

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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CO concentration impacts. More specifically, the Bay Area Air Quality Management District (BAAQMD) concludes that under existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact. The proposed Project considered herein would not produce the volume of traffic required to generate a CO hotspot either in the context of the 2003 Los Angeles hot spot study, or based on representative BAAQMD CO threshold considerations. Therefore, CO hotspots are not an environmental impact of concern for the proposed Project. Localized air quality impacts related to mobile source emissions would therefore be less than significant. (Urban Crossroads, 2014a, pp. 35-36)

Conclusion

Based on the analysis presented above, the proposed Project would not expose sensitive receptors which are located within one mile of the Project site to substantial point source emissions, and impacts would be less than significant.

e) There are no substantial sources of point source emissions within one mile of the Project site. Land uses within one mile of the site comprise residential, manufacturing warehouses, agricultural, school, and undeveloped lands, none of which are considered sources of point source emissions. Accordingly, no impact would occur.

f) The potential for the Project to generate objectionable odors has also been considered. Land uses generally associated with odor complaints include: agricultural uses (livestock and farming); wastewater treatment plants; food processing plants; chemical plants; composting operations; refineries; landfills; dairies; and fiberglass molding facilities. (Urban Crossroads, 2014a, pp. 38-39)

The Project does not contain land uses typically associated with emitting objectionable odors. Potential odor sources associated with the proposed Project may result from construction equipment exhaust and the application of asphalt and architectural coatings during construction activities and the temporary storage of typical solid waste (refuse) associated with the proposed Project's (long-term operational) uses. Standard construction requirements would minimize odor impacts from construction. The construction odor emissions would be temporary, short-term, and intermittent in nature and would cease upon completion of the respective phase of construction and is thus considered less than significant. It is expected that Project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with the County's solid waste regulations. The proposed Project would also be required to comply with SCAQMD Rule 402 to prevent occurrences of public nuisances. Therefore, odors associated with the proposed Project construction and operations would be less than significant and no mitigation is required. (Urban Crossroads, 2014a, p. 39)

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

BIOLOGICAL RESOURCES Would the project

7. Wildlife & Vegetation

a) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state conservation

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plan?				
b) Have a substantial adverse effect, either directly or through habitat modifications, on any endangered, or threatened species, as listed in Title 14 of the California Code of Regulations (Sections 670.2 or 670.5) or in Title 50, Code of Federal Regulations (Sections 17.11 or 17.12)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U. S. Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U. S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Source: RCIT; Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP); On-site Inspection; *General Biological Resources Assessment*, Aden Environmental, Inc., January 30, 2014; *Burrowing Owl Survey Results Report*, Alden Environmental Inc., September 11, 2013.

Findings of Fact:

a) The Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) is the applicable habitat conservation plan for western Riverside County. The Project site occurs within the Highgrove Area Plan portion of the MSHCP. The Project site does not occur within one of the Criteria Cells of the MSHCP, which were established for the acquisition of habitat and sensitive plant and wildlife species. Because the Project site is not in a Criteria Cell, it is not subject to the MSHCP's Habitat Evaluation and Acquisition Negotiation Strategy (HANS) process or the Joint Project Review (JPR) process and is not planned for open space preservation. (Alden, 2014, p. 6)

Although habitat conservation is not required on the Project site pursuant to the MSHCP, all projects must demonstrate compliance with applicable MSHCP requirements in accordance with the following sections of the MSHCP: Section 6.1.2, "Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools;" Section 6.1.3, "Protection of Narrow Endemic Plant Species;" Section 6.1.4, "Guidelines Pertaining to the Urban/Wildland Interface;" and Section 6.3.2, "Additional Survey Needs and Procedures." A discussion of the Project's consistency with these sections is provided below.

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Project Compliance with MSHCP Section 6.1.2

Volume 1, Section 6.1.2 of the MSHCP describes the process to protect species associated with riparian/riverine areas and vernal pools. The MSHCP requires focused surveys for sensitive riparian bird species when suitable habitat would be affected and surveys for sensitive fairy shrimp species when vernal pools or other suitable habitat would be affected. (Alden, 2014, p. 7).

Springbrook Wash is located south of the Project site and supports riparian/riverine habitat. The proposed Project is designed to avoid direct impacts to the riparian habitats located in the wash. There are also no vernal pools or ephemeral ponding habitat capable of supporting listed fairy shrimp species on the Project site; therefore, no surveys for fairy shrimp are required. Accordingly, the proposed Project would not impact riparian/riverine areas, vernal pools, or animal species that inhabit those areas. (Alden, 2014, p. 7)

The Project also would not indirectly impact the hydraulic regime of the Springbrook Wash. Under existing conditions, only the southern portion of the Project site (i.e. south of Spring Street) drains southwest towards Springbrook Wash. Under proposed conditions, the southern half of the Project site, south of Spring Street, would be split into two drainage areas. The northern half is designed to drain to a low point located in the northwesterly corner, adjacent to Spring Street. The proposed water quality basin in Lot B would treat flows and mitigate for increased runoff. The existing open channel along Spring Street would be replaced by a 54-inch reinforced concrete pipe (RCP) storm drain, into which the detention basin in Lot B would ultimately discharge. Flows from the southern portion of the site would be collected in catch basins which would discharge into the detention basin located in the southwest corner of the site (i.e., Lot C). (Webb, 2014b, p. 3) Before storm water would be discharged into the Springbrook Wash, the runoff would be treated by Best Management Practices (BMPs) associated with the proposed detention basin to remove urban pollutants in accordance with the Project's Water Quality Management Plan (WQMP) (Webb, 2014a, p. 8). Refer to *Appendix J* for a copy of the WQMP. In addition, as indicated in the Project's Drainage Study Report (Appendix I), the volume and velocity of water discharged into the Springbrook Wash would comply with Riverside County Flood Control and Water Control District (RCFCWCD) requirements (Webb, 2014b, pp. 6-7). Thus, the Project would not result in changes in the quantity or quality of water discharged from the site, and therefore would not adversely affect the functions or values of the Springbrook Wash.

Based on the foregoing analysis, the Project would be fully consistent with MSHCP Section 6.1.2.

Project Compliance with MSHCP Section 6.1.3

Volume 1, Section 6.1.3 of the MSHCP requires that within Narrow Endemic Plant Species Survey Areas (NEPSSA), site-specific focused surveys for Narrow Endemic Plants Species will be required for all public and private projects where appropriate soils and habitat are present.

The Project site is not located within any Narrow Endemic Plant Species Survey Areas (RCTMLA, 2014). Accordingly, focused rare plant surveys are not required. Appendix B of the Project's General Biological Resources Assessment (Appendix D1) includes a list of plant species observed in the study area by Alden Environmental. No NEPSSA plant species were observed or are anticipated to occur on the site (Alden, 2014, p. 5). As such, the proposed Project would not impact any MSHCP NEPSSA species and the Project would comply with MSHCP Section 6.1.3.

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Project Compliance with MSHCP Section 6.1.4

The MSHCP Urban/Wildland Interface Guidelines (UWIG) are intended to address indirect effects associated with locating development in proximity to the MSHCP conservation areas. The Project site is not located adjacent to any MSHCP conservation areas. Accordingly, the Urban/Wildlife Guidelines do not apply to the proposed Project. (Alden, 2014, p. 6)

Project Compliance with MSHCP Section 6.3.2

MSHCP Section 6.3.2 requires special surveys for certain plant and animal species for lands located within the Criteria Area Species Survey Areas (CASSA). The Project site is within the MSHCP CASSA for the burrowing owl, but does not occur within the CASSA for amphibians, mammals, or narrow endemic plants (RCTMLA, 2014). A focused burrowing owl survey was conducted by Alden Environmental in August 2013. The entire Project site provides suitable habitat for burrowing owls; however, no burrowing owls or signs of burrowing owl presence were observed on the site (Alden, 2013, p. 3). Due to the presence of suitable habitat for burrowing owl and the migratory nature of the species, there is the potential that the Project site could be occupied by burrowing owl individuals prior to the commencement of grading or ground disturbing activities. The potential for burrowing owl individuals to be present on the Project site prior to grading and the potential for burrowing owl individuals to be impacted by grading operations is a significant impact for which mitigation is required. Implementation of Mitigation Measure M-BR-1, which requires pre-construction surveys prior to commencement of grading activities, would reduce potential impacts to the burrowing owl to below a level of significance. Thus, with implementation of Mitigation Measure M-BR-1, the proposed Project would comply with MSHCP Section 6.3.2.

Conclusion

Based on the analysis presented above, and assuming implementation of Mitigation Measure M-BR-1, the proposed Project would be fully consistent with all applicable MSHCP policies and requirements. There are no other Habitat Conservation Plans, Natural Conservation Community Plans, or other approved local, regional, or state conservation plans applicable to the Project site. Accordingly, impacts due to a conflict with the provisions of an adopted Habitat Conservation Plan, Natural Conservation Community Plan, or other approved local, regional, or state conservation plan would be less than significant with implementation of the required mitigation.

b & c) Implementation of the proposed Project has the potential to directly or indirectly impact endangered or threatened plant and animal species, if such species occur within areas planned for impact by the Project. A discussion and analysis of potential impacts to sensitive plant species, sensitive animal species, and nesting birds is provided below.

Impacts to Sensitive Plant Species

No NEPPSA, CASSA, or other sensitive plant species were observed during general biological field surveys conducted by Alden Environmental, nor are any anticipated to occur on the Project site (Alden, 2014, p. 5). Appendix B of the Project's General Biological Resources Assessment (Appendix D1) includes a list of plant species observed on the Project site, none of which are threatened, endangered, candidate, sensitive, or special status species. Accordingly, implementation of the proposed Project would not result in any direct or indirect impacts to listed plant species, and no impact would occur.

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Impacts to Sensitive Animal Species

No sensitive animal species were observed on site during general biological surveys conducted by Alden Environmental in October 2013. The entire site is disturbed and while it provides suitable habitat for burrowing owls, no burrowing owls or signs of burrowing owl presence were observed during focused burrowing owl surveys conducted by Alden Environmental in August 2013 (Alden, 2014, p. 5). As discussed above, Mitigation Measure M-BR-1 has been identified to reduce to below a level of significance potential impacts to burrowing owls that may occupy the site prior to Project grading and clearing activities. Appendix C of the Project's General Biological Resources Assessment (Appendix D1) includes a list of animal species observed or detected in the study area by Alden Environmental, none of which are threatened, endangered, candidate, sensitive, or special status species. Accordingly, the only sensitive animal species with the potential to be impacted by the Project is the western burrowing owl, impacts to which are addressed under Threshold a), above.

Impacts to Nesting Birds

The proposed Project has the potential to impact active migratory bird nests if trees or other nesting habitat is removed during the nesting season (February 1 to September 15). Impacts to nesting birds are prohibited by the Migratory Bird Treaty Act (MBTA) and California Fish and Game Code. Impacts to nesting migratory birds are potentially significant and mitigation would be required. Implementation of Mitigation Measures M-BR-2 would reduce to below a level of significance the Project's potential impacts to nesting birds by requiring pre-construction surveys and, if necessary, the incorporation of buffers during the breeding season.

d) Under existing conditions, the Project site does not accommodate any established native resident or migratory wildlife corridors or native wildlife nursery sites. Springbrook Wash, located off-site and south of the Project site, has the potential to facilitate wildlife movement through the area. The Project incorporates design features that address potential indirect edge effects to Springbrook Wash. As shown on Figure 3-3, *Tentative Tract Map No. 36668*, the Project proposes a total of 2.67 acres of natural open space along the southern Project boundary, adjacent to the off-site Springbrook Wash. Additionally, no grading or disturbance is proposed within the habitat associated with the Springbrook Wash. With implementation of Project design features, the proposed Project would not interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites. Impacts are less than significant and no mitigation is required.

e) Figure 2-7 (previously presented) depicts the location of the five (5) vegetation communities mapped by Alden Environmental within the Project impact footprint and a 500-foot buffer that extends beyond the Project site boundaries. Of these, only the non-native grassland, eucalyptus woodland, and disturbed/developed habitat occur within the Project footprint. A description of each of the three (3) vegetation communities identified by Alden Environmental as occurring within the Project footprint are provided below.

