	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

pages 5-6). This report assesses the risks related to wildland fire and establishes appropriate criteria for a defensible space installation and maintenance program that would reduce the intensity of a wildfire approaching the proposed Project (Firesafe, 2014, p. 3).

Based on the results of the modeling efforts, Firesafe Planning Solutions identified fuel modification requirements that are intended to protect future Project residents and structures from wildland fires even without fire department suppression activities. The Project's recommended fuel modification components are described in IS/MND Section 3.2.2.D and graphically depicted on IS/MND Figure 3-16, and would be enforced pursuant to Condition of Approval 50.FIRE.005. Based on the scientific fire behavior analysis, Firesafe Planning Solutions concludes that compliance with the fuel modification requirements would ensure that exterior portions of future structures or attic spaces would not ignite from the exterior fire exposure associated with a wildland vegetation fire. This is primarily because the greatest fire energy is too far away from the structures due to the low plant densities within the defensible space zones and the proposed fuel modification requirements. Therefore, and assuming compliance with the fuel modification recommendations (as would be assured by pursuant to Condition of Approval 60.FIRE.001), the proposed Project would have a less than significant impact regarding exposure of persons to wildland fires. (Firesafe, 2014, p. 29, pages 5-6)

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

HYDROLOGY AND WATER QUALITY Would the project				
25. Water Quality Impacts a) Substantially alter the existing drainage pattern of the site or area, including the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site?	☐	☐	☒	☐
b) Violate any water quality standards or waste discharge requirements?	☐	☐	☒	☐
c) 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)?	☐	☐	☒	☐
d) Create or contribute runoff water that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	☐	☐	☒	☐
e) Place housing within a 100-year flood hazard area, as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	☐	☐	☐	☒
f) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	☐	☐	☐	☒
g) Otherwise substantially degrade water quality?	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
h) Include new or retrofitted stormwater Treatment Control Best Management Practices (BMPs) (e.g. water quality treatment basins, constructed treatment wetlands), the operation of which could result in significant environmental effects (e.g. increased vectors or odors)?	☐	☐	☐	☒

Source: *Hydrology Report*, MDS Consulting, July 31, 2015; *Project Specific Water Quality Management Plan*, MDS Consulting, August 3, 2015; *Urban Water Management Plan*, Western Municipal Water District, 2010.

Findings of Fact:

a) Under existing conditions, and as shown on Plate 1 of the Project's hydrology study (IS/MND Appendix I1), the Project site conveys runoff from an approximately 315-acre area located to the southeast of the Project site, primarily from lands located south of El Sobrante Road. Flows from these off-site areas are combined with flows from the southern portions of the Project site and are conveyed via a natural drainage to an existing drop inlet structure that connects to a 90-inch reinforced concrete pipe (RCP) storm drain. Flows from the northwest portion of the site are conveyed to a man-made drainage ditch that outlets directly onto McAllister Street. Flows from the northeastern portion of the Project site are conveyed off-site to the north, and eventually drain into the existing stream that traverses the extreme northeastern corner of the Project site. (MDS, 2015a, p. 4)

As proposed by the Project, the Project site would be graded to facilitate the construction of 272 single-family residential lots. Additionally, the Project would include two water quality detention basins, a sewage lift station and a 2.2 acre community park. Associated exterior improvements are expected to include asphalt-paved access streets, concrete driveways and pedestrian sidewalks, surface drainage controls, perimeter fencing, common landscaped areas, extensive underground infrastructure, and required storm water quality devices.

As shown previously on IS/MND Figure 3-11, under post-developed conditions, the Project site would be separated into three separate watersheds (Watersheds A, B, and C) that largely correspond to the site's existing watersheds, with flows within Lot 'B' comprising a fourth watershed (Watershed D). Additionally, and as shown previously on IS/MND Figure 3-12, the Project proposes to construct an approximate 7.7-acre Off-Site Basin abutting the southern edge of El Sobrante Road. This basin has been designed to reduce peak runoff flows from approximately 197.9 acres of the approximately 315 acres of off-site watershed that is tributary to the Project site (refer to IS/MND Figure 3-10). The purpose of this detention basin is to off-set increased peak runoff from the developed portions of the Project site. Flows from the detention basin would be conveyed towards the proposed on-site open space in Lot 'B' via a proposed drop inlet structure (that includes a trash rack) that outlets into a 60-inch RCP storm drain to be constructed beneath El Sobrante Road. Please refer to Section 3.1.3.C for a detailed description of the Project's proposed drainage system. (MDS, 2015a)

As indicated in the Project's hydrology study, runoff tributary to the Project site discharges at two locations under existing conditions: along the northern boundary in the northeastern portion of the Project site (i.e., Node 130), where runoff drains towards the north and discharges into the existing stream that traverses the northeastern corner of the Project site; and along the western boundary of the site (Note 995), where flows from the existing drainage traversing the site are conveyed to an existing 84-inch RCP storm drain constructed in association with the residential development to the west of the Project site. (MDS, 2015a)

With development of the Project site as proposed, runoff in the northern portions of the site would discharge at the same location as occurs under existing conditions (i.e., Node 130), and the post-development runoff rate during peak storm events would be reduced from 70.5 cubic feet per second (cfs) to 67.4 cfs. Runoff from the remaining portions of the Project site ultimately would be conveyed to the drainage within proposed Lot B, where a proposed 90-inch RCP storm drain would be constructed beneath McAllister Street (i.e., Node 630). Node 630 generally occurs in the same location as Node 995, and flows exiting the site to the west would be reduced from 465.3 cfs to 353.7 cfs. (MDS, 2015a, p. 8)

Based on the foregoing discussion, the Project's proposed drainage concept generally would maintain the site's existing drainage patterns. Additionally, because peak flows discharging from the site would be reduced with construction of the Project's proposed extended detention/water quality basins and off-site detention basin, it can reasonably be concluded that Project runoff in the post developed condition would not result in substantial erosion or siltation on- or off-site. Accordingly, impacts would be less than significant and no mitigation would be required.

b) 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 Watershed is contained in the Santa Ana RWQCB's Water Quality Control Plan for the Santa Ana River Basin (as most recently updated in February 2008). This document is herein incorporated by reference and is available for public review at the Santa Ana RWQCB office located at 3737 Main Street, Suite 500 Riverside, CA 92501-3348.

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 Watershed. As detailed in the Project Specific Water Quality Management Plan for the proposed Project (IS/MND Appendix I2), receiving waters for the property's drainage are as follows: Temescal Channel, Santa Ana River (Reaches 1, 2, and 3), Prado Basin Management Zone, Tidal Prism of Santa Ana River and Newport Slough, Pacific Ocean surf zone, and Pacific Ocean offshore. Of the above listed receiving waters Reach 3 of the Santa Ana River is on the EPA Approved 303(d) list of impairments for copper, pathogens, and lead, and Reach 2 of the Santa Ana River is on the 303(d) list for indicator bacteria (MDS, 2015b, p. 7)

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 clearing, 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 County of Riverside, the Project would be required to obtain a NPDES Municipal Stormwater Permit for construction activities. The NPDES permit is required for all projects that include construction activities, such as clearing, 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 Water Quality Control Plan for the Santa Ana River Basin. Compliance with the NPDES permit and the Water Quality Control Plan for the Santa Ana River Basin involves the preparation and implementation of a Stormwater Pollution Prevention Program (SWPPP) for construction-related activities. The SWPPP is required to 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 violate any water quality standards or waste discharge requirements during construction activities. Therefore, with mandatory adherence to the Project's SWPPP, water quality impacts associated with construction activities would be less than significant and no mitigation measures would be required.

Post-Development Water Quality Impacts

As detailed in the WQMP for the proposed Project, potential pollutants associated with development of detached residential land uses include: bacterial indicators, nutrients, pesticides, sediments, trash debris, and oils/grease (MDS, 2015b, p. 18). Onsite runoff would be conveyed and collected by curb and gutter and the Project's proposed storm drain system. Prior to leaving the development, the low flows or first flush from developed areas of the site would be diverted and routed through a detention/water quality basin for water treatment. The water treatment would be consistent with Riverside County Stormwater Quality Best Management Practice Design Handbook (MDS, 2015a, p. 4) (refer to the Project's Hydrology Report in IS/MND Appendix I1).

Furthermore, the Project would be required to implement a Water Quality Management Plan (WQMP), pursuant to the requirements of the applicable 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 is included as IS/MND Appendix I2. The WQMP identifies bioretention and biotreatment BMPs. Reclaimed water would be used for the non-potable water demands for the Project. The Project site is divided into five drainage management areas (DMAs). As detailed in the WQMP for the proposed Project, all proposed drainage areas would be treated by biotreatment BMPs, while the drainage within Lot B also would utilize bioretention BMPs (MDS, 2015b, p. 15). Mandatory compliance with the WQMP would ensure that the Project does 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 with mandatory WQMP compliance and no mitigation measures would be required.

c) No potable groundwater wells are proposed as part of the Project. The proposed Project would be served with potable water by the WMWD. Water supplies from the WMWD are reliant on imported water from the Metropolitan Water District (MWD), groundwater, and imported water (WMWD, 2010, Page ES-2)Based on review of numerous groundwater databases conducted by Petra Geotechnical, groundwater basins are not located within or adjacent to the site. Based on information presented in the UWMP, WMWD is projected to have sufficient water supplies to meet demand within its service area during all climactic conditions (normal year, single-dry year, and multiple-dry years) until at least 2035. (The year 2035 is the horizon year for the UWMP, meaning the the UWMP's analysis does not extend beyond 2035.) WMWD also is projected to have a water surplus during all climactic conditions until at least 2035. (WMWD, 2010, pp.5.-2 - 5-4) 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 below under Issue 45.
Development of the Project would increase impervious surface coverage on the site, which would in turn reduce the amount of direct infiltration of runoff into the ground. However, based on the hydrology studies prepared for the proposed Project, the proposed storm drain system will adequately covey the 100 year storm water within the development and ultimately discharge into either natural watercourses or existing storm drains, where groundwater recharge would continue to occur (MDS, 2015a, p. 8). Thus, with buildout of the Project, the local groundwater levels would not be substantially affected. Therefore, impacts to groundwater supplies and recharge would be less than significant, and mitigation would not be required.

d) As described above in Threshold 25.b) onsite runoff will be conveyed and collected by curb and gutter and storm drain system. Prior to leaving the development, the low flows or first flush would be diverted and routed through a detention/water quality basin for water treatment. The water treatment would be consistent with Riverside County Stormwater Quality Best Management Practice Design Handbook (MDS, 2015a, p. 4). Additionally, as described in Threshold 25.a), the proposed Project would not result in runoff water that would exceed the capacity of existing or planned storm water drainage systems. Based on the analysis presented in the Project's hydrology study (IS/MND Appendix I1), post-development runoff from the site would decrease during 100-year storm events (i.e., from 535.7 cfs under existing conditions to 421.1 cfs under post-development conditions). (MDS, 2015a, p. 8)

With the improvements to be installed by the Project as described in IS/MND Section 3.1.3C, 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 Threshold 25.b), the Project would not provide substantial additional sources of polluted runoff. Therefore, less-than-significant impacts would occur and mitigation is not required.

e & f) Per FEMA Map No. 06065C1385G, the proposed Project site is located within FEMA Flood Zone "X" which is defined as "areas determined to be outside the 0.2 percent annual chance floodplain (FEMA, 2014). Accordingly, the proposed Project would not place housing within a 100-year flood hazard area, nor would the Project place within a 100-year flood hazard area structures which would impede or redirect flood flows. No impact would occur.

g) Mandatory compliance with the BMPs specified in the Project's WQMP (refer to IS/MND Appendix I2) would ensure that the Project does not result in any other impacts to water quality. 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 Thresholds 25.a), 25.b), or 25.d). Accordingly, no impact would occur.

h) As detailed in the Project's WQMP, the Project would utilize the following source control BMPs: marking all inlets with the words "Only Rain Down the Storm Drain"; maintaining landscaping using minimum of pesticides; and preventing accumulation of litter and debris on sidewalks (MDS, 2015b, p. 23). Thus these water quality BMPs would not result in the detention of water on-site for long periods of time such that vectors (e.g., mosquitoes) or odors could result. Impacts associated with the construction of the Project's BMPs are evaluated throughout this IS/MND, and where necessary, mitigation has been identified to address any impacts associated with their construction.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Accordingly, the Project would not include any new or retrofitted stormwater BMPs that could result in significant environmental effects, and no impact would occur.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

26. Floodplains

Degree of Suitability in 100-Year Floodplains. As indicated below, the appropriate Degree of Suitability has been checked.

NA - Not Applicable ☒ U - Generally Unsuitable ☐ R - Restricted ☐

a) 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 that would result in flooding on- or off-site?	☐	☐	☒	☐
b) Changes in absorption rates or the rate and amount of surface runoff?	☐	☐	☒	☐
c) 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 (Dam Inundation Area)?	☐	☒	☐	☐
d) Changes in the amount of surface water in any water body?	☐	☐	☐	☒

Source: *Hydrology Report*. MDS Consulting, July 31, 2015; *Project Specific Water Quality Management Plan*, MDS Consulting, August 3, 2015

Findings of Fact:

a) As described above under the analysis of Threshold 25.a), the Project generally would maintain the site's existing drainage patterns. With development of the Project site as proposed, runoff in the northern portions of the site would discharge at the same location as occurs under existing conditions (i.e., Node 130), and the post-development runoff rate during peak storm events would be reduced from 70.5 cubic feet per second (cfs) to 67.4 cfs. Runoff from the remaining portions of the Project site ultimately would be conveyed to the drainage within proposed Lot B, where a proposed 90-inch RCP storm drain would be constructed beneath McAllister Street (i.e., Node 630). Node 630 generally occurs in the same location as Node 995, and flows exiting the site to the west would be reduced from 465.5 cfs to 353.7 cfs. (MDS, 2015a, p. 8) As such, the Project has no potential to result in flooding on- or off-site, and impacts would be less than significant.

b) Development of the proposed Project would result in the development of more impervious surfaces (in the form of roads, rooftops, sidewalks etcetera), compared to existing conditions. However, as described in Threshold 26a) above, with development of the proposed Project, post-development peak runoff would decrease compared to existing conditions, thus the proposed Project would not increase runoff compared to existing conditions. Additionally, based on review of numerous groundwater databases conducted by Petra Geotechnical, groundwater basins are not located within or adjacent to the site. (Petra, 2014, p. 6; Petra, 2015, p. 4) Accordingly, the Project would not result

in significant impacts due to changes in absorption rates or the rate and amount of surface runoff, and impacts would be less than significant.

c) As previously indicated under the discussion and analysis of Threshold 16., a majority of the Project site has a high risk of inundation in the event of failure of the Lake Mathews Dam. Lake Mathews Dam and spillway are located approximately 0.20 kilometers from the southern boundary of the site. A seismically-induced failure of the Lake Mathews Dam facility when the dam basin is filled to capacity could cause extensive flooding across most of the Project site. In recognition of this possibility, the Lake Mathews/Woodcrest Area Plan includes three policies intended to attenuate the risk of dam failure to persons or property. Specifically, Policy LMWAP 14.2 requires adherence to the flood proofing, flood protection requirements, and flood management review requirements of Riverside County Ordinance No. 458, which regulates flood hazards. Additionally, Policy LMWAP 14.3 requires proposed development projects (such as the proposed Project) to undergo review by the Riverside County Flood Control and Water Conservation District. Moreover, County Ordinance No. 457 establishes building standards and codes that apply to development that is subject to inundation. Compliance with the above-reference regulations and policies would ensure that any potential dam inundation hazards associated with future development would be less than significant. However, mitigation has been identified (refer to Mitigation Measures ~~M-GEO-1 and~~ M-GEO-2) to reduce impacts associated with dam inundation to below a level of significance. M-GEO-1 requires the homeowner be informed about their home being located within a dam inundation area through several disclosure mechanisms. M-GEO-1 would ensure that all future residents on the Project site are aware of their home being located in a dam inundation hazard area, the risks associated with the home being located in an inundation zone, and the public service resources in place to help address dam inundation effects in the event the Lake Mathews Dam fails. Therefore, with mandatory compliance to LMWAP policies, and mitigation measure M-GEO-1, the Project's impacts due to being located within a damn inundation hazard area would be less than significant.

d) As described in detail under the analysis of Threshold 25.a), the Project would generally maintain the two discharge points from the Project site towards the west and north. Flows in the southern portions of the Project site would be conveyed to the storm drainage system that occurs in the existing residential community to the west, similar to existing conditions, while flows to the north would be conveyed to the existing drainage in the northeastern portion of the Project site following treatment. Total flows of water exiting the site would not be substantially changed as compared to existing conditions. Furthermore, both drainages that traverse the site are eventually funneled into a storm drainage system, and are conveyed to the Santa Ana River (similar to existing conditions). There are no components of the Project's proposed drainage system that would result in changes in the amount of surface water in any water body. As such, no impact would occur.

Mitigation: Mitigation Measures M-GEO-1 ~~and M-GEO-2~~ shall apply.

Monitoring: As specified above for Mitigation Measures M-GEO-1 ~~and M-GEO-2~~.

LAND USE/PLANNING Would the project				
27. Land Use a) Result in a substantial alteration of the present or planned land use of an area?	☐	☐	☒	☐
b) Affect land use within a city sphere of influence and/or within adjacent city or county boundaries?	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Source: General Plan; Riverside County GIS (Riverside County, 2014), Project Application Materials; *City of Riverside General Plan 2020*, City of Riverside, November 2007.

Findings of Fact:

a) Under existing conditions, the northern portions of the Project site are used for citrus production, while the southern portions of the site contain fallow agricultural land. Implementation of the proposed Project would result in the conversion of the site from undeveloped and agricultural uses to that of a master-planned residential community with up to 272 single family homes. Although the change from undeveloped and agricultural uses to residential uses represents a change to the site's existing land use, environmental impacts associated with such conversion have been evaluated throughout this IS/MND and mitigation measures have been imposed where necessary to reduce potentially significant impacts to a level below significance. Accordingly, impacts would be less than significant.

b) The Project site is located in unincorporated Riverside County, within the Sphere of Influence of the City of Riverside (City of Riverside, 2007, Figure LU-1). The City of Riverside General Plan primarily pre-zones the Project site for "A- Agricultural," although the southwestern corner of the site is designated for "C- Commercial" (City of Riverside, 2007, LU-10).

Although the Project would not be consistent with the site's pre-zoning designation of "A- Agricultural" and "C- Commercial," lands to the west of the Project site, which are designated by the City of Riverside General Plan for "HR – Hillside Residential," has been fully developed as a master planned community. Residential dwelling units proposed by the Project would be similar in character to this existing residential community. Additionally, and as discussed under the analysis of Issue 4, the Project would result in less-than-significant impacts to surrounding agricultural lands, assuming mandatory compliance with Riverside County Ordinance No. 625.1.

Accordingly, and based on the foregoing analysis, although the Project would result in a change to the site's planned land uses as shown in the City of Riverside General Plan, such impacts would be less than significant because the proposed change in land uses would not result in, induce, or require changes to surrounding planned land uses and would not result in land use compatibility conflicts. No mitigation is required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

28. Planning				
a) Be consistent with the site's existing or proposed zoning?	☐	☐	☐	☒
b) Be compatible with existing surrounding zoning?	☐	☐	☒	☐
c) Be compatible with existing and planned surrounding land uses?	☐	☐	☒	☐
d) Be consistent with the land use designations and policies of the Comprehensive General Plan (including those of any applicable Specific Plan)?	☐	☐	☐	☒
e) Disrupt or divide the physical arrangement of an established community (including a low-income or minority	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

community)?

Source: General Plan Land Use Element, Staff review, GIS database (Riverside County, 2014), Riverside County Ord. 348

Findings of Fact:

a) Under existing conditions, the 103.62-acre site is zoned for "Light Agriculture, Minimum 10-acre lot sizes," which would allow for residential development at a maximum density of 0.1 du/ac and limited agricultural uses. The 272 residential dwelling units proposed by the Project would not be consistent with this zoning designation. However, the Project proposes a change of zone (CZ 07844) to change the site's zoning designation to "Planned Residential (R-4)" on the southern 76.75 acres of the site and "One-Family Dwellings (R-1)" on the northern approximately 26.87 acres. The R-1 zoning designation allows for residential development on minimum 7,200 square foot (s.f.) lots, while the R-4 designation allows for development of single- or multi-family homes on minimum 3,500 s.f. lots with approval of a development plan. It should be noted that the R-1 and R-4 zoning designations are consistent with the site's LMWAP land use designation of "Medium Density Residential," which applies to a majority of the Project site. Accordingly, and assuming approval of CZ 07844, the Project would be fully consistent with the site's proposed zoning designations of R-1 and R-4, and no impact would occur.

b) Zoning designations surrounding the site include "Residential Agriculture, 5-acre minimum lot size (A-1-5)" and "Residential Agriculture, 5-acre minimum lot size (R-A-5)" to the north; "One-Family Dwellings (R-1)" and "Specific Plan Zone (SP Zone)" to the west; "Watercourse, Watershed and Conservation Areas (W-1)" to the south; and A-1-10 and "Light Agriculture with Poultry (A-P) to the east. Areas within the R-1 and SP Zones are fully developed with medium density residential uses. The proposed Project, which proposes urban level residential uses on the 103.62-acre site, would be fully compatible with the planned medium density residential land uses within this existing community to the west.

Lands to the north and east of the Project site are zoned A-1-5, A-1-10, and R-A-5, which allow for limited residential development and agricultural production. Although there is a potential for the Project to conflict with agricultural uses that could occur within the A-1-5, A-1-10, and R-A-5 zones, the proposed Project would be required to comply with Riverside County Ordinance No. 625.1. Ordinance No. 625.1 specifies that if any agricultural operation has been in place for at least three years and is not considered a nuisance operation at the time the operation began, no change in surrounding land uses may cause said operation to become a nuisance. Ordinance No. 625 requires notification to future residents at the time homes on-site are purchased that agricultural operations are on-going in the area and that such uses may not be the subject of nuisance complaints.

Mandatory compliance with Ordinance No. 625 would ensure that potential conflicts between proposed residential uses on-site and existing agricultural zoning located north and east of the Project site do not occur, thereby ensuring that impacts would be less than significant. No mitigation beyond mandatory compliance with Ordinance No. 625 would be required.

c) Existing land uses surrounding the Project site include three existing single-family homes located near the northwest corner of the Project site, to the north of which is a mixture of agricultural lands, greenhouses, and several single-family residences and ancillary structures. Remaining areas located north of the Project site consist of undeveloped lands that appear to be regularly disced and a

north-south oriented natural drainage. To the west of the Project site is McAllister Street, beyond which is a medium density single-family residential community. To the south of the Project site is El Sobrante Road, beyond which is Lake Mathews. To the east of the Project site are fallow and active agricultural lands, with greenhouses, a single family residence, and multiple sheds occurring near the Project site's southeastern boundary.

As indicated under Threshold 28.b), the medium density residential uses proposed by the Project would be fully compatible with the existing medium density residential community located to the west of the site. Residential uses proposed as part of the Project also would be compatible with the existing large lot residential uses to the north and east. Additionally, mandatory compliance with Ordinance No. 625 would ensure that potential conflicts between proposed residential uses on-site and existing agricultural zoning located north and east of the Project site do not occur. Accordingly, impacts due to a conflict with existing surrounding land uses would be less than significant.

General Plan land use designations surrounding the proposed Project site include the following: Rural Community – Estate Density Residential (RC-EDR)", "Rural Community – Low Density Residential (RC-LDR)", and "Community Development – Medium Density Residential (MDR)" to the north; MDR to the west; "Public Facilities (PF)" and "Open Space – Water" to the south; and RC-LDR and MDR to the east.

The Project proposes to develop the 103.62-acre site with medium density residential land uses. The residential land uses proposed as part of the Project would serve as an extension of the existing medium density residential uses that occur to the west of the site, and also would provide a transition to the RC-EDR and RC-LDR land uses planned to the east and north of the Project site. Because the Project area is planned by the Riverside County General Plan for residential uses at varying densities, development of the Project site with residential uses would not result in a conflict with the planned land uses in the area. Accordingly, no impact would occur.

d) The Project site is not located within the boundaries of any Specific Plan. The Project includes a request for a General Plan Amendment to change the subject property's CR land use designation to MDR. Upon approval of GPA 01127, the Project would be consistent with the land use designations of the General Plan and LMWAP.

The proposed Project is located within the LMWAP's El Sobrante Policy Area. The purpose of the El Sobrante Policy Area is to address the infrastructure capacity within the policy area with an emphasis on preservation of the area's rural lifestyle. The Project's consistency with the El Sobrante Policy Area policies is discussed below. It should be noted that in order for a policy inconsistency to be significant under CEQA, the inconsistency must result in a significant environmental effect.

> *LMWAP 1.1: Require the provision of adequate and available infrastructure to support development. To sustain the rural lifestyle found within the area, while still providing an acceptable level of service on local roadways, the total number of dwelling units within the Policy Area shall not exceed an additional 1,500 dwelling units. The circulation system, which would support the development of these additional dwelling units and which would, in part, be funded by their development, includes the following roadway improvements: the McAllister Street/ Dufferin Avenue Loop and the construction of a new connection ("A" Street) between McAllister Street/Dufferin Avenue Loop and Van Buren Boulevard, south of Dufferin Avenue. In addition to these improvements, other circulation connections between the Policy Area and the adjacent City of Riverside would be closed. These closures would direct high traffic volumes away from*

rural residential and green belt streets and toward more appropriate thoroughfares. Limiting the number of dwelling units within the Policy Area will help to maintain acceptable levels of service on local roadways both within the County and adjacent green belt areas of the City of Riverside. Limiting the number of dwelling units will also contribute to the continuation of the rural lifestyle enjoyed by area residents.

The proposed Project consists of a General Plan Amendment (GPA01127), Change of Zone (CZ07844) and Tentative Tract Map (TR36730) to provide for the development of 272 single family homes.
When the General Plan Update was approved in 2003, development in the El Sobrante Policy Area was sparse, although several subdivisions and land entitlements had previously been approved. Specifically, two small-lot tracts (McAllister and Perkins) were recorded and together had the legal right to 312 dwelling units. In addition, the Lake Mathews Golf and Country Club Specific Plan (SP No. 325) was approved, with legal right to 295 dwelling units (SP No. 325 has since been renamed Citrus Heights I). In addition, in 2003 there were 97 existing legal lots within the Policy Area that were of a size and configuration that could accommodate the construction of one (1) single family home by right. 704 residential dwelling units could have been constructed within the Policy Area by right in 2003. These 704 dwelling units are the base number to which the 1,500 additional dwelling units are intended to be added by LMWAP Policy 1.1. Thus, the total number of residential dwelling units allowed within the El Sobrante Policy Area is 2,204 units.

Since 2003, Riverside County has approved one tentative tract map (TTM) in the Policy Area (TTM No. 36390 associated with SP 325 Amendment No. 1 (Citrus Heights I). Two TTMs are currently proposed in the Policy Area (TTM No. 36475 (Citrus Heights II) and TTM No. 36730 (Lake Ranch)). These TTMs would collectively result in the development of 786 residential dwelling units. Of these, 304 dwelling units (295 for Citrus Heights I, 4 for Citrus Heights II, and 5 for Lake Ranch) had the legal right to be implemented in 2003. Accordingly, buildout in accordance with these approved and proposed TTMs would result in an additional 482 dwelling units within the Policy Area. The 482 approved and proposed dwelling unit allocations are part of the "additional 1,500 dwelling units" allowed by Policy 1.1. Thus, 1,018 dwelling units are yet to be allocated as follows: 1,500 additional units – 482 units approved and proposed for allocation = 1,018 units remain to be allocated.

If all parcels in the Policy Area were further subdivided to achieve the maximum residential development densities allowed by the County's General Plan, an additional 867 dwelling units would be allocated within the Policy Area. All existing, current, proposed, and potential development within the Policy Area would be fully consistent with the dwelling unit restrictions specified by Policy LMWAP 1.1, with a margin of 151 units. Any future allocations of the 151 units remaining would require a General Plan Amendment.

Therefore, implementation of the proposed Project would not violate or otherwise preclude the implementation of LMWAP Policy 1.1.

LMWAP 1.2 *Within the area depicted as Medium Density Residential, overall density shall not exceed three (3) dwelling units per acre.*

The Project proposes to develop the portions of the Project site designated as MDR with residential land uses at an overall density of 2.62 du/ac, which is less than 3.0 du/ac. Accordingly, the Project would be fully consistent with Policy LMWAP 1.2.

LMWAP 1.3 *Coordinate with local agencies to ensure adequate service provision for all development within the Policy Area.*

The proposed Project would be developed in coordination with local service providers and, therefore, would be consistent with LMWAP 1.3 (refer to the analysis under the *Public Services* and *Utilities and Service Systems* issue areas, below).

LMWAP 1.4 *Coordinate development strategies with the City of Riverside.*

This policy applies to the County of Riverside and is not applicable to individual development projects. However, the County of Riverside did coordinate with the City of Riverside with regards to the Project's potential impacts to circulation and traffic.

LMWAP 1.5 *Encourage the use of Specific Plans to implement the land use designations identified within the Policy Area.*

LMWAP 1.5 is a recommendation and not a formal requirement. The Project does not propose a Specific Plan. The Project would not prevent implementation of LMWAP 1.5.

