	1	2	1	72.8	12.7	F	B	100	16.0	F	C
10	Driveway 2 / 68th St.	CSS	0	1	0	0	0	0	0	2	0	1	2	0	Not Applicable				16.3	12.8	C	B
11	Wineville Av. / Limonite Av.	TS	1	2	0	1	1	0	1	2	1	1	2	d	100	100	F	F	100	100	F	F
12	Wineville Av. / 68th St.	AWS	1	1	0	1	1	1	1	1	1	0	1	0	17.3	10.7	C	B	20.2	11.6	C	B
13	Smith Av. / 68th St.	CSS	0	0	0	0	1	0	0	1	0	0	1	0	10.4	9.4	B	A	14.7	10.8	B	B
14	Etiwanda Av. / Limonite Av.	TS	1	1	1	1	2	1>>	0	2	1	0	1	1	100	100	F	F	100	100	F	F
15	I-15 SB Ramps / Schleisman Rd.		Not Applicable																			
16	I-15 NB Ramps / Schleisman Rd.		Not Applicable																			

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 Phasing; >> = Free-Right Turn Lane; d= Defacto Right Turn Lane

² Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. The I-15 Ramp Locations have been analyzed utilizing the Synchro software.

³ TS = Traffic Signal; AWS = All Way Stop; CSS = Cross-street Stop

⁴ Volume-to-capacity ratio is greater than 1.00; Intersection unstable; Level of Service "F".

BOLD = Unsatisfactory level of service.

ID	I	L
1	Hamner Av. / Limonite Av.	Eastvale
5	Hamner Av. / "A" St.	Eastvale
6	I-15 SB Ramps / Limonite Av.	Caltrans
7	I-15 NB Ramps / Limonite Av.	Caltrans
8	Pats Ranch Rd. / Limonite Av.	Jurupa Valley
9	Pats Ranch Rd. / 68 th St.	Jurupa Valley
11	Wineville Av. / Limonite Av.	Jurupa Valley
14	Etiwanda Av. / Limonite Av.	Jurupa Valley

The intersection operations analysis worksheets for Horizon Year (2035) without Project conditions are included in Appendix "7.1" of this TIA. The intersection operations analysis worksheets for Horizon Year (2035) with Project conditions are included in Appendix "7.2" of this TIA. Measures to address impacts for Horizon Year (2035) traffic conditions are discussed in Section 7.6 *Horizon Year (2035) Impacts and Recommended Improvements*.

7.5 TRAFFIC SIGNAL WARRANTS ANALYSIS

For Horizon Year (2035) without Project conditions, traffic signals appear to be warranted at the following intersections (see Appendix "7.3"):

ID	I	L
15	I-15 SB Ramps / Schleisman Rd.	Caltrans
16	I-15 NB Ramps / Schleisman Rd.	Caltrans

For Horizon Year (2035) with Project conditions, there are no additional traffic signals that appear to be warranted with the addition of Project traffic in comparison to those warranted under Horizon Year (2035) without Project conditions (see Appendix "7.4").

7.6 HORIZON YEAR (2035) IMPACTS AND RECOMMENDED IMPROVEMENTS

Improvements have been recommended at intersections that have been identified as cumulatively impacted to reduce each location's peak hour delay and improve the associated LOS grade to LOS "D" or better. The effectiveness of the recommended improvements discussed below to address Horizon Year (2035) cumulative traffic impacts are presented in Table 7-2.

The following improvements are recommended to reduce impacts identified at transportation facilities under Horizon Year (2035) to "less-than-significant":

T 72

I A H Y (2035) W P C W I M C I

#	Intersection	Traffic Control ³	Intersection Approach Lanes ¹												Delay ² (secs.)		Level of Service	
			Northbound			Southbound			Eastbound			Westbound			AM	PM	AM	PM
			L	T	R	L	T	R	L	T	R	L	T	R				
1	Hamner Av. / Limonite Av.																	
	- Without Improvements	TS	2	3	1	2	2	1	2	3	1	2	2	1	58.1	94.8	E	F
	- With Improvements ⁵	TS	2	3	<u>1</u>	2	<u>3</u>	<u>1</u>	2	3	1	2	<u>3</u>	<u>1</u>	35.6	41.8	D	D
5	Hamner Av. / "A" St.																	
	- Without Improvements	CSS	1	1	0	0	1	1	1	0	1	0	0	0	100	100	F	F
	- With Improvements	TS	<u>2</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>2</u>	1	<u>2</u>	<u>3</u>	1	<u>2</u>	<u>3</u>	<u>1</u>	40.4	54.8	D	D
6	I-15 SB Ramps / Limonite Av.																	
	- Without Improvements	TS	0	0	0	1	1	1	0	2	1	2	2	0	100	100	F	F
	- With Improvements	TS	0	0	0	1	1	1	0	<u>3</u>	1	<u>0</u>	<u>3</u>	<u>1</u>	12.7	15.1	B	B
7	I-15 NB Ramps / Limonite Av.																	
	- Without Improvements	TS	1	1	1	0	0	0	2	2	0	0	2	1	100	100	F	F
	- With Improvements	TS	1	1	1	0	0	0	<u>0</u>	<u>3</u>	<u>1</u>	0	<u>3</u>	<u>1</u>	25.0	36.3	C	D
8	Pats Ranch Rd. / Limonite Av.																	
	- Without Improvements	TS	2	0	1	0	0	0	0	2	1	1	2	0	77.5	76.0	F ⁴	F ⁴
	- With Improvements	TS	2	0	1	0	0	0	0	<u>3</u>	1	1	<u>3</u>	0	25.3	23.9	C	C
9	Pats Ranch Rd. / 68th St.																	
	- Without Improvements	AWS	<u>1</u>	<u>1</u>	0	1	<u>1</u>	1	1	<u>2</u>	0	<u>1</u>	2	1	100	16.0	F	C
	- With Improvements	TS	<u>1</u>	<u>1</u>	0	1	<u>1</u>	1	1	<u>2</u>	0	<u>1</u>	2	1	41.1	30.9	D	C
11	Wineville Av. / Limonite Av.																	
	- Without Improvements	TS	1	2	0	1	1	0	1	2	1	1	2	d	100	100	F	F
	- With Improvements	TS	1	2	0	<u>2</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>3</u>	1	<u>2</u>	<u>3</u>	<u>1</u>	60.2	82.5	E	F
	- With Additional Improvements	TS	1	2	0	<u>2</u>	<u>2</u>	<u>1</u>	<u>2</u>	<u>4</u>	1	<u>2</u>	<u>4</u>	<u>1</u>	35.2	43.9	D	D
14	Etiwanda Av. / Limonite Av.																	
	- Without Improvements	TS	1	1	1	1	2	1>>	0	2	1	0	1	1	100	100	F	F
	- With Improvements ⁶	TS	1	<u>2</u>	<u>0</u>	<u>2</u>	2	1>>	<u>2</u>	<u>3</u>	1	<u>2</u>	<u>3</u>	1	40.5	44.5	D	D
15	I-15 SB Ramps / Schleisman Rd.																	
	- Without Improvements		Not Applicable															
	- With Improvements	TS	0	0	0	<u>1</u>	<u>1</u>	<u>1</u>	0	<u>3</u>	<u>1</u>	<u>2</u>	<u>3</u>	0	18.7	23.4	B	C
16	I-15 NB Ramps / Schleisman Rd.																	
	- Without Improvements		Not Applicable															
	- With Improvements	TS	<u>1</u>	<u>1</u>	<u>1</u>	0	0	0	<u>2</u>	<u>3</u>	0	0	<u>3</u>	<u>1</u>	28.6	41.1	C	D