- Non-native Grassland. Non-native grassland occurs in the northern portion of the Project site, all of which would be impacted by the Project (Alden, 2014, p. 5). Non-native grassland is not considered sensitive; therefore impacts to non-native grassland would be less than significant.
- Eucalyptus Woodland. Eucalyptus woodland vegetation occurs in scattered patches in the southern portion of the Project site (Alden, 2014, p. 5). This habitat is not considered sensitive; therefore impacts to eucalyptus woodland would be less than significant.

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- Disturbed/Developed. Developed/disturbed habitat occurs throughout the Project site (Alden, 2014, p. 5). Disturbed/developed habitat is not considered sensitive; therefore, impacts to disturbed/developed habitat would be less than significant.

Although riparian habitats, including southern willow scrub and mule fat scrub, occur within the southern portions of the Project site, the Project has been designed to avoid impacts to this habitat type with the preservation of approximately 2.67 acres of the southern portions of the site as natural open space (Alden, 2014, pp. 4-5). Additionally, and as indicated above, none of the upland habitats occurring within the Project's impact limits are considered sensitive natural communities. Therefore, the Project would not adversely affect any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U. S. Fish and Wildlife Service, and impacts would be less than significant.

f) The only portions of the Project site that contain wetland resources are the southern portions of the site, which support southern willow scrub and mule fat scrub habitats. However, the Project has been designed to avoid impacts to the portions of the site containing wetland resources.

The Project also would not indirectly impact the hydraulic regime of the Springbrook Wash. Under existing conditions, only the southern portion of the Project site (i.e. south of Spring Street) drains southwest towards Springbrook Wash. Under proposed conditions, the southern half of the Project site, south of Spring Street, would be split into two drainage areas. The northern half is designed to drain to a low point located in the northwesterly corner, adjacent to Spring Street. The proposed water quality basin in Lot B would treat flows and mitigate for increased runoff. The existing open channel along Spring Street would be replaced by a 54-inch reinforced concrete pipe (RCP) storm drain, into which the detention basin in Lot B would ultimately discharge. Flows from the southern portion of the site would be collected in catch basins which would discharge into the detention basin located in the southwest corner of the site (i.e., Lot C). (Webb, 2014b, p. 3) Before storm water would be discharged into the Springbrook Wash, the runoff would be treated by Best Management Practices (BMPs) associated with the proposed detention basin to remove urban pollutants in accordance with the Project's Water Quality Management Plan (WQMP) (Webb, 2014a, p. 8). Refer to *Appendix J* for a copy of the WQMP. In addition, as indicated in the Project's Drainage Study Report (*Appendix I*), the volume and velocity of water discharged into the Springbrook Wash would comply with RCFCWCD requirements. (Webb, 2014b, pp. 6-7)

Accordingly, the Project would not have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means. Thus, impacts would be less than significant and no mitigation would be required.

g) Aside from the MSHCP (which is addressed above under Issue 7.a), the only other local policies/ordinances protecting biological resources within the Project area are the Riverside County Oak Tree Management Guidelines and the Stephens' kangaroo rat impact fee area.

The Oak Tree Management Guidelines require surveys of individual trees and the minimization and/or avoidance of oak trees, where feasible. Based on the results of Project's General Biological Resources Assessment (IS/MND Appendix D1), the Project site does not contain any oak trees or oak woodland habitat. Thus, the proposed Project has no potential to conflict with the County's Oak Tree Management Guidelines, and no impact would occur.

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In addition, according to Riverside County's "Map My County," the Project site is located within the Stephens kangaroo rat impact fee area. However, the Project would be conditioned to comply with applicable provisions of the County's Stephens' Kangaroo Rat Mitigation Fee Ordinance (Ordinance No. 663), which requires the payment of fees for the assembly and management of the Stephens' Kangaroo Rat Conservation Plan. Payment of fees pursuant to Ordinance No. 663 is mandatory, and would be enforced as part of the Project's conditions of approval (refer to Condition of Approval 60.PLANNING.15). Accordingly, the Project would not conflict with Ordinance No. 663, and impacts would be less than significant.

Mitigation:

M-BR-1 (Condition of Approval 60.EPD.001) 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:

- 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 prior to the issuance of a grading permit and prior to the commencement of ground-disturbing activities on the property, the qualified biologist shall passively or actively relocate any burrowing owls. Passive relocation, including the required use of one-way doors to exclude owls from the site and the collapsing of burrows, will occur if the biologist determines that the proximity and availability of alternate habitat is suitable for successful passive relocation. Passive relocation shall follow CDFW relocation protocol and shall only occur between September 15 and February 1. If proximate alternate habitat is not present as determined by the biologist, active relocation shall follow CDFW relocation protocol. The biologist shall confirm in writing that the species has fledged the site or been relocated prior to the issuance of a grading permit.
- c) In the event that the pre-construction survey identifies the presence of three (3) or more mating pairs of burrowing owl, the requirements of MSCHP Species-Specific Conservation Objectives 5 for the burrowing owl shall be followed. Objective 5 states that if the site (including adjacent areas) supports three (3) or more pairs of burrowing owls and supports greater than 35 acres of suitable Habitat, at least 90 percent of the area with long-term conservation value and burrowing owl pairs will be conserved onsite until it is demonstrated that 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

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- 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-2 (Condition of Approval 60.EPD.002) As a condition of grading permits, vegetation clearing and ground disturbance shall be prohibited during the migratory bird nesting season (February 1 through September 15), unless a migratory bird nesting survey is completed in accordance with the following requirements:

- A migratory nesting bird survey of the Project's impact footprint, including suitable habitat within a 500-foot radius, shall be conducted by a qualified biologist within three (3) days prior to initiating vegetation clearing or ground disturbance.
- A copy of the migratory nesting bird survey results shall be provided to the County of Riverside. If the survey identifies the presence of active nests, then the qualified biologist shall provide the County of Riverside with a copy of maps showing the location of all nests and an appropriate buffer zone around each nest sufficient to protect the nest from direct and indirect impact. The size and location of all buffer zones, if required, shall be subject to review and approval by the County of Riverside and shall be no less than a 300-foot radius around the nest for non-raptors and a 500-foot radius around the nest for raptors. The nests and buffer zones shall be field checked weekly by a qualified biological monitor. The approved buffer zone shall be marked in the field with construction fencing, within which no vegetation clearing or ground disturbance shall commence until the qualified biologist verifies that the nests are no longer occupied and the juvenile birds can survive independently from their nests.

Monitoring:

M-BR-1 Prior to commencement of grading activities, the County of Riverside shall review a report to be provided by the Project Applicant documenting the results of the pre-grading burrowing owl survey and shall verify compliance with the recommendations specified therein.

M-BR-2 If grading is proposed during the migratory bird nesting season (February 1 through September 15), prior to the issuance of grading permits, the County of Riverside shall review the results of the preconstruction nesting bird species survey report and shall verify that all measures specified therein to protect nesting migratory bird species are adhered to during grading activities. Alternatively, if no grading is anticipated during

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the migratory bird nesting season, then the County of Riverside shall ensure that implementing grading permits are conditioned to prohibit grading activities during the nesting season (February 1 through September 15).

CULTURAL RESOURCES Would the project

8. Historic Resources

a) Alter or destroy an historic site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of a historical resource as defined in California Code of Regulations, Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Source: General Plan EIR Figure 4.7-1; *Archaeological Sensitivity Areas; Phase I Cultural Resources Survey for the Bixby Highgrove Project*, Brian F. Smith and Associates, Inc., December 12, 2013 (Appendix E1).

Findings of Fact:

a & b) A Phase I Archaeological Survey was conducted for the site by Brian F. Smith & Associates (BFSA), the results of which are contained in Appendix E1. The Phase I Archaeological Survey includes the results of a records search and field survey.

BFSA conducted an archaeological survey of the property on November 12, 2013. The survey was an intensive reconnaissance consisting of a series of parallel survey transects spaced at approximately five-meter intervals. Four (4) concrete pads for mounting equipment were noted on the Project site. Each of these pads had an intaglio inscription that read either "6-6-63" or "6-7-63" which provides the date for the installation of the pads. Judging by the size of the bolts protruding from some of the pads, BFSA believes that these served as mounts for large engines or electric motors, perhaps pumping water to the orchards. The concrete pads are not considered to meet the minimum threshold for recordation as a historic feature. No other potentially historic features were identified during the archaeological survey. Accordingly, the archeological survey did not result in the identification of any historic or prehistoric cultural resources. (BFSA, 2013a, pp. 5.0-3)

An archaeological records search for a one-mile radius around the Project site was conducted by the Eastern Information Center (EIC) at University of California Redlands (UCR). The Eastern Information Center (EIC) did not report any previously recorded prehistoric sites within the Project site boundaries. A single historic structure, recorded as P-33-6923, was listed in the archaeological database at the EIC as the "Albert house" at 888 Center Street (northwest corner of the subject property). This structure was recorded as a one-and-a-half story wood frame vernacular house constructed in approximately 1915. The historic structure has been removed from the property and no historic structures or features were noted in a previous survey conducted in 2007 by Michael Brandman Associates. During the 2007 Michael Brandman Associates survey, a small quantity of historic artifacts was noted; however, due to the highly dispersed and sparse nature of the historic scatter, Michael Brandman Associates did not record these materials as an archeological site. (BFSA, 2013a, pp. 5.0-1)

Within the one-mile radius records search parameters, 53 cultural resource locations have been recorded at the EIC. The majority of these recorded resources are historic structures that reflect the development of the Highgrove region for citrus production. The majority of these sites (historic structures) occur to the west of Transit Avenue (BFSA, 2013a, pp. 5.0-1). The records search and

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literature review suggests that there is a potential for both historic and prehistoric sites to be contained within the boundaries of the property. Given the historic settlement of the region, in addition to the prehistoric sites known to be surrounding the Project Area of Potential Effect (APE), there is a low to moderate potential for archaeological discoveries. The largest number of sites indicated by the records search suggests that historic properties should be the primary site type within the property (BFSA, 2013a, pp. 5.0-3). Although, no prehistoric or historic sites were observed during field reconnaissance, the Project's potential to physically impact a historic or prehistoric site that could be buried beneath the surface represents a significant impact for which mitigation is required.

Mitigation:

M-CR-1 (Condition of Approval 10.Planning.003 – Unanticipated Resources) The developer/permit holder shall comply with the following for the life of this permit:

If during ground disturbance activities, unanticipated cultural resources are discovered, the following procedures shall be followed (a cultural resource site is defined as being a feature and/or three or more artifacts in close association with each other, but may include fewer artifacts if the area of the find is determined to be of significance due to sacred or cultural importance):

- 1) All ground disturbance activities within 100 feet of the discovered cultural resource shall be halted until a meeting is convened between the developer, the project archaeologist, the Native American tribal representative (or other appropriate ethnic/cultural group representative), and the County Archaeologist to discuss the significance of the find. If not already employed by the Project developer, a County-approved archaeologist shall be employed by the Project developer to assess the value/importance of the cultural resource, attend the meeting described, and continue monitoring of all future site grading activities as necessary.
- 2) The developer shall call the County Archaeologist immediately upon discovery of the cultural resource to convene the meeting.
- 3) At the meeting with the aforementioned parties, the significance of the discoveries shall be discussed and a decision is to be made with the concurrence of the County Archaeologist, as to the appropriate mitigation (documentation, recovery, avoidance, etc.) for the cultural resource.
- 4) Further ground disturbance shall not resume within the area of discovery until a meeting has been convened with the aforementioned parties and a decision is made with the concurrence of the County Archaeologist, as to the appropriate mitigation measures.