LMWAP 1.6 *Encourage clustering of dwelling units when it would avoid the development of areas constrained by physical features or sensitive resources. Encourage clustering in areas designated for Low Density Residential uses (One-half acre minimum lot size) rather than areas designated for Very Low Density Residential uses (1 acre minimum lot size) or Estate Density Residential uses (2 acre minimum lot size), except where Very Low Density Residential-designated properties consisting of at least 300 acres and processed through a Specific Plan offer significant public recreational and/or areawide circulation benefits.*

Where clustering is allowed, minimum pad size shall not be less than 8,000 square feet. However, for projects featuring public golf courses, a minimum pad size of 7,200 square feet will be allowed on a minimum lot size of 8,500 square feet. This pad size exception may only occur adjacent to golf courses.

The El Sobrante Policy Area encourages clustering of dwelling units to avoid development of areas constrained by physical features or sensitive resources. Clustering is specifically encouraged within Low Density Residential Areas rather than Very Low Density Residential or Estate Density Residential areas, although it does not prohibit clustering in Very Low Density Residential or Estate Density Residential areas. Portions of the Project site have been designed to cluster residential dwelling units in areas outside of environmentally sensitive areas – notably, the drainage located in the northeastern portion of the Project site. The Tentative Tract Map proposes to cluster development within the Low Density-Residential (22.5 acres), and Estate Density-Residential (2.3 acres) portion of the site to avoid the drainage area located in the northeastern portion of the project site. Where clustering is allowed, lots shall have a minimum pad size of 8,000 square feet. Clustering would technically not occur within the Medium Density-Residential portion of the site since there are no stated minimum lot sizes for this designation and development within this area would comply with the applicable density criteria.

Lots within the Low Density-Residential and Estate Density-Residential areas where clustering would occur have a minimum lot size of 10,912 square feet and a minimum pad size of 10,000 square feet. Accordingly, the Project would be consistent with Policy LMWAP 1.6.

~~The Project site is designated for RC-EDR (2.3 acres), Rural Community-Low Density Residential (22.5 acres), Community Development - Medium Density (62.6 acres), and Community Development - Commercial Retail (11.6 acres) land uses. The portions of the Project designated for RC - LDR and RC - EDR land uses have been designed to cluster residential dwelling units in areas outside of environmentally sensitive areas -- notably, the drainage located in the northeastern portion of the Project site. Accordingly, the Project would be consistent with Policy LMWAP 1.6.~~

LMWAP 1.7 *Development shall be sensitive to and retain the unique topographical features within and adjacent to the planning area.*

The Project site does not contain any unique topographic features. The majority of the site is characterized by undulating terrain, with some hillside topography that is not unique to the Project site. The Project would grade the majority of the 103.62-acre Project site and retain the remaining areas as natural open space. Although the natural topography of the graded areas would be modified to accommodate building pads for residential development, the Project design is sensitive to the natural topography, in conformance with LMWAP 1.7.

LMWAP 1.8 *Require that development on hillsides blend with the natural surroundings through architecture, the use of appropriate construction materials and colors, and the retention of natural vegetation.*

The Project's grading concept is sensitive to the natural terrain, and manufactured slopes would be constructed and landscaped to blend with the natural surroundings to the extent feasible. Future development on the Project site would be required to comply with the *Countywide Design Guidelines* and would utilize construction materials and colors that complement the natural surroundings, including natural vegetation. The Project would be consistent with LMWAP 1.8.

LMWAP 1.9 *Restrict hillside development and grading in accordance with policies found in the Open Space, Habitat & Natural Resources section and Hillside Development and Slope section of the Land Use Element and the Scenic Resources section of the Multipurpose Open Space Element.*

The Riverside County Planning Department reviewed the Project's Development Plan and determined that the Project would not conflict with any policies of the Land Use and Open Space elements of the General Plan. As such, the Project would be consistent with LMWAP 1.9.

LMWAP 1.10 *Encourage open space and recreational amenities.*

The Project would accommodate a total of 15.34 acres of common and natural open space on-site. The Project also accommodates a 2.18-acre park site. Accordingly, the Project would be consistent with LMWAP 1.10.

As demonstrated above, the Project would be consistent with the LMWAP's El Sobrante Policy Area. The proposed Project also would not conflict with any other policies of the General Plan or the

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

LMWAP. Based on the foregoing analysis, there are no components of the Project that would conflict with any applicable policy of the General Plan or LMWAP. Accordingly, no impact would occur.

e) Under existing conditions, an established community exists to the west of the site, while several rural residential uses also occur to the north and east of the Project site. There are no components of the Project that would physically disrupt or divide any of these existing communities. Moreover, with buildout of the Project's proposed residential uses, public access would be afforded via public roads to be constructed on-site and immediately adjacent to the site. Accordingly, the proposed Project would not disrupt or divide the physical arrangement of an established community, and no impact would occur.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

MINERAL RESOURCES Would the project				
29. Mineral Resources a) 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?	☐	☐	☐	☒
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?	☐	☐	☐	☒
c) Be an incompatible land use located adjacent to a State classified or designated area or existing surface mine?	☐	☐	☐	☒
d) Expose people or property to hazards from proposed, existing or abandoned quarries or mines?	☐	☐	☐	☒

Source: General Plan, Figure OS-5 (Mineral Resources)

Findings of Fact:

a & b) Based on available information, the Project site has never been the location of mineral resource extraction activity. No mines are located on the property. According to Figure OS-5 of the Riverside County General Plan, the Project site and off-site impact areas are designated within Mineral Resources Zone 3 (MRZ-3) pursuant to the Surface Mining and Reclamation Act of 1975 (SMARA). MRZ-3 is defined by the State of California Department of Conservation SMARA Mineral Land Classification Project as "Areas where the available geologic information indicates that mineral deposits are likely to exist, however, the significance of the deposit is undetermined." Furthermore, the Project site is not identified as an important mineral resource recovery site by the County General Plan. Accordingly, 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, nor would the Project result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan. No impact would occur. (Riverside County, 2003a)

c & d) The Project site is not located within or near any lands that are classified as Mineral Resources Zone 2 (MRZ-2), which are areas known to have mineral resources deposits. Additionally, lands abutting the Project site do not include any State classified or designated areas, and there are

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

no known active or abandoned mining or quarry operations on lands abutting the proposed Project site. Accordingly, no impact would occur. (Riverside County, 2003a)

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

NOISE Would the project result in:				
Definitions for Noise Acceptability Ratings Where indicated below, the appropriate Noise Acceptability Rating(s) has been checked. NA - Not Applicable A - Generally Acceptable B - Conditionally Acceptable C - Generally Unacceptable D - Land Use Discouraged				
30. Airport Noise a) 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? NA ☒ A ☐ B ☐ C ☐ D ☐	☐	☐	☐	☒
b) 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? NA ☒ A ☐ B ☐ C ☐ D ☐	☐	☐	☐	☒

Source: General Plan, Figure S-19 (Airport Locations); Riverside County GIS (Riverside County, 2013); *Riverside County Airport Land Use Compatibility Plan, Volume I*, Riverside County ALUC, October 14, 2005.

Findings of Fact:

a) According to Riverside County GIS, the Project site is not located within the airport influence area (AIA) or Master Plan for any private or public airport facility (Riverside County, 2015). The nearest airport to the Project site is the Riverside Municipal Airport, which is a public use airport located approximately 5.7 miles north of the Project site. According to Map RI-3 of the Riverside County Airport Land Use Compatibility Plan Policy Document, the Project site is located well outside of the 55 Community Noise Equivalent Level (CNEL) noise contour for the Riverside Municipal Airport. As such, future residents of the proposed Project would not be exposed to excessive noise levels associated with airport operations. Accordingly, no impact would occur.

b) A small, private airstrip is located approximately 0.4 mile south of the Project site (north of Lake Mathews); however, based on aerial photographs from Google Earth, this airstrip has not been operational since at least 2011 – a large yellow "X" is painted at the beginning of the runway (a universal aviation symbol for a runway closed to all operations) and the runway is covered in dirt and used as a construction materials staging area (Google Earth, 2015). The Project site is not located within the vicinity of any active private airports or heliports. Accordingly, implementation of the proposed Project has no potential to expose people residing or working in the project area to excessive noise levels. No impact would occur.

Mitigation: No mitigation is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Monitoring: No monitoring is required.

31. Railroad Noise
NA ☒ A ☐ B ☐ C ☐ D ☐ ☐ ☐ ☐ ☒

Source: General Plan, Figure C-1 (Circulation Plan); Riverside County GIS (Riverside County, 2013), On-site Inspection

Findings of Fact: The Project site is not located near any railroad tracks and no aspect of the proposed Project involves railroad use or rail transport. The nearest rail line occurs approximately 3.1 miles northwest of the Project site, and is too far from the Project area to generate substantial noise affecting future Project residents. (Google Earth, 2015) Accordingly, no railroad-related noise impact would occur.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

32. Highway Noise
NA ☒ A ☐ B ☐ C ☐ D ☐ ☐ ☐ ☐ ☒

Source: On-site Inspection, Project Application Materials; Riverside County GIS (Riverside County, 2013).

Findings of Fact: The nearest highway to the proposed Project site is SR-91, located approximately 3.0 miles north of the site. Due to distance, intervening development, and topography, vehicular traffic along SR-91 would not expose future on-site residents to noise levels in excess of the County General Plan standards and no impact would occur. Please refer also to Threshold 34.c) below for a discussion of the Project's potential to expose future Project residents to excessive noise levels associated with nearby roadways, and for a discussion of the Project's potential to create or contribute to substantial vehicular-related noise in off-site locations.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

33. Other Noise
NA ☒ A ☐ B ☐ C ☐ D ☐ ☐ ☐ ☐ ☒

Source: Project Application Materials, Riverside County GIS (Riverside County, 2013).

Findings of Fact: There are no other known sources of noise within the Project vicinity that could expose future Project residents to noise levels above the County General Plan standards. Accordingly, no impact would occur.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
34. Noise Effects on or by the Project				
a) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
b) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	☐	☒	☐	☐
c) 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?	☐	☐	☒	☐
d) Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?	☐	☐	☒	☐

Source: Riverside County General Plan, Table N-1 ("Land Use Compatibility for Community Noise Exposure"); Project Application Materials, Lake Ranch (Tract No. 36730) Noise Impact Analysis County of Riverside, Urban Crossroads, Inc., December 11, 2014.

Findings of Fact:

a) The Project proposes to develop the site with single-family detached dwelling units. As discussed below under Threshold 34.c), with implementation of project design features, the proposed Project would not create a substantial permanent increase in ambient noise levels due to future traffic generated by the proposed Project. The analysis presented under Threshold 34.c) concludes that the Project would have less than significant near term construction-phase impacts and less than significant on- and off-site traffic impacts with the implementation of mitigation measures. Refer the analysis under Threshold 34.c) for more information.

b) To assess the short-term construction noise impacts ten sensitive receiver locations were identified, as shown on Exhibit 8-A of the Noise Impact Analysis (IS/MND Appendix J). Sensitive receivers are generally defined as locations where people reside or where the presence of unwanted sound could otherwise adversely affect the use of the land. Noise-sensitive land uses are generally considered to include: schools, hospitals, single-family homes, mobile home parks, churches, libraries, and recreation areas. Sensitive receivers in the vicinity of the Project site include the single-family residential homes at locations R1 through R10. The closest noise-sensitive receiver is represented by location R8, where an existing residential home is located approximately 94 feet west of the Project site. A description of the location of noise sensitive receptors R1 through R10 is provided below (Urban Crossroads, 2014a, p. 51):

- R1: Located approximately 471 feet north of the Project site, R1 represents existing residential homes east of McAllister Street.
- R2: Location R2 represents the existing residential home located roughly 1,178 feet west of the northern Project site boundary across McAllister Street.
- R3: Location R3 represents the existing residential home situated along McAllister Street, approximately 629 feet northwest of the Project site boundary.
- R4: Location R4 represents the existing residential home situated approximately 481 feet north of the Project site.

- R5: At a distance of approximately 173 feet north of the Project site, location R5 represents an existing residential home.
- R6: At a distance of 292 feet north of the Project site, R6 describes the residential home located east of McAllister Street.
- R7: Location R7 represents the existing residential home located approximately 101 feet west of the Project site across McAllister Street.
- R8: Located approximately 94 feet west of the Project site across McAllister Street, R8 represents the nearest sensitive residential receiver.
- R9: Location R9 represents the existing residential home located north of El Sobrante Road and approximately 274 feet east of the Project site.
- R10: Located approximately 934 feet southeast of the Project site and north of El Sobrante Road, R10 represents an existing residential home.

Project construction is expected to occur in the following eight stages:

- Demolition
- Grading and Import
- Sewer, Water, and Storm
- Building Construction
- Street Improvements
- Architectural Coating
- Common Area Landscaping
- Hard Rock Blasting

The County of Riverside has established limits to the hours of operation regarding construction. Section 9.52.020 of the County's Noise Regulation ordinance indicates that noise associated with any private construction activity located within one-quarter of a mile from an inhabited dwelling is considered exempt between the hours of 6:00 a.m. and 6:00 p.m., during the months of June through September, and 7:00 a.m. and 6:00 p.m., during the months of October through May. Neither the County's General Plan nor Municipal Code establish numeric maximum acceptable construction source noise levels at potentially affected receivers (Urban Crossroads, 2014a, p. 65).

Calculations of the Project construction noise level impacts at the ten noise receiver locations were completed as part of the noise impact analysis for the proposed Project. The analysis shows that the highest construction noise level impacts would occur during grading and blasting construction activities at the edge of the Project site. The construction noise levels are expected to range from 46.6 to 79.1 dBA Leq (Urban Crossroads, 2014a, p. 65). The construction noise analysis shows that the nearby sensitive residential receivers would likely experience a significant, temporary/periodic increase above the existing ambient noise due to Project construction activities. However, as described below, with implementation of Mitigation Measure M-N-1, impacts would be reduced to a less than significant level.

The construction of the proposed Project would include blasting of hard rock areas, which is a major source of potential noise impacts to nearby residential receivers. Based on the FHWA's RCNM, the estimated noise levels due to blasting activities at the Project site at each receiver location would range from 66.6 to 83.5 dBA Lmax. Rock blasting activities will be limited during the permitted hours for construction activity between 6:00 a.m. and 6:00 p.m., during the months of June through September, and 7:00 a.m. and 6:00 p.m., during the months of October through May, as required by

the County of Riverside Code of Ordinances. The construction noise analysis shows that the highest construction noise levels would occur during grading and blasting construction activities at the edge of the Project site (Urban Crossroads, 2014a, p. 62)

Although construction-related noise impacts would be less than significant due to the timing restrictions specified by Municipal Code Section 9.52.020, Mitigation Measure M-N-1 is nonetheless proposed to reduce the noise levels due to blasting activities. Mitigation Measure M-N-1 includes measures such as the use of alternatives to explosives within 200 feet of nearby residential receivers, and the incorporation of blasting mats. Since two receiver locations (R5 and R7) identified in the noise impact analysis are within 200 feet of the proposed hard rock blasting areas, the blasting operations at these hard rock locations are required to be conducted using alternative methods to explosives, thereby further reducing the noise levels at receiver locations R1 to R7. With implementation of Mitigation Measure M-N-1 and mandatory compliance with Municipal Code Section 9.52.020, impacts during construction of the proposed Project would be less than significant. (Urban Crossroads, 2014a, p. 65)

c) The proposed Project has the potential to expose nearby sensitive receptors to noise levels in excess of the County standard. Sensitive receptors within the immediate vicinity of the Project site include existing residential uses to the west, northwest, and east. The Project has the potential to result in noise levels in excess of the County's standard during Project construction activities, under long-term conditions due to the potential exposure of future on-site residents to traffic-related noise from nearby streets, and under long-term conditions due to the potential for Project-related traffic to create or contribute to noise levels along off-site streets. Each of these conditions is discussed below.

Near-Term Construction-Related Noise

As noted in the discussion and analysis of Threshold 34.b), above, and Threshold 34.d), below, with implementation of Mi9tigation Measure M-N-1 and mandatory compliance with Section 9.52.020 of the County's Noise Regulation ordinance, and impacts during construction would be less than significant.

On-Site Traffic-Related Noise Impacts

A Noise Impact Analysis technical report (IS/MND Appendix J) was prepared to evaluate the Project's potential to expose future on-site residents to noise levels exceeding the County's interior and exterior noise standards. The County of Riverside General Plan Noise Element specifies the maximum noise levels allowable for new developments impacted by transportation noise sources such as arterial roads, freeways, airports, and railroads. For noise sensitive residential uses the exterior noise levels shall not exceed 65 dBA CNEL. In addition, the County requires that residential developments achieve an indoor noise standard of 45 dBA CNEL with windows closed consistent with the California Building Code requirements (Urban Crossroads, 2014a, p. 22).

The estimated roadway noise contributions from vehicular traffic were calculated using a computer program that replicates the Federal Highway Administration (FHWA) Traffic Noise Prediction Model-FHWA-RD-77-108. The FHWA Model arrives at a predicted noise level through a series of adjustments to the Reference Energy Mean Emission Level (REMEL). In California the national REMELs are substituted with the California Vehicle Noise (Calveno) Emission Levels. Adjustments are then made to the REMEL to account for: the roadway classification (e.g., collector, secondary, major or arterial), the roadway active width (i.e., the distance between the center of the outermost travel lanes on each side of the roadway), the total average daily traffic (ADT), the travel speed, the percentages of automobiles, medium trucks, and heavy trucks in the traffic volume, the roadway grade, the angle of view (e.g., whether the roadway view is blocked), the site conditions ("hard" or

"soft" relates to the absorption of the ground, pavement, or landscaping), and the percentage of total ADT which flows each hour throughout a 24-hour period (Urban Crossroads, 2014a, p. 27). Refer to Section 5 of the Project-specific Noise Impact Analysis (IS/MND Appendix J) for a description of the various inputs used in the modeling of future on-site noise levels.

Based on the County of Riverside General Plan Circulation Element, Table C-1, El Sobrante Road is classified as a 4-lane Arterial Highway, and McAllister Street is classified as a 2-lane Collector Street. To predict the future on-site noise environment at the Project site, the maximum two-way traffic volumes at a Level of Service "C" identified in the Circulation Element, Figure C-3, were utilized. The traffic volumes shown in Table EA-22, *On-Site Roadway Parameters*, reflect future long-range traffic conditions needed to assess the future on-site traffic noise environment and to identify the appropriate Project Design Features that address the worst-case future conditions. For the purposes of this analysis, hard site conditions were used to analyze the potential on-site traffic noise impacts for the Project study area. Hard site conditions account for the sound propagation loss over a reflective surface between the source and the receiver (Urban Crossroads, 2014a, p. 30).

Table EA-22 On-Site Roadway Parameters

Roadway	Lanes	Classification[1]	Maximum Two-Way Traffic Volume (LOS C)[2]	Speed Limit (mph)[3]	Site Conditions
El Sobrante Rd.	4	Arterial	28,700	40	Hard
McAllister St.	2	Collector	10,400	40	Hard

[1] Road classifications based upon the County of Riverside General Plan Circulation Element, August 2013.
[2] Source: County of Riverside General Plan Circulation Element, Figure C-3.
[3] Source: County of Riverside Office of Industrial Hygiene (Appendix 5.1).

(Urban Crossroads, 2014a, Table 5-5)

Table EA-23, *On-Site Distribution of Traffic Flow by Vehicle Type (Vehicle Mix),* presents the total traffic flow distributions (vehicle mixes) obtained from the County of Riverside Office of Industrial Hygiene noise study requirements. The vehicle mix provides the hourly distribution percentages of automobile, medium trucks and heavy trucks for input into the FHWA Model based on roadway types (Urban Crossroads, 2014a, p. 30).

To predict the future noise environment at each building within the Project site, coordinate information was collected to identify the noise transmission path between the noise source and receiver. The coordinate information is based on the Project site plan showing the plotting of each lot in relationship to El Sobrante Road and McAllister Street. The site plan was used to identify the relationship between the roadway centerline elevation, the pad elevation and the centerline distance to the noise barrier, and the building façade. The exterior noise levels at the backyard receivers were placed five feet above the pad elevation and ten feet from the proposed barrier location or at the proposed building façade, whichever is greater (Urban Crossroads, 2014a, p. 31)

Table EA-23 On-Site Distribution of Traffic Flow by Vehicle Type (Vehicle Mix)

Roadway	Classification[1]	Total % Traffic Flow[2]			Total
		Autos	Medium Trucks	Heavy Trucks	
El Sobrante Rd.	Arterial	92.00%	3.00%	5.00%	100%
McAllister St.	Collector	97.42%	1.84%	0.74%	100%

[1] Road classifications based upon the County of Riverside General Plan Circulation Element, August 2013.
[2] Source: County of Riverside Office of Industrial Hygiene (Appendix 5.1).

(Urban Crossroads, 2014a, Table 5-6)

Future vehicle noise from El Sobrante Road and McAllister Street is the principal source of community noise that will impact the Project site. The Project will also experience some background traffic noise impacts from the Project's internal roads, however due to the distance, topography and low traffic volume/speeds, traffic noise from these roads would not make a significant contribution to the noise environment. Mitigation Measures have been identified (refer to Mitigation Measures M-N-2 and M-N-3) to reduce the exterior and interior noise levels to satisfy the County of Riverside transportation related CNEL noise criteria for residential development.

Exterior Noise Levels

Using the FHWA traffic noise prediction model, the expected future exterior noise levels for individual lots were calculated. Table EA-24, *Future On-Site Exterior Noise Levels*, below presents a summary of future exterior noise level impacts in the outdoor living areas (backyards). The on-site traffic noise level impacts indicate that the lots adjacent to El Sobrante Road and McAllister Street would experience uncontrolled exterior noise levels ranging from 58.4 to 72.5 dBA CNEL (Urban Crossroads, 2014a, p. 45)

To satisfy the County of Riverside 65 dBA CNEL exterior noise level standards for single-family residential development, the planned 6-foot high noise barriers for lots adjacent to McAllister Street and El Sobrante Road are required. With the planned noise barriers shown on Exhibits ES-A and ES-B of the Noise Impact Analysis for the proposed Project, and assuming implementation of Mitigation Measure M-N-2, the future exterior noise levels with mitigation would range from 52.9 to 64.4 dBA CNEL. The noise analysis shows that the recommended noise barriers would satisfy the County of Riverside 65 dBA CNEL exterior noise level standards (Urban Crossroads, 2014a, p. 45). Thus, no additional mitigation measures are warranted.

Interior Noise Levels

To ensure that interior noise levels of proposed residential homes comply with the County of Riverside 45 dBA CNEL interior noise standards, future noise levels were calculated at the first and second floor building facades.

The interior noise level is the difference between the predicted exterior noise level at the building façade and the noise reduction of the structure. Typical building construction provides a noise level reduction of approximately 12 dBA with "windows open" and a minimum 25 dBA noise reduction with "windows closed." However, sound leaks, cracks, and openings within the window assembly can greatly diminish its effectiveness in reducing noise. Several methods are used to improve interior noise reduction, including: (1) weather-stripped solid core exterior doors; (2) upgraded dual glazed

windows; (3) mechanical ventilation/air conditioning; and (4) exterior wall/roof assembles free of cut outs or openings (Urban Crossroads, 2014a, p. 47).

Table EA-24 Future On-Site Exterior Noise Levels

Lot Number	Roadway	Uncontrolled Noise Level (dBA CNEL)	Noise Level With Project Design Features (dBA CNEL)	Barrier Height (Feet)	Top of Barrier Elevation (Feet)
4	El Sobrante Rd.	68.0	61.2	6.0'	1312'
5	El Sobrante Rd.	63.5	58.2	6.0'	1316'
9	El Sobrante Rd.	63.3	57.7	6.0'	1318'
18	El Sobrante Rd.	66.6	61.1	6.0'	1316'
19	El Sobrante Rd.	58.4	64.3	6.0'	1316'
84	El Sobrante Rd.	62.3	63.3	6.0'	1322'
85	El Sobrante Rd.	72.3	64.4	6.0'	1322'
88	El Sobrante Rd.	72.5	64.4	6.0'	1324'
90	El Sobrante Rd.	72.4	64.3	6.0'	1325'
92	El Sobrante Rd.	71.9	63.9	6.0'	1326'
93	El Sobrante Rd.	71.7	63.7	6.0'	1327'
197	McAllister St.	64.3	56.6	6.0'	1314'
194	McAllister St.	64.2	56.3	6.0'	1312'
191	McAllister St.	64.0	56.1	6.0'	1310'
190	McAllister St.	64.0	55.9	6.0'	1310'
36	McAllister St.	59.0	52.9	6.0'	1307'
33	McAllister St.	59.2	52.9	6.0'	1309'
31	McAllister St.	59.8	53.3	6.0'	1310'
10	McAllister St.	60.0	53.9	6.0'	1305'
1	McAllister St.	65.5	58.8	6.0'	1306'
3	McAllister St.	65.5	57.0	6.0'	1308'

(Urban Crossroads, 2014a, Table 7-1)

To provide the necessary interior noise level reduction, Table EA-25 *First Floor Interior Noise Impacts,* and Table EA-26, *Second Floor Interior Noise Impacts*, indicate that residential homes facing El Sobrante Road and McAllister Street would require a windows closed condition and a means of mechanical ventilation (e.g. air conditioning). Table EA-25 shows that the future uncontrolled noise levels at the first floor building façade are expected to range from 52.8 to 66.9 dBA CNEL. The first floor interior noise level analysis shows that the County of Riverside 45 dBA CNEL interior noise level standards can be satisfied using standard windows with a minimum STC rating of 27. Table EA-26 shows that the future noise levels at the second floor building façade are expected to range from 57.7 to 72.1 dBA CNEL, and windows with a minimum STC rating of 27 are expected to satisfy the County of Riverside's 45 dBA CNEL interior noise level standards for lots 1 to 5, 8 to 10, 18, 19, 30 to 36, and 189 to 197 adjacent to El Sobrante Road and McAllister Street. Lots 84 to 93 adjacent to El Sobrante Road would require upgraded second floor windows with a minimum STC rating of 31.

Table EA-25 First Floor Interior Noise Impacts

Lot	Noise Level at Façade[1]	Required Interior Noise Reduction[2]	Estimated Interior Noise Reduction[3]	Upgraded Windows[4]	Interior Noise Level[5]
4	63.1	18.1	25	No	38.1
5	60.1	15.1	25	No	35.1
9	59.7	14.7	25	No	34.7
18	63.2	18.2	25	No	38.2
19	64.4	19.4	25	No	39.4
84	65.9	20.9	25	No	40.9
85	66.9	21.9	25	No	41.9
88	66.9	21.9	25	No	41.9
90	66.8	21.8	25	No	41.8
92	66.4	21.4	25	No	41.4
93	66.2	21.2	25	No	41.2
197	55.8	10.8	25	No	30.8
194	55.4	10.4	25	No	30.4
191	55.1	10.1	25	No	30.1
190	54.9	9.9	25	No	29.9
36	52.8	7.8	25	No	27.8
33	52.8	7.8	25	No	27.8
31	53.1	8.1	25	No	28.1
10	53.9	8.9	25	No	28.9
1	58.2	13.2	25	No	33.2
3	57.2	12.2	25	No	32.2

Notes:
All values shown in Table EA-25 are dBA CNEL.
1 Exterior noise level at the facade with a windows closed condition requiring a means of mechanical ventilation (e.g. air conditioning).
2 Noise reduction required to satisfy the 45 dBA CNEL interior noise standards.
3 A minimum of 25 dBA noise reduction is assumed with standard building construction.
4 Does the required interior noise reduction trigger upgraded with a minimum STC rating of greater than 27?
5 Estimated interior noise level with minimum STC rating for all windows.
(Urban Crossroads, 2014a, Table 7-2)

Table EA-26 Second Floor Interior Noise Impacts

Lot	Noise Level at Façade[1]	Required Interior Noise Reduction[2]	Estimated Interior Noise Reduction[3]	Upgraded Windows[4]	Interior Noise Level[5]
4	66.0	21.0	25	No	41.0
5	67.1	22.1	25	No	42.1
9	66.6	21.6	25	No	41.6
18	64.0	19.0	25	No	39.0
19	57.7	12.7	25	No	32.7
84	70.9	25.9	29	Yes	41.9
85	72.0	27.0	29	Yes	43.0
88	72.1	27.1	29	Yes	43.1
90	72.1	27.1	29	Yes	43.1
92	71.7	26.7	29	Yes	42.7
93	71.4	26.4	29	Yes	42.4
197	63.8	18.8	25	No	38.8
194	63.6	18.6	25	No	38.6
191	63.5	18.5	25	No	38.5
190	63.5	18.5	25	No	38.5
36	58.8	13.8	25	No	33.8
33	59.0	14.0	25	No	34.0
31	59.6	14.6	25	No	34.6
10	59.8	14.8	25	No	34.8
1	64.8	19.8	25	No	39.8
3	64.8	19.8	25	No	39.8

Notes:
All values shown in Table EA-26 are dBA CNEL.
1 Exterior noise level at the facade with a windows closed condition requiring a means of mechanical ventilation (e.g. air conditioning).
2 Noise reduction required to satisfy the 45 dBA CNEL interior noise standards.
3 Estimated interior noise reduction with the recommended STC ratings.
4 Does the required interior noise reduction trigger upgraded with a minimum STC rating of greater than 27?
5 Estimated interior noise level with the recommended STC rating for all windows.
(Urban Crossroads, 2014a, Table 7-3)

The noise analysis shows that with the incorporation of Mitigation Measure M-N-3, the Project would satisfy the County of Riverside 45 dBA CNEL interior noise level standards for single-family residential development. A final noise study shall be prepared prior to obtaining building permits for the Project. This report would finalize the Project Design Features proposed in this study using the precise grading plans and actual building design specifications, and may include additional abatement, if necessary, to meet the County of Riverside 45 dBA CNEL interior noise level standard. (Urban Crossroads, 2014a, p. 47).