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 Phasing; >> = Free-Right Turn Lane; d = Defacto Right Turn Lane; 1 = Improvement

² Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown. The I-15 Ramp Locations have been analyzed utilizing the Synchro software.

³ TS = Traffic Signal; AWS = All Way Stop; CSS = Cross-street Stop

⁴ Volume-to-capacity ratio is greater than 1.00; Intersection unstable; Level of Service "F".

⁵ Eliminate crosswalk on the east leg (northbound approach)

⁶ In addition to lane improvement shown, implement protected left-turn phasing on the eastbound/westbound left turning movements.

BOLD = Unsatisfactory level of service.

Recommended Improvement – Hamner Avenue / Limonite Avenue (#1) – The following improvements (shown in) are necessary to reduce the impact to less-than-significant:

Northbound: Two left turn lanes, three through lanes and one right turn lane with

Southbound: Two left turn lanes, and one right turn lane with

Eastbound: Two left turn lanes, three through lanes and one right turn lane.

Westbound: Two left turn lanes, and one right turn lane with

Recommended Improvement – Hamner Avenue / “A” Street (#) – The following improvements (shown in) are necessary to reduce the impact to less-than-significant:

Northbound: T and
Southbound: T and one right turn lane.
Eastbound: T and one right turn lane.
Westbound: T

Recommended Improvement – I-1 South bound Ramps / Limonite Avenue (#6) – The following improvements (shown in) are necessary to reduce the impact to less-than-significant:

Northbound: N/A

Southbound: One left turn lane, one shared left-through-right turn lane and one right turn lane.

Eastbound: T and one right turn lane.

Westbound: T and

Recommended Improvement – I-1 North bound Ramps / Limonite Avenue (#) – The following improvements (shown in) are necessary to reduce the impact to less-than-significant:

Northbound: One left turn lane, one shared left-through-right turn lane and one right turn lane.

Southbound: N/A

Eastbound: T and

Westbound: T and one right turn lane.

Recommended Improvement – Pats Ranch Road / Limonite Avenue (#8) – The following improvements (shown in) are necessary to reduce the impact to less-than-significant:

Northbound: Two left turn lanes and one right turn lane.

Southbound: N/A

Eastbound: T and one right turn lane.

Westbound: One left turn lane and

Recommended Improvement – Pats Ranch Road / 68th Street (#9) – Mitigation Measure 1.1 shall apply; no additional mitigation would be required.

Recommended Improvement – Wineville Avenue / Limonite Avenue (#11) – The following improvements (shown in) are necessary to reduce the impact to less-than-significant:

Northbound: **T** , two through lane and .

Southbound: **T** , and .

Eastbound: **T** , and one right turn lane.

Westbound: **T** , and .

I

Recommended Improvement – Etiwanda Avenue / Limonite Avenue (#14) – The following improvements (shown in) are necessary to reduce the impact to less-than-significant:

Northbound: Re-stripe to provide one left turn lane, one through lane and

Southbound: **T** , two through lanes and one free-right turn lane.

Eastbound: **T** , and one right turn lane.

Westbound: **T** , and one right turn lane.

I

Recommended Improvement – I-1 South bound Ramps / Schleisman Road (#1) – The following improvements (shown in) are necessary to reduce the impact to less-than-significant:

I

Northbound: N/A

Southbound: **O** , and .

Eastbound: **T** and .

Westbound: **T** and .

Recommended Improvement – I-1 North bound Ramps / Schleisman Road (#16) – The following improvements (shown in) are necessary to reduce the impact to less-than-significant:

I

Northbound: **O** , and .

Southbound: N/A

Eastbound: **T** and .

Westbound: **T** and .

The applicant shall participate in the funding or construction of off-site improvements, including traffic signals that are needed to serve Horizon Year (2035) traffic conditions through the payment of Western Riverside County Transportation Uniform Mitigation Fees (TUMF), Mira Loma Road and Bridge Benefit District (RBBD) fees, County of Riverside Development Impact Fees (DIF), or a fair share contribution as directed by the City. These fees are collected as part of a funding mechanism aimed at ensuring that regional highways and arterial expansions keep pace with the projected population increases.