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Monitoring:

M-CR-1 No monitoring is required. However, if during ground disturbance activities, unanticipated cultural resources are discovered, compliance with Mitigation Measure M-CR-1 (Condition of Approval 10.Planning.3) is required.

9. Archaeological Resources				
a) Alter or destroy an archaeological site.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to California Code of Regulations, Section 15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Restrict existing religious or sacred uses within the potential impact area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Source: General Plan EIR Figure 4.7-1, *Archaeological Sensitivity Areas; Phase I Cultural Resources Survey for the Bixby Highgrove Project*, Brian F. Smith and Associates, Inc., December 12, 2013 (Appendix E1)

Findings of Fact:

a & b) A Phase I Cultural Resources Survey was conducted for the Project site by BFSa, the results of which are contained in *Appendix E1* to this IS/MND. The Phase I Cultural Resources Survey includes the results of the field survey, the results of an archeological records search for a one-mile radius around the Project site conducted by the Eastern Information Center (EIC) at the University of California Riverside (UCR), and the results of the review of the Sacred Lands file by the Native American Heritage Commission (NAHC).

As a result of the cultural resources study, Brian F. Smith and Associates, Inc. determined that there is little likelihood that archaeological deposits are present within the Project boundaries. The records search indicated that one previous survey had been conducted on the property in 2007 which resulted in negative results for cultural resources. In addition, the review of the archeological records search and historic background data for the surrounding area indicated that most recorded sites are historic structures or elements of the historic irrigation infrastructure. Very few prehistoric sites are recorded for the area which could be due to the extensive introduction of citrus groves in the 1900s that likely removed most evidence of prehistoric sites in the area (BFSa, 2013a, pp. 5.0-4).

Accordingly, there is a low potential for discovery of archaeological resources. Thus, monitoring is not required. Although unlikely, the potential nonetheless exists for resources to be unearthed during ground disturbing activities. Thus, the Project's potential to physically impact an archaeological resource that could be buried beneath the surface represents a significant impact for which mitigation is required. With implementation of Mitigation Measure M-CR-1 (provided above under Threshold 8), the Project's potential to result in impacts to previously undiscovered archaeological resources would be reduced to a level below significant.

c) The Project site does not contain a cemetery and no known formal cemeteries are located within the immediate vicinity of the Project site. Field surveys conducted on the Project site did not

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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identify the presence of any human remains and no human remains are known to exist beneath the surface of the site. Nevertheless, the remote potential exists that human remains may be unearthed during grading and excavation activities associated with Project construction, and this represents a potentially significant impact for which mitigation is required. Implementation of Mitigation Measure M-CR-2 (Condition of Approval 10.Planning.2) would reduce the Project's potential impacts to human remains to a level below significant.

d) The NAHC Sacred Land File search did not indicate the presence of a sacred site within the one-mile search radius (BFSA, 2013a, pp. 4.0-1). There are no religious or sacred uses occurring within the Project site or off-site impact areas. The majority of the Project area has been disturbed by cultivation and agricultural uses for several decades (BFSA, 2013a, pp. 5.0-3). Accordingly, implementation of the proposed Project would not restrict religious or sacred uses would occur within the potential impact area. Thus, no impact would occur and no mitigation is required.

Mitigation:

M-CR-2 (Condition of Approval 10.Planning.002 - If human remains found). Pursuant to State Health and Safety Code Section 7050.5, if human remains are encountered, no further disturbance shall occur until the County Coroner has made the necessary findings as to origin. Further, pursuant to Public Resources Code Section 5097.98(b), remains shall be left in place and free from disturbance until a final decision as to the treatment and their disposition has been made. If the Riverside County Coroner determines the remains to be Native American, the Native American Heritage Commission shall be contacted by the Coroner within the period specified by law (24 hours). Subsequently, the Native American Heritage Commission shall identify the "Most Likely Descendant." The Most Likely Descendant shall then make recommendations and engage in consultation with the property owner and the County Archaeologist concerning the treatment of the remains as provided in Public Resources Code Section 5097.98. Human remains from other ethnic/cultural groups with recognized historical associations to the Project area shall also be subject to consultation between appropriate representatives from that group and the County Archaeologist.

Monitoring:

M-CR-2 No monitoring is required. However, if human remains are encountered during grading activities, compliance with Mitigation Measure M-CR-2 (Condition of Approval 10.Planning.002) is required.

10. Paleontological Resources

a) Directly or indirectly destroy a unique paleontological resource, or site, or unique geologic feature?

Source: General Plan EIR Figure 4.7.2, *Paleontological Sensitivity Areas; Paleontological Resource Assessment, Bixby Highgrove Project*, Brian F. Smith and Associates, Inc., December 10, 2013.

Findings of Fact: According to the Riverside County General Plan EIR Figure 4.7.2, *Paleontological Sensitivity Areas*, the Project site has a High Potential/Sensitivity (High A) for paleontological resources. The Project site lies on the northwestern flank of the Box Springs Mountains, which are primarily composed of Cretaceous granitic rocks. The sedimentary units on the western slopes in the

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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vicinity of the southwestern part of the Project area are mapped as geologically young Quaternary (late and middle Holocene) alluvial fan deposits, whereas the northern part of the property is overlain by Quaternary old and very old alluvial fan deposits. Holocene stream deposits are also present in the Springbrook Wash located off-site and south of the Project site. The young deposits all overlie the older units. (BFSA, 2013b, p. n.p.)

A foot survey of the Project site was conducted on November 12, 2013 by Brian F. Smith and Associates. The survey consisted of observations made along transects that were spaced at five-meter intervals across the entire property. No bones or fossils of any sort were observed during the pedestrian survey (BFSA, 2013b, p. n.p.).

A paleontological literature review and collection and records search did not identify any previously recorded fossil localities within the Project boundaries, nor within a one-mile radius of the Project site (BFSA, 2013b, p. n.p.). However, on the basis of the numerous known vertebrate fossil localities from Quaternary alluvial and alluvial fan deposits across western Riverside County, the San Bernardino County Museum regards the area of the Project site as having a high potential to contain significant paleontological resources, and thus recommends that a program be implemented to mitigate impacts to these non-renewable paleontological resources (BFSA, 2013b, p. n.p.).

The existence of Quaternary older alluvial and alluvial fan deposits across the Project site, the known abundance of terrestrial vertebrate fossils from these types of sediments in the Inland Empire of Riverside County and San Bernardino counties, and the High Paleontological Resource Potential, Sensitivity (High A) assigned to these Quaternary sediments all support the recommendation that full-time paleontological monitoring be required during all mass grading and excavation activities in order to mitigate any adverse impacts (loss or destruction) to potential nonrenewable paleontological resources (BFSA, 2013b, p. n.p.). Although the Project site does not contain any known fossils or paleontological resources, the Project's potential to physically impact unique paleontological resources that could be buried beneath the surface represents a significant impact for which mitigation is required. Implementation of Mitigation Measure M-CR-1 (Condition of Approval 10.Planning.003) would reduce the Project's potential impacts to previously undiscovered paleontological resources to below a level of significance.

Mitigation:

M-CR-3 (Condition of Approval 60.Planning.003 – Paleontologist Required) During mass grading and excavation activities, a qualified paleontologist or paleontological monitor shall conduct full-time monitoring in areas of grading or excavation in undisturbed surficial exposures of older Pleistocene alluvial and alluvial fan deposits, as well as where the over-excavation of younger alluvial fan deposits will encounter these sediments in the subsurface. All recovered specimens shall be prepared to a point of identification and permanent preservation, including screen washing sediments to recover small invertebrates and vertebrates, if indicated by the results of soil sampling. All fossils shall be deposited at the Western Science Center Museum on Searl Parkway in Hemet, Riverside County, California. All costs of the paleontological monitoring and mitigation program, including any one-time charges by the receiving institution, are the responsibility of the developer.

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

M-CR-3 A final monitoring and mitigation report of findings and significance, including lists of all fossils recovered and necessary maps and graphics to accurately record their original location shall be prepared. If any paleontological resources are encountered, a letter documenting receipt and acceptance of all fossil collections by the receiving institution must be included in the final report. The report, when submitted to (and accepted by) the appropriate lead agency, will signify satisfactory completion of the project program to mitigate impacts to any nonrenewable paleontological resources.

GEOLOGY AND SOILS Would the project

11. Alquist-Priolo Earthquake Fault Zone or County Fault Hazard Zones	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Be subject to rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Source: General Plan, Figure S-2, Earthquake Fault Study Zones; RCIT; *Preliminary Geotechnical Investigation 65 (±) Acre Property Located at the Southeast Corner of the Intersection of Center and California Avenues, Highgrove Area of Riverside County, California*, Petra Geotechnical, Inc., December 13, 2013.

Findings of Fact:

a & b) Geologically, the Project site lies within the northern portion of the Peninsular Ranges Geomorphic Province. The Peninsular Range Geomorphic Province is generally characterized by alluviated basins and elevated erosion surfaces. (Petra, 2013a, p. 4) The Project site is not located within a currently designated State of California Alquist-Priolo Earthquake Fault Zone and no known active faults have been identified on or adjacent to the site. In addition, the site does not lie within a fault zone established by the County of Riverside. The nearest active fault (design fault for the site) is the San Jacinto fault which is located approximately 2.9 miles northeast of the site. Therefore, the potential for active fault rupture at the site is considered very low and no direct seismically-induced rupture impacts would occur. (Petra, 2013a, p. 5)

A probabilistic seismic hazard analysis (HASA) was performed by Petro Geotechnical, Inc. for the site in order to determine the ground-motions for the Design-Basis earthquakes. Based on the results of the analysis, the probable peak horizontal ground acceleration would be 0.535g and the maximum credible magnitude would be 7.1 for the site (Petra, 2013a, p. 6). The Ground Motion analysis is contained in Appendix C of the Project's Geotechnical Investigation (Appendix F1).

Through mandatory compliance with Section 1613 of the 2013 California Building Code (CBC), structures proposed to be constructed on the site would be designed and constructed to resist the effects of seismic ground motions (Petra, 2013a, p. 10). Thus, impacts would be less than significant and no mitigation is required.

Mitigation: No mitigation is required.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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Monitoring: No monitoring is required.

12. Liquefaction Potential Zone

a) Be subject to seismic-related ground failure, including liquefaction?

Source: General Plan Figure S-3, Generalized Liquefaction; RCIT; *Preliminary Geotechnical Investigation 65 (±) Acre Property Located at the Southeast Corner of the Intersection of Center and California Avenues, Highgrove Area of Riverside County, California*, Petra Geotechnical, Inc., December 13, 2013.

Findings of Fact:

Seismically-induced liquefaction occurs when dynamic loading of a saturated sand or silt causes pore-water pressures to increase to levels where grain-to-grain contact is lost and material temporarily behaves as a viscous fluid. Liquefaction can cause settlement of the ground surface, settlement and tilting of engineered structures, flotation of buoyant structures, and fissuring of the ground surface. Typically, liquefaction occurs in areas where groundwater lies within the upper 50 ± feet of the ground surface. According to Riverside County GIS, the Project site is identified as having a “low” liquefaction susceptibility (RCIT, 2015).

Geologic boring testing was conducted on the Project site by Petra Geotechnical, during which groundwater was not encountered. The maximum depth explored was 51.5 feet below existing grade; therefore, groundwater is below grade at deeper levels (Petra, 2013a, p. 7). In light of the relatively deep groundwater, requirements for soil removals and compaction during grading, and the relatively dense nature of the underlying older alluvium, the potential for liquefaction and seismically induced settlement is considered low (Petra, 2013a, p. 7). Accordingly, the proposed Project would not be subject to seismic-related ground failure, including liquefaction. Impacts would be less than significant and no mitigation is required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

13. Ground-shaking Zone

Be subject to strong seismic ground shaking?