Implementation of the required mitigation would ensure that potential impacts to future residents associated with exterior and interior noise levels would be reduced to a less than significant level.

Off-Site Project-Related Traffic Noise Impacts

Traffic generated by the proposed Project would influence the traffic noise levels in surrounding off-site areas. To quantify the off-site traffic noise level increases on the surrounding off-site areas, the changes in traffic noise levels on 21 roadway segments surrounding the Project site were estimated based on the change in the average daily traffic (ADT) volumes. The traffic noise levels provided in this analysis are based on the traffic forecasts found in the Lake Ranch (Tract No. 36730) Traffic Impact Analysis (IS/MND Appendix K). To assess the off-site noise level impacts associated with the proposed Project, noise contour boundaries were developed for Existing, Year 2016, and Year 2035 traffic conditions. Noise contour boundaries represent the equal levels of noise exposure and are measured in CNEL from the center of the roadway. Noise contours were developed for the following traffic scenarios:

- Existing Without / With Project: This scenario refers to the existing present-day noise conditions, without the Project and with the construction of the proposed Project.
- Year 2016 Without / With Project: This scenario refers to the background noise conditions at future Year 2016 with and without the proposed Project. This scenario corresponds to 2016 conditions, and includes all cumulative projects identified in the Traffic Impact Analysis.
- Year 2035 Without / With Project: This scenario refers to the background noise conditions at future Year 2035 with and without the proposed Project. This scenario corresponds to 2035 conditions, and includes all cumulative projects identified in the Traffic Impact Analysis prepared for the proposed Project (Urban Crossroads, 2014a, p. 33).

The noise contours do not take into account the effect of any existing noise barriers or topography that may affect ambient noise levels. Tables 6-1 through 6-6 of the Noise Impact Analysis (IS/MND Appendix J) present a summary of the uncontrolled exterior traffic noise levels for the 21 study area roadway segments analyzed from the "without Project" and "with Project" conditions in each of the three timeframes: Existing, Year 2016, and Year 2035 conditions. Appendix 6.1 to the Noise Impact Analysis (IS/MND Appendix J) includes a summary of the traffic noise level contours for each of the six traffic scenarios.

A significant off-site traffic noise level impact would occur if the without Project noise levels at nearby noise-sensitive receivers:

- Are less than 60 dBA CNEL and the Project creates a readily perceptible 5 dBA CNEL or greater noise level increase, or;
- Range from 60 to 65 dBA CNEL and the project creates a barely perceptible 3 dBA CNEL or greater project noise level increase; or
- Already exceed 65 dBA CNEL, and the project creates a community noise level impact of greater than 1.5 dBA CNEL (Urban Crossroads, 2014a, p. 33)

As shown on Table EA-27, *Existing Off-Site Project-Related Traffic Noise Impacts*, for existing conditions, the Project would increase the off-site traffic noise levels between 0.0 to 3.3 dBA CNEL on the off-site roadway segments. All noise increases attributable to the Project would be less than 1.5 dBA CNEL, except for the roadway segment of McAllister Street north of El Sobrante Road, where the Project would contribute an increase of 3.3 dBA. As shown in Table EA-27, this segment of McAlister Street has noise levels less than 60 dBA CNEL under existing conditions; therefore, the Project's

Table EA-27 Existing Off-Site Project-Related Traffic Noise Impacts

ID	Road	Segment	Adjacent Land Use[1]	CNEL at Adjacent Land Use (dBA)			Potential Significant Impact?[2]
				Without Project	With Project	Project Addition	
1	La Sierra Av.	n/o SR-91 WB Ramps	Residential	79.7	79.7	0.0	No
2	La Sierra Av.	s/o SR-91 WB Ramps	Commercial	79.9	79.9	0.0	No
3	La Sierra Av.	s/o SR-91 EB Ramps	Commercial	80.6	80.7	0.1	No
4	La Sierra Av.	s/o Indiana Av.	Residential	79.3	79.4	0.1	No
5	La Sierra Av.	n/o Arizona Av.	Residential	78.1	78.3	0.2	No
6	La Sierra Av.	s/o Arizona Av.	Residential	78.3	78.5	0.2	No
7	La Sierra Av.	s/o Victoria Av.	Residential	78.6	78.9	0.3	No
8	La Sierra Av.	n/o McAllister Pkwy.	Residential	78.6	78.8	0.2	No
9	La Sierra Av.	s/o McAllister Pkwy.	Residential	78.0	78.2	0.2	No
10	La Sierra Av.	n/o El Sobrante Rd.	Residential	75.9	76.2	0.3	No
11	La Sierra Av.	s/o El Sobrante Rd.	Residential	71.3	71.5	0.2	No
12	A St.	n/o McAllister Pkwy.	Residential	n/a	n/a	n/a	n/a
13	McAllister Pkwy.	s/o A St.	Residential	n/a	n/a	n/a	n/a
14	McAllister Pkwy.	n/o El Sobrante Rd.	Residential	57.5	60.8	3.3	No
15	Indiana Av.	w/o La Sierra Av.	Commercial	76.9	77.0	0.1	No
16	Indiana Av.	e/o La Sierra Av.	Residential	75.5	75.6	0.1	No
17	McAllister Pkwy.	e/o La Sierra Av.	Residential	64.8	65.2	0.4	No
18	McAllister Pkwy.	w/o A St.	Residential	n/a	n/a	n/a	n/a
19	El Sobrante Rd.	e/o La Sierra Av.	Residential	73.6	74.2	0.6	No
20	El Sobrante Rd.	w/o McAllister Pkwy.	Residential	73.0	73.7	0.7	No
21	El Sobrante Rd.	e/o McAllister Pkwy.	Residential	73.2	73.6	0.4	No

1 Sources: City of Riverside General Plan Land Use Policy Map, November 2007, and the County of Riverside General Plan, Lake Mathews Area Land Use Plan, October 2003.
2 Significance Criteria (Section 4, Table 4-1, of the Noise Impact Analysis, IS/MND Appendix J).
"n/a" = Roadway segment does not exist.
(Urban Crossroads, 2014a, Table 6-7)

contribution to noise levels along this roadway segment would be less than significant based on the above-described significance criteria. (Urban Crossroads, 2014a, p. 40)

Table EA-28, *Year 2016 Off-Site Project-Related Traffic Noise Impacts*, indicates that for Year 2016 conditions, the Project would increase the off-site traffic noise levels between 0.0 to 1.6 dBA CNEL. All Project-related noise increases would be less than 1.5 dBA CNEL, except for the segment of McAllister Street north of Street A, where the Project-related noise increase would be 1.6 dBA CNEL. As shown in Table EA-28, this segment is projected to have a noise level of 61.0 dBA CNEL without the addition of Project traffic; therefore, impacts along this segment would be less than significant based on the above-described significance criteria. (Urban Crossroads, 2014a, p. 40)

Table EA-29, *Year 2035 Off-Site Project-Related Traffic Noise Impacts*, indicates that for Year 2035 conditions, the Project would increase the off-site traffic noise levels between 0.0 to 0.8 dBA CNEL. Because the Project would not result in an off-site noise increase of 1.5 dBA CNEL on any study area road segment, impacts would be less than significant based on the above-described significance criteria. (Urban Crossroads, 2014a, p. 40)

Table EA-28 Year 2016 Off-Site Project-Related Traffic Noise Impacts

ID	Road	Segment	Adjacent Land Use[1]	CNEL at Adjacent Land Use (dBA)			Potential Significant Impact?[2]
				Without Project	With Project	Project Addition	
1	La Sierra Av.	n/o SR-91 WB Ramps	Residential	80.3	80.3	0.0	No
2	La Sierra Av.	s/o SR-91 WB Ramps	Commercial	80.7	80.7	0.0	No
3	La Sierra Av.	s/o SR-91 EB Ramps	Commercial	81.5	81.5	0.0	No
4	La Sierra Av.	s/o Indiana Av.	Residential	80.2	80.3	0.1	No
5	La Sierra Av.	n/o Arizona Av.	Residential	79.2	79.3	0.1	No
6	La Sierra Av.	s/o Arizona Av.	Residential	78.9	79.0	0.1	No
7	La Sierra Av.	s/o Victoria Av.	Residential	79.3	79.4	0.1	No
8	La Sierra Av.	n/o McAllister Pkwy.	Residential	79.3	79.4	0.1	No
9	La Sierra Av.	s/o McAllister Pkwy.	Residential	78.4	78.5	0.1	No
10	La Sierra Av.	n/o El Sobrante Rd.	Residential	76.4	76.6	0.2	No
11	La Sierra Av.	s/o El Sobrante Rd.	Residential	72.3	72.5	0.2	No
12	A St.	n/o McAllister Pkwy.	Residential	62.3	62.9	0.6	No
13	McAllister Pkwy.	s/o A St.	Residential	61.0	62.6	1.6	No
14	McAllister Pkwy.	n/o El Sobrante Rd.	Residential	62.3	63.1	0.8	No
15	Indiana Av.	w/o La Sierra Av.	Commercial	77.3	77.4	0.1	No
16	Indiana Av.	e/o La Sierra Av.	Residential	77.4	77.5	0.1	No
17	McAllister Pkwy.	e/o La Sierra Av.	Residential	66.9	67.1	0.2	No
18	McAllister Pkwy.	w/o A St.	Residential	62.6	63.2	0.6	No
19	El Sobrante Rd.	e/o La Sierra Av.	Residential	74.2	74.6	0.4	No
20	El Sobrante Rd.	w/o McAllister Pkwy.	Residential	73.7	74.2	0.5	No
21	El Sobrante Rd.	e/o McAllister Pkwy.	Residential	73.6	73.9	0.3	No

1 Sources: City of Riverside General Plan Land Use Policy Map, November 2007, and the County of Riverside General Plan, Lake Mathews Area Land Use Plan, October 2003.

2 Significance Criteria (Section 4, Table 4-1, of the Noise Impact Analysis, IS/MND Appendix J).

(Urban Crossroads, 2014a, Table 6-8)

Table EA-29 Year 2035 Off-Site Project-Related Traffic Noise Impacts

ID	Road	Segment	Adjacent Land Use[1]	CNEL at Adjacent Land Use (dBA)			Potential Significant Impact?[2]
				Without Project	With Project	Project Addition	
1	La Sierra Av.	n/o SR-91 WB Ramps	Residential	80.6	80.6	0.0	No
2	La Sierra Av.	s/o SR-91 WB Ramps	Commercial	81.1	81.2	0.1	No
3	La Sierra Av.	s/o SR-91 EB Ramps	Commercial	81.8	81.8	0.0	No
4	La Sierra Av.	s/o Indiana Av.	Residential	80.5	80.6	0.1	No
5	La Sierra Av.	n/o Arizona Av.	Residential	79.7	79.8	0.1	No
6	La Sierra Av.	s/o Arizona Av.	Residential	79.3	79.5	0.2	No
7	La Sierra Av.	s/o Victoria Av.	Residential	80.0	80.1	0.1	No
8	La Sierra Av.	n/o McAllister Pkwy.	Residential	80.0	80.1	0.1	No
9	La Sierra Av.	s/o McAllister Pkwy.	Residential	79.7	79.8	0.1	No
10	La Sierra Av.	n/o El Sobrante Rd.	Residential	79.1	79.2	0.1	No
11	La Sierra Av.	s/o El Sobrante Rd.	Residential	76.2	76.3	0.1	No
12	A St.	n/o McAllister Pkwy.	Residential	67.9	68.1	0.2	No
13	McAllister Pkwy.	s/o A St.	Residential	64.3	65.1	0.8	No
14	McAllister Pkwy.	n/o El Sobrante Rd.	Residential	63.2	63.9	0.7	No
15	Indiana Av.	w/o La Sierra Av.	Commercial	78.4	78.4	0.0	No
16	Indiana Av.	e/o La Sierra Av.	Residential	78.0	78.1	0.1	No
17	McAllister Pkwy.	e/o La Sierra Av.	Residential	67.5	67.7	0.2	No
18	McAllister Pkwy.	w/o A St.	Residential	65.5	65.8	0.3	No
19	El Sobrante Rd.	e/o La Sierra Av.	Residential	77.0	77.2	0.2	No
20	El Sobrante Rd.	w/o McAllister Pkwy.	Residential	77.0	77.2	0.2	No
21	El Sobrante Rd.	e/o McAllister Pkwy.	Residential	76.8	77.0	0.2	No

1 Sources: City of Riverside General Plan Land Use Policy Map, November 2007, and the County of Riverside General Plan, Lake Mathews Area Land Use Plan, October 2003.
2 Significance Criteria (Section 4, Table 4-1, of the Noise Impact Analysis, IS/MND Appendix J).
(Urban Crossroads, 2014a, Table 6-9)

The above analysis demonstrates that the Project's contributions to roadway noise levels would be less than significant for Existing, Year 2016, and Year 2035 conditions. Therefore, the proposed Project would not create a substantial permanent increase in traffic-related noise levels or expose persons to noise levels in excess of the exterior noise level standards established by the County of Riverside, and the Project's traffic-related noise effects to sensitive receptors located off-site would be less than significant.

d) As detailed in the Noise Impact Analysis prepared for the proposed project (IS/MND Appendix J), potential groundborne vibration/noise impacts could occur in association with vehicular traffic and construction activities. Ground-borne vibration levels from automobile traffic are generally overshadowed by vibration generated by heavy trucks that roll over the same uneven roadway surfaces. However, due to the rapid drop-off rate of ground-borne vibration and the short duration of the associated events, vehicular traffic-induced ground-borne vibration is rarely perceptible beyond the roadway right-of-way, and rarely results in vibration levels that cause damage to buildings in the vicinity. (Urban Crossroads, 2014a, p. 31)

However, while vehicular traffic is rarely perceptible, construction has the potential to result in varying degrees of temporary ground vibration, depending on the specific construction activities and

equipment used. Ground vibration levels associated with various types of construction equipment are summarized on Table EA-30, *Vibration Source Levels for Construction Equipment*. Based on the representative vibration levels presented for various construction equipment types, it is possible to estimate the human response (annoyance) using the following vibration assessment methods defined by the Federal Transportation Administration (FTA). To describe the human response (annoyance) associated with vibration impacts the FTA provides the following equation: LVdB(D) = LVdB(25 ft) – 30log(D/25). (Urban Crossroads, 2014a, p. 31)

Table EA-30 Vibration Source Levels for Construction Equipment

Equipment	Vibration Decibels (VdB) at 25 feet
Small bulldozer	58
Jackhammer	79
Loaded Trucks	86
Large bulldozer	87

(Urban Crossroads, 2014a, Table 5-7)

The blasting of hard rock areas is a major source of potential vibration impacts to nearby residential receivers when conducted during construction activities. The intensity of the vibration impacts associated with rock blasting depends on location, size, material, shape of the rock, and the methods used to crack it. While a blasting contractor can design the blasts to stay below a given vibration level that could cause damage to nearby sensitive structures, it is difficult to design blasts that are not perceptible to receivers in the vicinity of the blast site. (Urban Crossroads, 2014a, p. 32)

Construction Vibration Impacts

Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods used, distance to the affected structures and soil type. It is expected that ground-borne vibration from Project construction activities would cause only intermittent, localized intrusion. The proposed Project's construction activities most likely to cause vibration impacts include but are not limited to the following (Urban Crossroads, 2014a, p. 67):

- Heavy Construction Equipment: Although all heavy mobile construction equipment has the potential of causing at least some perceptible vibration while operating close to building, the vibration is usually short-term and is not of sufficient magnitude to cause building damage. It is not expected that heavy equipment such as large bulldozers would operate close enough to any residences to cause a vibration impact.
- Trucks: Trucks hauling building materials to construction sites can be sources of vibration intrusion if the haul routes pass through residential neighborhoods on streets with bumps or potholes. Repairing the bumps and potholes generally eliminates the problem.
- Blasting: The intensity of the vibration impacts associated with rock blasting depends on location, size, material, shape of the rock, and the methods used to crack it.

Ground-borne vibration levels resulting from construction activities occurring within the Project site were estimated by data published by the Federal Transit Administration. Construction activities that would occur within the Project site are expected to include grading and blasting, which would have the

potential to generate low levels of ground-borne vibration. Using the vibration source level of construction equipment provided on Table EA-30 and the construction vibration assessment methodology published by the FTA, it is possible to estimate the Project vibration impacts. Table EA-31, *Construction Equipment Noise Levels*, presents the expected Project related vibration levels at each of the ten sensitive receiver locations.

Table EA-31 Construction Equipment Noise Levels

Noise Receiver[1]	Distance To Property Line (In Feet)	Receiver Vibration Levels (VdB)[2]					Potential Significant Impact?[3]
		Small Bulldozer	Jackhammer	Loaded Trucks	Large Bulldozer	Peak Vibration	
R1	471'	19.7	40.7	47.7	48.7	48.7	No
R2	1,178'	7.8	28.8	35.8	36.8	36.8	No
R3	629'	16.0	37.0	44.0	45.0	45.0	No
R4	481'	19.5	40.5	47.5	48.5	48.5	No
R5	292'	26.0	47.0	54.0	55.0	55.0	No
R6	173'	32.8	53.8	60.8	61.8	61.8	No
R7	101'	39.8	60.8	67.8	68.8	68.8	No
R8	94'	40.7	61.7	68.7	69.7	69.7	No
R9	274'	26.8	47.8	54.8	55.8	55.8	No
R10	934'	10.8	31.8	38.8	39.8	39.8	No

1 Noise receiver locations are shown on Exhibit 8-A of the Noise Impact Analysis (IS/MND Appendix J).
2 Based on the Vibration Source Levels of Construction Equipment included on Table EA-30.
3 Does the Peak Vibration exceed the FTA maximum acceptable vibration standard of 80 (VdB)?
(Urban Crossroads, 2014a, Table 9-10)

Based on the reference vibration levels provided by the FTA, shown on Table EA-30, a large bulldozer represents the peak source of vibration with a reference level of 87 VdB at a distance of 25 feet. At distances ranging from 94 to 1,178 feet from the Project site, construction vibration levels are expected to range from 7.8 to 69.7 VdB. Using the construction vibration assessment methods provided by the FTA, the proposed Project would not include nor require equipment, facilities, or activities that would result in a perceptible human response (annoyance). Accordingly, construction-related vibration impacts would be less than significant. (Urban Crossroads, 2014a, p. 68)

Hard Rock Blasting Ground-Borne Vibration

The construction of the proposed Project would include blasting of hard rock areas, which is a major source of potential vibration impacts to nearby residential receivers. The intensity of the vibration impacts associated with rock blasting depends on location, size, material, shape of the rock, and the methods used to crack it. While a blasting contractor can design the blasts to stay below a given vibration level that could cause damage to nearby sensitive structures, it is difficult to design blasts that are not perceptible to receivers in the vicinity of the blast site. (Urban Crossroads, 2014a, p. 68)

To reduce the risk of damage to the adjacent homes, traditional blasting methods utilizing explosives should not occur within 200 feet from any existing home. The use of alternate rock breaking methods must be used within 200 feet from any existing noise-sensitive homes. The *Transportation and Construction Vibration Guidance Manual* provides the human perception thresholds for vibration due to blasting at a peak particle velocity (PPV) level of 0.02 in/sec, and provides vibration velocity levels

for various building materials susceptibile to damage. For residential structures, the threshold of damage for vibration is approximately 3.0 in/sec (PPV) for cosmetic cracking and damage. (Urban Crossroads, 2014a, pp. 68-69)

It is anticipated that blasting-related impacts would represent a significant impact for which mitigation would be required. To reduce blasting-related impacts to a level below significance, Mitigation Measure M-N-1 has been imposed on the Project, requiring the preparation and implementation of a Blasting Noise and Vibration Monitoring And Abatement Plan during construction activities. A pre- and post-blast survey radius of approximately 200 feet is required to assess the potential vibration level radius due to blasting activities and shall include the inspection of the closest residential structures. Existing defects or damage must be noted and documented to determine the conditions of the closest residential homes, and surveys shall be offered to homeowners to assess such damage. Neighborhood meetings, notifications, or posting of signs are all required as part of the Blasting Noise And Vibration Monitoring and Abatement Plan to notify nearby homeowners of the blasting activities. To reduce adverse effects, Mitigation Measure M-N-1 also requires that rock blasting activities be limited during the permitted hours for construction activity between 6:00 a.m. and 6:00 p.m., during the months of June through September, and 7:00 a.m. and 6:00 p.m., during the months of October through May, as required by the County of Riverside Code of Ordinances. Further, the identified mitigation requires the blasting contractor to design the blasts using alternative methods when located within 200 feet of existing residential structures, and when necessary, reduce vibration velocity levels from each blast below the damage threshold of 3.0 in/sec. A blast signal shall be used to notify nearby residents that blasting is about to occur. Lastly, all complaints must be responded to and investigated as they occur. (Urban Crossroads, 2014a, p. 69)

With implementation of the required mitigation, the vibration levels at nearby residential receivers would be reduced. Because Mitigation Measure M-N-1 includes measures identified by the California Department of Transportation, *Transportation and Construction Vibration Guidance Manual,* the vibration velocity levels due to blasting activities are expected to be reduced to less-than-significant levels. (Urban Crossroads, 2014a, pp. 69-70)

Soil Import Truck Haul Trips

The Project site will require 102,877 cubic yards (c.y.) of import material in order to balance[2]. Soil import would take place for approximately eight months concurrent with grading activities during Project construction. To assess the potential vibration impacts from truck haul trips associated with soil import activities, the human threshold of perception for vibration of 0.02 in/sec (PPV) is used. Truck vibration levels are dependent on vehicle characteristics, load, speed, and pavement condition. Typical vibration levels for the proposed Project's heavy truck activity at normal traffic speeds would not exceed 0.02 in/sec. Truck deliveries transiting on-site would be travelling at very low speeds so it is expected that delivery truck vibration impacts at nearby homes would not exceed the vibration threshold for human perception identified by the California Department of Transportation of 0.02 in/sec (PPV), and therefore, would be less than significant. (Urban Crossroads, 2014a, p. 70)

Conclusion

As indicated in the preceding analysis, the Project construction vibration levels ranging from 7.8 to

[2] It should be noted that the Project's Noise Impact Analysis (IS/MND Appendix J) assumes the Project would require up to 223,000 c.y. of soil import; thus, the Noise Impact Analysis presents a "worst-case" analysis of potential impacts associated with haul truck trips.

69.7 VdB are not expected to exceed the Federal Transportation Administration (FTA) maximum acceptable vibration standard of 80 VdB. Based on the California Department of Transportation, *Transportation and Construction Vibration Guidance Manual*, and with the incorporation of Mitigation Measure M-N-1, the vibration levels from blasting activities and soil import truck haul trips would not exceed the human perception threshold of 0.02 in/sec or the residential structure damage threshold of 3.0 in/sec. (Urban Crossroads, 2014a, p. 70)

Further, impacts at the site of the closest sensitive receiver are unlikely to be sustained during the entire construction period, but would occur rather only during the times that heavy construction equipment is operating adjacent to the Project site perimeter. Moreover, construction at the Project site would be restricted to the daytime hours consistent with County requirements thereby eliminating potential vibration impacts during the sensitive nighttime hours. On this basis the potential for the Project to result in exposure of persons to, or generation of, excessive ground-borne vibration is determined to be less than significant. (Urban Crossroads, 2014a, p. 70)

Mitigation:

M-N-1 (Condition of Approval 10.HEALTH.002) In order to reduce construction-related noise affecting nearby noise sensitive residential land uses to the maximum feasible extent, the following requirements shall apply:

- ~~Prior to approval of grading plans and/or issuance of building permits, plans shall include a note indicating that w~~Whenever a construction site is located within one-quarter (1/4) mile of an occupied residence or residences construction activities shall be limited between the hours of 6:00 a.m. and 6:00 p.m., during the months of June through September, and 7:00 a.m. and 6:00 p.m., during the months of October through May. Exceptions to these standards shall be allowed only with the written consent of the building official.

- ~~A Noise Abatement Plan shall be prepared and submitted to the County for review and approval prior to issuance of grading permits. The plan shall depict t~~The location of construction equipment and ~~how the~~ noise from this equipment shall be reduced during construction of the Project through the use of such methods as:

    - During all Project site construction, the construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards. The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receivers nearest the Project site.
    - The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise sensitive receivers nearest the Project site (i.e., to the east) during all Project construction.
    - In order to reduce nighttime noise level contributions, it is recommended that outgoing flatbed trailer loading occur during the daytime or evening hours before Project site delivery, and that the loaded trailer be parked near the driveway to the site. This will reduce the duration of equipment

pick-up activity noise and increase the distance between the nearest noise receivers.

- The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment (between the hours of 6:00 a.m. and 6:00 p.m., during the months of June through September, and 7:00 a.m. and 6:00 p.m., during the months of October through May).
- No music or electronically reinforced speech from construction workers shall be audible at noise-sensitive properties.

- ~~Prior to issuance of grading permits that include~~During grading/blasting activities within hard rock areas, ~~a Blasting Noise and Vibration Monitoring and Abatement Plan shall be prepared and submitted to the County. The Blasting Noise and Vibration Monitoring and Abatement Plan~~the Project shall adhere to the ~~shall include the~~ following requirements:
  - Pre-blasting inspections shall be offered to homes within 200 feet of the hard rock areas.
    - Existing damage of each structure shall be documented.
    - Post-blasting inspections shall be offered to assess new or additional damage to each residential structure once blasting activities have ceased.
  - Traditional rock blasting methods shall not occur within 200 feet from any residential home. In these areas rock breaking must be performed with nonexplosive methods.
  - Blasting mats shall be used whenever feasible to further reduce the noise from blasting activities.
  - Nearby residential homes shall be notified via postings on the construction site 24 hours before the occurrence of major construction related noise and vibration impacts (such as grading and rock blasting) which may affect them.
  - The County may impose conditions and procedures on the blasting operations as necessary. The construction contractor shall comply with these measures for the duration of the blasting permit. The County may inspect the blast site and materials at any reasonable time (pursuant to County of Riverside Ordinance No. 787).

M-N-2 (Condition of Approval 10.HEALTH.002) To satisfy the County of Riverside 65 dBA CNEL exterior noise level standards for single-family residential development, 6-foot high noise barriers for lots adjacent to McAllister Street and El Sobrante Road are required as depicted on Exhibits ES-A and ES-B of the Project's Noise Impact Analysis, prepared by Urban Crossroads and dated December 11, 2014. Construction of the required barriers would reduce the future exterior noise levels to between 52.9 and 64.4 dBA CNEL. The recommended noise control barriers shall be constructed so that the top of each wall extends to the recommended height above the pad elevation of the lot it is shielding. When the road is elevated above the pad elevation, the barrier shall extend to the recommended height above the highest point between the residential home and the road. The barriers shall provide a weight of at least 4 pounds per square foot of face area with no decorative cutouts or line-of-sight openings between shielded areas and the roadways. The noise barrier may be constructed using one of the following materials:

- Masonry block
- Stucco veneer over wood framing (or foam core), or 1 inch thick tongue and groove wood of sufficient weight per square foot
- Glass (1/4 inch thick), or other transparent material with sufficient weight per square foot
- Earthen berm
- Any combination of these construction materials

The barrier must present a solid face from top to bottom. Unnecessary openings or decorative cutouts should not be made. All gaps (except for weep holes) should be filled with grout or caulking.

M-N-3 (Condition of Approval 10.HEALTH.002) To satisfy the County of Riverside 45 dBA CNEL interior noise level criteria, lots facing El Sobrante Road and McAllister Street will require a Noise Level Reduction (NLR) of up to 27.1 dBA and a windows closed condition requiring a means of mechanical ventilation (e.g. air conditioning). In order to meet the County of Riverside 45 dBA CNEL interior noise standards the Project shall provide the following or equivalent Project Design Features:

- Windows:
  - All windows and sliding glass doors shall be well fitted, well weather-stripped assemblies and shall have a minimum sound transmission class (STC) rating of 27.
  - Lots 84 to 93 adjacent to El Sobrante Road will require upgraded second floor windows with a minimum STC rating of 31.

- Doors: All exterior doors shall be well weather-stripped solid core assemblies at least one and three-fourths-inch thick.

- Roof: Roof sheathing of wood construction shall be well fitted or caulked plywood of at least one-half inch thick. Ceilings shall be well fitted, well-sealed gypsum board of at least one-half inch thick. Insulation with at least a rating of R-19 shall be used in the attic space.

- Attic: Attic vents should be oriented away from El Sobrante Road and McAllister Street. If such an orientation cannot be avoided, then an acoustical baffle shall be placed in the attic space behind the vents.

- Ventilation: Arrangements for any habitable room shall be such that any exterior door or window can be kept closed when the room is in use. A forced air circulation system (e.g. air conditioning) shall be provided which satisfies the requirements of the Uniform Mechanical Code. Wall mounted air conditioners shall not be used.

- Furnishings: All bedrooms, when in use, are expected to contain furniture or other materials that absorb sound equivalent to the absorption provided by wall-to-wall carpeting over a conventional pad.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

With the interior Project Design Features provided in this study, the proposed Lake Ranch (Tract No. 36730) is expected to meet the County of Riverside 45 dBA CNEL interior noise level standards for residential development. A final noise study shall be prepared prior to obtaining building permits for the Project. This report would finalize the Project Design Features proposed in this study using the precise grading plans and actual building design specifications, and may include additional abatement, if necessary, to meet the County of Riverside 45 dBA CNEL interior noise level standard.