Worksheets for Horizon Year (2035) with Project conditions, with mitigation, HCM calculations are provided in Appendix “7.5”.

8.0 LOCAL CIRCULATION AND SITE ACCESS

This section summarizes Project site access and on-site circulation recommendations.

The Project is proposed to have access on 68th Street via Pats Ranch Road, Wineville Avenue and Smith Avenue. All Project access points are proposed to be full-access. Regional access to the Project site will be provided by the I-15 Freeway (located to the northwest) via Limonite Avenue and by the I-15 Freeway via the future extension of Schleisman Road under Horizon Year (2035) traffic conditions.

8.1 ON SITE ROADWAY IMPROVEMENTS

The recommended site-adjacent roadway improvements for the Project are described below. Exhibit 8-1 illustrates the site-adjacent roadway improvement recommendations.

68th Street – 68th Street is an east-west oriented roadway located along the Project's northern boundary. The Project shall construct 68th Street from the Project's western boundary to Wineville Avenue at its ultimate half-section width as a Major Highway (118-foot right-of-way) in compliance with the applicable County of Riverside standards. 68th Street is not classified as a General Plan roadway to the east of Wineville Avenue. However, 68th Street between Wineville Avenue and the Project's eastern boundary will be constructed as a collector street to accommodate a minimum of one travel lane in each direction of travel, on-street parking along the north side, and Class II bike lanes on both the north and south sides of the street within 44-feet of pavement.

The intersection of Wineville Avenue at 68th Street/Holmes Avenue is currently skewed due to the intersecting alignment of Holmes Avenue at 68th Street. However, it is anticipated that the intersection would generally remain in its current configuration with minor modifications to lanes and crossings as shown on Exhibit 8-2. The improvements shown on Exhibit 8-2 include the existing and proposed school-zone crosswalk locations, proposed access points in relation to the existing roadway network, proposed turn lane striping modifications and the addition of a 2nd through lane along the Project's northern boundary (part of the half-section improvements).

Wherever necessary, roadways adjacent to the Project, site access points and site-adjacent intersections will be constructed to be consistent with or within the recommended roadway classifications and respective cross-sections in the County of Riverside General Plan Circulation Element.

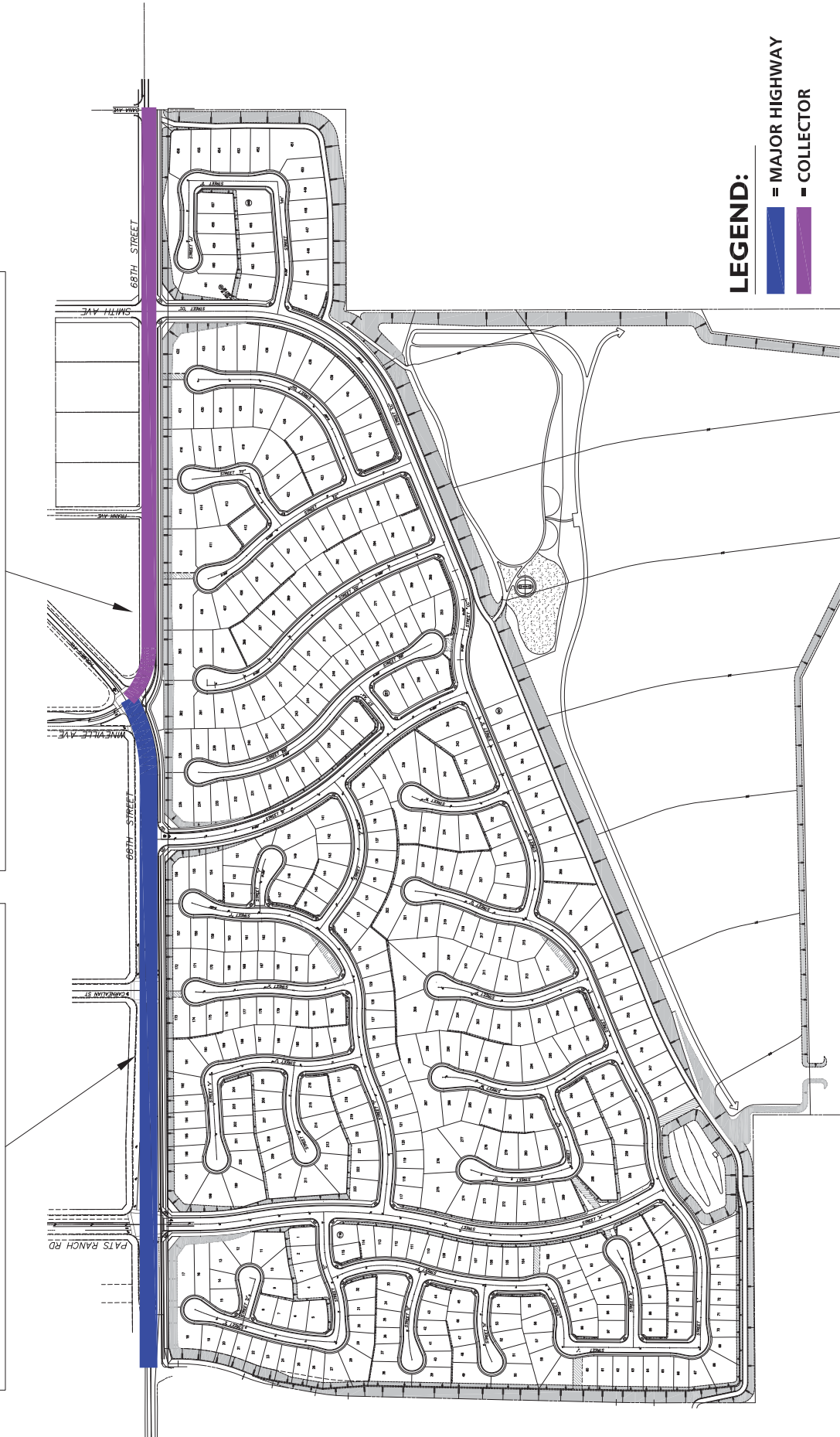
8.2 NON MOTORIZED ACCOMMODATIONS

The plan of walkways and pedestrian paths for Project promotes pedestrian access to various elements of the Project and to existing and proposed pedestrian facilities adjacent to the Project. The routes include