Source: RCIT; *Preliminary Geotechnical Investigation 65 (±) Acre Property Located at the Southeast Corner of the Intersection of Center and California Avenues, Highgrove Area of Riverside County, California*, Petra Geotechnical, Inc., December 13, 2013.

Findings of Fact: According to information in the Project-specific Geotechnical Investigation (Appendix F1) and as discussed under the analysis for Thresholds 11.a) and 11.b), the probable peak horizontal ground acceleration would be 0.535g and the maximum credible magnitude would be 7.1 for the site during a seismic event (Petra, 2013a, p. 6). The Ground Motion analysis is contained in Appendix C of the Project’s Geotechnical Investigation (Appendix F1). With mandatory compliance with Section 1613 of the 2013 California Building Code (CBC), structures within the site would be

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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designed and constructed to resist the effects of seismic ground motions (Petra, 2013a, p. 10). Accordingly, ground shaking impacts would be less than significant and no mitigation is required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

14. Landslide Risk

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

Source: County of Riverside General Plan HAP Figure 11, *Highgrove Area Plan Steep Slope*; County of Riverside General Plan HAP Figure 12, *Highgrove Area Plan Slope Instability*; *Preliminary Geotechnical Investigation 65 (±) Acre Property Located at the Southeast Corner of the Intersection of Center and California Avenues, Highgrove Area of Riverside County, California*, Petra Geotechnical, Inc., December 13, 2013.

Findings of Fact: Elevations on-site range from approximately 964 to 1,000 feet AMSL. The site is relatively flat and gently sloping, except for the southernmost portion of the site that slopes downward into the adjacent Springbrook Wash, which occurs off-site to the south. Based on the relatively flat topography across the site and the surrounding area, and the preservation of the southern portion of the site adjacent to Springbrook Wash as open space, the potential for landslides is considered low. Additionally, due to the site being underlain by older alluvium mantled by a relatively thin layer of topsoil, after site grading, the potential for ground subsidence, ground lurching, and lateral spreading are considered low. (Petra, 2013a, pp. 7-8) Furthermore, and as shown on County of Riverside General Plan HAP Figure 12, *Highgrove Area Plan Slope Instability*, the Project site is not located in an area mapped with existing landslides, or an area of high, moderate, or low susceptibility to seismically induced landslides and rockfalls. Accordingly, the proposed Project would not be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, collapse, or rockfall hazards. Thus, impacts are less than significant and no mitigation is required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

15. Ground Subsidence

a) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in ground subsidence?

Source: RCIT; *Preliminary Geotechnical Investigation 65 (±) Acre Property Located at the Southeast Corner of the Intersection of Center and California Avenues, Highgrove Area of Riverside County, California*, Petra Geotechnical, Inc., December 13, 2013.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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Findings of Fact:

a) The effects of areal subsidence generally occur at the transition of boundaries between low-lying areas and adjacent hillside terrain, where materials of substantially different engineering properties (i.e. alluvium vs. bedrock) are present. Riverside County GIS maps the Project site as being susceptible to subsidence (RCIT, 2015). However, Petra Geotechnical, Inc. encountered no such conditions on the Project site during geologic testing, as the area is completely underlain by older alluvium (Petra, 2013a, p. 8). During review of aerial photographs for the site and vicinity, Petra Geotechnical, Inc. observed no readily discernible features (i.e. ground fissures, linearity of depressions associated with mountain fronts, radial directed drainages, etc.) that would indicate subsidence is occurring under existing conditions. Thus, the potential for areal subsidence to affect the Project site is low and would generally be no greater than that for other developed properties in the immediate vicinity (Petra, 2013a, p. 8). Accordingly, the Project site is not located on a geologic unit that is unstable, or that would become unstable as a result of the Project and potentially result in ground subsidence. Thus, impacts are less than significant and no mitigation is required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

16. Other Geologic Hazards

a) Be subject to geologic hazards, such as seiche, mudflow, or volcanic hazard?

Source: County of Riverside General Plan HAP, Figure 8, *Highgrove Area Plan Flood Hazards*; RCIT; *Preliminary Geotechnical Investigation 65 (±) Acre Property Located at the Southeast Corner of the Intersection of Center and California Avenues, Highgrove Area of Riverside County, California*, Petra Geotechnical, Inc., December 13, 2013.

Findings of Fact:

The Project site is more than 41 miles from the Pacific Ocean and is not located in close proximity to any enclosed bodies of water. Additionally, there are no volcanoes in the Project vicinity. As such, the Project site would not be subject to inundation by tsunamis or seiches, and would not be affected by volcanos. The Project site is located approximately 16 miles southwest of the Seven Oaks Dam but is not within the Seven Oaks Dam inundation zone; therefore, inundation of the site due to dam failure or seiches during an earthquake event is considered low. (Petra, 2013a, p. 8) The Project site is located within FEMA Flood Zone X, which is defined as an area of low flooding. As shown on Figure 3-3, *Tentative Tract Map No. 36668*, the approximate 100-Year Flood Zone is located in the southern portion of the Project site in the natural open space area; thus the developed portions of the Project site would not be subject to flood hazards. Additionally, due to the relatively flat topography of the Project site and surrounding areas, there is no potential for the Project site to be impacted by mudflow hazards. The Project site would not be affected by any other geologic hazards beyond what is discussed herein under the appropriate topic heading. Accordingly, impacts would be less than significant and no mitigation would be required.

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
17. Slopes				
a) Change topography or ground surface relief features?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Create cut or fill slopes greater than 2:1 or higher than 10 feet?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Result in grading that affects or negates subsurface sewage disposal systems?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Source: County of Riverside General Plan HAP Figure 8, *Highgrove Area Plan Flood Hazards*; RCIT; *Preliminary Geotechnical Investigation 65 (±) Acre Property Located at the Southeast Corner of the Intersection of Center and California Avenues, Highgrove Area of Riverside County, California*, Petra Geotechnical, Inc., December 13, 2013.

Findings of Fact:

a) Under existing conditions, the majority of the site is relatively flat with on-site elevations ranging from approximately 964 to 1,000 feet above mean sea level (AMSL). The northern portion of the site, northerly of Spring Street, currently slopes gently downward towards the northwestern corner of the site. South of Spring Street, the site exhibits two different gradients. Approximately half of the area drains to the north towards an open trapezoidal channel along the southern side of Spring Street. This concrete channel flows west where it terminates just east of California Ave at a concrete drop inlet. The southern half of the site drains south towards Spring Brook Wash. (Webb, 2014b, p. 1)

Implementation of the proposed Project would require mass grading of the site to accommodate the proposed development. As shown on Figure 3-3, *Tentative Tract Map No. 36668*, grading planned by the Project generally would maintain the site's existing topographic conditions. The portion of the site northerly of Spring Street would continue to drain towards the northwest, while the two drainage basins in the southern portion of the site also largely would be retained. The existing slopes along the outer edge of the Springbrook Wash would be placed within an open space area and would not be impacted by Project grading. Accordingly, because the Project would generally retain the site's existing topographic relief, impacts would be less than significant and no mitigation would be required.

b) As shown on Figure 3-3, *Tentative Tract Map No. 36668*, all proposed slopes would be constructed at a maximum gradient of 2:1 (horizontal:vertical). In addition, none of the proposed slopes would exceed a height of ten feet. Accordingly, no impact would occur.

c) Under existing conditions, the Project site comprises undeveloped land with no existing uses that require wastewater treatment. However, the Project site once contained a single-family home, and it is possible that the home site was associated with a septic tank or leach field. However, because the home was removed from the site sometime prior to 2005, any septic tanks or leach fields that may still be present on-site would no longer serve any purpose. Thus, implementation of the proposed Project would not result in grading that affects or negates any active subsurface sewage disposal systems, and 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
18. Soils				
a) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Be located on expansive soil, as defined in Section 1802.3.2 of the California Building Code (2007), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Have soils incapable of adequately supporting use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Source: *Preliminary Geotechnical Investigation 65 (±) Acre Property Located at the Southeast Corner of the Intersection of Center and California Avenues, Highgrove Area of Riverside County, California*, Petra Geotechnical, Inc., December 13, 2013; *Drainage Study Report*, Albert A. Webb Associates, November 2014; *Project Specific Water Quality Management Plan*, Albert A. Webb Associates, November 2014.

Findings of Fact:

a) Proposed grading activities associated with the Project would temporarily expose underlying soils to water and air, which would increase erosion susceptibility while the soils are exposed. Exposed soils would be subject to erosion during rainfall events or high winds due to the removal of stabilizing vegetation and exposure of these erodible materials to wind and water. Erosion by water would be greatest during the first rainy season after grading and before the Project's structure foundations are established and paving and landscaping occur. Erosion by wind would be highest during periods of high wind speeds when soils are exposed.

Pursuant to the requirements of the State Water Resources Control Board, the Project Applicant is required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for construction activities. 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. Additionally, during grading and other construction activities involving soil exposure or the transport of earth materials, Chapter 15.12 (Uniform Building Code) of the Riverside County Municipal Code, which establishes, in part, requirements for the control of dust and erosion during construction, would apply to the Project. As part of the requirements of Chapter 15.12, the Project Applicant would be required to prepare an erosion control plan that would address construction fencing, sand bags, and other erosion-control features that would be implemented during the construction phase to reduce the site's potential for soil erosion or the loss of topsoil.

Following construction, wind and water erosion on the Project site would be minimized, as the areas disturbed during construction would be landscaped or covered with impervious surfaces. Only nominal areas of exposed soil, if any, would occur in the site's landscaped areas. The only potential for erosion effects to occur during Project operation would be indirect effects from storm water discharged from the property. Under proposed conditions, catch basins and underground storm drains would be installed to collect all runoff and discharge the flow into proposed extended detention basins. The streets would be used to convey flows in compliance with Riverside County requirements keeping the 10-year flow rate depth below the top of the curb and the 100-year flow rate within the right-of-way. Catch basins would be strategically located to ensure requirements are met. For areas of the site located north of Spring Street, storm flows would be treated within the infiltration/extended

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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detention basin (Lot A) for water quality and the basin also would mitigate for increased flow by utilizing an outlet structure. In addition, the outlet structure would utilize a weir in combination with the orifices to restrict the outflow from the basin during larger storm events. (Webb, 2014b, p. 3) Ultimately, flows would be discharged into the existing Center Street storm drain, and thus would not cause or contribute to any erosion hazards downstream.

The southern half of the Project site, south of Spring Street, would be split into two drainage areas. The northern half is designed to a low point located in the northwesterly corner (Lot B), adjacent to Spring Street. The basin would treat flows and mitigate for increased runoff in a similar fashion to the other basin. The existing open channel along Spring Street would be replaced by a 54-inch reinforced concrete pipe (RCP) storm drain, into which the detention basin proposed for the northwest corner of the site, would ultimately discharge. The southern half of the property south of Spring Street is designed to drain to the southwesterly corner to a proposed low point in proposed Lot C. Flows would be collected and discharged into the detention basin in Lot C. This basin is designed to discharge into the Spring Street storm drain facility. The proposed streets, water quality basins, and drainage facilities would provide adequate flood protection from the 100-year frequency storm event in accordance with Riverside County Flood Control District requirements. As concluded in the hydrology study, peak runoff during the two-year, 24-hour storm flows and 10-year, 24-hour storm flows would be slightly decreased with implementation of the Project. (Webb, 2014b, pp. 2-4)

Accordingly, because the Project's drainage would be fully controlled via the proposed on-site drainage facilities, and because the peak velocity of storm flows under the proposed Project conditions would decrease, impacts due to water erosion would be less than significant under long-term conditions.

b) According to the Project geologist (Petra Geotechnical), laboratory tests of on-site soil samples indicate the expansion potential of the surficial soils across the site is generally very low. Some clayey soils were encountered, though they were determined not to significantly affect the surficial behavior of the foundation systems. Accordingly, Petra Geotechnical concluded that on-site soils are classified as non-expansive in accordance with the 2010 CBC Section 1803.5.3 (Petra, 2013a, p. 10). Accordingly, the Project would not be located on expansive soil, as defined in Section 1802.3.2 of the California Building Code (2007), and would therefore not create substantial risks to life or property; accordingly, impacts would be less than significant.

c) No septic tanks or alternative waste water disposal systems are proposed to be constructed or expanded as part of the Project. Accordingly, no impact would occur.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

19. Erosion

a) Change deposition, siltation, or erosion that may modify the channel of a river or stream or the bed of a lake?

b) Result in any increase in water erosion either on or off site?