Monitoring:

M-N-1 Prior to approval of grading plans and/or issuance of building permits, the Riverside County Building and Safety Department shall ensure the Project's plans include the required notes. Prior to issuance of grading permits, the County shall review and approve a Noise Abatement Plan, which shall be adhered to by construction contractors during all construction activities on-site. Prior to issuance of grading permits that include hard rock areas, a Blasting Noise and Vibration Monitoring and Abatement Plan shall be approved by Riverside County, and construction contractors shall be required to adhere to the requirements specified therein during all grading activities involving hard rock blasting.

M-N-2 Prior to building permit final inspection, the Riverside County Building and Safety Department shall ensure that the required noise barriers have been constructed.

M-N-3 Prior to issuance of building permits, the Riverside County Building and Safety Department shall ensure that the building plans include the required noise attenuation measures, and shall verify the required features have been constructed prior to building permit final inspection.

POPULATION AND HOUSING Would the project				
35. Housing a) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
b) Create a demand for additional housing, particularly housing affordable to households earning 80% or less of the County's median income?	☐	☐	☐	☒
c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒
d) Affect a County Redevelopment Project Area?	☐	☐	☐	☒
e) Cumulatively exceed official regional or local population projections?	☐	☐	☐	☒
f) 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)?	☐	☐	☒	☐

Source: Project Application Materials, Riverside County GIS (Riverside County, 2013), General Plan, General Plan Housing Element

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Findings of Fact:

a & c) Under existing conditions, the Project site contains two existing single family homes, only one of which is occupied (Environ, 2013, p. 8; Google Earth, 2015). The Project proposes to develop the site with up to 272 residential homes, which would provide new opportunities for housing in the County. The elimination of the two existing homes on-site would not displace substantial numbers of existing housing or people requiring the construction of replacement housing elsewhere. Accordingly, no impact would occur.

b) The Project is a proposed residential community and would provide for 272 new homes providing housing for approximately 909 residents (Riverside County, 2013, Appendix E-1, Table E-2). The Project would provide for new housing opportunities on the site, which would help meet the current population growth trends in western Riverside County. The residential dwelling units proposed as part of the Project would not result in an increased demand for affordable housing. Therefore, the proposed Project would not create a demand for additional housing, including housing affordable to households earning 80% or less of the County's median income, and no impact would occur.

d) According to Riverside County GIS, the proposed Project site and off-site impact areas are not located within or adjacent to any County Redevelopment Project Areas (Riverside County, 2015). Accordingly, the Project has no potential to affect a County Redevelopment Project Area, and no impact would occur.

e) The General Plan assigns the following land use designations to the Project site: RC-EDR (2.3 acres), Rural Community-Low Density Residential (22.5 acres), Community Development-Medium Density (62.6 acres), and Community Development-Commercial Retail (11.6 acres) land uses. Therefore, and based on the residential density restrictions specified by Policy LMWAP 1.2, the General Plan assumes that the Lake Ranch property would be developed with up to 233 dwelling units and approximately 177,000 square feet of commercial retail uses. The 233 dwelling units would yield a future population of 778 residents (Riverside County, 2013, Table E-2). The 177,000 s.f. of commercial retail uses would generate approximately 354 jobs. According to Appendix E to the 2003 General Plan, the participation rate in Riverside County, which is the percent of the total population that is either employed or not employed but actively seeking employment, is 44.86% (Riverside County, 2003a). Thus, the 354 new jobs that would be expected within the on-site CR land use designation would result in a total population increase in the County by 606 residents. Accordingly, based on the existing General Plan land use designations applied to the Project site, buildout in accordance with the site's existing designations would result in a future population increase of approximately 1,384 people.

The Lake Ranch project proposes the development of 272 dwelling units and no commercial retail uses. These 272 dwelling units would result in a future population of 909 people (Riverside County, 2013, Appendix E-1, Table E-2). Thus, future population associated with the proposed Project would be less than what would be reasonably expected based on the site's existing General Plan land use designations. Accordingly, the proposed Project would not cumulatively exceed official regional or local population projections, and no impact would occur.

f) The proposed Project would develop the subject property with 272 residential homes. At full build-out, the Project is estimated to provide housing for 909 people (Riverside County, 2013, Table E-2).

It is unlikely that the Project could induce off-site population growth because the Project site abuts existing medium density residential development to the west. Additionally, none of the improvements planned as part of the Project (e.g., proposed water and sewer lines) would remove impediments to growth such that the adjacent, largely undeveloped properties to the north and east would be induced to convert to urban uses. Furthermore, all lands surrounding the Project site are planned by the Riverside County General Plan for development with residential uses at various densities, and it is unlikely that development of the Project site with residential uses would induce these nearby properties to be developed in accordance with their existing General Plan land use designations because there are no regional improvements proposed by the Project that would remove obstacles to development, such as the construction of a regional sewer line.

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 transportation/traffic while all other population-based impacts would be less than significant. Mitigation measures are provided in this IS/MND to reduce the Project's transportation/traffic impacts to less-than-significant levels. Accordingly, the Project's impacts associated with population inducement would be less than significant.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

PUBLIC SERVICES Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered government facilities or the 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:				
36. Fire Services	☐	☐	☒	☐

Source: Riverside County, 2003a, Safety Element; County of Riverside, 1986; Ordinance No. 659; Google Earth, 2014.

Findings of Fact:

The Riverside County Fire Department provides fire protection services to the Project area. Pursuant to the Riverside County Fire Department's *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 Lake Hills Fire Station (Station No. 82), located at 17452 Lakepointe Drive, Riverside, CA 92503, or approximately two (2) roadway miles from the site, which would meet the Category II – Urban level of service criteria established by the Riverside County Fire Department (Google Maps, 2015).

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 County 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. The Project also shall be conditioned to implement a Fuel Management Plan to minimize the risk of wildland fire hazards (refer to Condition of Approval 60.FIRE.001 and 50.FIRE.005). Furthermore, the Project would be required to comply with the provisions of the County's Development Impact Fee (DIF) Ordinance (Ordinance No. 659), which requires a fee payment to assist the County in providing for public services, including 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 protections services. Impacts would be less than significant and mitigation is not required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

37. Sheriff Services	☐	☐	☒	☐

Source: Riverside County, 2003a; Ordinance No. 659; Google Earth, 2014.

Findings of Fact:

The Riverside County Sheriff's Department provides community policing to the Project area via the Perris Sheriff's Station located at 137 N. Perris Boulevard in the City of Perris, or approximately 16.2 roadway miles from the Project site. 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 up to 909 new residents on 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 demand for approximately one (1) deputy. The proposed Project would not, however, result in the need for new or expanded physical sheriff facilities because the addition of one new deputy 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 County's DIF Ordinance, which requires a fee payment to assist the County 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 required payment of DIF fees.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

38. Schools ☐ ☐ ☒ ☐

Source: Riverside County, 2003b; State of California, 1998, California Senate Bill 50 (Greene); RUSD, 2014.

Findings of Fact:

The construction of 272 new 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 Riverside Unified School District (RUSD). Elementary students generated by the Project would attend Lake Mathews Elementary School, located at 12252 Blackburn Road, in the City of Riverside (approximately 1.2 roadway miles west of the Project site). The Project's middle school students would attend Miller Middle School, located at 17925 Krameria Avenue in Riverside (approximately 8.0 roadway miles east of the Project site). The Project's high school students would attend the Arlington High School, located at 2951 Jackson Street in Riverside (approximately 6.3 roadway miles North of the Project site) (RUSD, 2014). Table EA-32, *Project-Related School Services Demand*, provides an estimate of future students that would be generated by the Project, based on the student generation factors provided in the Riverside County General Plan EIR (Riverside County, 2003b, Table 4.15E).

Table EA-32 Project-Related School Services Demand

School Type	Project Units	Student Generation Factor	Total Number of Students
Elementary	272	0.369	101
Middle School	272	0.201	55
High School	272	0.246	70
		Total Project-Related Students:	**226**

Source: (Riverside County, 2003b, Table 4.15E).

Although it is possible that the RUSD 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 RUSD and is not the responsibility of the Project. Furthermore, the proposed Project would be required to contribute fees to the RUSD 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: No mitigation is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Monitoring: No monitoring is required.

39. Libraries	☐	☐	☒	☐

Source: Riverside County, 2003a; Ordinance No. 659.

Findings of Fact:

Implementation of the Project would result in an increase in the population in the Project area and would increase the demand for library services. The Project would not generate the need for the physical construction of new or expanded public facilities. There are no library facilities or expansion of library facilities proposed as part of the Project.

The Project would be required to comply with the provisions of the County's DIF Ordinance, which requires a fee payment to assist the County in providing public services, including library services. Payment of the DIF fee would ensure that the Project provides fair share funds for the provision of library 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.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

40. Health Services	☐	☐	☒	☐

Source: Riverside County, 2003a; Riverside County, 2003b; Ordinance No. 659.

Findings of Fact:

The proposed Project would increase the regional population and would thereby result in an increased demand for public health services. New development, such as the proposed Project, would not have a significant direct effect on public health services because the increase in the County's tax base would provide additional funding for public health services and facilities. Furthermore, the Project would be required to comply with the provisions of the County's DIF Ordinance, which requires a fee payment to assist the County 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. Mandatory payment of DIF fees would ensure that Project-related impacts to public services would be less than significant.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

RECREATION

41. Parks and Recreation a) Would the project include recreational facilities or require the construction or expansion of recreational	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
facilities which might have an adverse physical effect on the environment?				
b) Would the project include the use of existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
c) Is the project located within a Community Service Area (CSA) or recreation and park district with a Community Parks and Recreation Plan (Quimby fees)?	☐	☐	☒	☐

Source: Riverside County, 2013, Appendix E-1; Ordinance No. 460; RCLIS, 2014.

Findings of Fact:

a&b) The Project would develop the subject property with 272 single family homes. Pursuant to the population generation rates contained in the 2013 Draft Riverside County General Plan Update, the Project would accommodate approximately 909 residents (Riverside County, 2013, Appendix E-1, Table E-2). Based on the requirement in Ordinance No. 460 to provide a minimum of five (5) acres of park land for each 1,000 residents, the Project would generate a demand for 5.5 acres of park land.

The Project would construct 2.2 acres of park land and would also construct trails along the site's frontages with McAllister Street and El Sobrante Road. The Project also proposes a regional recreational trail along McAllister and El Sobrante, which is in addition to the 2.18 acre park site. Using the County of Riverside's household density factor of 2.59 persons per household and a local park standard of 3.0 acres per 1,000 persons, the Project would generate a demand for 2.1 acres of park space. Thus, the Project would meet local and Quimby Act requirements of 3.0 acres of parkland per 1,000 persons. Additionally, there are several public parks in the vicinity of the Project site. Refer to Figure 3-8, *Park Locations and Distances,* which shows the nearest public parks and their respective driving distances from the Project site. 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 Initial Study. In instances where significant impacts have been identified, mitigation measures are recommended in each applicable subsection of this Initial Study 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 Initial Study would not be required.

Based on the foregoing analysis, it is concluded that the proposed Project would result in a less-than-significant impact due to the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

c) The Project site is not located within a County Service area (CSA) or a recreation and park district with a community parks and recreation plan. No impact to the environment would result.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
42. Recreational Trails	☐	☐	☐	☒

Source: LMWAP, Figure 8 (Trails and Bikeway System)

Findings of Fact: According to Figure 8 of the Lake Mathews/Woodcrest Area Plan, a Regional Trail is planned along the Project's frontage with El Sobrante Road, with an additional segment of a Regional Trail planned adjacent to the natural drainage channel that skirts the northeastern corner of the Project site. As shown on IS/MND Figure 3-9, a Regional Trail has been accommodated as part of the proposed improvements to El Sobrante Road, with an additional Regional Trail proposed along the Project's frontage with McAllister Street. Although no trail is planned by the Project adjacent to the drainage due to the limited extent of this drainage on-site and the lack of connections to off-site portions of this trail, the Project would preserve this portion of the Project site as natural open space, thereby allowing for the future construction of a Regional Trail through this area. Impacts associated with the Project's planned improvements have been evaluated throughout this IS/MND, and where significant impacts have been identified, mitigation measures have been imposed on the Project to reduce impacts to below a level of significance. Accordingly, implementation of the proposed Project would not result in environmental impacts associated with the construction of recreational trails, and no impact would occur.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

TRANSPORTATION/TRAFFIC Would the project				
43. Circulation a) Conflict with an applicable plan, ordinance or policy establishing a measure 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) Alter waterborne, rail or air traffic?	☐	☐	☐	☒
e) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	☐	☐	☒	☐
f) Cause an effect upon, or a need for new or altered maintenance of roads?	☐	☐	☒	☐
g) Cause an effect upon circulation during the project's	☐	☐	☐	☒

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
construction?				
h) Result in inadequate emergency access or access to nearby uses?	☐	☐	☐	☒
i) Conflict with adopted policies, plans or programs regarding public transit, bikeways or pedestrian facilities, or otherwise substantially decrease the performance or safety of such facilities?	☐	☐	☐	☒

Source: RCIP; Ordinance No. 460; Ordinance No. 461; Urban Crossroads, 2014d; RCTC, 2011; Google Earth, 2014.

Findings of Fact:

a) For purposes of analyzing the Project's potential impacts to traffic, the County of Riverside identified the traffic impact study area in conformance with their Traffic Impact Analysis (TIA) preparation guidelines. Based on these guidelines, the minimum area to be studied includes any intersections to which the Project is anticipated to contribute 50 or more peak-hour trips. With this County of Riverside requirement, and in consultation with the City of Riverside, the traffic study area includes 11 existing and future intersections (Urban Crossroads, 2014b, p. 4). Refer to IS/MND Appendix K for more information about the analysis methodologies employed in the Project-specific TIA prepared by Urban Crossroads.

Thresholds of Significance

The definition of an intersection deficiency has been obtained from each of the applicable surrounding jurisdictions, which within the Project's study area includes Riverside County, the City of Riverside, and Caltrans facilities. Within the County of Riverside, the acceptable level of service (LOS) is 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. (Urban Crossroads, 2014b, p. 17) Within the City of Riverside, LOS D is considered an acceptable level of service for intersections of Collector or higher classification (Urban Crossroads, 2014b, p. 18). For Caltrans Facilities, Caltrans endeavors to maintain a target LOS at the transition between LOS C and LOS D on State Highway System facilities, however, Caltrans acknowledges that this may not always be feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS. Consistent with the County of Riverside minimum LOS of LOS D, LOS D will be used as the target LOS at arterial-to-freeway ramps. (Urban Crossroads, 2014b, p. 18) Table EA-33, *Summary of LOS Criteria and Thresholds of Significance for Study Area Intersections*, summarizes the applicable level of service (LOS) threshold for each study area intersection.

Existing Conditions

Under existing conditions, the Project site is undeveloped and does not generate traffic. Existing traffic counts in the study area were collected in January, June, and August 2014. 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 (Urban Crossroads, 2014b, p. 30). Based on those traffic counts, and as depicted in Table EA-34, *Existing (2014) Conditions Intersection Analysis*, all existing intersections in the study area operate at

acceptable LOS, with the exception of the La Sierra Av. / El Sobrante Rd. intersection which operated at a LOS "E" at PM Peak hour conditions. The La Sierra Av. / El Sobrante Rd. intersection warrants a traffic signal under existing conditions to achieve an acceptable LOS (Urban Crossroads, 2014b, p. 30).

Traffic signal warrants for Existing traffic conditions are based on existing peak hour intersection turning volumes. For Existing traffic conditions, a traffic signal appears to currently be warranted at the following unsignalized study area intersections (see Appendix "3.3" to the Project's Traffic Impact Analysis in IS/MND Appendix K): La Sierra Av. / El Sobrante Rd. (Urban Crossroads, 2014b, p. 34)

A queuing analysis was performed for the westbound and eastbound off-ramps at the SR-91 Freeway at La Sierra Avenue interchange to assess vehicle queues for the off ramps that may potentially impact peak hour operations at the ramp-to-arterial intersections and may potentially "spill back" onto the SR-91 Freeway mainline. Queuing analysis findings are presented in Table EA-35, *Peak Hour Off-Ramp Queuing Analysis for Existing (2014) Conditions*. It is important to note that off-ramp lengths are consistent with the measured distance between the intersection and the freeway mainline. As shown on Table EA-35, there are no existing queuing issues. Worksheets for Existing conditions off-ramp queuing analysis are provided in Appendix "3.4" of the Project's Traffic Impact Analysis (IS/MND Appendix K).

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 Project is estimated to produce an estimated 2,589 daily vehicle trips, including 204 trips during the AM Peak Hour and 272 trips during the PM Peak Hour, as indicated previously in IS/MND Table 3-5 (Urban Crossroads, 2014b, p. 39). For more information about trip generation, refer to IS/MND Appendix K.

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's trip distribution pattern is graphically depicted on Figure EA-8, *Project Trip Distribution*. (Urban Crossroads, 2014b, p. 40)

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 development. Based on the identified Project traffic generation and trip distribution patterns, Project average daily traffic (ADT) volumes for the weekday are shown on Figure EA-9, *Project Average Daily Traffic*. (Urban Crossroads, 2014b, p. 44).

Table EA-33 Summary of LOS Criteria and Thresholds of Significance for Study Area Intersections

#	Intersection	Traffic Control[2]	Jurisdiction	LOS Methodology[1]	Acceptable LOS	Deficiency Criteria
1	La Sierra Av. / SR-91 WB Ramps	TS	Caltrans	2010 HCM	D	Addition of project trips causes the peak hour LOS to fall from acceptable LOS to an unacceptable LOS.
2	La Sierra Av. / SR-91 EB Ramps	TS	Caltrans	2010 HCM	D	
3	La Sierra Av. / Indiana Av.	TS	City of Riverside	2010 HCM	D	
4	La Sierra Av. / Arizona Av.	TS	City of Riverside	2010 HCM	D	
5	La Sierra Av. / Victoria Av.	TS	City of Riverside / Riverside County	2010 HCM	D	
6	La Sierra Av. / McAllister Pkwy.	TS	Riverside County	2010 HCM	D	
7	La Sierra Av. / El Sobrante Rd.	AWS	Riverside County	2010 HCM	D	
8	McAllister St. / Driveway 1	CSS	Riverside County	2010 HCM	C	
8A	McAllister St. / Driveway 2	CSS	Riverside County	2010 HCM	C	
9	McAllister St. / El Sobrante Rd.	CSS	Riverside County	2010 HCM	D	
10	Driveway 3/ El Sobrante Rd.	CSS	Riverside County	2010 HCM	D	
11	McAllister St./ "A" St.	CSS	Riverside County	2010 HCM	C	

1 2010 HCM = 2010 Highway Capacity Manual Methodology
2 AWS = All-way Stop; CSS = Cross-street Stop; TS = Traffic Signal
(Urban Crossroads, 2014b, Table 2-4)

Table EA-34 Existing (2014) Conditions Intersection Analysis

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1] Northbound L	T	R	Southbound L	T	R	Eastbound L	T	R	Westbound L	T	R	Delay[2] (secs.) AM	PM	LOS AM	PM	Acceptable LOS
1	La Sierra Av. / SR-91 WB Ramps	TS	2	3	0	0	3	1	0	0	0	1	1	1	14.4	18.1	B	B	D
2	La Sierra Av. / SR-91 EB Ramps	TS	0	3	1	2	3	0	1	1	1	0	0	0	20.6	20.2	C	C	D
3	La Sierra Av. / Indiana Av.	TS	2	3	1	2	3	1	2	2	1	2	2	d	38.1	36.5	D	D	D
4	La Sierra Av. / Arizona Av.	TS	1	2	d	1	2	1	1	1	0	1	1	1>	41.3	16.6	D	B	D
5	La Sierra Av. / Victoria Av.	TS	1	2	d	1	2	d	2	1	1	1	1	1	19.4	22.6	B	C	D
6	La Sierra Av. / McAllister Pkwy.	TS	0	2	1	1	2	0	0	0	0	1	0	1	11.9	6.9	B	A	D
7	La Sierra Av. / El Sobrante Rd.	AWS	0	2	0	1	1	0	0	1	0	0	1	0	12.8	**35.4**	B	**E**	D
8	McAllister St. / Driveway 1	--	Future Intersection												--	--	--	--	C
8A	McAllister St. / Driveway 2	--	Future Intersection												--	--	--	--	C
9	McAllister St. / El Sobrante Rd.	CSS	0	0	0	1	0	d	1	1	0	0	2	0	15.9	18.7	C	C	D
10	Driveway 3 / El Sobrante Rd.	--	Future Intersection												--	--	--	--	D
11	McAllister St. / "A" St.	--	Future Intersection												--	--	--	--	C

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

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; d= Defacto Right Turn Lane; > = Right-Turn Overlap Phasing

2 Per the 2010 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.

3 CSS = Cross-street Stop; AWS = All-Way Stop; TS = Traffic Signal

(Urban Crossroads, 2014b, Table 3-1)

Table EA-35 Peak Hour Off-Ramp Queuing Analysis for Existing (2014) Conditions

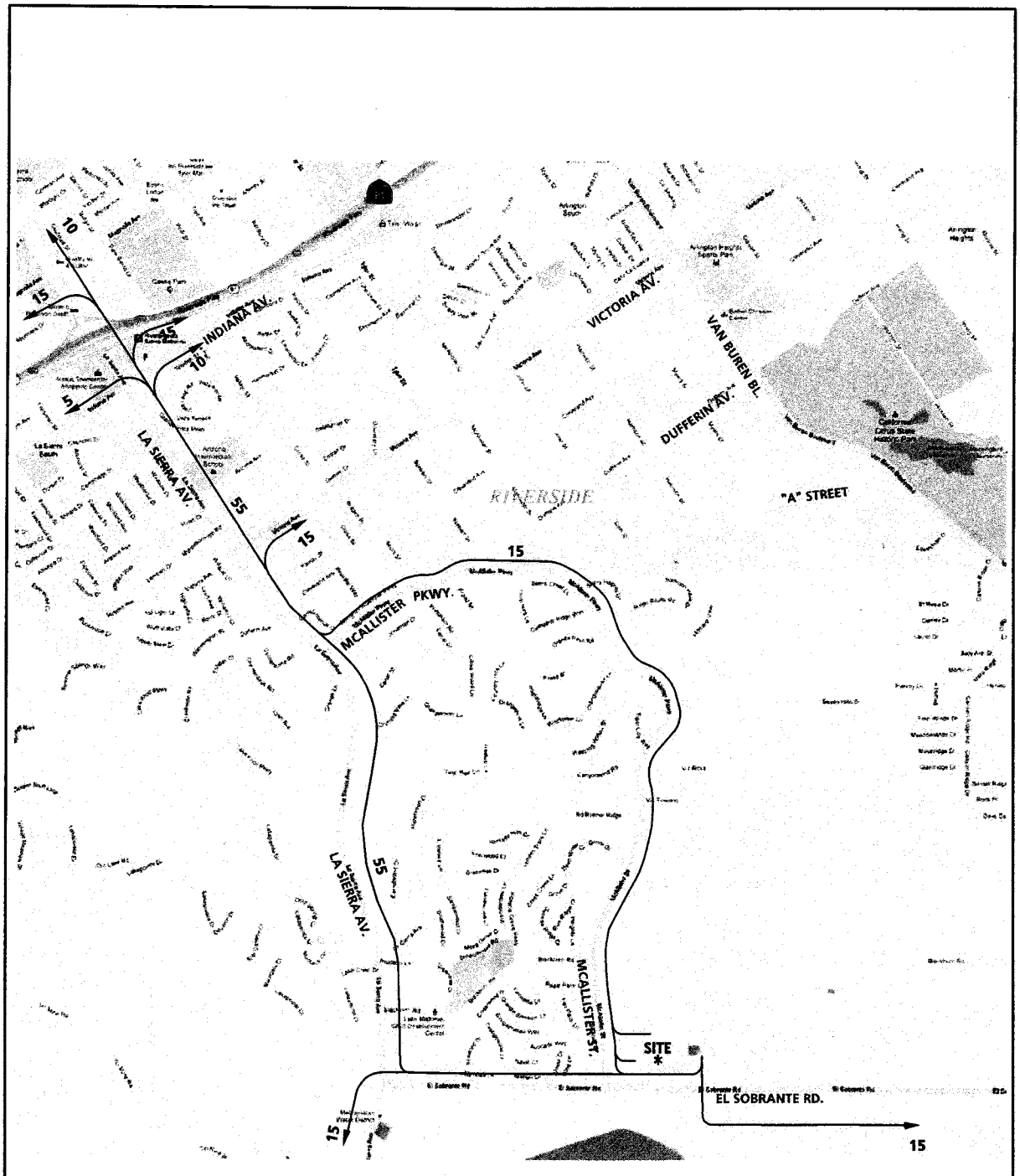
Intersection	Movement	Stacking Distance (Feet)	95th Percentile Stacking Distance Required (Feet) AM Peak Hour	PM Peak Hour	Acceptable?[1] AM	PM
La Sierra Av. / SR-91 WB Ramps						
	WBL	585	272	396	Yes	Yes
	WBLTR	1,210	295	384	Yes	Yes
	WBR	520	241	313	Yes	Yes
La Sierra Av. / SR-91 EB Ramps						
	EBL	1,615	288	321	Yes	Yes
	EBLTR	1,730	303[2]	568[2]	Yes	Yes
	EBR	480	147	523[2,3]	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 Although the 95th percentile queue length exceeds capacity, the total queue length of the ramp is anticipated to accommodate excess turn pocket queues and is not considered to result in any deficiencies.

(Urban Crossroads, 2014b, Table 3-2)

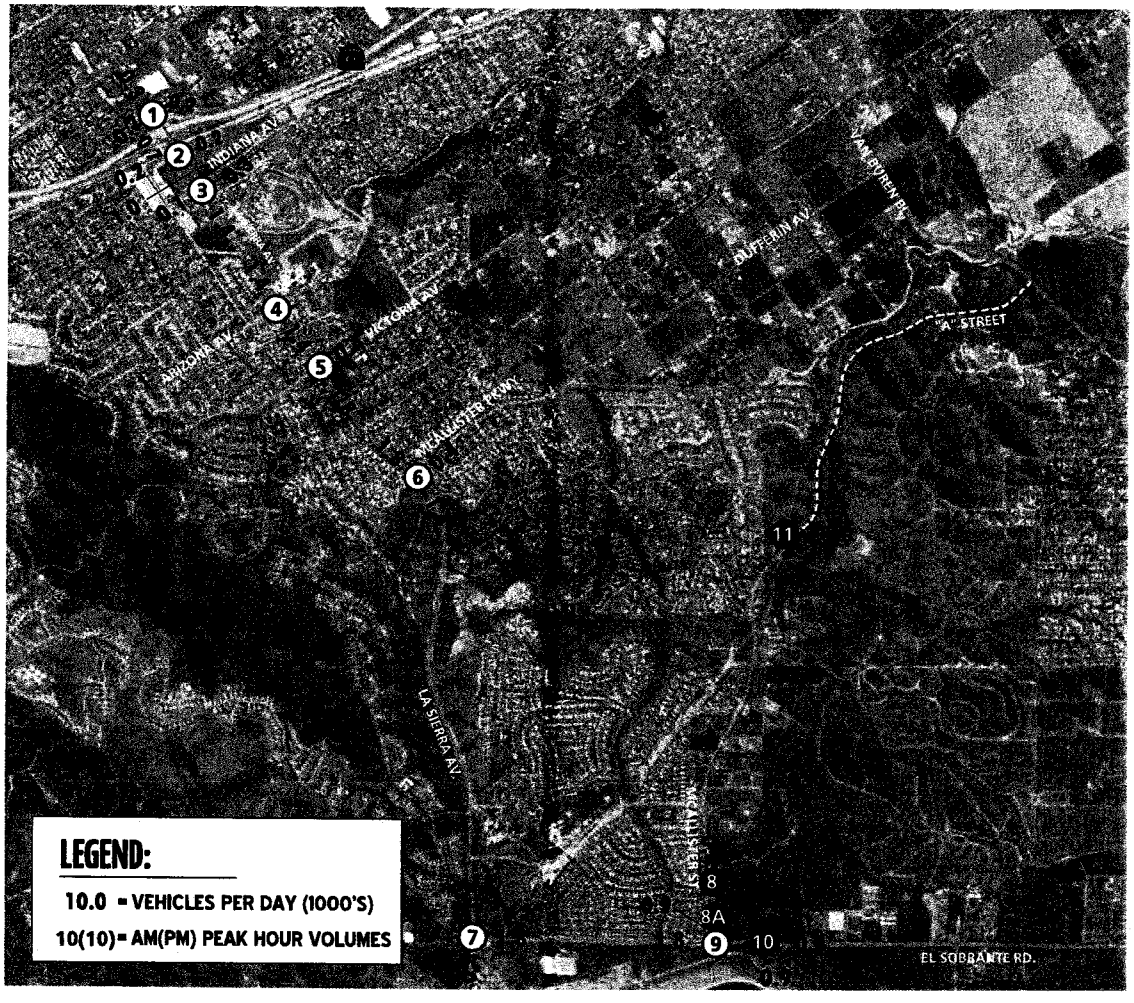


Source(s): Urban Crossroads (11-06-14)

Figure EA-7

NOT TO SCALE

PROJECT TRIP DISTRIBUTION



1 La Sierra Av. & SR-91 WB Ramps 0(0) 5(17) 0(0) 0(0) 8(26) 23(15) 15(10)	2 La Sierra Av. & SR-91 EB Ramps 13(43) 0(0) 0(0) 0(0) 8(26) 38(25) 23(15)	3 La Sierra Av. & Indiana Av. 0(0) 20(68) 0(0) 0(0) 0(0) 5(17) 0(0) 0(0) 3(9) 8(5) 61(40) 15(10)	4 La Sierra Av. & Arizona Av. 0(0) 28(94) 0(0) 0(0) 0(0) 0(0) 0(0) 0(0) 0(0) 0(0) 84(55) 0(0)	5 La Sierra Av. & Victoria Av. 0(0) 28(94) 0(0) 0(0) 0(0) 8(26) 0(0) 0(0) 0(0) 84(55) 23(15)	6 La Sierra Av. & McAllister Pkwy. 28(94) 8(26) 23(15) 0(0) 84(55) 0(0)
7 La Sierra Av. & El Sobrante Rd. 0(0) 0(0) 28(94) 84(55) 0(0) 23(15) 0(0) 0(0) 0(0) 0(0) 0(0) 8(26)	8 McAllister St. & Driveway 1 1(2) 7(24) 21(14) 47(30) 2(1) 17(53)	8A McAllister St. & Driveway 2 47(30) 1(2) 2(1) 8(6) 17(53) 2(9)	9 McAllister St. & El Sobrante Rd. 53(35) 2(1) 1(2) 53(35) 18(60) 18(60)	10 Driveway 3 & El Sobrante Rd. 53(35) 21(15) 7(25) 2(1) 18(60) 2(1)	11 McAllister St. & "A" St. Future Intersection

Source(s): Urban Crossroads (11-06-14)

Figure EA-8

NOT TO SCALE

PROJECT AVERAGE DAILY TRAFFIC

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 (Urban Crossroads, 2014b, p. 1):

- Near-Term Construction conditions;
- Existing (2014) plus Project conditions (E+P);
- Existing plus Ambient Growth plus Project (EAP 2016);
- Existing plus Ambient Growth plus Project plus Cumulative (2016) Conditions (EAPC 2016);
- Horizon Year (2035) without Project; and
- Horizon Year (2035) with Project.