EXHIBIT 8-1 SITE ADJACENT ROADWAY RECOMMENDATIONS

68TH STREET IS AN EAST-WEST ORIENTED ROADWAY LOCATED ALONG THE PROJECT'S NORTHERN BOUNDARY. CONSTRUCT 68TH STREET FROM THE PROJECT'S WESTERN BOUNDARY TO WINEVILLE AVENUE AT ITS ULTIMATE HALF-SECTION WIDTH AS A MAJOR HIGHWAY (118-FOOT RIGHT-OF-WAY) IN COMPLIANCE WITH THE APPLICABLE COUNTY OF RIVERSIDE STANDARDS.

68TH STREET IS NOT CLASSIFIED AS A GENERAL PLAN ROADWAY TO THE EAST OF WINEVILLE AVENUE. HOWEVER, 68TH STREET BETWEEN WINEVILLE AVENUE AND THE PROJECT'S EASTERN BOUNDARY WILL BE CONSTRUCTED AS A COLLECTOR STREET BY ACCOMMODATING A MINIMUM OF ONE TRAVEL LANE IN EACH DIRECTION OF TRAVEL, ON-STREET PARKING ALONG THE NORTHSIDE AND BIKE LANES ALONG BOTH THE NORTH AND SOUTH SIDES OF 68TH STREET.



LEGEND:

- MAJOR HIGHWAY
- COLLECTOR



EXHIBIT 8-2 (Page 1 of 2)

CONCEPTUAL STRIPING PLAN

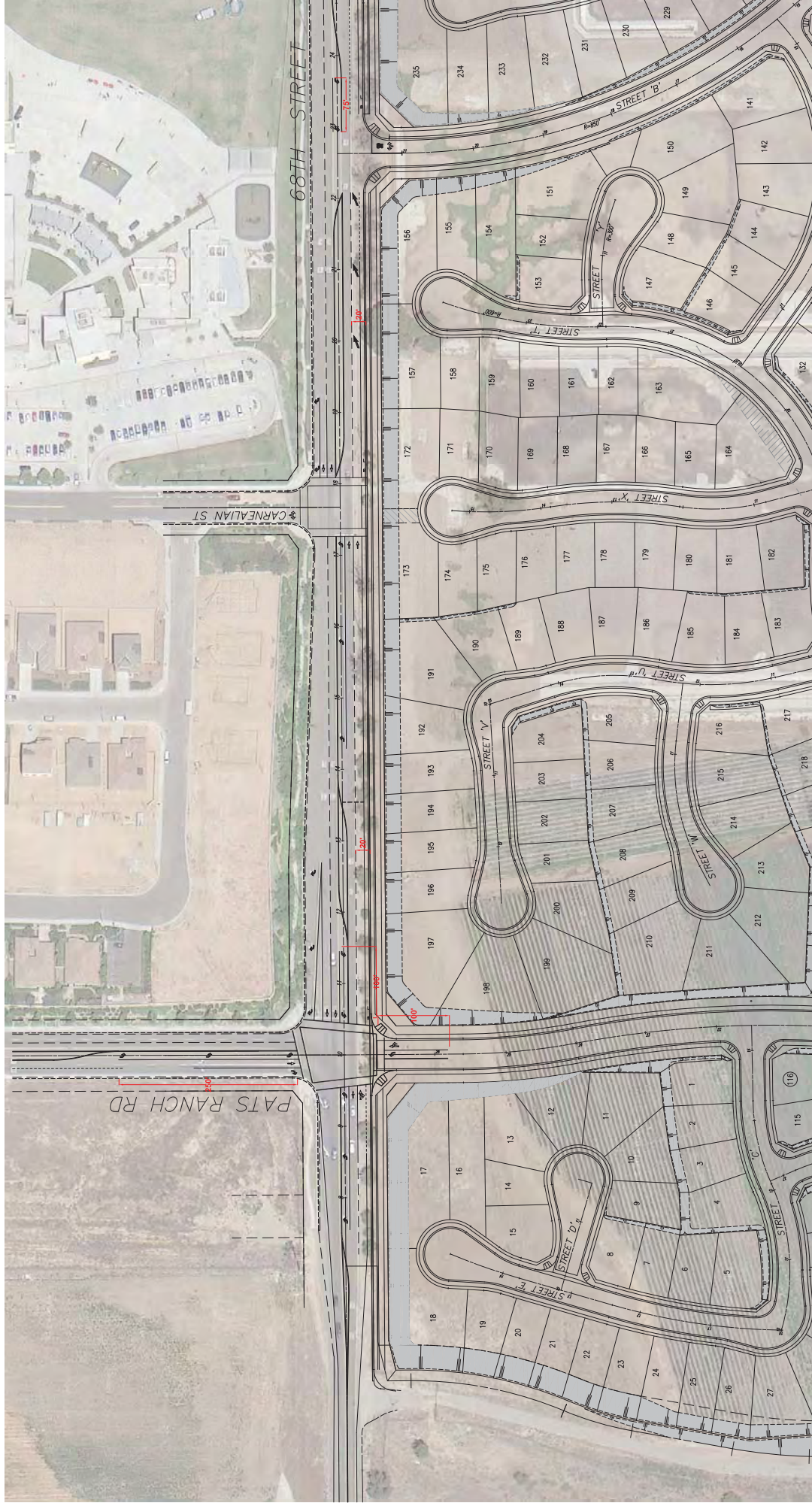
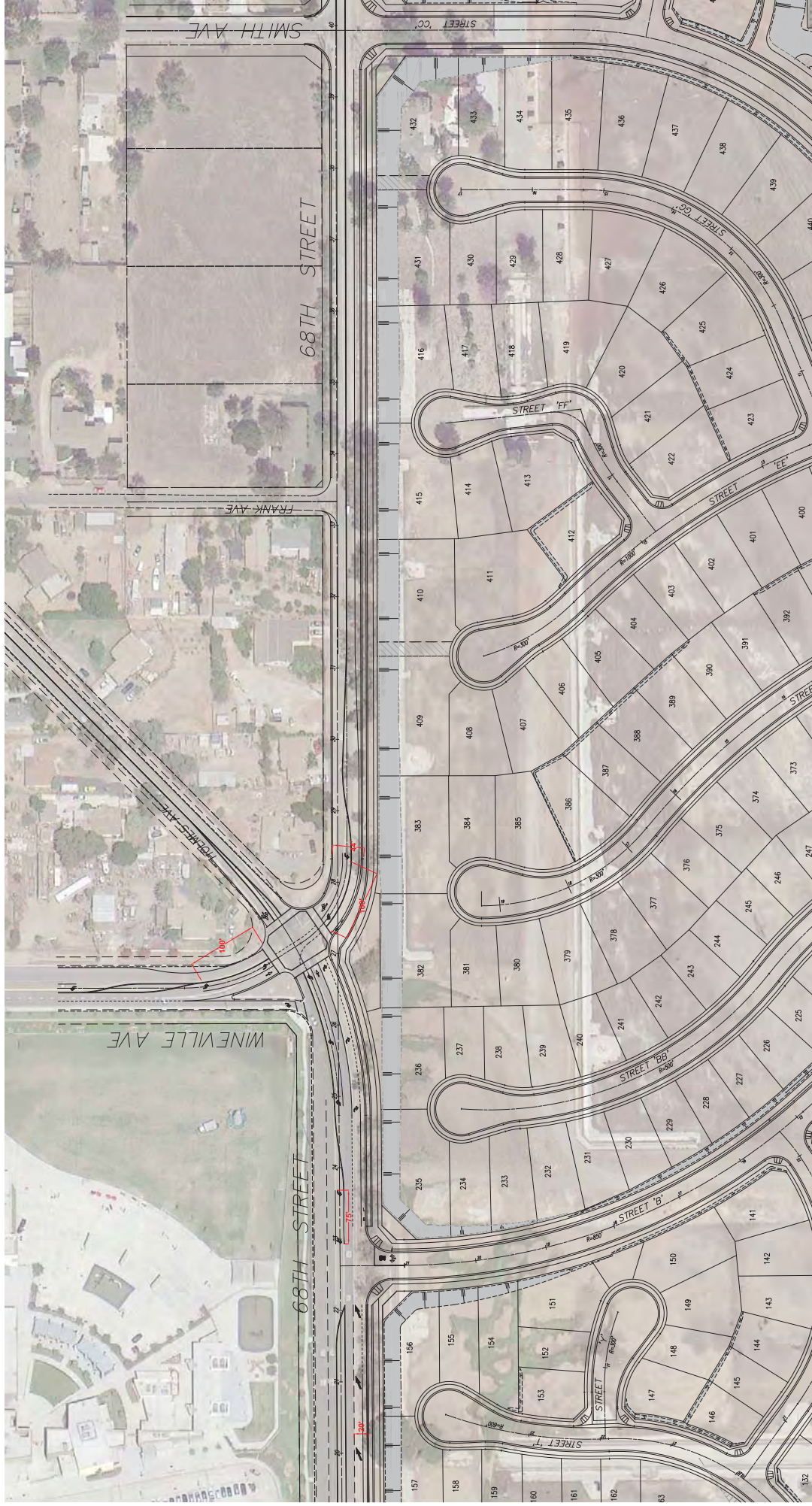