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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Source: Tentative Tract Map November 17, 2014; *Drainage Study Report*, Albert A. Webb Associates, November 2014; *Project Specific Water Quality Management Plan*, Albert A. Webb Associates, November 2014.

Findings of Fact:

a & b) As indicated under the discussion and analysis of Threshold 18.a), proposed grading activities associated with the Project would temporarily expose underlying soils to water and air, which would increase erosion susceptibility while the soils are exposed. Exposed soils would be subject to erosion during rainfall events or high winds due to the removal of stabilizing vegetation and exposure of these erodible materials to wind and water. Erosion by water would be greatest during the first rainy season after grading and before the Project's structure foundations are established and paving and landscaping occur. Erosion by wind would be highest during periods of high wind speeds when soils are exposed.

Pursuant to the requirements of the State Water Resources Control Board, the Project Applicant is required to obtain a National Pollutant Discharge Elimination System (NPDES) permit for construction activities. 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. Additionally, during grading and other construction activities involving soil exposure or the transport of earth materials, Chapter 15.12 (Uniform Building Code) of the Riverside County Municipal Code, which establishes, in part, requirements for the control of dust and erosion during construction, would apply to the Project. As part of the requirements of Chapter 15.12, the Project Applicant would be required to prepare an erosion control plan that would address construction fencing, sand bags, and other erosion-control features that would be implemented during the construction phase to reduce the site's potential for soil erosion or the loss of topsoil. Requirements for the reduction of particulate matter in the air also would apply, pursuant to SCAQMD Rule 403. Mandatory compliance with the Project's NPDES permit and these regulatory requirements would ensure that erosion impacts during construction activities would be less than significant. Mitigation is not required.

Following construction, erosion on the Project site would be minimized, as the areas disturbed during construction would be landscaped or covered with impervious surfaces. Only nominal areas of exposed soil, if any, would occur in the site's landscaped areas. The only potential for erosion effects to occur during Project operation would be indirect effects from storm water discharged from the property. Under proposed conditions, all drainage from the developed portions of the site would be conveyed to water quality basins for treatment. Runoff from the northern portion of the site ultimately would discharge, following treatment by the water quality basins, to the existing Center Street storm drain, while runoff from the southern portions of the site would be conveyed off-site to the south to the Springbrook Wash via the Spring Street storm drain facility following treatment. The proposed water quality basins would ensure that sediments in runoff discharged from the site is minimized. As documented by the Project's Water Quality Management Plan (WQMP) (Appendix J), the proposed water quality basins would remove sediments, thereby ensuring that Project runoff does not change the deposition, siltation, or erosion rates within the Springbrook Wash. Additionally, the required BMPs also would ensure that the Project would not result in any increase in water erosion either on or off site as compared to existing conditions. Accordingly, impacts would be less than significant and mitigation measures would not be required.

Mitigation: No mitigation is required.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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Monitoring: No monitoring is required.

20. Wind Erosion and Blowsand from project either on or off site.	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
a) Be impacted by or result in an increase in wind erosion and blowsand, either on or off site?				

Source: General Plan Figure S-8, *Wind Erosion Susceptibility Map*; Ord. 460, Sec 14.2; Ord. 484.

Findings of Fact: Proposed grading activities would expose underlying soils at the Project site which would increase wind erosion susceptibility during grading and construction activities. Exposed soils would be subject to erosion due to the removal of stabilizing vegetation and exposure of these erodible materials to wind. Erosion by wind would be highest during periods of high wind speeds.

The Project site is considered to have a "moderate" susceptibility to wind erosion (Riverside County, 2003a, Figure S-8). During grading and other construction activities involving soil exposure or the transport of earth materials, significant short-term impacts associated with wind erosion would be precluded with mandatory compliance with the Project's SWPPP and WQMP (described above) and Riverside County Ordinance No. 484.2, which establishes requirements for the control of blowing sand. In addition, the Project would be required to comply with South Coast Air Quality Management District (SCAQMD) Rule 403, which addresses the reduction of airborne particulate matter. With mandatory compliance to these regulatory requirements, wind erosion impacts would be less than significant during construction and no mitigation is required.

Following construction, wind erosion on the Project site would be very negligible, as the disturbed areas would be landscaped or covered with impervious surfaces. Therefore, implementation of the proposed Project would not significantly increase the risk of long-term wind erosion on- or off-site, and impacts would be less than significant.

Mitigation: No mitigation is required beyond mandatory compliance with the BMPs specified in the site-specific WQMP, which would be enforced as part of the Project's conditions of approval.

Monitoring: Construction contractors shall ensure compliance with the BMPs specified in the site-specific WQMP. The Riverside County Building and Safety Department shall verify that the various BMPs have been adhered to during both construction and prior to final grading inspection.

GREENHOUSE GAS EMISSIONS Would the project

21. Greenhouse Gas Emissions				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Source: *Bixby-Highgrove (Tract No. 36668) Greenhouse Gas Analysis*, Urban Crossroads, October 2, 2014.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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Findings of Fact:

Background

Global Climate Change (GCC) refers to the change in average meteorological conditions on the earth with respect to temperature, wind patterns, precipitation, and storms. Global temperatures are regulated by naturally occurring atmospheric gases such as water vapor, CO₂ (Carbon Dioxide), N₂O (Nitrous Oxide), CH₄ (Methane), hydrofluorocarbons, perfluorocarbons and sulfur hexafluoride. These particular gases are important due to their residence time (duration they stay) in the atmosphere, which ranges from 10 years to more than 100 years. These gases allow solar radiation into the Earth's atmosphere, but prevent radioactive heat from escaping, thus warming the Earth's atmosphere. GCC can occur naturally as it has in the past with the previous ice ages. According to the California Air Resources Board (CARB), the climate change since the industrial revolution differs from previous climate changes in both rate and magnitude. (Urban Crossroads, 2014b, p. 12)

Gases that trap heat in the atmosphere are often referred to as GHG's. GHG's are released into the atmosphere by both natural and anthropogenic (human) activity. Without the natural greenhouse gas effect, the Earth's average temperature would be approximately 61° Fahrenheit (F) cooler than it is currently. The cumulative accumulation of these gases in the Earth's atmosphere is considered to be the cause for the observed increase in the Earth's temperature. (Urban Crossroads, 2014b, pp. 13-14)

Although California's rate of growth of GHG emissions is slowing, the state is still a substantial contributor to the U.S. emissions inventory total. In 2004, California is estimated to have produced 492 million gross metric tons of carbon dioxide equivalent (CO₂e) GHG emissions. Despite a population increase of 16 percent between 1990 and 2004, California has substantially slowed the rate of growth of GHG emissions due to the implementation of energy efficiency programs as well as adoption of strict emission controls. (Urban Crossroads, 2014b, p. 14)

An individual project like the proposed Project cannot generate enough GHG emissions to effect a discernible change in global climate. However, the proposed Project may participate in the potential for GCC by its incremental contribution of GHG combined with the world-wide increase of all other sources of GHG, which when taken together constitute potential influences on GCC. (Urban Crossroads, 2014b, p. 12)

Methodology

CEQA Guidelines Section 15064.4(a) states that a lead agency may use a model or methodology to quantify GHG emissions associated with a project (Urban Crossroads, 2014b, p. 27). On October 2, 2013, the SCAQMD released the California Emissions Estimator Model (CalEEMod™) Emissions Inventory Model™. The purpose of this model is to more accurately calculate air quality and GHG emissions from direct and indirect sources and quantify applicable air quality and GHG reductions achieved from mitigation measures. As such, the October 2013 CalEEMod™ was used for this Project. The CalEEMod™ model includes GHG emissions from the following source categories: construction, area, energy, mobile, waste, water. (Urban Crossroads, 2014b, pp. 34-35)

Thresholds for Determining Significance

In order to assess the significance of a proposed project's environmental impacts it is necessary to identify quantitative or qualitative thresholds which, if exceeded, would constitute a finding of significance. While Project-related GHG emissions can be estimated, the direct impacts of such

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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emissions on climate change and global warming cannot be determined on the basis of available science. There is no evidence at this time that would indicate that the emissions from a project the size of the proposed Project would directly affect global climate change. As set forth by CEQA, lead agencies are allowed to follow their own discretion in making their significance determination, though they are encouraged to consider as many factors as possible.

The CEQA Guidelines indicate that a project would potentially result in a significant impact on climate change if a project were to: a) generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment, or b) conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases. Section 15064.4 of the CEQA Guidelines state that a lead agency may establish significance criteria by way of model or method and the resulting qualitative analysis may be relied upon to determine significance. (Urban Crossroads, 2014b, p. 34)

A 30% reduction from Business as Usual (BAU) conditions is utilized as the significance threshold for GHG impacts, based on the Riverside County Planning Department's Standard Operating Procedure (SOP). The "Standard Operating Procedure" released in May 2010 by the County of Riverside Planning Department states that, "until such time as a binding regulatory guidance or a more specific threshold is adopted by a regulatory agency, a demonstration by the project applicant that the project has reduced GHG emission by 30% or more below a business-as-usual-standard shall suffice for demonstrating the project has a less than significant impact." The SOP later states that "for purposes of this Standard Operating Procedure, "business-as-usual" shall mean those emissions that would occur in 2020 if the average baseline emissions during the 2002-2004 period were grown to 2020 levels without control." Therefore, for purposes of this analysis, a 30% reduction from BAU conditions is utilized as the significance threshold for GHG impacts. (Urban Crossroads, 2014b, p. 32)

Project Greenhouse Gas Impact Analysis

In order to assess the Project's potential to result in significant impacts due to GHG emissions, a Project-specific greenhouse gas analysis was conducted for the Project. A copy of the greenhouse gas analysis is provided as Appendix C to this IS/MND. It should be noted that in order to provide consistency with the Project's traffic impact analysis (IS/MND Appendix L), the greenhouse gas analysis evaluates the construction of 219 detached single-family homes whereas the Project proposes only 200 homes; thus, the analysis of impacts due to GHG emissions provided below represents a conservative estimate of Project-related impacts.