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 (2014) 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 (2014) represents the baseline traffic conditions as they existing at the time the Project's applications were deemed complete by the County of Riverside. Because the Project is not expected to be fully built and occupied until at least December 2016, the E+P scenario is presented to disclose direct impacts as required by CEQA. (Urban Crossroads, 2014b, p. 3)

The Opening Year (2016) analysis includes an evaluation the Existing plus Ambient Growth plus Project (EAP 2016) traffic conditions. The EAP 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 (2016) analysis also includes an evaluation of Existing plus Ambient Growth plus Project plus Cumulative Development (EAPC 2016) conditions to identify the Project's potential cumulative contribution to traffic impacts within the study area. (Urban Crossroads, 2014b, p. 3)

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, Riverside County 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 County 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 County. 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. (Urban Crossroads, 2014b, p. 3)

Refer to IS/MND Appendix K for a detailed discussion of the methodologies and assumptions for each analysis scenario, and a list of cumulative development projects considered in the analysis.

Impact Analysis for Near-Term Construction Traffic Conditions

During the construction phase of the Project, traffic to-and-from the subject property would be generated by activities such as construction employee trips, delivery of construction materials, and use of heavy equipment. Vehicular traffic associated with construction employees would be minimal, much less than daily and peak hour traffic volumes generated during Project operational activities, and is not expected to result in a substantial adverse effect to the local roadway system. Deliveries of construction materials to the Project site would also have a nominal effect to the local roadway network; construction materials would be delivered to the site throughout the construction phase based on need and would not occur on an everyday basis. 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. As with the delivery of construction materials, the 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. As previously described, all existing intersections in the Project's study area operate at acceptable LOS under Existing (2014) conditions with the exception of the La Sierra Av. / El Sobrante Rd. intersection (which operates at LOS "E" under existing conditions). The addition of temporary, Project-related construction traffic to this deficient intersection is not anticipated to contribute 50 or more peak hour trips. Accordingly, traffic generated by the Project's construction phase would not result in a conflict with an applicable plan, ordinance, or policy establishing measures of effectiveness for the performance of the circulation system. Impacts during the Project's construction phase would be less than significant.

Impact Analysis for Existing (2014) plus Project Traffic Conditions

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 existing conditions (2014) and estimated Project buildout (2016) is two (2) 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.

The lane configurations and traffic controls assumed to be in place for E+P conditions are consistent with existing conditions (refer to Exhibit 3-1 of the Project's Traffic Impact Analysis in IS/MND Appendix K), with the exception of the Project driveways and those facilities assumed to be in place prior to or constructed by the Project to provide site access are also assumed to be in place for E+P conditions. (Urban Crossroads, 2014b, p. 53)

Intersection levels of service for E+P conditions are summarized in Table EA-36, *Existing (2014) plus Project Conditions Intersections Analysis*. As shown in Table EA-36, under E+P traffic conditions, all Project study area intersections would operate at acceptable LOS during peak hours with the exception of the La Sierra Av. / El Sobrante Rd. intersection, which operates at LOS "E" during PM Peak Hour Conditions. This intersection operated at LOS "E" under existing conditions (without

Project traffic), and warrants a traffic signal (Urban Crossroads, 2014b, p. 30). However, the Project's contribution of more than 50 peak hour trips to this deficient intersection represents a cumulatively significant impact requiring mitigation (refer to Mitigation Measures M-TR-1 and M-TR-2). (Urban Crossroads, 2014b, p. 53)

For E+P conditions, there are no additional unsignalized study area intersections anticipated to warrant a traffic signal in addition to those previously warrant under Existing conditions (see Appendix "5.2" of the Traffic Impact Analysis in IS/MND Appendix K). (Urban Crossroads, 2014b, p. 53)

A queuing analysis was performed for the westbound and eastbound off-ramps at the SR-91 Freeway and La Sierra Avenue interchange to assess vehicle queues for the off ramps that may potentially result in deficient peak hour operations at the ramp-to-arterial intersections and may potentially "spill back" onto the SR-91 Freeway mainline. Queuing analysis findings for E+P traffic conditions are presented in Table EA-37, *Peak Hour Off-Ramp Queuing Analysis for E+P Conditions*. Off-ramp lengths are consistent with the measured distance between the intersection and the freeway mainline. As shown on Table EA-37 and consistent with Existing traffic conditions, there are no potential queuing issues anticipated during the weekday AM or PM peak 95th percentile traffic flows for E+P traffic conditions. (Urban Crossroads, 2014b, pp 53 and 58)

Table EA-36 Existing (2014) plus Project Conditions Intersections Analysis

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Delay[2] (secs.)		LOS		Acceptable LOS
			Northbound			Southbound			Eastbound			Westbound							
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM	
1	La Sierra Av. / SR-91 WB Ramps	TS	2	3	0	0	3	1	0	0	0	1	1	1	14.6	18.7	B	B	D
2	La Sierra Av. / SR-91 EB Ramps	TS	0	3	1	2	3	0	1	1	1	0	0	0	21.0	20.8	C	C	D
3	La Sierra Av. / Indiana Av.	TS	2	3	1	2	3	1	2	2	1	2	2	d	38.4	37.4	D	D	D
4	La Sierra Av. / Arizona Av.	TS	1	2	d	1	2	1	1	1	0	1	1	1>	41.7	18.2	D	B	D
5	La Sierra Av. / Victoria Av.	TS	1	2	d	1	2	d	2	1	1	1	1	1	20.1	27.5	C	C	D
6	La Sierra Av. / McAllister Pkwy.	TS	0	2	1	1	2	0	0	0	0	1	0	1	13.5	8.1	B	A	D
7	La Sierra Av. / El Sobrante Rd.	AWS	0	2	0	1	1	0	0	1	0	0	1	0	19.0	**37.8**	C	E	D
8	McAllister St. / Driveway 1	CSS	0	1	0	0	1	0	0	0	0	0	**1**	0	9.4	9.4	A	A	C
8A	McAllister St. / Driveway 2	CSS	0	1	0	0	1	0	0	0	0	0	**1**	0	9.3	9.3	A	A	C
9	McAllister St. / El Sobrante Rd.	CSS	0	0	0	1	0	d	1	1	0	0	2	0	18.4	26.2	C	D	D
10	Driveway 3 / El Sobrante Rd.	CSS	0	0	0	0	**1**	0	0	1	0	0	1	0	15.4	14.5	C	B	D
11	McAllister St. / "A" St.	--	Future Intersection												--	--	--	--	C

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[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; d= Defacto Right Turn Lane; > = Right-Turn Overlap Phasing; **1** = Improvement

[2] Per the 2010 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.

[3] CSS = Cross-street Stop; AWS = All-Way Stop; TS = Traffic Signal; **CSS** = Improvement

Source: (Urban Crossroads, 2014b, Table 5-1)

Table EA-37 Peak Hour Off-Ramp Queuing Analysis for E+P Conditions

Intersection	Movement	Stacking Distance (Feet)	95th Percentile Stacking Distance Required (Feet)		Acceptable?[1]	
			AM Peak Hour	PM Peak Hour	AM	PM
Existing (2014) Conditions						
La Sierra Av. / SR-91 WB Ramps						
	WBL	585	272	396	Yes	Yes
	WBLTR	1,210	295	384	Yes	Yes
	WBR	520	241	313	Yes	Yes
La Sierra Av. / SR-91 EB Ramps						
	EBL	1,615	288	321	Yes	Yes
	EBLTR	1,730	303 [2]	568 [2]	Yes	Yes
	EBR	480	147	523 [2,3]	Yes	Yes
Existing plus Project Conditions						
La Sierra Av. / SR-91 WB Ramps						
	WBL	585	278	410	Yes	Yes
	WBLTR	1,210	297	401	Yes	Yes
	WBR	520	241	320	Yes	Yes
La Sierra Av. / SR-91 EB Ramps						
	EBL	1,615	295	321	Yes	Yes
	EBLTR	1,730	309 [2]	589 [2]	Yes	Yes
	EBR	480	151	547 [2,3]	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 fee of stacking.
2 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.
3 Although the 95th percentile queue length exceeds capacity, the total queue length of the ramp is anticipated to accommodate excess turn pocket queues and is not considered to result in any deficiencies.
(Urban Crossroads, 2014b, Table 5-2)

Impact Analysis for Opening Year (2016) Traffic Conditions

The Opening Year (2016) 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 EAP). Cumulative development projects within the Project study area are not included within the EAP evaluation. As shown in Table EA-38, *Opening Year (2016) Intersection Analysis*, no additional intersections in the Project study area are projected to operate at unacceptable LOS during the AM and PM peak hours beyond those previously identified for Existing (2014) conditions. Therefore, implementation of the proposed Project would result in less-than-significant impacts to study area intersections under EAP conditions, assuming implementation of Mitigation Measures M-TR-1 and M-TR-2. (Urban Crossroads, 2014b, p. 61)

For EAP conditions, there are no additional unsignalized study area intersections anticipated to warrant a traffic signal in addition to those previously warrant under Existing conditions (see Appendix "6.2" to the Project's Traffic Impact Analysis in IS/MND Appendix K). (Urban Crossroads, 2014b, p. 61)

A queuing analysis was performed for the westbound and eastbound off-ramps at the SR-91 Freeway and La Sierra Avenue interchange to assess vehicle queues for the off ramps that may potentially result in deficient peak hour operations at the ramp-to-arterial intersections and may potentially "spill back" onto the SR-91 Freeway mainline. Queuing analysis findings for EAP traffic conditions are presented in Table EA-39, *Peak Hour Off-Ramp Queuing Analysis for EAP (2016) Conditions*. Off-ramp lengths are consistent with the measured distance between the intersection and the freeway

Table EA-38 Opening Year (2016) Intersection Analysis

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Existing (2014)				EAP (2016)				Acceptable LOS
			Northbound			Southbound			Eastbound			Westbound			Delay[2] (secs.)		LOS		Delay[2] (secs.)		LOS		
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM	AM	PM	AM	PM	
1	La Sierra Av. / SR-91 WB Ramps	TS	2	3	0	0	3	1	0	0	0	1	1	1	14.4	18.1	B	B	15.4	19.7	B	B	D
2	La Sierra Av. / SR-91 EB Ramps	TS	0	3	1	2	3	0	1	1	1	0	0	0	20.6	20.2	C	C	22.4	22.6	C	C	D
3	La Sierra Av. / Indiana Av.	TS	2	3	1	2	3	1	2	2	1	2	2	d	38.1	36.5	D	D	40.0	39.2	D	D	D
4	La Sierra Av. / Arizona Av.	TS	1	2	d	1	2	1	1	1	0	1	1	1>	41.3	16.6	D	B	47.0	21.3	D	C	D
5	La Sierra Av. / Victoria Av.	TS	1	2	d	1	2	d	2	1	1	1	1	1	19.4	22.6	B	C	20.8	30.2	C	C	D
6	La Sierra Av. / McAllister Pkwy.	TS	0	2	1	1	2	0	0	0	0	1	0	1	11.9	6.9	B	A	14.4	8.7	B	A	D
7	La Sierra Av. / El Sobrante Rd.	AWS	0	2	0	1	1	0	0	1	0	0	1	0	12.8	35.4	B	E	21.0	38.5	C	E	D
8	McAllister St. / Driveway 1	CSS	0	1	0	0	1	0	0	0	0	0	1	0	--	--	--	--	9.4	9.4	A	A	C
8A	McAllister St. / Driveway 2	CSS	0	1	0	0	1	0	0	0	0	0	1	0	--	--	--	--	9.4	9.4	A	A	C
9	McAllister St. / El Sobrante Rd.	CSS	0	0	0	1	0	d	1	1	0	0	2	0	15.9	18.7	C	C	19.2	27.7	C	D	D
10	Driveway 3 / El Sobrante Rd.	CSS	0	0	0	0	1	0	0	1	0	0	2	0	--	--	--	--	15.8	14.9	C	B	D
11	McAllister St. / "A" St.	--	Future Intersection												--	--	--	--	--	--	--	--	C

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

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; d= Defacto Right Turn Lane; > = Right-Turn Overlap Phasing; 1 = Improvement

2 Per the 2010 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.

3 CSS = Cross-street Stop; AWS = All-Way Stop; TS = Traffic Signal; CSS = Improvement

(Urban Crossroads, 2014b, Table 6-1)

Table EA-39 Peak Hour Off-Ramp Queuing Analysis for EAP (2016) Conditions

Intersection	Movement	Stacking Distance (Feet)	95th Percentile Stacking Distance Required (Feet)		Acceptable?[1]	
			AM Peak Hour	PM Peak Hour	AM	PM
Existing (2014) Conditions						
La Sierra Av. / SR-91 WB Ramps	WBL	585	272	396	Yes	Yes
	WBLTR	1,210	295	384	Yes	Yes
	WBR	520	241	313	Yes	Yes
La Sierra Av. / SR-91 EB Ramps	EBL	1,615	288	321	Yes	Yes
	EBLTR	1,730	303 [2]	568 [2]	Yes	Yes
	EBR	480	147	523 [2,3]	Yes	Yes
EAP (2016) Conditions						
La Sierra Av. / SR-91 WB Ramps	WBL	585	293	432 [2]	Yes	Yes
	WBLTR	1,210	337 [2]	452 [2]	Yes	Yes
	WBR	520	254	340	Yes	Yes
La Sierra Av. / SR-91 EB Ramps	EBL	1,615	307	336	Yes	Yes
	EBLTR	1,730	343 [2]	628 [2]	Yes	Yes
	EBR	480	171	584 [2,3]	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 fee of stacking.

2 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.

3 Although the 95th percentile queue length exceeds capacity, the total queue length of the ramp is anticipated to accommodate excess turn pocket queues and is not considered to result in any deficiencies.

(Urban Crossroads, 2014b, Table 6-2)

mainline. As shown on Table EA-39 and consistent with Existing traffic conditions, there are no potential queuing issues anticipated during the weekday AM or PM peak 95th percentile traffic flows for EAP traffic conditions. (Urban Crossroads, 2014b, pp. 61 and 67)

Impact Analysis for Opening Year (2016) plus Cumulative Conditions

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 Opening Year (EAP 2016) traffic volumes to represent Existing plus Ambient Growth plus Project plus Cumulative Development conditions (EAPC 2016). 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. This scenario includes Existing traffic volumes, an ambient growth factor of 4.04%, traffic from pending and approved but not yet constructed known development projects in the area and the addition of Project traffic. (Urban Crossroads, 2014b, p. 69)

The lane configurations and traffic controls assumed to be in place for EAPC traffic conditions are consistent with those shown previously on Exhibit 3-1 of the Project's Traffic Impact Analysis (IS/MND

Appendix K), with the exception of the Project driveways and those facilities assumed to be in place prior to or constructed by the Project or cumulative developments to provide site access are also assumed to be in place for EAPC traffic conditions. This includes the future "A" Street connection between McAllister Street and Van Buren Boulevard proposed to be developed by nearby cumulative developments. (Urban Crossroads, 2014b, p. 69)

Intersection levels of service for the Opening Year (2016) plus Cumulative Project conditions are summarized in Table EA-40, *Opening Year (2016) plus Cumulative Conditions Intersection Analysis.* As summarized in Table EA-40, under Opening Year (2016) Plus Cumulative traffic conditions (E+A+P+C), the following study area intersections are projected to operate at an unacceptable LOS during peak hours. Two of these intersections are located within the City of Riverside (Urban Crossroads, 2014b, p. 69):

- La Sierra Avenue/Indiana Avenue in the PM peak hour,
- La Sierra Avenue/Arizona Avenue in the AM peak hour; and

One of the intersections is located within the County of Riverside:

- McAllister Street/El Sobrante Road in the PM peak hour.

The proposed Project would contribute to, but would not directly cause, LOS deficiencies at these intersections. Accordingly, the intersections would experience significant cumulative impacts under Opening Year (2016) plus Cumulative traffic conditions (EAPC) and the Project's contribution to the impacts at these two intersections would be cumulatively considerable, because the Project would contribute more than 50 peak hour trips. Mitigation measures have been imposed on the Project to address these cumulative deficiencies (refer to Mitigation Measures M-TR-1 and M-TR-2). (Urban Crossroads, 2014b, Table 7-3)

Traffic signal warrants have been performed on unsignalized intersections that have not warranted a signal under Existing, E+P or EAP traffic conditions. For EAPC traffic conditions, the intersection of McAllister at El Sobrante Road appears to warrant a traffic signal in addition to those previously

warranted under Existing, E+P or EAP traffic conditions (see Appendix "7.2" to the Project's Traffic Impact Analysis in IS/MND Appendix K). This is evaluated as a cumulative impact for which mitigation would be required (refer to Mitigation Measures M-TR 1 and M-TR-2). (Urban Crossroads, 2014b, p. 73)

Table EA-40 Opening Year (2016) plus Cumulative Conditions Intersection Analysis

#	Intersection	Traffic Control[3]	Northbound			Southbound			Eastbound			Westbound			Delay[2] (secs.)		LOS		Acceptable LOS
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM	
1	La Sierra Av. / SR-91 WB Ramps	TS	2	3	0	0	3	1	0	0	0	1	1	1	18.1	32.5	B	C	D
2	La Sierra Av. / SR-91 EB Ramps	TS	0	3	1	2	3	0	1	1	1	0	0	0	26.2	39.7	C	D	D
3	La Sierra Av. / Indiana Av.	TS	2	3	1	2	3	1	2	2	1	2	2	d	54.2	**73.5**	D	**E**	D
4	La Sierra Av. / Arizona Av.	TS	1	2	d	1	2	1	1	1	0	1	1	1>	**60.1**	24.8	**E**	C	D
5	La Sierra Av. / Victoria Av.	TS	1	2	d	1	2	d	2	1	1	1	1	1	23.5	34.1	C	C	D
6	La Sierra Av. / McAllister Pkwy.	TS	0	2	1	1	2	0	0	0	0	1	0	1	23.4	15.6	C	B	D
7	La Sierra Av. / El Sobrante Rd.	AWS	0	2	0	1	1	0	0	1	0	0	1	0	25.3	**39.5**	D	**E**	D
8	McAllister St. / Driveway 1	CSS	0	1	0	0	1	0	0	0	0	0	**1**	0	9.6	9.9	A	B	C
8A	McAllister St. / Driveway 2	CSS	0	1	0	0	1	0	0	0	0	0	**1**	0	9.6	9.8	A	B	C
9	McAllister St. / El Sobrante Rd.	CSS	0	0	0	1	0	d	1	1	0	0	2	0	21.9	**35.8**	C	**E**	D
10	Driveway 3 / El Sobrante Rd.	CSS	0	0	0	0	**1**	0	0	1	0	0	**2**	0	16.3	15.8	C	C	D
11	McAllister St. / "A" St.	CSS	0	1	0	0	1	0	0	0	0	0	1	0	10.7	11.8	B	B	C

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[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; d= Defacto Right Turn Lane; > = Right-Turn Overlap Phasing; **1** = Improvement

[2] Per the 2010 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.

[3] CSS = Cross-street Stop; AWS = All-Way Stop; TS = Traffic Signal; **CSS** = Improvement

Source: (Urban Crossroads, 2014b, Table 7-1)

A queuing analysis was performed for the westbound and eastbound off-ramps at the SR-91 Freeway and La Sierra Avenue interchange to assess vehicle queues for the off ramps that may potentially result in deficient peak hour operations at the ramp-to-arterial intersections and may potentially "spill back" onto the SR-91 Freeway mainline. Queuing analysis findings for EAPC traffic conditions are presented in Table EA-41, *Peak Hour Off-Ramp Queuing Analysis for EAPC (2016) Conditions*. Off-ramp lengths are consistent with the measured distance between the intersection and the freeway mainline. As shown on Table EA-41 and consistent with Existing traffic conditions, there are no potential queuing issues anticipated during the weekday AM or PM peak 95th percentile traffic flows for EAPC traffic conditions. Worksheets for EAPC conditions off-ramp queuing analysis are provided in Appendix "7.3" of the Project's Traffic Impact Analysis (IS/MND Appendix K). (Urban Crossroads, 2014b, p. 73)

Impact Analysis for Horizon Year (2035) Conditions

The Horizon Year (2035) conditions analysis is utilized to determine if improvements anticipated in long-term planning documents such as the County General Plan are adequate to accommodate long-term cumulative traffic conditions at the target LOS, or if additional mitigation is necessary. The lane configurations and traffic controls assumed to be in place for Horizon Year conditions are consistent with those shown previously on Exhibit 3-1 of the Project's Traffic Impact Analysis (IS/MND Appendix K), with the exception of Project driveways and those facilities assumed to be constructed by the Project or cumulative developments to provide site access. This includes the future "A" Street connection between McAllister Street and Van Buren Boulevard proposed to be developed by nearby cumulative developments. (Urban Crossroads, 2014b, p. 77)

Table EA-41 Peak Hour Off-Ramp Queuing Analysis for EAPC (2016) Conditions

Intersection	Movement	Stacking Distance (Feet)	95th Percentile Stacking Distance Required (Feet)		Acceptable?[1]	
			AM Peak Hour	PM Peak Hour	AM	PM
La Sierra Av. / SR-91 WB Ramps						
	WBL	585	369 [2]	580 [2]	Yes	Yes
	WBLTR	1,210	384 [2]	598 [2]	Yes	Yes
	WBR	520	276	472 [2]	Yes	Yes
La Sierra Av. / SR-91 EB Ramps						
	EBL	1,615	374 [2]	386	Yes	Yes
	EBLTR	1,730	405 [2]	806 [2]	Yes	Yes
	EBR	480	229	760 [2]	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 fee of stacking.
2 95th percentile volume exceeds capacity, queue may be longer. Queue shown is maximum after two cycles.
3 Although the 95th percentile queue length exceeds capacity, the total queue length of the ramp is anticipated to accommodate excess turn pocket queues and is not considered to result in any deficiencies.
(Urban Crossroads, 2014b, Table 7-2)

Intersection levels of service for the Horizon Year scenario are summarized in Table EA-42, *Horizon Year (2035) Intersection Analysis*. As shown in Table EA-42, under Horizon Year (2035) with Project traffic conditions, the following study area intersections (beyond those previously identified) are projected to operate at unacceptable LOS during peak hours (Urban Crossroads, 2014b, p. 77):

- La Sierra Avenue/Indiana Avenue (City of Riverside) in both the AM and PM peak hours;
- La Sierra Avenue / Victoria Avenue (City and County of Riverside) in the AM and PM peak hours; and
- McAllister Street/"A" Street (County of Riverside) in the PM peak hour.

The proposed Project would contribute to, but would not directly cause, LOS deficiencies at these intersections. Accordingly, the intersections would experience significant cumulative impacts to the above-listed intersections and the Project's contribution to the impacts at these intersections would be cumulatively considerable under Horizon Year (2035) traffic conditions because the Project would contribute more than 50 peak hour trips. Mitigation is required (refer to Mitigation Measures M-TR-1, M-TR-2, and M-TR-3).

Based upon the Traffic Signal Warrant Analysis performed by Urban Crossroads, the intersection of McAllister St. / "A" Street meets the minimum conditions under which the installation of a traffic signal might be warranted (in addition to those previously identified). However, meeting this 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 LOS. As such, although warranted, with implementation of other recommended improvements it is anticipated that the intersection of McAllister Street and "A" Street would operate at an acceptable LOS without the installation of a traffic signal. As such, a traffic signal has not been recommended at this intersection (Urban Crossroads, 2014b, p. 83). No traffic signals are required under Horizon Year (2035) traffic conditions beyond those identified for Existing, and Opening Year plus Cumulative conditions.

Table EA-42 Horizon Year (2035) Intersection Analysis

#	Intersection	Traffic Control[3]	Intersection Approach Lanes[1]												Without Project				With Project				Acceptable LOS
			Northbound			Southbound			Eastbound			Westbound			Delay[2] (secs.)		LOS		Delay[2] (secs.)		LOS		
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM	AM	PM	AM	PM	
1	La Sierra Av. / SR-91 WB Ramps	TS	2	3	0	0	3	1	0	0	0	1	1	1	22.8	36.2	C	D	23.9	39.4	C	D	D
2	La Sierra Av. / SR-91 EB Ramps	TS	0	3	1	2	3	0	1	1	1	0	0	0	35.2	52.3	D	D	37.4	54.0	D	D	D
3	La Sierra Av. / Indiana Av.	TS	2	3	1	2	3	1	2	2	1	2	2	d	68.9	121.4	E	F	70.1	128.7	E	F	D
4	La Sierra Av. / Arizona Av.	TS	1	2	d	1	2	1	1	1	0	1	1	1>	57.3	32.7	E	C	67.9	34.7	E	C	D
5	La Sierra Av. / Victoria Av.	TS	1	2	d	1	2	d	2	1	1	1	1	1	110.6	114.1	F	F	119.5	124.9	F	F	D
6	La Sierra Av. / McAllister Pkwy.	TS	0	2	1	1	2	0	0	0	0	1	0	1	53.4	27.6	D	C	54.6	33.7	D	C	D
7	La Sierra Av. / El Sobrante Rd.	AWS	0	2	0	1	1	0	0	1	0	0	1	0	59.3	67.2	F	F	59.6	67.3	F	F	D
8	McAllister St. / Driveway 1	CSS	0	1	0	0	1	0	0	0	0	0	1	0	--	--	--	--	9.9	10.2	A	B	C
8A	McAllister St. / Driveway 2	CSS	0	1	0	0	1	0	0	0	0	0	1	0	--	--	--	--	9.9	10.1	A	B	C
9	McAllister St. / El Sobrante Rd.	CSS	0	0	0	1	0	d	1	1	0	0	2	0	>100.0	>100.0	F	F	>100.0	>100.0	F	F	D
10	Driveway 3 / El Sobrante Rd.	CSS	0	0	0	0	1	0	0	1	0	0	2	0	--	--	--	--	77.5	>100.0	F	F	D
11	McAllister St. / "A" St.	CSS	0	1	0	0	1	0	0	0	0	0	1	0	20.7	75.4	C	F	24.7	124.5	C	F	C

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

[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; d= Defacto Right Turn Lane; > = Right-Turn Overlap Phasing; 1 = Improvement

[2] Per the 2010 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.