EXHIBIT 8-2 (Page 2 of 2)
CONCEPTUAL STRIPING PLAN



streets, sidewalks, paths, walkways and an equestrian trail that connect throughout the plan. In addition, the Project is located in close proximity to the existing Louis Vandermolen Fundamental Elementary School. As such, pedestrian accommodations include the provision of school-zone crossings at the Project access points along 68th Street. There is also an existing equestrian trail along the north side of the existing Goose Creek Golf Course. The Project proposes to provide connections to the existing equestrian trail through the Project towards the Santa Ana River corridor. The non-motorized accommodations and facilities are shown on Exhibit 8-3.

8.3 SITE ACCESS IMPROVEMENTS

The recommended site access driveway improvements for the Project are described below. Exhibit 8-4 illustrates the on-site and site adjacent recommended roadway lane improvements. Construction of on-site and site adjacent improvements shall occur in conjunction with adjacent Project development activity or as needed for Project access purposes.

Pats Ranch Road / 68th Street – Install a traffic signal and construct the intersection with the following geometrics:

Northbound Approach: One left turn lane with 100-feet of storage and one shared through-right turn lane.

Southbound Approach: One left turn lane with 250-feet of storage, one through lane and one right turn lane. The left turn lane should be striped within the existing painted median the existing left turn lane restriped as a through lane.

Eastbound Approach: One left turn lane with 195-feet of storage, one through lane and one shared through right turn lane.

Westbound Approach: One left turn lane with 100-feet of storage, two through lanes and one right turn lane with 220-feet of storage. The left turn lane should be striped within the existing painted median.

Driveway 2 / 68th Street – Install a stop control on the northbound approach and construct the intersection with the following:

Northbound Approach: One shared left-right turn lane.

Southbound Approach: N/A.

Eastbound Approach: One through lane and one shared through-right turn lane.

Westbound Approach: One left turn lane with 75-feet of storage and two through lanes.