Project-Related Greenhouse Gas Emissions

On October 2, 2013, the SCAQMD in conjunction with the California Air Pollution Control Officers Association (CAPCOA) released the latest version of the California Emissions Estimator Model™ (CalEEMod™) v2013.2.2. The purpose of this model is to more accurately calculate construction-source and operational-source criteria pollutant (NO_x, VOC, PM₁₀, PM_{2.5}, SO_x, and CO) and greenhouse gas (GHG) emissions from direct and indirect sources; and quantify applicable air quality and GHG reductions achieved from mitigation measures. Accordingly, the latest version of CalEEMod™ has been used for this Project to determine construction and operational air quality impacts. Output from the model runs for both construction and operational activity are provided in Appendix 3.1 of the Project's Greenhouse Gas Analysis (Technical Appendix G). (Urban Crossroads, 2014b, pp. 34-35)

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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Construction and Operational Life-Cycle Analysis

A full life-cycle analysis (LCA) for construction and operational activity is not included in this analysis due to the lack of consensus guidance on LCA methodology at this time. Life cycle analysis assessing economy - or the GHGs from the processes in manufacturing and transporting all raw materials used in the project development, infrastructure, and on-going operations) depends on emission factors or econometric factors that are not well established for all processes. At this time a LCA would be extremely speculative and thus has not been prepared. (Urban Crossroads, 2014b, p. 35)

Construction Emissions

Construction activities associated with the proposed Project would result in emissions of CO₂ and CH₄ from construction activities. The types of construction equipment and material use would be very similar for buildout of the previously adopted zoning and the currently proposed Project. As such, GHG emissions related to construction activity identified in the Project-specific air quality impact analysis (Technical Appendix C) would represent construction activity for both the BAU and Project scenarios. For construction phase Project emissions, GHGs are quantified and amortized over the life of the Project. To amortize the emissions over the life of the Project, the SCAQMD recommends calculating the total greenhouse gas emissions for the construction activities, dividing it by the a 30 year project life then adding that number to the annual operational phase GHG emissions. As such, construction emissions were amortized over a 30 year period and added to the annual operational phase GHG emissions. (Urban Crossroads, 2014b, p. 35)

Operational Emissions

Operational activities associated with the proposed Project would result in emissions of CO₂, CH₄, and N₂O from the following primary sources:

- Area Source Emissions
- Energy Source Emissions
- Mobile Source Emissions
- Solid Waste
- Water Supply, Treatment and Distribution

Please refer to Section 3.5 of the Project's greenhouse gas analysis (Technical Appendix G) for a detailed description of the various sources of GHGs associated with the above operational characteristics. (Urban Crossroads, 2014b, p. 35)

Emissions Summary

The total amount of Project-related GHG emissions for BAU scenario would total 5,064.56 MTCO₂e as shown on Table EA-6, *Total Annual Project Greenhouse Gas Emissions (BAU Year 2005)*. The total amount of Project-related GHG emissions for the Project 2020 scenario, which accounts for compliance with regulations adopted to reduce GHGs, as well as project design features and Mitigation Measure M-GG-1 would total 3,437.40 MTCO₂e, as shown on Table EA-7, *Total Annual Project Greenhouse Gas Emissions (With Project Design Features)*.

Project design features accounted for in Table EA-7 include a network of trails and sidewalks that would provide pedestrian connections throughout the Project site and to the surrounding areas to reduce vehicle miles traveled (VMT) and emissions associated with VMT. As shown in Figure EA-6,

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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Pedestrian Connectivity, a 10-foot wide regional trail with equestrian access would enter the Project site's southwest corner, continue north along the east side of Street "C", turn right to continue along the south side of Spring Street, and exit the site at the northwest corner of Garfield Avenue and Spring Street. In addition, sidewalks would be provided along the interior roadways as well as the roadways bordering the Project site to the west, north, and east to provide pedestrian connectivity throughout the Project site and surrounding area.

Regulations that would apply to the proposed Project and that would serve to reduce GHG emissions include the following:

- Global Warming Solutions Act of 2006 (AB 32)
- Regional GHG Emissions Reduction Targets/Sustainable Communities Strategies (SB 375)
- Pavely Fuel Efficiency Standards (AB 1493). Establishes fuel efficiency ratings for new vehicles.
- Title 24 California Code of Regulations (California Building Code). Establishes energy efficiency requirements for new construction.
- Title 20 California Code of Regulations (Appliance Energy Efficiency Standards). Establishes energy efficiency requirements for appliances.
- Title 17 California Code of Regulations (Low Carbon Fuel Standard). Requires carbon content of fuel sold in California to be 10% less by 2020.
- California Water Conservation in Landscaping Act of 2006 (AB1881). Requires local agencies to adopt the Department of Water Resources updated Water Efficient Landscape Ordinance or equivalent by January 1, 2010 to ensure efficient landscapes in new development and reduced water waste in existing landscapes.
- Statewide Retail Provider Emissions Performance Standards (SB 1368). Requires energy generators to achieve performance standards for GHG emissions.
- Renewable Portfolio Standards (SB 1078). Requires electric corporations to increase the amount of energy obtained from eligible renewable energy resources to 20 percent by 2010 and 33 percent by 2020.

As shown in Table EA-8, *Summary of GHG Emissions for BAU vs. Project*, with the implementation of project design features, Mitigation Measure M-GG-1, and mandatory compliance with the above-listed regulations, the Project would achieve an emissions reduction of 32.13% when compared to the BAU scenario. This reduction meets the target reduction percentage of 30% based on Riverside County Planning Department's SOP. (Urban Crossroads, 2014b, p. 37)

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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Table EA-6 Total Annual Project Greenhouse Gas Emissions (BAU Year 2005)

Emission Source	Emissions (metric tons per year)			
	CO ₂	CH ₄	N ₂ O	Total CO ₂ E
Construction Emissions (amortized over 30 years)	129.41	0.016	--	129.75
Area	56.28	6.92e-3	9.60e-3	56.72
Energy	930.08	0.03	0.01	934.66
Mobile Sources	3,720.19	0.32	--	3,726.88
Waste	52.10	3.08	--	116.76
Water Usage	86.29	0.47	0.01	99.78
Carbon Sequestration from Trees	--	--	--	--
Total CO₂E (All Sources)	5,064.56			

Source: CalEEMod™ model output, See Appendix 3.1 of the Greenhouse Gas Analysis (Technical Appendix G) for detailed model outputs.

Note: Totals obtained from CalEEMod™ and may not total 100% due to rounding. Table results include scientific notation. e is used to represent times ten raised to the power of (which would be written as x 10^{bn}) and is followed by the value of the exponent. (Urban Crossroads, 2014b, Table 3-1)

Table EA-7 Total Annual Project Greenhouse Gas Emissions (With Project Design Features)

Emission Source	Emissions (metric tons per year)			
	CO ₂	CH ₄	N ₂ O	Total CO ₂ E
Construction Emissions (amortized over 30 years)	129.41	0.016	--	129.75
Area	56.28	4.61e-3	9.60e-4	56.68
Energy	713.12	0.03	0.01	717.19
Mobile Sources	2,376.65	0.07	--	2,378.13
Waste	52.10	3.08	--	116.76
Water Usage	48.82	0.37	9.36e-3	59.60
Carbon Sequestration from Trees	-20.71	--	--	-20.71
Total CO₂E (All Sources)	3,437.40			

Source: CalEEMod™ model output, See Appendix 3.1 of the Greenhouse Gas Analysis (Technical Appendix G) for detailed model outputs.

Note: Totals obtained from CalEEMod™ and may not total 100% due to rounding. Table results include scientific notation. e is used to represent times ten raised to the power of (which would be written as x 10^{bn}) and is followed by the value of the exponent. (Urban Crossroads, 2014b, Table 3-1)

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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Table EA-8 Summary of GHG Emissions for BAU vs. Project

Category	CO2e Emissions	
	BAU, Year 2005, full buildout, with design features without mitigation	Proposed Project, Year 2020, full buildout, with design features, without mitigation
	Metric Tons per Year	
Construction	129.75	129.75
Area	56.72	56.68
Energy Use	934.66	717.19
Mobile Sources	3,726.88	2,378.13
Waste Disposed	116.76	116.76
Water Use	99.78	59.60
Carbon Sequestration from Trees	-	-20.71
Total	5,064.56	3,437.40
Project reduction when compared to BAU	32.13%	

(Urban Crossroads, 2014b,)

Would the Project:

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

As shown in Table EA-8, with implementation of project design features, Mitigation Measure M-GG-1, and compliance with standard regulatory requirements, the Project would achieve a GHG reduction of approximately 32.13% below BAU, which exceeds the County's threshold of significance of 30% below BAU. Accordingly, the Project's GHG emissions would be less than significant on both a direct and cumulative basis, and additional mitigation (beyond M-GG-1) would not be required. (Urban Crossroads, 2014b, p. 7)

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

As indicated above, the Project would be subject to the following regulatory requirements related to GHG emissions:

- Global Warming Solutions Act of 2006 (AB 32)
- Regional GHG Emissions Reduction Targets/Sustainable Communities Strategies (SB 375)
- Pavely Fuel Efficiency Standards (AB1493). Establishes fuel efficiency ratings for new vehicles.
- Title 24 California Code of Regulations (California Building Code). Establishes energy efficiency requirements for new construction.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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- Title 20 California Code of Regulations (Appliance Energy Efficiency Standards). Establishes energy efficiency requirements for appliances.
- Title 17 California Code of Regulations (Low Carbon Fuel Standard). Requires carbon content of fuel sold in California to be 10% less by 2020.
- California Water Conservation in Landscaping Act of 2006 (AB 1881). Requires local agencies to adopt the Department of Water Resources updated Water Efficient Landscape Ordinance or equivalent by January 1, 2010 to ensure efficient landscapes in new development and reduced water waste in existing landscapes.
- Statewide Retail Provider Emissions Performance Standards (SB 1368). Requires energy generators to achieve performance standards for GHG emissions.
- Renewable Portfolio Standards (SB 1078). Requires electric corporations to increase the amount of energy obtained from eligible renewable energy resources to 20 percent by 2010 and 33 percent by 2020.

Assuming mandatory compliance with the above-listed regulatory measures, the following provides a discussion and analysis of the Project's consistency with the provisions of AB 32 and SB 375.

Project Consistency with AB 32

AB 32 requires California to reduce its GHG emissions to 1990 levels by 2020. CARB identified reduction measures to achieve this goal as set forth in the CARB Scoping Plan. Thus, projects that are consistent with the CARB Scoping Plan are also consistent with the reduction targets to achieve the requirements of AB 32. (Urban Crossroads, 2014b, p. 5)

The proposed Project would generate GHG emissions from a variety of sources which would all emit CO₂, CH₄, and N₂O. GHGs could also be indirectly generated by incremental electricity consumption and waste generation from the proposed Project. (Urban Crossroads, 2014b, p. 6)

The Scoping Plan recommends strategies for implementation at the statewide level to meet the goals of AB 32. The Scoping Plan recommendations serve as statewide strategies to reduce the state's existing GHG emissions and proposed Project's contributions. Table EA-9, *Project Consistency with Scoping Plan GHG Emission Reduction Strategies*, highlights measures that have or will be developed under the Scoping Plan and that would be applicable to the Project, and demonstrates Project compliance with each measure. Because the Project would be consistent with applicable Scoping Plan strategies, and since the Scoping Plan strategies serve to implement AB 32, the Project would not conflict with or obstruct implementation of AB 32 and a less-than-significant impact would occur. (Urban Crossroads, 2014b, p. 6)

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

Table EA-9 Project Consistency with Scoping Plan GHG Emission Reduction Strategies

Scoping Plan Measure	Measure Number	Project Consistency
Pavley Motor Vehicle Standards (AB 1493)	T-1	The project's residences would purchase vehicles in compliance with CARB vehicle standards that are in effect at the time of vehicle purchase.
Limit High GWP Use in Consumer Products	H-4	The project's residences would use consumer products that would comply with the regulations that are in effect at the time of manufacture.
Motor Vehicle Air Conditioning Systems – Reduction from Non-Professional Servicing	H-1	The project's residences would be prohibited from performing air conditioning repairs and required to use professional servicing.
Tire Pressure Program	T-4	Motor vehicles driven by the project's residences would maintain proper tire pressure when their vehicles are serviced.
Low Carbon Fuel Standard	T-2	Motor vehicles driven by project's residences would use compliant fuels in the future.
Water Use Efficiency	W-1	The project includes measures to minimize water use and maximize efficiency.
Green Buildings	GB-1	The project will be required to be constructed in compliance with state or local green building standards in effect at the time of building construction.
Air Conditioning Refrigerant Leak Test During Vehicle Smog Check	H-5	Motor vehicles driven by the project's residences would comply with the leak test requirements during smog checks.
Renewable Portfolios Standard (33% by 2020)	E-3	The electricity used by residences in the proposed project will benefit from reduced GHG emissions resulting from increased use of renewable energy sources.
Energy Efficiency Measures (Electricity)	E-1	The project will comply with energy efficiency standards for electrical appliances and other devices at the time of building construction.
Energy Efficiency (Natural Gas)	CR-1	The project will comply with energy efficiency standards for natural gas appliances and other devices at the time of building construction.
Greening New Residential and Commercial Construction	GB-1	The project's buildings would meet green building standards that are in effect at the time of design and construction.
Greening Existing Homes and Commercial Buildings	GB-1	The proposed project's buildings would meet retrofit standards when they become effective.