[3] CSS = Cross-street Stop; AWS = All-Way Stop; TS = Traffic Signal; CSS = Improvement

Source: (Urban Crossroads, 2014b, Table 8-1)

A queuing analysis was performed for the westbound and eastbound off-ramps at the SR-91 Freeway and La Sierra Avenue interchange to assess vehicle queues for the off ramps that may potentially result in deficient peak hour operations at the ramp-to-arterial intersections and may potentially "spill back" onto the SR-91 Freeway mainline. Queuing analysis findings are presented in Table EA-43, *Peak Hour Off-Ramp Queuing Analysis for Horizon Year (2035) Conditions*, for Horizon Year Without and With Project traffic conditions. Off-ramp lengths are consistent with the measured distance between the intersection and the freeway mainline. As shown on Table EA-43 and consistent with Existing traffic conditions, there are no potential queuing issues anticipated during the weekday AM or PM peak 95th percentile traffic flows for Horizon Year Without and With Project traffic conditions. Worksheets for Horizon Year Without and With Project conditions off-ramp queuing analysis are provided in Appendix "8.5" and Appendix "8.6", respectively, of the Project's Traffic Impact Analysis (IS/MND Appendix K). (Urban Crossroads, 2014b, p. 83)

Conclusion as to Significance After Mitigation

As shown in Table EA-44, *Level of Service With Mitigation for Horizon Year (2035) Conditions*, with implementation of Mitigation Measures M-TR-1 through M-TR-8, the Project's cumulative impacts to study area intersections would be reduced to below a level of significance.

b) According to Exhibit 2-1 of the Riverside County Transportation Commission (RCTC) Congestion Management Program (CMP), the only facilities that are identified as part of the CMP roadway system within the Project's study area (i.e., where the Project would contribute 50 or more peak hour trips) is the intersection of La Sierra Avenue at SR-91 westbound and eastbound ramps (RCTC, 2011, Exhibit 2-1). As indicated in Table EA-36 through Table EA-43, the Project would not cause or contribute to a deficient LOS at these on- and off-ramps during any study scenario. Additionally, the Project would not cause or contribute to any queuing deficiencies affecting the SR-91. Accordingly, impacts due to a conflict with the applicable congestion management plan would be less than significant, requiring no mitigation.

Table EA-43 Peak Hour Off-Ramp Queuing Analysis for Horizon Year (2035) Conditions

Intersection	Movement	Stacking Distance (Feet)	95th Percentile Stacking Distance Required (Feet)		Acceptable?[1]	
			AM Peak Hour	PM Peak Hour	AM	PM
Without Project Conditions						
La Sierra Av. / SR-91 WB Ramps						
	WBL	585	415 [2]	638 [2]	Yes	Yes
	WBLTR	1,210	452 [2]	678 [2]	Yes	Yes
	WBR	520	342 [2]	524 [2]	Yes	Yes
La Sierra Av. / SR-91 EB Ramps						
	EBL	1,615	442 [2]	433	Yes	Yes
	EBLTR	1,730	469 [2]	881 [2]	Yes	Yes
	EBR	480	338 [2]	830 [2]	Yes	Yes
With Project Conditions						
La Sierra Av. / SR-91 WB Ramps						
	WBL	585	428 [2]	651 [2]	Yes	Yes
	WBLTR	1,210	454 [2]	685 [2]	Yes	Yes
	WBR	520	342 [2]	548 [2]	Yes	Yes
La Sierra Av. / SR-91 EB Ramps						
	EBL	1,615	442 [2]	433	Yes	Yes
	EBLTR	1,730	471 [2]	904 [2]	Yes	Yes
	EBR	480	349 [2]	851 [2]	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 fee 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 Although the 95th percentile queue length exceeds capacity, the total queue length of the ramp is anticipated to accommodate excess turn pocket queues and is not considered to result in any deficiencies.
(Urban Crossroads, 2014b, Table 8-2)

Table EA-44 Level of Service With Mitigation for Horizon Year (2035) Conditions

#	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
3	La Sierra Av. / Indiana Av.																	
	- without Project	TS	2	3	1	2	3	1>	2	2	1>	2	2	1>	43.0	51.6	D	D
	- with Project	TS	2	3	1	2	3	1>	2	2	1>	2	2	1>	43.1	54.4	D	D
4	La Sierra Av. / Arizona Av.																	
	- without Project[4]	TS	1	2	d	1	2	1	1	1	0	1	1	1>	41.5	21.9	D	C
	- with Project[4]	TS	1	2	d	1	2	1	1	1	0	1	1	1>	51.3	28.8	D	C
5	La Sierra Av. / Victoria Av.																	
	- without Project	TS	1	2	d	1	2	d	2	1	1	2	1	1>	48.0	46.0	D	D
	- With Project	TS	1	2	d	1	2	d	2	1	1	2	1	1>	54.0	54.5	D	D
7	La Sierra Av. / El Sobrante Rd.																	
	- without Project	TS	0	2	0	2	1	0	0	1	0	0	1	1>	33.3	45.7	C	D
	- with Project	TS	0	2	0	2	1	0	0	1	0	0	1	1>	39.8	54.1	D	D
9	McAllister St. / El Sobrante Rd.																	
	- without Project	TS	0	0	0	1	0	d	1	1	0	0	2	0	9.1	10.6	A	B
	- with Project	TS	0	0	0	1	0	d	1	1	0	0	2	0	9.9	14.2	A	B
10	Driveway 3 / El Sobrante Rd.																	
	- with Project[5]	CSS	0	0	0	0	1	0	0	1	0	0	2	0	20.0	24.9	C	C
11	McAllister St. / "A" St.																	
	- without Project[6]	CSS	0	1	0	0	1	0	0	0	0	0	1	0	10.4	16.1	B	C
	- with Project[6]	CSS	0	1	0	0	1	0	0	0	0	0	1	0	11.2	20.4	B	C

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).

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; d= Defacto Right Turn Lane; > = Right-Turn Overlap Phasing; 1 = Improvement

2 Per the 2010 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.

3 CSS = Cross-street Stop; AWS = All-Way Stop; TS = Traffic Signal; CSS = Improvement

4 Recommended improvement is to change the eastbound and westbound left turn phasing on Arizona Avenue from Protected to Protected / Permissive.

5 Recommended improvement consists of modification of the median in order to allow storage for two outbound left turning vehicles in order to facilitate crossing the eastbound and westbound traffic in two stages. In addition, signalization of the adjacent intersection of McAllister Street and El Sobrante Road will provide sufficient "gaps" in traffic in order to assist in southbound left turning movements.

6 Improvement consists of building out "A" Street to its ultimate cross-section width as a Collector (66-foot right-of-way) and not allowing for on-street parking along the northern side of "A" Street in the vicinity of the westbound approach in order to allow enough space for one right turning vehicle to queue at the approach. In addition, improvement includes the modification of McAllister Street to provide a median at the intersection in order to allow storage for two outbound left turning vehicles from "A" Street in order to facilitate crossing the northbound and southbound traffic in two stages.

(Urban Crossroads, 2014b, Table 8-3)

c & d) The Project site is not in the vicinity of any public or active private airfield and the Project does not include an air travel component (e.g., runway, helipad, etc.). Structures proposed by the Project site would be less than 40 feet in height as required by the Riverside County Zoning Ordinance NO. 348 for single-family residential structures, and would not interfere with air travel. 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. In addition, the Project site is not located near a railroad or navigable waterway and does not contain any rail or water components. Accordingly, the Project would not alter rail or waterborne traffic. No impact would occur.

e) The residential land uses proposed Project would be compatible with existing development in the surrounding area (refer to analysis under Issue Area 28, *Planning*, above); therefore,

implementation of the Project would not create a transportation hazard as a result of an incompatible use. All roadway improvements planned as part of the Project would be in conformance with applicable Riverside County standards, and would not result in any hazards due to a design feature. Accordingly, impacts would be less than significant.

f) Implementation of the proposed Project would result in the establishment of several new roadways within the Project site that would require maintenance. Maintenance of the Project's roadways would not result in any significant impacts to the environment. Impacts associated with the physical construction of these roadways already are evaluated in appropriate sections of this Initial Study, and any identified significant impacts have been mitigated to the maximum feasible extent. The Project would contribute traffic to off-site public roadways; however, public roads require periodic maintenance as part of their inherent operational activities, and such maintenance would not result in substantial impacts to the environment. Public roadway maintenance would be funded through the Project developer's payment of Development Impact Fees (DIF) and future Project residents' payment of property taxes. Maintenance of roadways would not result in any new impacts to the environment beyond that which is already disclosed and mitigated by this Initial Study, and impacts would therefore be less than significant.

g) The proposed Project would not adversely and physically affect any existing roadways in the vicinity of the site during construction. The Project would construct three connections to the existing roadway network, and all construction traffic would enter the Project site via these three connections. Surrounding roadways would have sufficient capacity to accommodate construction vehicle traffic traveling to and from the site as discussed in detail in the response to Threshold 43.a), above. Impacts would be less than significant.

h) The proposed Project would be required to comply with Riverside County Ordinance Nos. 460 & 461, which regulate access road provisions. The requirement to provide adequate paved access to the Project site would be required as a condition of Project approval. Additionally, the proposed Project would not affect any roadways that provide emergency access under existing conditions. With required adherence to County requirements for emergency access, impacts would be less than significant.

i) The Riverside County General Plan does not identify the proposed Project site for any public transit facilities, bikeways, or pedestrian facilities, other than the planned Regional Trails as discussed above under the analysis of Threshold 42. As indicated under Threshold 42, the Project would be fully consistent with the General Plan's proposed trail alignments. There are no components of the proposed Project that would substantially decrease the performance or safety of any public transit facilities, bikeways, or pedestrian facilities. Accordingly, no impact would occur.

Mitigation:

M-TR-1 (90.TRANS.001) Prior to the issuance of any building permits, the Project Proponent shall make required per-unit fee payments associated with the Western Riverside County Transportation Uniform Mitigation Fees (TUMF), and the County of Riverside Development Impact Fee (DIF).

M-TR-2 (80.TRANS.3) Prior to the issuance of any building permits, the applicant shall approach the City of Riverside to pay standard traffic impact fees for intersections within the City limits which are impacted by the Project. The project proponent shall

pay the standard traffic impact fees in accordance with the fee schedule in effect at the time of building permit issuance. Receipt(s) and a letter for fees paid shall be provided to the County in order pull building permit(s).

M-TR-3 (80.TRANS.11) Prior to the first building permit final inspection, the Project Applicant shall work with the County of Riverside to establish improvement fair-share fee program for improvements to the intersection of McAllister Street/Street "A" that ensures the construction of the following improvement, or comparable improvement that would allow the intersection to operate an acceptable LOS. The Project Proponent shall contribute a fair-share fee payment to the County of Riverside (Project's fair-share contribution is 8.6%) for the identified improvement.

- Provide space for a westbound defacto right turn movement by implementing signage disallowing on-street parking; and
- Provide space on McAllister Street in the intersection for westbound left-turning vehicles to cross northbound and southbound traffic in two stages.

Monitoring:

M-TR-1 Prior to issuance of the first building permit, the Riverside County Building and Safety Department shall ensure that appropriate fees have been paid in accordance with the Western Riverside County Transportation Uniform Mitigation Fees (TUMF) and the County of Riverside Development Impact Fee (DIF) programs.

M-TR-2 Prior to the issuance of building permits, the Riverside County Building and Safety Department shall verify that the standard Traffic and Railroad Signal Mitigation Fee of $190 per detached single family residential unit and the Transportation Impact Fee of $525 per detached single family residential unit has been paid to the City of Riverside.

M-TR-3 Prior to the issuance of the first building permit final inspection, the Project Applicant shall provide evidence to the Riverside County Building and Safety Department that appropriate fees have been paid or bonding for construction has been posted.

44. Bike Trails	☐	☐	☒	☐

Source: LMWAP Figure 8 (Trails and Bikeways System); Project Application Materials, 2014)

Findings of Fact:

According to Figure 8 of the LMWAP (Trails and Bikeway Systems), there are no bicycle facilities planned in the Project vicinity. Although Class III bike lanes would be accommodated along El Sobrante Road, McAllister Street, and internal Project roadways, impacts associated with the construction of improvements to these roadways has been evaluated throughout this IS/MND, and where significant impacts have been identified, mitigation measures have been imposed to reduce impacts to a level below significant. There are no components of the proposed Project that would result in impacts associated with bike trails; accordingly, impacts would be less than significant.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
UTILITY AND SERVICE SYSTEMS Would the project				
45. Water a) Require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	☐	☐	☒	☐

Source: *Urban Water Management Plan*, Western Municipal Water District, 2010; Project Application Materials; *Water, Sewer and Recycled Water Facilities,* Albert A. Webb Associates, January 2015.

Findings of Fact:

a) The proposed Project would construct an on-site network of water pipes. The proposed Project can be served by off-site improvements as follows: a proposed 18-in diameter pipeline extension in El Sobrante Road and a 12-in diameter loop in McAllister Street northerly to Blackburn Road. The system is capable of meeting the residential fire flow demands of 1,500 gpm for 2 hours without other off-site improvements. No other water improvements are required as implementing facilities for the proposed Project. The proposed on-site improvements include a 12-inch diameter pipeline in Street 'A', 8-inch diameter pipelines within all other streets, a pipeline connection to El Sobrante Road through an easement to serve properties on Streets 'B' and 'C' and a connection in Street 'X' to the existing pipeline serving properties easterly of the proposed Project. Western Municipal Water District has given preliminary approval for these proposed facilities (Webb, 2015, pp. 2-6)

In addition to the water lines discussed above, the Project proposes recycled water facilities. Adjacent to the proposed Project site, there is an existing 24-in diameter transmission main in McAllister Street and an existing 20-inch diameter transmission main in El Sobrante Road. This system is served by the 1660' Pressure Zone with the existing Roosevelt Tank and supplied by the existing El Sobrante Pump Station. The connection points for the proposed Project are proposed at the tract entrances on McAllister Street and El Sobrante Road. One 8-inch diameter pipeline is proposed in the loop through the tract in Street 'W' and one 8-inch diameter in Street 'L' (Webb, 2015, pp. 4-1). The installation of water 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 Initial Study 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 water 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 Initial Study. Accordingly, additional mitigation measures beyond those identified throughout this Initial Study would not be required.

b) As detailed in the Water, Sewer and Recycled Water Facilities report prepared for the proposed Project, average daily water demand for the proposed Project is estimated to be 310,080 gallons per day (GPD), Maximum Daily Demand (MDD) is estimated to be 542,640 GPD, and peak hour demand is estimated to be 646 gallons per minute (Webb, 2015, Table 2-1). The total average

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

daily demand for recycled water is estimated to be 15,909 GPD and Peak Hour Demand is estimated to be 91 gallons per minute (Webb, 2015, Table 4-1)

The Project is located within the service area of the Western Municipal Water District (WMWD), within the WMWD's Riverside Service Area. WMWD has prepared an Urban Water Management Plan (UWMP) dated June 2011, which provides a detailed account of current and projected WMWD water supplies and demands under a variety of climactic conditions. The UWMP is herein incorporated by reference and available for review at WMWD headquarters located at 14205 Meridian Parkway Riverside, CA 92518, or online at: http://www.wmwd.com/DocumentCenter/Home/View/437http://www.wmwd.com/DocumentCenter/Home/View/437.

Based on information presented in the UWMP, WMWD is projected to have sufficient water supplies to meet demand within its service area during all climactic conditions (normal year, single-dry year, and multiple-dry years) until at least 2035. (The year 2035 is the horizon year for the UWMP, meaning the UWMP's analysis does not extend beyond 2035.) WMWD also is projected to have a water surplus during all climactic conditions until at least 2035. (WMWD, 2010, pp.5.-2 - 5-4)

The supply and demand projections in the UWMP are based, on build-out of the Riverside County General Plan (WMWD, 2010, p.1-6). As previously described, if the Project site were developed in accordance with its existing General Plan land use designations, the Lake Ranch property would be developed with up to 233 dwelling units and approximately 177,000 square feet of commercial retail uses. However, the Project proposes to develop the subject property with 272 single-family dwelling units, which would have a reduced demand for water resources as compared to the site's existing General Plan land use designations. As such, implementation of the Project would not result in demand for water that was unanticipated by WMWD in its UWMP. Accordingly, the WMWD is projected to have sufficient water supplies available to serve the Project from existing entitlements and resources, and no new or expanded entitlement are needed to serve the Project's and WMWD's existing obligations. Furthermore, a "Will-Serve" letter from WMWD was provided to the Project applicant on August 26, 2015 indicating that WMWD will provide water, sewer, and recycled water services to the proposed Project upon satisfaction of certain conditions (WMWD, 2015). Impacts would be less than significant.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

46. Sewer				
a) Require or result in the construction of new wastewater treatment facilities, including septic systems, or expansion of existing facilities, the construction of which would cause significant environmental effects?	☐	☐	☒	☐
b) Result in a determination by the wastewater treatment provider that serves or may service the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	☐	☐	☒	☐

Source: (WMWD, 2014b; WMWD, 2014a; WMWD, 2011; Project Application Materials)

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Findings of Fact:

a) The proposed Project would construct an on-site network of sewer pipes and one sewage lift station. As detailed in the Project's *Water, Sewer and Recycled Water Facilities Report*, to provide sewer service to the proposed Project, a connection is proposed to an existing 8-inch gravity main in Avocado Way at McAllister Street. 1,134 linear feet of existing 8-inch sewer mains in Willow and Avocado would be replaced by 10-inch sewer mains. An on-site lift station would be required to provide sewer service to 79 lots at the northern end of the Project site. The proposed Lift Station will require a 4-in diameter forcemain pipeline. The In-tract sewer system is proposed to consist of 8-inch diameter gravity mains and one 4-inch diameter forcemain (Webb, 2015, pp. 3-6).The installation of 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 Initial Study 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 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 Initial Study. Accordingly, impacts would be less than significant and additional mitigation measures beyond those identified throughout this Initial Study would not be required.

b) Sewer service to the Project site would be provided by WMWD. All wastewater flows from the Project site would be conveyed to the Western Riverside County Regional Wastewater Authority (WRCRWA) Wastewater Treatment Plant (WTP) for treatment. The WRCRWA WTP currently accepts approximately 6.5 million gallons per day (mgd) for treatment with a total capacity of 8.0 mgd. The WRCRWA WTP is currently under construction to expand its total treatment capacity to 14.0 mgd. (WMWD, 2014b; WMWD, 2014a)

The Project is estimated to generate 89,760 gallons of wastewater per day, based on Table 3-1, Wastewater Generation, of the Water, Sewer and Recycled Water Facilities Report prepared for the proposed Project (refer to IS/MND Appendix L). As described above, the facility that would treat the Project's wastewater flows, the WRCRWA WTP, has an excess treatment capacity of approximately 1.5 mgd and an expansion project to add an additional 6.0 mgd of treatment capacity is under construction. Implementation of the Project would utilize approximately 6.0 percent of the existing available, excess treatment capacity at the WRCRWA WTP, and 0.06% of the expanded capacity. Accordingly, the WRCRWA WTP would have sufficient capacity to treat wastewater generated by the Project in addition to existing commitments. With the exception of new on-site sewer conveyance lines and sewage lift station (as discussed above under the response to Issue 46(a)), the Project would not create the need for any new or expanded wastewater facility (such as conveyance lines, treatment facilities, or lift stations). Because there is adequate capacity at existing treatment facilities to serve the Project's projected sewer demand, impacts would be less than significant.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

47. Solid Waste a) Is the project served by a landfill with sufficient permitted capacity to accommodate the project's solid	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
waste disposal needs?				
b) Does the project comply with federal, state, and local statutes and regulations related to solid wastes including the CIWMP (County Integrated Waste Management Plan)?	☐	☐	☐	☒

Source: RCIP General Plan Environmental Impact Report, Riverside County, 2003; Countywide Disposal Tonnage Tracking System Disposal Reports – 2nd Quarter 2014 (April 1, 2014 – June 30, 2014), RCWMD, 2014; Estimating 2003 Building-Related Construction and Demolitions Materials Amounts, EPA, 2009; RCIP General Plan, County of Riverside, 2003; Solid Waste Information System (SWIS), CalRecycle, 2014.

Findings of Fact:

a) Construction and operation of the proposed Project would result in the generation of solid waste, requiring disposal at a landfill. Solid waste generated by the Project could be disposed at one of three landfill facilities in the County: Badlands, Lamb Canyon, and/or El Sobrante. Therefore, the analysis below evaluates the Project's potential to result in adverse impacts to these landfill facilities.

The Badlands Landfill has a permitted disposal capacity of 4,000 tons per day. The Badlands Landfill is estimated to reach capacity, at the earliest time, in the year 2024; however, future landfill expansion opportunities exist at this site (CalRecycle, 2014). During the second quarter of 2014, which is the most recent time period for which reporting data is available, the Badlands Landfill accepted approximately 223,302.39 tons of waste (approximately 2,481.1 tons per day), which corresponds to approximately 62-percent of its permitted daily disposal volume (RCWMD, 2014).

The Lamb Canyon Landfill has a permitted disposal capacity of 3,000 tons per day. The landfill is estimated to reach capacity, at the earliest, in the year 2021; however, future landfill expansion opportunities exist at this site (CalRecycle, 2014). During the second quarter of 2014, the Lamb Canyon Landfill accepted approximately 156,086.28 tons of waste (approximately 1,734.3 tons per day), which corresponds to approximately 58-percent of its permitted daily disposal volume (RCWMD, 2014).

The El Sobrante Landfill has a permitted disposal capacity of 16,054 tons per day. 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 (CalRecycle, 2014). During the second quarter of 2014, the El Sobrante Landfill accepted approximately 539,577.15 tons of waste (approximately 5,995.3 tons per day), which corresponds to approximately 37-percent of its permitted daily disposal volume (RCWMD, 2014).

Impact Analysis for Construction Solid Waste

Table EA-45, *Estimated Construction Solid Waste Generation*, provides an estimate of the amount of solid waste that can conservatively be estimated to occur on a daily basis during construction of the proposed Project. As indicated, construction waste generated by the Project would amount to approximately 22,389 pounds per day, or 11.2 tons per day. Total waste generated by construction activities over the 160 days of building construction would amount to approximately 3,582,240 pounds, or 1,791.1 tons. Using a conversion factor of 200 pounds of uncompacted solid waste per cubic yard, the 3,582,240 pounds of solid waste generated during the building construction phase of the Project is equal to approximately 17,911.2 cubic yards (EPA, 1994, Appendix C).

Table EA-45 Estimated Construction Solid Waste Generation

Land Use	Construction Rate[1]	Estimated Dwelling Unit Size	Solid Waste Generation Rate	Total	
				LBS/Day	Tons/Day
272 Dwelling Units	1.7 dwelling units/day	3, 000 s.f.[2]	4.39 lb/s.f.[3]	22,389	11.2

1. Based on information presented in IS/MND Section 3.2.1B, which indicates that building construction would occur over approximately 160 days. Using the building construction rate, the Project would be anticipated to construct an average of approximately 1.7 dwelling units per day (272 dwelling units ÷ 160 days = 1.7 dwelling units/day).
2. Estimated average dwelling unit size is based on the minimum lot size specified on TTM 36730 (60' x 90') and setbacks specified by TTM 36730 (i.e., 20-foot minimum front yard, 5-foot minimum side yards, and 10-foot minimum backyard). Application of these factors would result in a maximum double-story building measuring 50' x 60', or 3,000 s.f.
3. Source: (EPA, 2009)

Due to the Project's location, it can reasonably be anticipated that solid waste generated by the Project would most likely be disposed of at the Badlands, Lamb Canyon, and/or El Sobrante landfills. These landfills have a permitted daily disposal capacity of between 3,000 and 16,054 tons per day, and the Project's daily demand for construction waste disposal at buildout amounts to between 0.37% and 0.07% of the available daily disposal capacity at these landfills. Because the Project would generate a relatively small amount of solid waste, as compared to the permitted disposal capacities for the Badlands, Lamb Canyon, and El Sobrante landfills, these regional landfill facilities would have sufficient disposal capacity to accept solid waste generated by the Project. Impacts would be less than significant.

Impact Analysis for Long-Term Operational Solid Waste

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 272 homes would generate approximately 111.5 tons of waste per year, or approximately 0.3 tons per day (Riverside County, 2003b, Table 4.17-O)

Solid waste generated during long-term operation of the Project would be disposed at the Badlands, Lamb Canyon, and/or El Sobrante landfills. During long-term operation, the Project's solid waste would represent less than 0.01-percent of the daily permitted disposal capacity at the Badlands, Lamb Canyon, and El Sobrante landfills. 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 the Badlands, Lamb Canyon, and El Sobrante landfills, these regional landfill facilities would have sufficient daily capacity to accept solid waste generated by the Project. Impacts would be less than significant.

Conclusion

Based on the analysis presented above, the proposed Project would be served by landfills with adequate capacity to accommodate the Project's solid waste needs during both construction and long-term operation. Although the Project would likely contribute to the ultimate need for landfill expansion as needed to accommodate future growth within Riverside County, such potential landfill expansions would not be the direct result of the proposed Project. Furthermore, any environmental impacts that could result from such landfill expansions cannot be determined at this time, as the environmental impacts would be evaluated as part of a future CEQA document prepared in support of future landfill expansion efforts. Accordingly, environmental impacts that may result from future landfill expansions are herein evaluated as speculative in nature (CEQA Guidelines §15145).

b) 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 County of Riverside in achieving the mandated goals of the Integrated Waste Management Act, the Project Applicant 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, there would be no impact.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

48. Utilities

Would the project impact the following facilities requiring or resulting in the construction of new facilities or the expansion of existing facilities; the construction of which could cause significant environmental effects?

a) Electricity?	☐	☐	☒	☐
b) Natural gas?	☐	☐	☒	☐
c) Communications systems?	☐	☐	☒	☐
d) Storm water drainage?	☐	☐	☒	☐
e) Street lighting?	☐	☐	☒	☐
f) Maintenance of public facilities, including roads?	☐	☐	☐	☒
g) Other governmental services?	☐	☐	☐	☒

Source: RCIP General Plan, County of Riverside, 2003; Project Application Materials.

Findings of Fact:

a through g) Implementation of the proposed Project would require the construction of numerous facilities as necessary to provide services to the site, including electrical facilities, natural gas lines, communication systems (telephone/cable), storm water drainage facilities, and street lighting. In addition, the project would introduce new public roads on-site that would require maintenance by Riverside County. Impacts associated with the provision of utility service to the site are discussed below for each type of utility.

Electricity, Natural Gas, and Communications Systems
Electrical service is currently available in the Project area and would be provided by Southern California Edison (SCE). Natural gas would be provided by Southern California Gas Company (SCGC) and communication systems would be provided by Verizon Communications (telephone) and Adelphia Cable (cable service). Electrical, natural gas, and communication systems facilities would be constructed in conjunction with implementation of the proposed Project, impacts for which are evaluated throughout this Initial Study. Where necessary, mitigation measures have been identified to reduce identified impacts to a level below significance. Accordingly, impacts due to the construction of new electrical facilities, natural gas lines, and communication systems as necessary to serve the Project are evaluated as less than significant.

Storm Water Drainage
The proposed Project would construct an on-site network of storm drains and water quality/detention basins to convey storm water flows. The proposed Project would not require the expansion of any off-site existing storm water drainage facilities, with exception of the off-site detention basin and associated drop inlet structure, which are evaluated as part of the Project's construction phase throughout this IS/MND.

The construction of storm drain lines 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 Initial Study 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 Initial Study. Accordingly, additional mitigation measures beyond those identified throughout this Initial Study would not be required.

Street Lighting
In accordance with Riverside County requirements, street lights would be provided along all roadways planned for improvement by the Project. Impacts associated with the construction of street lights have been evaluated in association with the physical impact of on- and off-site roadway construction throughout this Initial Study. Where necessary, mitigation measures have been identified to reduce identified impacts to a level below significance. Accordingly, impacts due to the construction of street lights are evaluated as less than significant.

Public Facilities Maintenance
The only public facilities proposed by the Project that would require maintenance include public roadways. Public roadways would be maintained by Riverside County. There would be no impacts to the environment resulting from routine maintenance of public roads, water quality/detention basins, the park site, or sewage lift station. Accordingly, no impact would occur and mitigation is not required.

Other Governmental Services
There are no other governmental services or utilities needed to serve the proposed Project beyond what is evaluated and disclosed above and throughout the remaining sections of this Initial Study. Accordingly, no impact would occur.

Mitigation: No mitigation is required.

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact

Monitoring: No monitoring is required.

49. Energy Conservation a) Would the project conflict with any adopted energy conservation plans?	☐	☐	☒	☐

Source: Lake Ranch Greenhouse Gas Impact Analysis, Urban Crossroads, 2014b; Project Application Materials.

Findings of Fact: Project implementation would result in the conversion of the subject site from its existing, undeveloped condition to a residential community that would feature 272 single-family dwelling units, a park site, and open space. This land use transition would increase the site's demand for energy. Specifically, the proposed Project would increase consumption of energy for space and water heating, air conditioning, lighting, and operation of miscellaneous equipment and appliances.

As summarized in the Project's Greenhouse Gas Analysis (Appendix G to this Initial Study), the Project is estimated to require approximately 1,974,770 kilowatt-hours of electricity per year and approximately 7.985,370 kilo-British Thermal Units of natural gas per year (Urban Crossroads, 2015b). Planning efforts by energy resource providers take into account planned land uses to ensure the long-term availability of energy resources necessary to service anticipated growth. Energy demands associated with the proposed Project are addressed through long-range planning by energy purveyors and can be accommodated as they occur. Therefore, Project implementation is not anticipated to result in the need for the construction or expansion of existing energy generation facilities, the construction of which could cause significant environmental effects.

Furthermore, the State of California regulates energy consumption under Title 24 of the California Code of Regulations. The Title 24 Building Energy Efficiency Standards were developed by the CEC and apply to energy consumed for heating, cooling, ventilation, water heating, and lighting in new residential and non-residential buildings. Adherence to these efficiency standards would result in a "maximum feasible" reduction in unnecessary energy consumption. Furthermore, and pursuant to Mitigation Measure M-AQ-1, the Project would be required to achieve a minimum 10% increase in energy efficiencies beyond 2013 California Building Code Title 24 performance standards. As such, the development and operation of the proposed Project would not conflict with applicable energy conservation plans, and impacts would be less than significant.