Wineville Avenue / 68th Street – Maintain the existing four-way stop control and construct the intersection with the following:

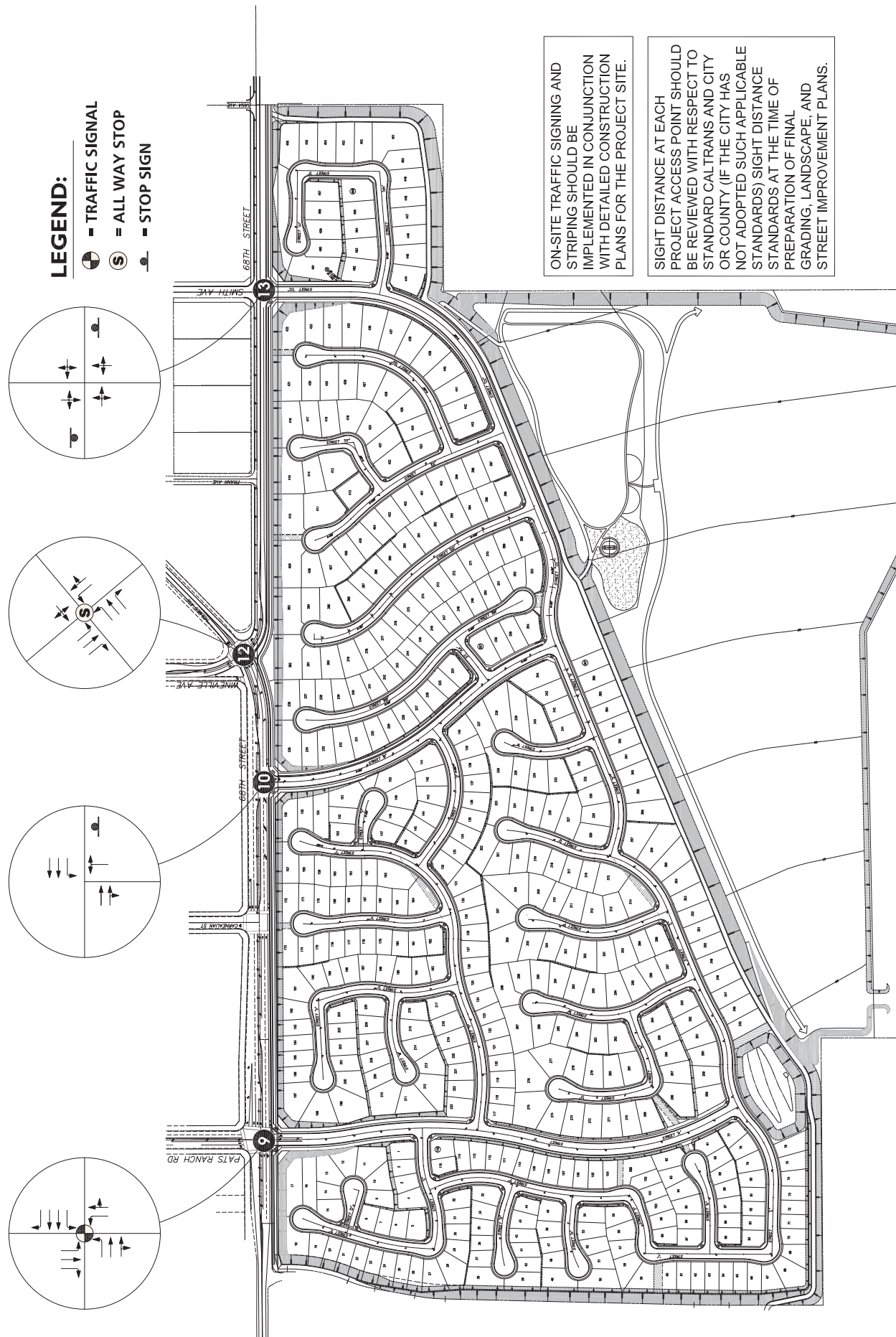
Northbound Approach: One left turn lane with 100-feet of storage and one shared through-right turn lane.

Southbound Approach: One left turn lane with 100-feet of storage, one through lane and one right turn lane. The left turn lane should be striped within the existing painted median. The addition of a southbound through lane will require modifications to the existing island in order to accommodate the travel lane.

EXHIBIT 8-3 PEDESTRIAN ACCOMMODATIONS



EXHIBIT 8-4 SITE ACCESS AND ON-SITE CIRCULATION RECOMMENDATIONS



Eastbound Approach: One left turn lane with 200-feet of storage, one through lane and one right turn lane (lane drop from the 2nd eastbound through lane along the Project's frontage).

Westbound Approach: One shared left-through-right turn lane.

Smith Avenue / 68th Street – Install a stop control on the northbound approach and construct the intersection with the following geometrics:

Northbound Approach: One shared left-through-right turn lane.

Southbound Approach: One shared left-through-right turn lane.

Eastbound Approach: One shared left-through-right turn lane.

Westbound Approach: One shared left-through-right turn lane.

On-site traffic signing and striping should be implemented in conjunction with detailed construction plans for the Project site.

Sight distance at each project access point should be reviewed with respect to standard Caltrans and City of Jurupa Valley sight distance standards at the time of preparation of final grading, landscape and street improvement plans.

9.0 LOCAL AND REGIONAL FUNDING MECHANISMS

Transportation improvements throughout the County of Riverside are funded through a combination of direct project mitigation, fair share contributions or development impact fee programs, such as the City's adoption of the Transportation Uniform Mitigation Fee (TUMF) program, Road and Bridge Benefit Districts (RBBD) or the County's Development Impact Fee (DIF) program. The Project will be subject to County DIF, unless and until the City adopts its own DIF program. Identification and timing of needed improvements is generally determined through local jurisdictions based upon a variety of factors.

The Project's contribution to one of the aforementioned transportation impact fee programs or as a fair share contribution toward a cumulatively impacted facility not found to be covered by a pre-existing fee program should be considered sufficient to address the Project's fair share toward a mitigation measure or measures designed to alleviate the impact. In other words, the Project's contribution to a significant impact will be rendered less than cumulatively considerable and thus is not significant.