(Urban Crossroads, 2014b, Table 1-2)

Project Consistency with SB 375

SB 375 requires local metropolitan planning agencies to prepare a Sustainable Communities Strategy (SCS) that demonstrates how the region will meet its GHG reduction targets through integrated land use, housing, and transportation planning. The Southern California Association of Governments (SCAG) is the metropolitan planning agency for the project area. The SCS for the southern California region, including Riverside, Los Angeles, Orange, and San Bernardino counties was prepared by SCAG and approved on April 4, 2012. The SCS plans to concentrate future development and provide higher intensity development, including residential development, in proximity to transit hubs in order to reduce vehicle miles traveled and, thereby, reduce GHG emissions from personal vehicles. Specifically, the SCS distributes growth forecast data to transportation analysis zones (TAZs) for the purpose of modeling performance. (SCAG, 2012, p. 124) The growth and land use assumptions for the SCS are to be adopted at the jurisdiction level. (SCAG, 2012, p. 124; Urban Crossroads, 2014b, p. 6)

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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For Riverside County, the SCS's Growth Forecast assumes 679,000 households in 2008, and anticipates 834,000 households in 2020, and 1,092,000 in 2035. (SCAG, 2012, p. 35) Development of the Project site with up to 200 single-family homes would result in an increased population of approximately 603 persons. However, and based on the Assumptions and Methodology reported in Appendix E to the County's General Plan, implementation of the site's existing Light Industrial land use designation would yield a probable future light industrial building area of approximately 863,394 s.f., which in turn would support up to 838 jobs. The participation rate reported in Appendix E to the General Plan, which is the percent of the total population that is either employed or not employed but actively seeking employment, is 44.86% for Riverside County. Thus, the 838 jobs that would result from implementation of light industrial land uses for the site would support up to 1,868 new residents in the County. (Riverside County, 2003a, Appendix E) Accordingly, the Project's future population would fit within the growth allocation assumed by the SCS, and the Project would not conflict with the provisions of SB 375. Therefore, impacts would be less than significant. (Urban Crossroads, 2014b, p. 6)

Conclusion

As indicated in the above analysis, the proposed Project would be consistent with, or otherwise would not conflict with, the provisions of AB 32 and SB 375. Additionally, and as demonstrated under the analysis of Threshold 21.a), with project design features, the implementation of Mitigation Measure M-GG-1 and mandatory compliance with applicable regulations to reduce GHG emissions, the Project would achieve an emissions reduction of 32.13% when compared to the BAU scenario. This reduction meets the target reduction percentage of 30% based on Riverside County Planning Department's SOP. Other than the provisions of AB 32, SB 375, and the County's SOP, there are no other plans, policies, or regulations adopted for the purpose of reducing GHG emissions that are applicable to the Project. Accordingly, with implementation of Mitigation Measure M-GG-1 the Project would not conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases, and a less-than-significant impact would occur.

Mitigation:

- M-GG-1 (Condition of Approval 80.Planning.024) To reduce water demands and associated energy use, subsequent development proposals within the Project site shall incorporate a Water Conservation Strategy and demonstrate a minimum 30% reduction in outdoor water usage when compared to baseline water demand (total expected water demand without implementation of the Water Conservation Strategy). Evidence of compliance with this requirement shall be documented in a technical study to be reviewed by the Riverside County Planning Department, and shall be approved prior to issuance of building permits. The technical report shall require implementation of the following measures to reduce the Project's water demands:
- a) Landscaping palette emphasizing drought tolerant plants;
 - b) Use of water-efficient irrigation techniques;
 - c) U.S. Environmental Protection Agency (EPA) Certified WaterSense labeled or equivalent faucets, high-efficiency toilets (HETs), and water-conserving shower heads.

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

M-GG-1 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. The County shall also review final landscaping plans for compliance with this requirement, and to ensure the use of drought tolerant plants, water-efficient irrigation techniques, and the use of water saving faucets, toilets, and shower heads.

HAZARDS AND HAZARDOUS MATERIALS Would the project

22. Hazards and Hazardous Materials

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Impair implementation of or physically interfere with an adopted emergency response plan or an emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Source: Phase I Environmental Site Assessment, Petra Geotechnical, Inc., November 22, 2013; Working & Digging Near Pipelines, Kinder Morgan, 2014.

Findings of Fact:

a) The Project has the potential to create a significant hazard to the public or environment based on existing site conditions, construction of the proposed Project, and long-term operation. Each is discussed below.

Impact Analysis for Existing Conditions

A Phase I Environmental Site Assessment (ESA) was conducted for the property by Petra Geotechnical, Inc. to determine if any recognized environmental conditions exist on the site under existing conditions. Recognized environmental conditions are defined by the American Society for Testing and Materials (ASTM) as any hazardous substance or petroleum product under conditions that indicate an existing, past, or material threat of release into the structures, ground, groundwater, or surface water (Petra, 2013b, p. 1). The Phase I ESA is contained in Appendix H to this IS/MND. Based on the results of the analysis, it was determined that the Project site does not contain any underground storage tanks (USTs) or above-ground storage tanks (ASTs). Additionally, based on information from environmental agencies, it was concluded that hazardous materials were never

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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used, stored, or generated at the site. There are no existing structures that have the potential for containing asbestos, lead based paints, or fluorescent light fixtures (which may contain PCBs).

A Kinder-Morgan petroleum pipeline and Southern Pacific Railroad line and associated easements bound the western portion of the site along the alignment of California Avenue. Southern California Edison (SCE) electric power lines with wooden poles extend along the southern side of W. Spring Street, the western boundary of the site, along California Avenue from W. Spring Street to past the southern site boundary, and along the eastern site boundary from Center Street to W. Spring Street. Three (3) pole-mounted transformers were observed onsite, associated with the well-house structure (Well No. 21) on the eastern-central portion of the site. In addition, six (6) more pole-mounted transformers are located on the perimeter of the site. Two (2) are located south of Spring Street and four (4) are located west of Garfield Avenue. No staining was noted on, or under the pole mounted transformers observed. Furthermore, one pad-mounted transformer was observed in front of the well-house structure (Well No. 22) on the west-central portion of the property. No staining on the concrete pad or surrounding soils was noted associated with this pad-mounted transformer. As such, it is not anticipated that these facilities have contaminated the site with PCBs. (Petra, 2013b, p. 23)

In addition, based on a review of historical uses of the Project site, the entire site appears to have been utilized for agricultural groves/orchards since at least 1930 until sometime before 1967 when the groves/orchards were removed from the far southern end of the property. In the 1930 aerial photo residential structures are visible in the north- and southwest and portions of the site. Sometime before 2005 the residential structure on the northwest portion of the site and the remaining groves/orchards were removed from the remainder of the property and agricultural activities appear to have ceased on the site. (Petra, 2013b, p. 23) Because of the site's historical agricultural land use there is a potential that pesticides and/or herbicides persistent in the environment were applied and residual concentrations may remain in the soil on the site. (Petra, 2013b, p. 24) This is evaluated as a potentially significant impact for which mitigation would be required.

Petra Geotechnical also identified several locations on-site associated with smudge-pot storage areas and old wind-machine sites that appear to be potentially contaminated by hydrocarbon spills. (Petra, 2013b, p. 24) This is also evaluated as a significant impact for which mitigation would be required.

Additionally, it is not known whether there are any septic tanks or leach fields associated with the property. Because the site once contained a single-family home that was removed from the site sometime prior to 2005, it is possible that septic tanks or leach fields may be present on-site. If present, a potentially significant impact could result if the septic tanks/leach fields were not removed in accordance with current regulations. This is considered a potentially significant impact for which mitigation would be required.

Impact Analysis for Project Construction Activities

Heavy equipment (e.g., dozers, excavators, tractors) would be operated on the subject property during construction of the Project. The heavy equipment would likely be fueled and maintained by petroleum-based substances such as diesel fuel, gasoline, oil, and hydraulic fluid, which is considered hazardous if improperly stored or handled. In addition, materials such as paints, adhesives, solvents, and other substances typically used in building construction would be located on the Project site during construction. Improper use, storage, or transportation of hazardous materials can result in accidental releases or spills, potentially posing health risks to workers, the public, and the environment. This is a standard risk on all construction sites, and there would be no greater risk for improper handling, transportation, or spills associated with the proposed Project than would occur on

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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any other similar construction site. Construction contractors would be required to comply with all applicable federal, state, and local laws and regulations regarding the transport, use, and storage of hazardous construction-related materials, including but not limited to, requirements imposed by the Environmental Protection Agency (EPA), California Department of Toxic Substances Control (DTSC), South Coast Air Quality Management District (SCAQMD), and Santa Ana Regional Water Quality Control Board (RWQCB). Because compliance with these regulatory requirements by construction contractors is mandatory, impacts due to hazardous materials used, transported, and/or stored during construction would be less than significant.

Impact Analysis for Long-Term Operational Activities

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

b) A 6-inch petroleum pipeline owned by Kinder Morgan occurs within the existing alignment of California Street. Impacts to this existing pipeline are not anticipated by the Project, as the Project would not involve any grading or improvements within the California Street right-of-way. Construction activities associated with the Project would be subject to adherence to applicable provisions enumerated in Kinder Morgan's "Guidelines for Design and Construction" and the Office of the California State Fire Marshal Bulletin #03-001, relating to encroachments within and adjacent to pipeline easements. Standard adherence to the Kinder Morgan guidelines and the requirements of the California State Marshall would preclude any safety impacts associated with this pipeline. However, and in an abundance of caution, Mitigation Measure M-HM-3 has been identified to ensure that appropriate coordination efforts are conducted with Kinder Morgan prior to the issuance of grading permits, and to ensure that grading plan designs fully avoid any impacts to this facility. Compliance with the required mitigation would preclude any potential safety impacts that could occur associated with this pipeline.

As discussed above under Threshold 22.a), the transport, use and handling of hazardous materials on the Project site during construction is a standard risk on all construction sites, and there would be no greater risk for upset and accidents than would occur on any other similar construction site. Upon buildout, the Project site would operate as a residential community, which is a land use type not typically associated with the transport, use, or disposal of hazardous materials that could be subject to upset or accident involving the release of hazardous materials into the environment. Accordingly, and with exception of potential construction impacts to the existing petroleum pipeline, impacts associated with the accidental release of hazardous materials would be less than significant during both construction and long-term operation of the Project.

c) The Project site does not contain any emergency facilities nor does it serve as an emergency evacuation route. During construction of the proposed Project, the only existing public roadways that

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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would be affected are Garfield Avenue, Center Street, and Spring Street. Proposed improvements to Center Street and Spring Street would be limited to the parkways, and the existing travel lanes would not be affected. Proposed improvements along Garfield Avenue would involve half-width improvements, although traffic control measures would be required by the County to ensure the continued access by emergency vehicles along Garfield Avenue. Thus, impacts during Project construction would be less than significant.