Electricity and natural gas transmission and distribution lines are located in the Project site vicinity and all new service lines to the property and Project's buildings would be installed as part of the Project's construction phase. Environmental impacts associated with construction of energy transmission and distribution infrastructure have been addressed throughout this Initial Study, and mitigation has been provided in each applicable section for all potential short-term impacts. Therefore, a significant impact due to the construction of energy transmission and distribution infrastructure as necessary to serve the proposed Project would not occur, or would be mitigated to below a level of significance with application of mitigation measures provided throughout this Initial Study.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

MANDATORY FINDINGS OF SIGNIFICANCE				
50. Does the project have the potential to substantially	☐	☐	☒	☐

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?				

Source: Staff review, Project Application Materials

Findings of Fact: As indicated in the discussion and analysis of Wildlife & Vegetation (IS/MND Section 7.), and assuming the implementation of Mitigation Measures M-BI-1 through M-BI-8, impacts to biological resources would be reduced to a level below significance. As indicated in the discussion of Historical and Archaeological Resources (IS/MND Sections 8. and 9.), the Project site is undeveloped under existing conditions, and does not contain any important examples of the major periods of California history or prehistory, including archaeological or historical resources. Therefore, the proposed Project, with implementation of mitigation measures, would not substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self- sustaining levels, threaten to eliminate a plant or animal community, 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. Impacts would be less than significant.

51.	Does the project have impacts which 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, other current projects and probable future projects)?	☐	☒	☐	☐

Source: Staff review, Project Application Materials

Findings of Fact: Implementation of the proposed Project would result in cumulatively considerable effects associated with biological resources and transportation/traffic. These potentially significant effects have been evaluated and disclosed in IS/MND Sections 7 (Wildlife & Vegetation) and 43 (Circulation). Cumulative impacts to wildlife/vegetation and circulation were evaluated as potentially significant, but would be reduced to less-than-significant levels with the incorporation of the mitigation measures specified in Sections 7 and 43 of this Initial Study. There are no other cumulatively considerable impacts associated with the proposed Project that are not already evaluated and disclosed throughout this IS/MND.

52.	Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☐	☒	☐

Source: Staff review; Project Application Materials

Findings of Fact: The Project's potential to result in substantial adverse effects on human beings has been evaluated throughout this IS/MND (e.g., Air Quality, Geology/Soils, Noise, etc.). Where

potentially significant impacts are identified, mitigation measures have been imposed on the Project to reduce these adverse effects to a level below significance. There are no components of the proposed Project that could result in substantial adverse effects on human beings that are not already evaluated and disclosed throughout this IS/MND. Accordingly, no additional impacts would occur.

VI. EARLIER ANALYSES

Earlier analyses may be used where, pursuant to the tiering, program EIR, or other CEQA process, an effect has been adequately analyzed in an earlier EIR or negative declaration as per California Code of Regulations, Section 15063 (c) (3) (D). In this case, a brief discussion should identify the following:

Earlier Analyses Used, if any: 2003 Riverside County General Plan EIR (Riverside County, 2003b) ~~None~~

Location Where Earlier Analyses, if used, are available for review: N/A

VII. AUTHORITIES CITED

Authorities cited: Public Resources Code Sections 21083 and 21083.05; References: California Government Code Section 65088.4; Public Resources Code Sections 21080(c), 21080.1, 21080.3, 21082.1, 21083, 21083.05, 21083.3, 21093, 21094, 21095 and 21151; *Sundstrom v. County of Mendocino* (1988) 202 Cal.App.3d 296; *Leonoff v. Monterey Board of Supervisors* (1990) 222 Cal.App.3d 1337; *Eureka Citizens for Responsible Govt. v. City of Eureka (2007)* 147 Cal.App.4th 357; *Protect the Historic Amador Waterways v. Amador Water Agency* (2004) 116 Cal.App.4th at 1109; *San Franciscans Upholding the Downtown Plan v. City and County of San Francisco* (2002) 102 Cal.App.4th 656.

VII. REFERENCES

The following documents were referred to as information sources during the preparation of this document.

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APPENDIX B:

MITIGATION, MONITORING AND REPORTING PROGRAM

MITIGATION MONITORING AND REPORTING PROGRAM

IMPACTS	LEVEL OF SIGNIFICANCE AFTER MITIGATION	MITIGATION MEASURES	RESPONSIBLE PARTY/ MONITORING PARTY	IMPLEMENTATION STAGE
AIR QUALITY:				
6. AIR QUALITY IMPACTS				
The Project would not exceed regional criteria pollutant thresholds established by the SCAQMD, and impacts would be less than significant without mitigation; however. It should be noted that operational emissions values are based on a minimum 10% increase in energy efficiencies beyond 2013 California Building Code Title 24 performance standards, as required by M-AQ-1.	Less than Significant	M-AQ-1 (Condition of Approval 80.Planning.019) Prior to the issuance of building permits, the Project Applicant shall submit energy demand calculations to the County Planning Department demonstrating that the increment of the Project for which building permits are being requested would achieve a minimum 10% increase in energy efficiencies beyond 2013 California Building Code Title 24 performance standards. Representative energy efficiency/energy conservation measures to be incorporated in the Project would include, but would not be not limited to, those listed below (it being understood that the items listed below are not all required and merely present examples; the list is not all-inclusive and other features that would reduce energy consumption and promote energy conservation would also be acceptable): ▪ Increase in insulation such that heat transfer and thermal bridging is minimized. ▪ Limit air leakage through the structure and/or within the heating and cooling distribution system. ▪ Use of energy-efficient space heating and cooling equipment. ▪ Installation of electrical hook-ups at loading dock areas. ▪ Installation of dual-paned or other energy efficient windows. ▪ Use of interior and exterior energy efficient lighting that exceeds the incumbent California Title 24 Energy Efficiency performance standards. ▪ Installation of automatic devices to turn off lights where they are not needed. ▪ Application of a paint and surface color palette that emphasizes light and off-white colors that reflect heat away from buildings. ▪ Design of buildings with "cool roofs" using products certified by the Cool Roof Rating Council, and/or exposed roof surfaces using light and off-white colors. ▪ Design of buildings to accommodate photo-voltaic solar electricity systems or the installation of photo-voltaic solar electricity systems.	Project Applicant/ Riverside County Planning Department	M-AQ-1 Prior to building permit issuance, the County Planning Department shall review the energy demand calculations to verify that the Project achieves a minimum 10% increase in energy efficiencies beyond 2013 California Building Code Title 24 performance standards.

IMPACTS	LEVEL OF SIGNIFICANCE AFTER MITIGATION	MITIGATION MEASURES	RESPONSIBLE PARTY/ MONITORING PARTY	IMPLEMENTATION STAGE
		▪ Installation of ENERGY STAR-qualified energy-efficient appliances, heating and cooling systems, office equipment, and/or lighting products.		
Emissions resulting from the Project construction would exceed criteria pollutant thresholds established by the SCAQMD for emissions of NOx (before mitigation). This is evaluated as a significant impact of Project construction for which mitigation (in the form of special construction equipment, restricted horsepower-hours per day, and limited truck haul distances/total number of trips per day) would be required. Implementation of MMs AQ2-AQ3, construction related emissions would be below the SCAQMD Regional Threshold and would be reduced to below a level of significance.	Less than Significant	M-AQ-2 (Condition of Approval 60.Planning.025) The Project is required to comply with the provisions of South Coast Air Quality Management District Rule 403, "Fugitive Dust" by implementing the following dust control measures during construction activities." ~~Rule 403 requires implementation of best available dust control measures during construction activities that generate fugitive dust~~, such as earth moving activities, grading, and equipment travel on unpaved roads. Prior to grading permit issuance, the County 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 County of Riverside staff or its designee to confirm compliance. These notes also shall be specified in bid documents issued to prospective construction contractors. ▪ During grading activity, all construction equipment (>150 horsepower) shall be California Air Resources Board (CARB) Tier 3 Certified or better. The construction contractor shall keep a log of all construction equipment greater than 150 horsepower demonstrating compliance with this requirement, and the log shall be made available for inspection by Riverside County upon request. ▪ During construction activity, total horsepower-hours per day for all equipment shall not exceed 24,464 horsepower-hours per day. The construction contractor shall keep a log of all gas-powered equipment used during each day of construction, the number of hours each piece of equipment was used, and the total horsepower of all construction equipment used. These logs shall be made available for inspection by Riverside County upon request. ▪ During 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	Project Applicant/ Riverside County Building and Safety Department	M-AQ-2 Prior to grading or building permit issuance, the County shall verify that the required notes are included on grading plans. During construction activities, the construction contractor shall be responsible for compliance with the idling restriction. The construction contractor also shall allow for inspection by Riverside County staff or its designee to verify compliance.

IMPACTS	LEVEL OF SIGNIFICANCE AFTER MITIGATION	MITIGATION MEASURES	RESPONSIBLE PARTY/ MONITORING PARTY	IMPLEMENTATION STAGE
		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. ▪ 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. M-AQ-3 (Condition of Approval 60.Planning.026) Prior to issuance of grading permits, the Project Applicant shall identify a location for the importation of soil material. The County shall verify that a note is included on the grading plans indicating that two-way haul trips associated with any soil import activity shall be limited to the following: ▪ If the haul site location is one mile or less from the Project site, then daily haul trips shall be limited to 923 two-way trips. ▪ If the haul site location is three miles or less from the Project site, then daily haul trips shall be limited to 513 two-way trips. ▪ If the haul site location is five miles or less from the Project site, then daily haul trips shall be limited to 350 two-way trips. ▪ If the haul site location is ten miles or less from the Project site, then daily haul trips shall be limited to 204 two-way trips. ▪ If the haul site location is 15 miles or less from the Project site, then daily haul trips shall be limited to 138 two-way trips. ▪ If the haul site location is 20 miles or less from the Project site, then daily haul trips shall be limited to 102 two-way trips. These notes also shall be specified in bid documents issued to prospective construction contractors. The construction contractor shall keep daily logs of all soil import-related haul trips to and from the Project site, and shall make these logs available to County staff for inspection upon request.	Project Applicant, Construction Contractor / Riverside County Planning Department	M-AQ-3 Prior to grading permit issuance, the Project Applicant shall identify a location for the importation of material. The Riverside County Planning Department shall verify that the appropriate note(s) are included on the grading plans based on the distance between the Project site and the haul site. During construction activities, the construction contractor shall be responsible for compliance with the two-way trip restriction. The construction contractor also shall allow for inspection by Riverside County staff or its designee to verify compliance.
BIOLOGICAL RESOURCES:				
7.0 WILDLIFE AND VEGETATION				

IMPACTS	LEVEL OF SIGNIFICANCE AFTER MITIGATION	MITIGATION MEASURES	RESPONSIBLE PARTY/ MONITORING PARTY	IMPLEMENTATION STAGE
The proposed Project has the potential to result in conflicts with applicable MSHCP policies, including provisions of MSHCP Section 6.1.2 through Section 6.1.4. Mitigation Measures M-BR-1, M-BR-2, M-BR-7, and M-BR-8 have been identified to ensure consistency with applicable provisions of the MSHCP.	Less than Significant	M-BR-1 (Condition of Approval 60.EPD.007, 80.EPD.001, 50.EPD.004) Due to the presence of least Bell's vireo in the avoided drainage located in the northeastern portions of the Project site (Drainage B), the following avoidance and minimization measures shall be adopted to avoid impacts to the species during construction and following completion of construction during the breeding season (approximately April 10 until July 31, depending on when the birds arrive from and depart to wintering areas): *Mitigation Prior to and During Construction* a. Prior to the issuance of grading or building permits during the breeding season, a survey to determine the presence of potential nesting least Bell's vireo on-site shall be conducted by a qualified biologist three (3) days before any grading or ground disturbance activity commences in the vicinity of Drainage B during the breeding season, and all results shall be forwarded to the USFWS, CDFW, and the Riverside County Environmental Programs Department. b. The qualified biologist shall identify a 300-foot avoidance buffer from the habitat in Drainage B for construction occurring during the breeding season. If work is required within 300-feet during the breeding season, the biologist shall monitor all work to ensure no impacts occur to the least Bell's vireo. Written documentation shall be prepared and submitted to CDFW, USFWS, and Riverside County Environmental Programs Department on completion of construction during the breeding season to outline any monitoring activities. c. Construction limits in and around least Bell's vireo habitat associated with Drainage B shall be delineated with flags and/or fencing prior to the initiation of any grading or construction activities to clearly identify the limits of the habitat and/or the 300-foot avoidance buffer during the breeding season. d. Prior to grading and construction, a training program shall be developed and implemented by the qualified biologist to inform all workers on the project about	Project Applicant/ Riverside County Environmental Programs Department, Riverside County Planning Department, Riverside County Building and Safety Department	M-BR-1 Prior to issuance of grading permits and building permit final inspection, the Riverside County Environmental Programs Department and Building and Safety Department shall ensure that all requirements related to construction or post-construction impacts have been fulfilled.

IMPACTS	LEVEL OF SIGNIFICANCE AFTER MITIGATION	MITIGATION MEASURES	RESPONSIBLE PARTY/ MONITORING PARTY	IMPLEMENTATION STAGE
		the listed species, its habitat, and the importance of complying with avoidance and minimization measures. A copy of the training materials shall be included in bid documents issued to prospective construction contractors. e. Prior to the issuance of grading or building permits, the County of Riverside Building and Safety Department shall ensure the following not is included on the grading and/or building plans: "All construction work shall occur during daylight hours. The construction contractor shall limit all construction-related activities that would result in high noise levels to between the hours of 6:00 a.m. and 6:00 p.m., during the months of June through September, and 7:00 a.m. and 6:00 p.m., during the months of October through May." This note also shall be specified in bid documents issued to prospective construction contractors. f. During any excavation and grading within or immediately adjacent to the 300-foot avoidance buffer for Drainage B, the construction contractors shall install properly operating and maintained mufflers on all construction equipment, fixed or mobile, to reduce construction equipment noise to the maximum extent possible. The mufflers shall be installed consistent with manufacturers' standards. The construction contractor shall also place all stationary construction equipment so that emitted noise is directed away from the least Bell's vireo habitat within Drainage B. The construction contractor shall keep logs demonstrating that all construction equipment utilizes properly maintained mufflers, and shall make these logs available to County staff for inspection upon request. g. The construction contractor shall stage equipment in areas that will create the greatest distance between construction-related noise sources and Drainage B during all Project construction occurring during the breeding season. To ensure this requirement is enforced, the construction contractor shall provide a map to the Riverside County Environmental Programs Department depicting the location of staging areas in		

IMPACTS	LEVEL OF SIGNIFICANCE AFTER MITIGATION	MITIGATION MEASURES	RESPONSIBLE PARTY/ MONITORING PARTY	IMPLEMENTATION STAGE
		relation to Drainage B. The construction contractor also shall permit inspection by Riverside County staff upon request to verify compliance with this requirement. h. If the monitoring biologist determines that noise from the construction activities may be affecting the normal expected breeding behavior of the birds, the construction supervisor shall be informed and work within no less than 300 feet of construction areas shall be ceased until appropriate measures are implemented. This may include monitoring by a qualified acoustician to verify noise levels are below 60 decibels (dBA) within the least Bell's vireo habitat. If the 60 dBA requirement is exceeded the acoustician shall make operational changes, utilize technology to reduce construction noise such as mufflers, and/or install a barrier to alleviate noise levels during the breeding season. Installation of noise barriers and any other corrective actions taken to mitigate noise during the construction period shall be communicated to the USFWS, CDFW, and Riverside County Environmental Programs Department. i. If after all corrective actions are implemented the monitoring biologists determines that the normal expected breeding behavior of the birds is being affected, work within no less than 300 feet shall be ceased and the USFWS, CDFW, and Riverside County Environmental Programs Department shall be contacted to discuss the appropriate course of action. *Mitigation for Post-Construction Impacts* j. Prior to building permit final inspection, the Project Applicant shall demonstrate that cat-proof fencing has been installed at the perimeter of development adjacent to the open space for Drainage B. k. Access to the Drainage B open space area shall be restricted for conservation activities only. Prior to building permit final inspection, signs shall be installed prohibiting public access, including dogs.		

IMPACTS	LEVEL OF SIGNIFICANCE AFTER MITIGATION	MITIGATION MEASURES	RESPONSIBLE PARTY/ MONITORING PARTY	IMPLEMENTATION STAGE
		l. Prior to building permit final inspection, the Riverside County Building and Safety Department shall ensure that all night lighting within development areas are directed away from the open space area associated with Drainage B (Lot 'M'). The Riverside County Building and Safety Department shall also verify that Project has been designed to minimize exterior night lighting while remaining compliant with local ordinances related to street lighting. Any necessary lighting (e.g., to light up equipment for security measures) shall be shielded or directed away from the habitat area in Drainage B and are not to exceed 0.5 foot-candles. Monitoring by a qualified lighting engineer (attained by the Project Applicant and subject to spot checking by Riverside County staff) shall be conducted as needed to verify light levels are below 0.5 foot-candles required within identified occupied least Bell's vireo habitat following construction. If the 0.5 foot-candles requirement is exceeded, the lighting engineer shall make operational changes and/or install a barrier to alleviate light levels during the breeding season. m. An awareness program shall be implemented to educate residents about the conservation values associated with the Drainage B open space. A copy of the awareness program shall be provided to the Riverside County Environmental Programs Department for review and approval. The approved awareness program literature shall be included in sales documentation for individual units and provided to each homeowner within the proposed development. M-BR-2 (Condition of Approval 60.EPD.004) Pursuant to Objective 6 and Objective 7 of the Species Account for the Burrowing Owl included in the Western Riverside County Multiple Species Habitat Conservation Plan, within 30 days prior to initial grading or clearing activities, a qualified biologist shall conduct a survey of the Project site and make a determination regarding the presence or absence of the burrowing owl. The determination shall be documented in a report that shall be reviewed and approved by the County of Riverside prior to the issuance of a grading permit, subject to the following provisions:		M-BR-2 Prior to commencement of grading activities, the Riverside County Environmental Programs Department shall ensure that a pre-construction burrowing owl survey is completed within 30 days prior to initial grading or clearing activities, and shall enforce

IMPACTS	LEVEL OF SIGNIFICANCE AFTER MITIGATION	MITIGATION MEASURES	RESPONSIBLE PARTY/ MONITORING PARTY	IMPLEMENTATION STAGE
		a) In the event that the pre-construction survey identifies no burrowing owls on the property, 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 grading permits shall be conditioned to avoid occupied burrows to the greatest extent feasible, following the guidelines in the Staff Report on Burrowing Owl Mitigation published by Department of Fish and Wildlife (March 7, 2012) including, but not limited to, conducting pre-construction surveys; avoiding occupied burrows during the nesting and non-breeding seasons; implementing a worker awareness program; biological monitoring; establishing avoidance buffers; and flagging burrows for avoidance with visible markers. If occupied burrows cannot be avoided, acceptable methods may be used to exclude burrowing owl either temporarily or permanently, pursuant to a Burrowing Owl Exclusion Plan that shall be prepared and approved by the County of Riverside Environmental Programs Department (EPD), in coordination with the CDFW. The Burrowing Owl Exclusion Plan shall be prepared in accordance with the guidelines in the Staff Report on Burrowing Owl Mitigation and the MSHCP. In accordance with the MSHCP, take of active nests shall be avoided. Passive relocation (i.e., the scoping of the burrows by a burrowing owl biologist and collapsing burrows free of young) shall occur when owls are present outside the nesting season. Passive relocation shall follow CDFW relocation protocol and shall only occur between September 15 and February 1. The EPD may require translocation sites for the burrowing owl to be created in the MSHCP reserve for the establishment of new colonies pursuant to MSHCP objectives for the species. Translocation sites, if required, shall be identified in consultation with EPD and/or CDFW taking into consideration unoccupied habitat areas, presence of burrowing mammals, existing colonies, and effects to other MSHCP Covered Species. If proximate alternate habitat is not present as determined by the biologist,		the identified requirements should any burrowing owl(s) be identified on-site.

IMPACTS	LEVEL OF SIGNIFICANCE AFTER MITIGATION	MITIGATION MEASURES	RESPONSIBLE PARTY/ MONITORING PARTY	IMPLEMENTATION STAGE
		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 Objectives 1-4 have been met. A grading permit shall only be issued, either: ▪ Upon approval and implementation of a property-specific Determination of Biologically Superior Preservation (DBESP) report for the burrowing owl by the CDFW; or ▪ 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 CDFW protocols. 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. M-BR-7 (Condition of Approval 10.EPD.001) Prior to		M-BR-7 Prior to issuance

IMPACTS	LEVEL OF SIGNIFICANCE AFTER MITIGATION	MITIGATION MEASURES	RESPONSIBLE PARTY/ MONITORING PARTY	IMPLEMENTATION STAGE
		issuance of building permits, a final landscaping plan shall be submitted to the Riverside County Environmental Programs Department (EPD) for review. The EPD shall review the list of plant species to verify that none of the plant species listed in Table 6-2 of the MSHCP, *Plants That Should Be Avoided Adjacent to the MSHCP Conservation Area*, are identified in the landscape plans. . M-BR-8 (Condition of Approval 60.EPD.006) Prior to issuance of grading permits, a habitat mitigation and monitoring plan (HMMP) shall be prepared to address mitigation for MSHCP Riparian/Riverine resources. The HMMP shall provide details as to the implementation of the mitigation, performance standards, maintenance, and future monitoring of the proposed Riparian/Riverine habitat restoration and enhancement, Prior to grading permit final inspection, compensatory mitigation for impacts to 1.16 acres of the MSHCP Riparian/Riverine Areas in on-site and off-site portions of Drainage A shall be provided at a minimum 2:1 ratio by creating and enhancing habitat, as set forth in the Project's Determination of Biologically Equivalent or Superior Preservation (DBESP) prepared by PCR Services Corporation and dated November 2015. The riparian mitigation shall satisfy compensatory mitigation required pursuant to regulatory permits (as required by Mitigation Measure M-BR-4) and Section 6.1.2 of the MSHCP (as required by Mitigation Measure M-BR-1). As summarized in IS/MND Table EA-17, Acres of Proposed Mitigation Type and Habitat Per Drainage, Project compensatory mitigation shall consist of the following: ▪ enhancement to 0.27 acre of riparian habitat in Drainage A; ▪ enhancement to 0.43 acre of riparian transition in Drainage A and enhancement to 0.29 acre of riparian transition in Drainage B (for a total of 0.72 acre of riparian transition enhancements); ▪ enhancement to 0.09 acre of upland habitat within Drainage A and 0.71 acre of upland habitat in Drainage B (for a total of 0.80 acre of upland habitat enhancements); ▪ creation of 0.07 acre of riparian habitat in Drainage A and creation of 0.05 acre of riparian habitat in Drainage B (for a total of 0.12 acre of riparian habitat creations); and		of building permits, the Riverside County Environmental Programs Department shall verify that the landscape plans do not contain any plant species listed in Table 6-2 of the MSHCP. M-BR-8 Prior to issuance of grading permits, the County Building and Safety Department shall verify that the required habitat mitigation and monitoring plan (HMMP) has been approved by the Riverside County Environmental Programs Department. Prior to grading permit final inspection, the Project Applicant shall provide evidence to the Riverside County Environmental Programs Department demonstrating that the required compensatory mitigation has been achieved.

<table>
<tr><th>IMPACTS</th><th>LEVEL OF SIGNIFICANCE AFTER MITIGATION</th><th>MITIGATION MEASURES</th><th>RESPONSIBLE PARTY/ MONITORING PARTY</th><th>IMPLEMENTATION STAGE</th></tr>
<tr><td></td><td></td><td>▪ creation of 0.64 acre of riparian transition in Drainage A and creation of 0.03 acre of riparian transition in Drainage B (for a total of 0.67 acre of riparian transition creations);

<table>
<tr><th></th><th></th><th colspan="3">Area (acres)</th></tr>
<tr><th>Mitigation Type</th><th>Habitat Type</th><th>Drainage A</th><th>Drainage B</th><th>Total</th></tr>
<tr><td>Enhancement</td><td>Riparian</td><td>0.27</td><td>-</td><td>0.27</td></tr>
<tr><td></td><td>Riparian-transition</td><td>0.43</td><td>0.29</td><td>0.72</td></tr>
<tr><td></td><td>Upland</td><td>0.09</td><td>0.71</td><td>0.80</td></tr>
<tr><td>Subtotal</td><td></td><td>0.79</td><td>1.00</td><td>1.79</td></tr>
<tr><td>Creation</td><td>Riparian</td><td>0.07</td><td>0.05</td><td>0.12</td></tr>
<tr><td></td><td>Riparian Transition</td><td>0.64</td><td>0.03</td><td>0.67</td></tr>
<tr><td></td><td>Upland</td><td>-</td><td>-</td><td></td></tr>
<tr><td>Subtotal</td><td></td><td>0.71</td><td>0.08</td><td>0.79</td></tr>
<tr><td>Total</td><td></td><td>1.50</td><td>1.08</td><td>2.58</td></tr>
</table></td><td></td><td></td></tr>
<tr><td>Implementation of the proposed Project has the potential to impact sensitive wildlife species, including the least Bell's vireo and burrowing owl. Mitigation Measures M-BR-1, M-BR-2, M-BR-3, M-BR-5, M-BR-6, and M-BR-8 have been identified to ensure that the Project would have less-than-significant impacts on sensitive wildlife species.</td><td>Less than Significant</td><td>As specified for Mitigation Measure M-BR-1, M-BR-2, M-BR-3, M-BR-5, M-BR-6, and M-BR-8.</td><td>Project Applicant/ Riverside County Environmental Programs Department, Riverside County Planning Department, Riverside County Building and Safety Department</td><td>As specified for Mitigation Measure M-BR-1, M-BR-2, M-BR-3, M-BR-5, M-BR-6, and M-BR-8.</td></tr>
<tr><td>A total of 0.57 acre of sensitive native communities would be impacted by the proposed Project , including 0.48 acre of arroyo willow scrub and 0.09 acre of black willow scrub</td><td>Less than Significant</td><td>M-BR-3 (Condition of Approval 60.EPD.006) Prior to issuance of grading permits, a habitat mitigation and monitoring plan (HMMP) for impacts to two sensitive native communities (arroyo willow scrub and black willow scrub) shall be prepared. The HMMP shall offset impacts to these habitats by focusing on the creation, enhancement, and/or restoration of riparian habitats within disturbed habitat areas of the Project site and/or off-site. The functions and values of the mitigation areas shall be equivalent or superior to the impacted habitat. The HMMP shall provide details as to the implementation of the mitigation, performance standards, maintenance, and future monitoring. Prior to grading permit final inspection, compensatory mitigation for impacts to the three sensitive native communities shall be provided at a 2:1 ratio for impacts to arroyo willow scrub and black willow scrub by creating, enhancing and/or restoring riparian habitat. Mitigation is proposed both on-site and off-site at an agency approved mitigation bank or land acquired for the purpose of mitigation. The riparian mitigation shall also satisfy compensatory mitigation required pursuant to regulatory</td><td></td><td>M-BR-3 Prior to issuance of grading permits, the County Building and Safety Department shall verify that the required habitat mitigation and monitoring plan (HMMP) has been approved by the Riverside County Environmental Programs Department. Prior to grading permit final inspection, the Project Applicant shall provide evidence to the Riverside County Environmental Programs Department demonstrating that the required compensatory mitigation has been achieved.</td></tr>
</table>

IMPACTS	LEVEL OF SIGNIFICANCE AFTER MITIGATION	MITIGATION MEASURES	RESPONSIBLE PARTY/ MONITORING PARTY	IMPLEMENTATION STAGE
		permits (as required by Mitigation Measure M-BR-4) and Section 6.1.2 of the MSHCP (as required by Mitigation Measure M-BR-8). Mitigation for impacts shall occur in one or more of the following ways: 1. Transplantation of arroyo willow scrub and black willow scrub habitat species from impact areas, if feasible; 2. Seeding of arroyo willow scrub and black willow scrub species, in addition to species associated with these habitat types; 3. Planting of container plants and/or stakes of arroyo willow and black willow species and/or other species associated with these habitat types; or 4. Salvage of duff and topsoil from impact areas and subsequent dispersal into the mitigation areas.		
The Project site has the potential to support songbird and raptor nests due to the presence of shrubs, ground cover, and limited trees on-site. Disturbing or destroying active nests is a violation of the Migratory Bird Treaty Act (MBTA, 16 U.S.C. 703 et seq.). In addition, nests and eggs are protected under Fish and Wildlife Code Section 3503. As such direct impacts to breeding birds (e.g. through nest removal) or indirect impacts (e.g. by noise causing abandonment of the nest) are considered a potentially significant impact for which mitigation would be required	Less than Significant	M-BR-5 (Condition of Approval 60.EPD.005) Prior to the issuance of any grading permit that would remove potentially suitable nesting habitat for raptors or songbirds, the Project applicant shall demonstrate to the satisfaction of the County of Riverside that either of the following have been or will be accomplished. 1. Vegetation removal activities shall be scheduled outside the nesting season (September 1 to February 14 for songbirds; September 1 to January 14 for raptors) to avoid potential impacts to nesting birds. 2. Any construction activities that occur during the nesting season (February 15 to August 31 for songbirds; January 15 to August 31 for raptors) will require that all suitable habitat be thoroughly surveyed for the presence of nesting birds by a qualified biologist before commencement of clearing. If any active nests are detected a buffer of 300 feet (500 feet for raptors) around the nest adjacent to construction will be delineated, flagged, and avoided until the nesting cycle is complete. The buffer may be modified and/or other recommendations proposed as determined		M-BR-5 Prior to issuance of grading permits, the Riverside County Environmental Programs Department shall verify that either construction activities have been scheduled outside the nesting season, or that a pre-construction survey during the nesting season has taken place and that appropriate buffers have been established from any occupied nests.