Table 9-1 lists the incremental improvements that are required by the Year 2035 to mitigate the cumulative and project-related impacts. The regional and local transportation impact fee programs have each been reviewed and compared to the recommended improvements for each impacted facility. Recommended improvements already identified and included in one of the City's pre-existing fee programs (i.e., TUMF, Mira Loma RBBD, City of Jurupa Valley DIF, etc.) are clearly denoted. If an impacted facility was found to require improvements beyond those already identified within one of the City's fee programs, the Project may be required to contribute to the associated intersection or roadway fair-share percentage toward the costs of the recommended improvements. The fair-share calculations, also presented in Table 9-1, indicate that the project contributes approximately 1.6% of new vehicle trips to the intersection of Wineville Avenue at Limonite Avenue.

The improvements listed in Table 9-1 are comprised of lane additions, installation of signals and signal modifications. As noted, the identified improvements are covered either by the TUMF Program, Mira Loma RBBD, the City of Jurupa Valley DIF Program or as a fair-share contribution, if not covered by a fee program. Lane additions are shown as the number of lanes required and the direction of travel, for example, "1.EBT" indicates one additional eastbound through lane. Depending on the width of the existing pavement and right-of-way, these improvements may involve only striping modifications or they may involve construction of additional pavement width. Additional discussion of the relevant pre-existing transportation impact fee programs is provided below.

9.1 TRANSPORTATION UNIFORM MITIGATION FEE (TUMF) PROGRAM

The TUMF program is administered by Western Riverside Council of Governments (WRCOG) based upon a regional Nexus Study completed in early 2003 and updated in 2009 to address major changes

S T I F P I I

#	Intersection Location	Recommended Improvements	Project Mitigation Requirements ²	EAPC (2017) Cumulative Improvement Needs		Horizon Year (2035) Cumulative Improvement Needs		Fair Share ³
				Program Improvements ^{1,2}	Non-Program Improvements	Program Improvements ^{1,2}	Non-Program Improvements	
1	Hamner Av. / Limonite Av.	Overlap phasing on NBR, 1.SBT, overlap phasing on SBR, 1.WBT, overlap phasing on WBR		Overlap phasing on NBR, 1.SBT, overlap phasing on SBR, 1.WBT, overlap phasing on WBR				--
5	Hamner Av. / "A" St.	Install Traffic Signal: 1.NBL, 1.NBT, 1.NBR w/ overlap phasing, 2.SBL, 1.SBT, 1.EBL, 3.EBT, 2.WBL, 3.WBT, 1.WBR w/ overlap phasing				Install Traffic Signal: 1.NBL, 1.NBT, 1.NBR w/ overlap phasing, 2.SBL, 1.SBT, 1.EBL, 3.EBT, 2.WBL, 3.WBT, 1.WBR w/ overlap phasing		--
6	I-15 SB Ramps / Limonite Av.	1.EBT, 1.WBT, 1.WBR		1.EBT, 1.WBT		1.WBR		--
7	I-15 NB Ramps / Limonite Av.	1.EBT, 1.EBR, 1.WBT		1.EBT, 1.WBT		1.EBR		--
8	Pats Ranch Rd. / Limonite Av.	1.EBT, 1.WBT				1.EBT, 1.WBT		--
9	Pats Ranch Rd. / 68th St.	Install Traffic Signal: 1.NBL, 1.NBT/R, 1.SBT, 1.EBT/R, 1.WBL	Install Traffic Signal: 1.NBL, 1.NBT/R, 1.SBT, 1.EBT/R, 1.WBL					--
11	Wineville Av. / Limonite Av.	1.SBL, 1.SBT, 1.SBR w/ overlap phasing, 1.EBL, 2.EBT, 1.WBL, 2.WBT, 1.WBR, Implement protected NB/SB left turn phasing				1.SBL, 1.SBT, 1.SBR w/ overlap phasing, 1.EBL, 1.EBT, 1.WBL, 1.WBT, 1.WBR, Implement protected NB/SB left turn phasing	1.EBT, 1.WBT	1.6%
14	Etiwanda Av. / Limonite Av.	1.NBT, 1.SBL, 2.EBL, 1.EBT, 2.WBL, 1.WBT	1. NBT, 1.WBT	1.EBL, 1.WBL		1.SBL, 1.EBL, 1.EBT, 1.WB		--
15	I-15 SB Ramps / Schleisman Rd.	Install Traffic Signal: 1.SBL, 1.SBL/T/R, 1.SBR, 3.EBT, 1.EBR, 2.WBL, 3.WBT				Install Traffic Signal: 1.SBL, 1.SBL/T/R, 1.SBR, 3.EBT, 1.EBR, 2.WBL, 3.WBT		--
16	I-15 NB Ramps / Schleisman Rd.	Install Traffic Signal: 1.NBL, 1.NBL/T/R, 1.NBR, 2.EBL, 3.EBT, 3.WBT, 1.WBR				Install Traffic Signal: 1.NBL, 1.NBL/T/R, 1.NBR, 2.EBL, 3.EBT, 3.WBT, 1.WBR		--

¹ Improvements included in Mira Loma RBBP program (inclusive of TUMF and DIF) unless otherwise noted.

² Program improvements constructed by project may be eligible for fee credit. In-lieu fee payment is at discretion of City.

³ Fair Share percentage represents Project share of 2035 cumulative traffic growth at improvement location. Where City fees do not apply, a financial contribution may be required to mitigate impacts.

in right of way acquisition and improvement cost factors. TUMF identifies a network of backbone and local roadways that are needed to accommodate growth through 2035. This regional program was put into place to ensure that development pays its fair share and that funding is in place for construction of facilities needed to maintain the requisite level of service and critical to mobility in the region. TUMF is a truly regional mitigation fee program, and is imposed and implemented in every jurisdiction in Western Riverside County, except the City of Beaumont.