IMPACTS	LEVEL OF SIGNIFICANCE AFTER MITIGATION	MITIGATION MEASURES	RESPONSIBLE PARTY/ MONITORING PARTY	IMPLEMENTATION STAGE
		appropriate by the biological monitor to minimize impacts. M-BR-6 (Condition of Approval 10.Planning.010) Prior to building permit final inspection, the Project applicant shall demonstrate that payment of the MSHCP Local Development Mitigation Fee has occurred pursuant to Riverside County Ordinance No. 810.		M-BR-6 Prior to building permit final inspection, the Riverside County Building and Safety Department shall verify payment of the MSHCP Local Development Mitigation Fee.
The Project has the potential to result in impacts associated with the movement of wildlife species. Mitigation Measure M-BR-6 has been identified to ensure that the Project would have less-than-significant impacts on the movement of wildlife species.	Less than Significant	As specified for Mitigation Measure M-BR-6.	As specified for Mitigation Measure M-BR-6.	As specified for Mitigation Measure M-BR-6.
The Project has the potential to impact California Department of Fish and Game jurisdictional features. Mitigation Measure M-BR-3 has been identified to ensure that the Project would have less-than-significant impacts on California Department of Fish and Game jurisdictional features.	Less than Significant	As specified for Mitigation Measure M-BR-3.	As specified for Mitigation Measure M-BR-3.	As specified for Mitigation Measure M-BR-3.
The Project has the potential to impact federally protected wetlands. Mitigation Measure M-BR-4 has been identified to ensure that the Project would have less-than-significant impacts on federally protected wetlands.	Less than Significant	As specified for Mitigation Measure M-BR-4.	As specified for Mitigation Measure M-BR-4.	As specified for Mitigation Measure M-BR-4.
CULTURAL RESOURCES:				
9. ARCHEOLOGICAL RESOURCES				
There is a potential that buried archaeological materials may be present. Thus, before mitigation the proposed project could have a potentially significant impact to archeological resources.	Less than Significant	M-CR-1 (Condition of Approval 60.Planning.023) Prior to issuance of a grading permit, the Project Applicant shall prepare and submit to the County Archaeologist for review and approval a Cultural Resources Mitigation Monitoring and Reporting Program (CRMMRP). The CRMMRP shall include, but not necessarily be limited to, the following actions:	Project Applicant, Project Archaeologist, Construction Contractor / County Archaeologist	M-CR-1 Prior to issuance of any grading permits, the CRMMRP shall be reviewed and approved by the County Archaeologist. During ground-disturbing

IMPACTS	LEVEL OF SIGNIFICANCE AFTER MITIGATION	MITIGATION MEASURES	RESPONSIBLE PARTY/ MONITORING PARTY	IMPLEMENTATION STAGE
		1) Prior to issuance of a grading permit, the Project Applicant shall provide written verification that a certified archaeologist has been retained to implement the monitoring program. This verification shall be presented in a letter from the Project archaeologist to the Riverside County Planning Department. 2) The Project Applicant shall enter into an agreement with the Pechanga Tribe to provide Native American monitoring during grading. The Native American monitor shall work in concert with the archaeological monitor to observe ground disturbances and search for cultural materials. 3) The certified archaeologist shall attend the pre-grading meeting with the contractors to explain and coordinate the requirements of the monitoring program. 4) During the original cutting of previously undisturbed deposits, the archaeological monitor(s) and tribal representative shall be on-site, as determined by the consulting archaeologist, to perform periodic inspections of the excavations. The frequency of inspections will depend on the rate of excavation, the materials excavated, and the presence and abundance of artifacts and features. The consulting archaeologist shall have the authority to modify the monitoring program if the potential for cultural resources appears to be less than anticipated. 5) Isolates and clearly non-significant deposits will be minimally documented in the field so the monitored grading can proceed. 6) In the event that previously unidentified cultural resources are discovered, the archaeologist shall have the authority to divert or temporarily halt ground disturbance operation in the area of discovery to allow for the evaluation of potentially significant cultural resources. The archaeologist shall contact the lead agency at the time of discovery. The archaeologist, in consultation with the lead agency, shall determine the significance of the discovered resources. The lead agency must concur with the evaluation before		activities, the provisions of the CRMMRP shall be implemented. Prior to grading permit final inspection, the report documenting the field and analysis results shall be provided to the Riverside County Planning Department.

IMPACTS	LEVEL OF SIGNIFICANCE AFTER MITIGATION	MITIGATION MEASURES	RESPONSIBLE PARTY/ MONITORING PARTY	IMPLEMENTATION STAGE
		construction activities will be allowed to resume in the affected area. For significant cultural resources, a Research Design and Data Recovery Program to mitigate impacts shall be prepared by the consulting archaeologist and approved by the lead agency before being carried out using professional archaeological methods. If any human bones are discovered, the county coroner and lead agency shall be contacted. In the event that the remains are determined to be of Native American origin, the Most Likely Descendant (MLD), as identified by the NAHC, shall be contacted in order to determine proper treatment and disposition of the remains. 7) Before construction activities are allowed to resume in the affected area, the artifacts shall be recovered and features recorded using professional archaeological methods. The archaeological monitor(s) shall determine the amount of material to be recovered for an adequate artifact sample for analysis. 8) All cultural material collected during the grading monitoring program shall be processed and curated according to the current professional repository standards. The collections and associated records shall be transferred, including title, to an appropriate curation facility, to be accompanied by payment of the fees necessary for permanent curation. 9) A report documenting the field and analysis results and interpreting the artifact and research data within the research context shall be completed and submitted to the satisfaction of the lead agency prior to the issuance of any building permits. The report will include DPR Primary and Archaeological Site Forms.		
GEOLOGY AND SOILS				
16. OTHER GEOLOGIC HAZARDS				
The Project site is subject to inundation due to the failure of the Lake Mathews Dam, including inundation resulting from seismically-induced seiches. A seismically-induced seiche within Lake Mathews when the dam basin is filled to	Less than Significant	~~M-GEO-1 (Condition of Approval XX.Planning.XXX) Prior to the issuance of a building permit, the County of Riverside shall verify the proper design of foundations and that hydrologic studies have been prepared that account for appropriate storm water runoff flows from potential failure of the Lake Mathews Dam.~~	~~Project Applicant/ Riverside County Building and Safety Department~~	~~M-GEO-1 Prior to the issuance of a building permit, the County of Riverside shall verify safety issues have been addressed through Project design.~~

IMPACTS	LEVEL OF SIGNIFICANCE AFTER MITIGATION	MITIGATION MEASURES	RESPONSIBLE PARTY/ MONITORING PARTY	IMPLEMENTATION STAGE
capacity could cause extensive flooding within most areas of the Project site.		M-GEO-12 (Condition of Approval 80.Planning.022) Prior to building permit final inspection, evidence shall be provided to the Riverside County Building and Safety Department that all home deeds include a disclosure about the Project site's location within a dam inundation hazard area. Additionally, as part of future home sale documentation, the Project Applicant shall provide each new homeowner a copy of the Federal Emergency Management Agency's informational brochure, entitled "Living with Dams: Know Your Risks (FEMA P-956)." Additionally, each new homeowner shall be provided with informational materials from the Riverside County Fire Department's Community Emergency Response Team (CERT), including information about CERT's role in helping communities address potential impacts due to natural and man-made hazards, and information relating to how future residents can become involved and undergo CERT training to assist the future residents of the community in the event of failure of the Lake Mathews Dam.	Project Applicant/ Riverside County Building and Safety Department	M-GEO-12 Prior to building permit final inspection, the Project Applicant shall provide evidence to Riverside County demonstrating that the disclosure has been provided on all deeds, and that the sales documentation includes the FEMA and CERT informational materials.
18. SOILS				
Based on the preliminary grading plan imported soil material may be required to establish the planned finished grade elevations. Depending on the source of the imported soil, it is possible that expansive soils may be incorporated into onsite fills and ultimately be exposed at finished grades within proposed building pad areas.	Less than Significant	M-GEO-23 (Condition of Approval 60.Planning.003) In the event that imported soil material is required to establish the design finished grades within the site, adequate control shall be provided prior to and during import operations to ensure that the imported soil material is compatible with onsite soils in terms of expansion potential. If, after completion of grading, it is determined that near-surface soils within building pad areas exhibit an elevated expansion potential, then grading plans shall demonstrate that the proper design of building foundations, floor slabs and exterior improvements are designed to alleviate the potential uplift forces that can develop in expansive soils.	Qualified Geotechnical Consultant/ Riverside County Building and Safety Department	M-GEO-23 A qualified geotechnical consultant shall be responsible for monitoring imported soils materials for their expansive potential. If soils are determined to contain expansive properties, then the Project's geologist shall ensure appropriate measures are incorporated to protect building foundations, floor slabs, and other exterior improvements.
GREENHOUSE GAS EMISSIONS				
21. GREENHOUSE GASES				
Implementation of the proposed Project has the potential to generate greenhouse gases that would impact the environment. Mitigation measures M-GG-1 through M-GG-2 have been identified to ensure that the Project would achieve a GHG reduction of approximately 30.49%	Less than Significant	M-GG-1 (Condition of Approval 80.Planning.019): Prior to the issuance of building permits, the Project Applicant shall submit energy demand calculations to the County demonstrating that the increment of the Project for which building permits are being requested would achieve a minimum 10% increase in energy efficiencies beyond 2013 California Building Code Title 24 performance standards. Representative energy efficiency/energy conservation	Project Applicant/Riverside County Planning Department	M-GG-1 Prior to the issuance of building permits, the energy calculations showing the required energy use reduction shall be submitted to the Riverside County Planning

IMPACTS	LEVEL OF SIGNIFICANCE AFTER MITIGATION	MITIGATION MEASURES	RESPONSIBLE PARTY/ MONITORING PARTY	IMPLEMENTATION STAGE
below BAU, which exceeds the County's threshold of significant of 30% below BAU; thus, would result in less-than-significant greenhouse gas impacts.		measures to be incorporated in the Project would include, but would not be not limited to, those listed below (it being understood that the items listed below are not all required and merely present examples; the list is not all-inclusive and other features that would reduce energy consumption and promote energy conservation would also be acceptable): ▪ Increase in insulation such that heat transfer and thermal bridging is minimized; ▪ Limit air leakage through the structure and/or within the heating and cooling distribution system; ▪ Use of energy-efficient space heating and cooling equipment; ▪ Installation of electrical hook-ups at loading dock areas; ▪ Installation of dual-paned or other energy efficient windows; ▪ Use of interior and exterior energy efficient lighting that exceeds then incumbent California Title 24 Energy Efficiency performance standards; ▪ Installation of automatic devices to turn off lights where they are not needed; ▪ Application of a paint and surface color palette that emphasizes light and off-white colors that reflect heat away from buildings; ▪ Design of buildings with "cool roofs" using products certified by the Cool Roof Rating Council, and/or exposed roof surfaces using light and off-white colors; ▪ Design of buildings to accommodate photo-voltaic solar electricity systems or the installation of photo-voltaic solar electricity systems; ▪ Installation of ENERGY STAR-qualified energy-efficient appliances, heating and cooling systems, office equipment, and/or lighting products.		Department for review and approval. Compliance with the energy reduction measures assumed in the calculations shall be verified by Riverside County prior to building permit final inspection.
		M-GG-2 (Condition of Approval 10.Planning.023): To reduce water consumption and the associated energy-usage, the Project will be designed to: ▪ Reduce outdoor water use by 30%, consistent with Riverside County Ordinance No. 859. ▪ Reduce indoor water use by 20% consistent with Division 4.3 of the 2013 CalGreen Residential Mandatory Measures.	Project Applicant/ Riverside County Building and Safety Department	M-GG-2 Prior to the issuance of building permits, the Project Applicant shall demonstrate that the target reduction in outdoor water demand has been accommodated by the Project's plans.

IMPACTS	LEVEL OF SIGNIFICANCE AFTER MITIGATION	MITIGATION MEASURES	RESPONSIBLE PARTY/ MONITORING PARTY	IMPLEMENTATION STAGE
HAZARDS AND HAZARDOUS MATERIALS				
22. HAZARDS AND HAZARDOUS MATERIALS				
The presence of residual agricultural chemicals, such as pesticides, may be a potential concern with respect to worker exposure during as grading and foundation excavation work. This is evaluated as a potentially significant impact for which mitigation is required.	Less than Significant	Mitigation Measure M-AQ-2 (refer to Issue 6., *Air Quality*, of this Initial Study), which requires measures to control fugitive dust during construction and compliance with SCAQMD Rule 403, shall apply to address potential health impacts to workers during the Project's construction phase.	As specified for Mitigation Measure M-AQ-2	As specified for Mitigation Measure M-AQ-2
Construction of Project improvements to potential emergency access roadways would have the potential to adversely affect emergency response times in the local area. Implementation of a traffic control plan during construction, as required by M-HM-1, would ensure that the Project's improvements to these roadways do not significantly affect emergency service response times.	Less than Significant	M-HM-1 <u>(Condition of Approval 10.Planning.024) Continued vehicular access shall be maintained along El Sobrante Road and/or McAllister Street during construction of improvements to these roadways. Full lane closures are not permitted.</u> ~~(Condition of Approval XX.XXXX.XX) Prior to issuance of grading permits, encroachment permits, or improvement plans affecting El Sobrante Road and/or McAllister Street, the Project Applicant shall prepare and submit for review to the Riverside County Transportation Department a Traffic Control Plan that identifies measures to be undertaken to ensure continued vehicular access along El Sobrante Road and/or McAllister Street during construction of improvements to these roadways.~~	Project Applicant/ Riverside County Transportation Department	M-HM-1 Prior to issuance of grading permits, encroachment permits, or improvement plans affecting El Sobrante Road and/or McAllister Street, a traffic control plan shall be approved by the Riverside County Transportation Department and shall be implemented throughout the duration of construction activities affecting one or both roadways.
HYDROLOGY AND WATER QUALITY				
26. FLOODPLAINS				
The Project site has a high risk of inundation in the event of failure of the Lake Mathews Dam. A seismically-induced failure of the Lake Mathews Dam facility when the dam basin is filled to capacity could cause extensive flooding in the southern portions of the project.	Less than Significant	Mitigation Measure M-GEO-1 shall apply.	As specified above for M-GEO-1	As specified above for M-GEO-1
NOISE				
34. NOISE EFFECTS ON OR BY THE PROJECT				
Temporary construction-related noise impacts associated with the Project are expected to create intermittent	Less than Significant	M-N-1 (Condition of Approval 10.HEALTH.002) In order to reduce construction-related noise affecting nearby noise sensitive residential land uses to the maximum feasible	Project Applicant/ Riverside County Building and Safety Department	M-N-1 Prior to approval of grading plans and/or issuance of building

IMPACTS	LEVEL OF SIGNIFICANCE AFTER MITIGATION	MITIGATION MEASURES	RESPONSIBLE PARTY/ MONITORING PARTY	IMPLEMENTATION STAGE
high-level noise at receivers surrounding the Project site. Although not required because construction-related impacts would be less than significant assuming compliance with Section 9.52.020 of the County's Noise Regulation ordinance, Mitigation Measures M-N-1 has nonetheless been imposed on the Project to reduce to the maximum feasible extent Project-related construction noise levels affecting nearby sensitive receptors.		extent, the following requirements shall apply: ▪ ~~Prior to approval of grading plans and/or issuance of building permits, plans shall include a note indicating that w~~Whenever a construction site is located within one-quarter (1/4) mile of an occupied residence or residences construction activities shall be limited between the hours of 6:00 a.m. and 6:00 p.m., during the months of June through September, and 7:00 a.m. and 6:00 p.m., during the months of October through May. Exceptions to these standards shall be allowed only with the written consent of the building official. ▪ ~~A Noise Abatement Plan shall be prepared and submitted to the County for review and approval prior to issuance of grading permits. The plan shall depict t~~The location of construction equipment and ~~how the~~ noise from this equipment shall~~will~~ be reduced during construction of the Project through the use of such methods as: • During all Project site construction, the construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards. The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise sensitive receivers nearest the Project site. • The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise sensitive receivers nearest the Project site (i.e., to the east) during all Project construction. • In order to reduce nighttime noise level contributions, it is recommended that outgoing flatbed trailer loading occur during the daytime or evening hours before Project site delivery, and that the		permits, the Riverside County Building and Safety Department shall ensure the Project's plans include the required notes. Prior to issuance of grading permits, the County shall review and approve a Noise Abatement Plan, which shall be adhered to by construction contractors during all construction activities on-site. Prior to issuance of grading permits that include hard rock areas, a Blasting Noise and Vibration Monitoring and Abatement Plan shall be approved by Riverside County, and construction contractors shall be required to adhere to the requirements specified therein during all grading activities involving hard rock blasting.

IMPACTS	LEVEL OF SIGNIFICANCE AFTER MITIGATION	MITIGATION MEASURES	RESPONSIBLE PARTY/ MONITORING PARTY	IMPLEMENTATION STAGE
		loaded trailer be parked near the driveway to the site. This will reduce the duration of equipment pick-up activity noise and increase the distance between the nearest noise receivers. • The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment (between the hours of 6:00 a.m. and 6:00 p.m., during the months of June through September, and 7:00 a.m. and 6:00 p.m., during the months of October through May). • No music or electronically reinforced speech from construction workers shall be audible at noise-sensitive properties. ▪ ~~Prior to issuance of grading permits that include~~ During grading/blasting activities within hard rock areas, the Project shall adhere to the~~a Blasting Noise and Vibration Monitoring and Abatement Plan shall be prepared and submitted to the County. The Blasting Noise and Vibration Monitoring and Abatement Plan shall include~~ the following requirements: • Pre-blasting inspections shall be offered to homes within 200 feet of the hard rock areas. • Existing damage of each structure shall be documented. • Post-blasting inspections shall be offered to assess new or additional damage to each residential structure once blasting activities have ceased. • Traditional rock blasting methods shall not occur within 200 feet from any residential home. In these areas rock breaking must be performed with nonexplosive methods. • Blasting mats shall be used whenever feasible to further reduce the noise from blasting activities. • Nearby residential homes shall be notified via postings on the construction		

IMPACTS	LEVEL OF SIGNIFICANCE AFTER MITIGATION	MITIGATION MEASURES	RESPONSIBLE PARTY/ MONITORING PARTY	IMPLEMENTATION STAGE
		site 24 hours before the occurrence of major construction related noise and vibration impacts (such as grading and rock blasting) which may affect them. • The County may impose conditions and procedures on the blasting operations as necessary. The construction contractor shall comply with these measures for the duration of the blasting permit. The County may inspect the blast site and materials at any reasonable time (pursuant to County of Riverside Ordinance No. 787).		
The future exterior noise impact levels on the outdoor living areas (backyards) are estimated to range from 58.4 dBA CNEL to 72.5 dBA CNEL for homes adjacent to El Sobrante Road and McAllister Street. In order to meet the County of Riverside 65 dBA CNEL interior noise level standard, Mitigation Measure M-N-2 has been identified.	Less than Significant	M-N-2 (Condition of Approval 10.HEALTH.002) To satisfy the County of Riverside 65 dBA CNEL exterior noise level standards for single-family residential development, 6-foot high noise barriers for lots adjacent to McAllister Street and El Sobrante Road are required as depicted on Exhibits ES-A and ES-B of the Project's Noise Impact Analysis, prepared by Urban Crossroads and dated December 11, 2014. Construction of the required barriers would reduce the future exterior noise levels to between 52.9 and 64.4 dBA CNEL. The recommended noise control barriers shall be constructed so that the top of each wall extends to the recommended height above the pad elevation of the lot it is shielding. When the road is elevated above the pad elevation, the barrier shall extend to the recommended height above the highest point between the residential home and the road. The barriers shall provide a weight of at least 4 pounds per square foot of face area with no decorative cutouts or line-of-sight openings between shielded areas and the roadways. The noise barrier may be constructed using one of the following materials: ▪ Masonry block ▪ Stucco veneer over wood framing (or foam core), or 1 inch thick tongue and groove wood of sufficient weight per square foot ▪ Glass (1/4 inch thick), or other transparent material with sufficient weight per square foot ▪ Earthen berm ▪ Any combination of these construction materials The barrier must present a solid face from top to bottom. Unnecessary openings or decorative cutouts should not be	Project Applicant/ Riverside County Building and Safety Department	M-N-2 Prior to building permit final inspection, the Riverside County Building and Safety Department shall ensure that the required noise barriers have been constructed.

IMPACTS	LEVEL OF SIGNIFICANCE AFTER MITIGATION	MITIGATION MEASURES	RESPONSIBLE PARTY/ MONITORING PARTY	IMPLEMENTATION STAGE
		made. All gaps (except for weep holes) should be filled with grout or caulking.		
The future first and second floor interior noise levels at the façade are estimated to range from 52.8 dBA CNEL to 66.9 dBA CNEL for homes adjacent to El Sobrante Road and McAllister Street. In order to meet the County of Riverside 45 dBA CNEL interior noise level standard, Mitigation Measure M-N-3 has been identified.	Less than Significant	M-N-3 (Condition of Approval 10.HEALTH.002) To satisfy the County of Riverside 45 dBA CNEL interior noise level criteria, lots facing El Sobrante Road and McAllister Street will require a Noise Level Reduction (NLR) of up to 27.1 dBA and a windows closed condition requiring a means of mechanical ventilation (e.g. air conditioning). In order to meet the County of Riverside 45 dBA CNEL interior noise standards the Project shall provide the following or equivalent Project Design Features: ▪ Windows: • All windows and sliding glass doors shall be well fitted, well weather-stripped assemblies and shall have a minimum sound transmission class (STC) rating of 27. • Lots 84 to 93 adjacent to El Sobrante Road will require upgraded second floor windows with a minimum STC rating of 31. ▪ Doors: All exterior doors shall be well weather-stripped solid core assemblies at least one and three-fourths-inch thick. ▪ Roof: Roof sheathing of wood construction shall be well fitted or caulked plywood of at least one-half inch thick. Ceilings shall be well fitted, well-sealed gypsum board of at least one-half inch thick. Insulation with at least a rating of R-19 shall be used in the attic space. ▪ Attic: Attic vents should be oriented away from El Sobrante Road and McAllister Street. If such an orientation cannot be avoided, then an acoustical baffle shall be placed in the attic space behind the vents. ▪ Ventilation: Arrangements for any habitable room shall be such that any exterior door or window can be kept closed when the room is in use. A forced air circulation system (e.g. air conditioning) shall be provided which satisfies the requirements of the	Project Applicant/ Riverside County Building and Safety Department	M-N-3 Prior to issuance of building permits, the Riverside County Building and Safety Department shall ensure that the building plans include the required noise attenuation measures, and shall verify the required features have been constructed prior to building permit final inspection.

IMPACTS	LEVEL OF SIGNIFICANCE AFTER MITIGATION	MITIGATION MEASURES	RESPONSIBLE PARTY/ MONITORING PARTY	IMPLEMENTATION STAGE
Horizon Year (2035) Traffic Conditions: *Cumulatively Significant Impacts* ▪ La Sierra Avenue / Indiana Avenue (City of Riverside) ▪ La Sierra Avenue / Victoria Avenue (City and County of Riverside) ▪ McAllister Street/"A" Street (County of Riverside) Mitigation Measures M-TR-1 through M-TR-3 have been identified to ensure that the Project would not conflict with any applicable plans, ordinances or policies establishing a measure of effectiveness for the performance.		to issuance of building permits, the Project Applicant shall provide the Riverside County Building and Safety Department with evidence of the agreement entered into with the City of Riverside. M-TR-3 (Condition of Approval 80.TRANS.11) Prior to the first building permit final inspection, the Project Applicant shall work with the County of Riverside to establish improvement fair-share fee program for improvements to the intersection of McAllister Steet/Street "A" that ensures the construction of the following improvement, or comparable improvement that would allow the intersection to operate an acceptable LOS. The Project Proponent shall contribute a fair-share fee payment to the County of Riverside (Project's fair-share contribution is 8.6%) for the identified improvement. • Provide space for a westbound defacto right turn movement by implementing signage disallowing on-street parking; and • Provide space on McAllister Street in the intersection for westbound left-turning vehicles to cross northbound and southbound traffic in two stages.	Project Applicant/ Riverside County Building and Safety Department	residential unit and the Transportation Impact Fee of $525 per detached single family residential unit has been paid to the City of Riverside. M-TR-3 Prior to the issuance of the first building permit final inspection, the Project Applicant shall provide evidence to the Riverside County Building and Safety Department that appropriate fees have been paid or bonding for construction has been posted.

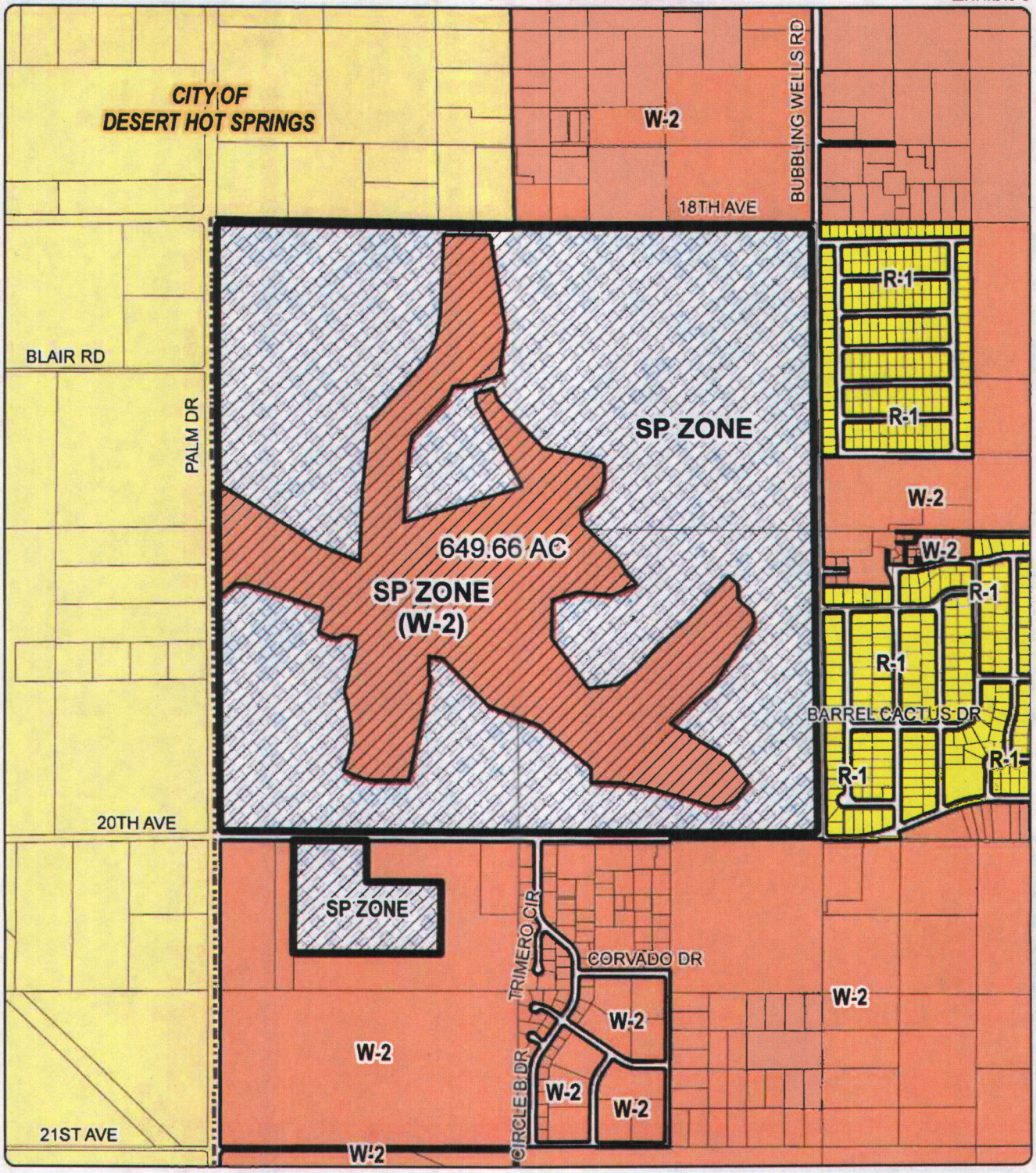
RIVERSIDE COUNTY PLANNING DEPARTMENT

CZ07899 GPA01164 SP00336A1

Supervisor: Benoit
District 4

PROPOSED ZONING

Date Drawn: 02/10/2016
Exhibit 3



Zoning Dist: Pass & Desert

Author: Vinnie Nguyen

N

0 600 1,200 2,400
Feet

DISCLAIMER: On October 7, 2003, the County of Riverside adopted a new General Plan providing new land use designations for unincorporated Riverside County parcels. The new General Plan may contain different type of land use than is provided for under existing zoning. For further information, please contact the Riverside County Planning Department offices in Riverside at (951)955-3200 (Western County) or in Palm Desert at (760)863-8277 (Eastern County) or Website http://planning.rctlma.org

Addendum No. 3 to the
Desert Dunes Specific Plan
Final Environmental Impact Report
SCH #2003121164

Prepared for:

Riverside County Planning Department

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Westlake Village, California 91361

April 2016

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