TUMF fees are imposed on new residential, industrial, and commercial development through application of the TUMF fee ordinance and fees are collected at the building or occupancy permit stage. TUMF rates are shown in Table 9-2. The fee for single family residential use is \$8,873 per dwelling unit. It should be noted that an annual inflation adjustment is considered each year in January. In this way, TUMF fees are adjusted upwards on a regular basis to ensure that the development impact fees collected keep pace with construction and labor costs, etc. Although there are several jurisdictions throughout the County of Riverside (including the County) charging the temporary 50% reduced fees for TUMF, the City of Jurupa Valley is currently charging the full fee.

A number of the facilities forecast to be impacted by the Project are programmed for improvements through the TUMF program. The project applicant will be subject to the TUMF fee program and will pay the requisite TUMF fees at the rates then in effect pursuant to the TUMF Ordinance. The facilities planned through the TUMF program are constructed prior to the time at which the identified facility is expected to deteriorate to an inadequate level of service. WRCOG has a successful track record funding and overseeing the construction of improvements funded through the TUMF program. In total, the TUMF program is anticipated to generate nearly \$5 billion in transportation projects for Western Riverside County. The project's payment of TUMF fees appear to be sufficient to mitigate its impacts to TUMF-funded facilities.

9.2 MIRA LOMA ROAD AND BRIDGE BENEFIT DISTRICT (RBBD) PROGRAM

The Jurupa Area Plan within the County of Riverside is anticipated to experience substantial growth. Extensive improvements are necessitated by new development within the region. In particular, Riverside County recognized the impact of this growth on the vicinity of the study area when it formed the Mira Loma RBBD. The proposed Project lies within Zone E of the Mira Loma RBBD. Zone E is generally bounded by Bellegrave Avenue to the north, Hamner Avenue to the west, Wineville Avenue and Etiwanda Avenue to the east and the Santa Ana River to the south. As discussed above, the facilities improvements that will be ultimately constructed as a result of the collection of these fees and assessments are substantial. They include:

Mira Loma Road and Bridge Benefits District (Zone E):

- Interchange improvements at I-15 Freeway at Limonite Avenue
- Widening of Limonite Avenue to six lanes between Hamner Avenue and Wineville Avenue

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E F O

FEE REFERENCE	SINGLE FAMILY RESIDENTIAL (\$ PER DU)	MULTI-FAMILY (\$ PER DU)	COMMERCIAL (\$ PER SQ FT)	SERVICE (\$ PER SQ FT)	INDUSTRIAL (\$ PER SQ FT)
County of Riverside DIF - Transportation Facilities	\$1,421.00	\$1,169.00	\$245.57	--	\$156.66
Transportation Uniform Mitigation Fee (TUMF)	\$8,873	\$6,231	\$10.49	\$4.19	\$1.73
Mira Loma Road and Bridge Benefit District (Zone E)	\$1,644	\$1,139	\$12.84	--	\$12.84

- All fees reflect full Nexus values
- Full DIF and TUMF fees are reflected (i.e., no reductions).
- MLRBBD fees include TUMF and DIF component for projects within MLRBBD boundaries

Fee Calculation

P	C	U	C	U	S .F.	T
TTM N . 36391						
DIF	Single-Family	\$1,421.00		466		\$662,186
TUMF	Single-Family	\$8,873.00		466		\$4,134,818
MLRBBD	Single-Family	\$1,644.00		466		\$766,104

Total Transportation Impact Fees	5,563,108
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- Landscaped median improvements to Limonite Avenue between Hamner Avenue and Wineville Avenue (where landscaped median improvements include curb, gutter, landscaping and irrigation)
- Overcrossing improvements to Bellegrave Avenue at the I-15 Freeway
- Landscaped median improvements to Hamner Avenue between Bellegrave Avenue to the Santa Ana River (where landscaped median improvements include curb, gutter, landscaping and irrigation)

9.3 COUNTY OF RIVERSIDE DEVELOPMENT IMPACT FEE (DIF) PROGRAM

The City does not have its own Development Impact Fee (DIF) program. However, the City is collecting DIF fees consistent with the County's DIF fee program. The Project area is located within the County's Jurupa Area Plan and therefore will be subject to County of Riverside Development Impact Fees (DIF) in an effort by the County to mitigate development throughout its unincorporated area. The DIF program consists of two separate transportation components: Roads, Bridges and Major Improvements component and the Traffic Signals component. Eligible facilities for funding by the County DIF program are identified on the County's Public Needs List. Table 9-2 shows the fee schedule for the County's DIF program, which without the 50% reduction in fees.

The cost of signaling DIF network intersections is identified under the Traffic Signals component of the DIF program. County staff generally defines DIF eligible intersections as those consisting of two intersecting general plan roadways. If the intersection meets this requirement, it is potentially eligible for up to \$235,000 of credit, which is subject to negotiations with the County. The project's Conditions of Approval will establish and clarify eligibility.

9.4 FAIR SHARE CONTRIBUTION

Project mitigation may include a combination of fee payments to established programs, construction of specific improvements, payment of a fair share contribution toward future improvements or a combination of these approaches. Table 9-1 presents improvements not included in an impact fee programs in the column labeled "Non-Program Improvements". Improvements constructed by development may be eligible for a fee credit or reimbursement through the program where appropriate. When off-site improvements are identified with a minor share of responsibility assigned to proposed development, the approving jurisdiction may elect to collect a fair share contribution or require the development to construct improvements. Detailed fair share calculations, for each analysis peak hour, has been provided on Table 9-3 for the cumulatively impacted intersection of Wineville Avenue at Limonite Avenue. Improvements included in a defined program and constructed by development may be eligible for a fee credit or reimbursement through the program where appropriate.

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P F S C

#	Intersection	E isting	Project	ear 2035 WP	Total New Traffic	Project % of New
10	Wineville Av. / Limonite Av.					
	AM:	1,842	46	5,378	3,536	1.3%
	PM:	2,438	61	6,284	3,846	1.6