Under long-term operational conditions, the proposed Project would be required to maintain adequate emergency access for emergency vehicles via Center Street, Spring Street, and Garfield Avenue and connecting on-site roadways as required by the County. Furthermore, the Project would not result in a substantial alteration to the design or capacity of any existing public road that would impair or interfere with the implementation of evacuation procedures. Because the Project would not interfere with an adopted emergency response or evacuation plan under long-term operating conditions, no impact would occur.

d) The Project site is located immediately west of Highgrove Elementary School which is located at the northeast corner of Center Street and Garfield Avenue. No other schools are located or proposed within 0.25 mile of the Project site. Grand Terrace High School is the next closest school to the Project site and is located approximately 0.8 miles north of the Project site. The potential for the Project to emit or handle hazardous or acutely hazardous materials is addressed above under the Threshold 22.a). As noted, under existing conditions the Project site has the potential to be contaminated by pesticides, herbicides, and/or petroleum, and may also contain an abandoned septic tank and/or leach fields. Implementation of Mitigation Measures M-HM-1 and M-HM-2 would ensure that the site's existing conditions are attenuated so as not to pose a risk to students at the Highgrove Elementary School.

As discussed under the response to Threshold 22.a), hazardous materials used during construction of the proposed Project is a standard risk on all construction sites, and there would be no greater risk for upset and accidents than would occur on any other similar construction site. Construction contractors would be required to comply with all applicable federal, state, and local laws and regulations regarding the transport, use, and storage of hazardous construction-related materials, including but not limited requirements imposed by the EPA, DTSC, SCAQMD, and RWQCB. Due to mandatory compliance with these regulatory requirements by construction contractors, impacts due to hazardous materials generated during construction and that could affect the adjacent school site would be less than significant.

As further noted under the response to Threshold 22.a), long-term operation of the Project site would not involve the emission or handling of hazardous materials that could pose a significant hazard to people or the environment, including the school. Although residential land uses may utilize household products that contain toxic substances, such as cleansers, paints, adhesives, and solvents, these products are usually in low concentration and small in amount and would not pose a significant risk to humans or the environment during transport to/from or use at the Project site. Pursuant to State law and local regulations, residents would be required to dispose of household hazardous waste (e.g., batteries, used oil, old paint) at a permitted household hazardous waste collection facility. Accordingly, the Project would not expose the Highgrove Elementary School to significant hazards associated with the disposal of hazardous materials at the Project site. Accordingly, the proposed Project would not emit hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school. Thus, impacts would be less than significant.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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e) A data search of the various government agency records listed in Appendix B of the Project's Phase I Environmental Site Assessment (IS/MND Appendix H), revealed no listing for the Project site. Based upon a thorough search of available federal, state, and local records, no known current regulatory action is pending with respect to the Project site. In addition, no information was obtained during the site assessment which would indicate the presence of recognized environmental conditions adjacent to the Project site that are considered likely to pose a significant impact to soils or groundwater beneath the site (Petra, 2013b, p. 20). Accordingly, the Project is not located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, and no impact would occur.

Mitigation:

- M-HM-1 (Condition of Approval 60.E.Health.001 – Environmental Cleanup Program) The Riverside County Department of Environmental Health Environmental Cleanup Program (RCDEH-ECP) has reviewed the Phase I Environmental Site Assessment (ESA) prepared by PETRA Geotechnical, Inc. dated November 22, 2013. Based on the information provided in the report and historic agricultural activity associated with the property soil sampling and analysis is required to evaluate for the presence of pesticides. The soil sampling and analysis (i.e., Limited Phase II ESA) shall be conducted prior to the issuance of grading permits, and shall be conducted in accordance to the Interim Guidance for Sampling Agricultural Properties (DTSC, 2008). In the event that the Phase II ESA identifies the presence of contaminants at levels that exceed applicable federal, state, or local regulations, then prior to commencement of grading activities, the Project Applicant shall implement the recommendations of the Phase II ESA. Grading activities at the site may not commence until completion of any required remediation efforts to the satisfaction of the Riverside County Department of Environmental Health.

- M-HM-2 (Condition of Approval 60.Planning.024) Prior to issuance of grading permits, the County shall ensure that the following note is included on the grading plans: "In the event that septic tanks or leach fields are encountered during site development, the septic tanks and/or leach fields shall be removed in accordance with current federal, state, and/or County regulations."

- M-HM-3 (Condition of Approval 60.Planning.025) Prior to issuance of a grading permit, the Project Applicant or their representative shall contact Kinder Morgan and work under their supervision and in accordance with their survey protocols to identify and flag the precise alignment of the existing 6-inch petroleum pipeline located within the existing alignment of California Street. The grading plan associated with the grading permit shall indicate the precise alignment of the Kinder Morgan pipeline, and be designed to avoid disturbance to the facility. The grading plan shall depict the Kinder Morgan pipeline in plan and profile (based on the survey data). No grading permit shall be issued until a letter of verification is received from Kinder Morgan that concurs with the measures that have been incorporated into the grading plan to ensure pipeline protection when working near this facility.

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

- M-HM-1 Prior to issuance of a grading permit, the Project Applicant shall provide evidence to the Riverside County Department of Environmental Health documenting the results of the Limited Phase II ESA and any remediation activities that were required pursuant to the Phase II ESA. A grading permit may be issued once Riverside County Department of Environmental Health verifies that the existing site conditions have been appropriately remediated.
- M-HM-2 The County shall ensure that the required note is included on Project grading plans prior to issuance of grading permits.
- M-HM-3 Prior to the issuance of grading permits, the County Building and Safety Department shall ensure that appropriate measures have been undertaken to ensure pipeline protection during Project construction activities, including the required coordination and verification efforts with Kinder Morgan.

23. Airports

a) Result in an inconsistency with an Airport Master Plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Require review by the Airport Land Use Commission?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) For a project within the vicinity of a private airstrip, or heliport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Source: County of Riverside General Plan HAP Figure 5, *March Air Reserve Base Airport Influence Policy Area*; County of Riverside General Plan HAP Figure 4, *Highgrove Area Plan Policy Areas*; 2014 March Air Reserve Base Inland Port Airport Land Use Compatibility Plan, ALUC Staff Report for Case ZAP1122MA15; Google Earth 2014.

Findings of Fact:

a) The nearest airport to the Project site is the Flabob Airport, which is located approximately 6.8 miles southwest of the Project site. Flabob airport is a small public use airport and the Project site not located in an airport land use plan covering the Flabob airport (ALUC, 2004). The Project site also is located approximately 15.2 miles northwest of the March Air Reserve Base. According to County of Riverside General Plan HAP Figure 4 and County of Riverside HAP Figure 5, the Project site was not located within the March Air Reserve Base Airport Influence Policy Area or within any airport safety zone areas at the time the County's General Plan was adopted. (Riverside County, 2003b). However, based on the more recently updated 2014 March Air Reserve Base/Inland Port (MARB/IP) Airport Land Use Compatibility Plan, the southern portion of the Project site, south of Spring Street, is located in the MARB/IP Airport Compatibility Zone E. The Land Use Compatibility Plan does not limit residential density in Compatibility Zone E. The area of the Project site north of Spring Street falls

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outside of the MARB/IP Airport Influence Area. (ALUC, 2014) TThe County of Riverside Airport Land Use Commission (ALUC) conducted a hearing on the Project on July 9, 2015, and determined that the Project is consistent with the 2014 MARB/IP Land Use Compatibility Plan, subject to standard mandatory conditions, including a condition that potential purchasers of lots located south of Spring Street be provided with a "Notice of Airport in Vicinity" disclosure. (ALUC, 2015)

b) As indicated under the analysis of Threshold 23.a), the 2014 March Air Reserve Base/Inland Port (MARB/IP) Airport Land Use Compatibility Plan identifies the southern portion of the Project site, south of Spring Street, within the MARB/IP Airport Compatibility Zone E. The County of Riverside ALUC conducted a hearing on the Project on July 9, 2015, and determined that the Project is consistent with the 2014 MARB/IP Land Use Compatibility Plan, subject to standard mandatory conditions, including a condition that potential purchasers of lots located south of Spring Street be provided with a "Notice of Airport in Vicinity" disclosure. (ALUC, 2015)

c) As discussed in Threshold 23.a), the nearest public use airport is the MARB/IP Airport located approximately 6.8 miles southwest of the Project site. The 2014 March Air Reserve Base/Inland Port (MARB/IP) Airport Land Use Compatibility Plan identifies the southern portion of the Project site, south of Spring Street, within the MARB/IP Airport Compatibility Zone E. The only uses prohibited in Airport Compatibility Zone E are hazards to flight, and no hazards to flight are proposed by the Project. (ALUC, 2015)

d) The Project site is not located within the vicinity of a private airstrip or heliport. Accordingly, the proposed Project would not result in a safety hazard for people living or residing in the Project area. No impact would occur and no mitigation is required.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

24. Hazardous Fire Area

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

Source: County of Riverside General Plan HAP Figure 9, *Highgrove Area Plan Wildfire Susceptibility*; RCIT.

Findings of Fact: According to County of Riverside General Plan HAP Figure 9, *Highgrove Area Plan Wildfire Susceptibility*, the Project site is not located within a Wildfire Zone (Riverside County, 2003b, Figure 9). According to Riverside County's "Map My County," the Project site is not located within a High Fire Area and the nearest high fire area is located approximately 1.0 mile southeast of the Project site in the area of the Box Springs Mountains. (RCIT, 2015) The Project site is surrounded to the north, east, and west by roads and developed properties, which do not pose a threat due to their developed nature. Springbrook Wash is located in an undeveloped open space area immediately to the south of the Project site and does not pose a high wildfire risk due to the wetland characteristics of this drainage. Thus, the proposed Project would not expose people or structures to a significant risk of loss or death involving wildland fires, including where wildlands are adjacent to urbanized areas or

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where residences are intermixed with wildlands. Accordingly, impacts would be less than significant and no mitigation is required.

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Source: County of Riverside General Plan HAP Figure 8, *Highgrove Area Plan Flood Hazards*; Tentative Tract Map No. 36668; *Drainage Study Report*, Albert A. Webb Associates, November 2014 (Appendix I); *Project Specific Water Quality Management Plan*, Albert A. Webb Associates, November 2014 (Appendix J); *Infiltration Test Results*, December 19, 2013, Petra Geotechnical, Inc. (Appendix F2).

Findings of Fact:

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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a) Under existing conditions, the northern portion of the Project site between Center Street and Spring Street drains to the northwest corner of the site. An existing 66-inch reinforced concrete pipe (RCP) that runs along Center Street collects the runoff from the tributary area. (Webb, 2014b, p. 1)

The portion of the Project site located south of Spring Street exhibits two separate drainage basins. Approximately half of the area drains to the north towards an open trapezoidal channel along the southern side of Spring Street. This concrete channel flows west where it terminates just east of California Ave at a concrete drop inlet. The flow collected in the existing Spring Street channel is discharged into an existing 60" RCP storm drain through the drop inlet. Runoff is then conveyed south through the 60" storm drain that parallels the railroad tracks along California Ave. The storm drain ultimately outlets into a rectangular channel that also collects the flow from Spring Brook Wash. The southern half of the site drains south towards Spring Brook Wash and continues west towards the rectangular channel. The rectangular channel is part of the Spring Street storm drain which connects to a 72" culvert that crosses California Ave. and the railroad tracks and discharges flows into an unimproved creek. (Webb, 2014b, p. 1)

As shown on Figure 3-3, *Tentative Tract Map No. 36668*, grading planned by the Project generally would maintain the site's existing topographic conditions. All runoff from the site would be collected by catch basins in individual streets and conveyed to one of the site's three proposed water quality basins.

Runoff in the northern portion of the site has been engineered to be conveyed to the water quality basin proposed in the northwest corner of the site (Lot A). Flows would be treated within the infiltration/extended detention basin in Lot A for water quality and the basin would also mitigate for increased flow by utilizing an outlet structure. The basin would rely on infiltration to dewater that basin when the volume is at or below the design capture volume. The basin outlet structure would utilize a series of orifices to restrict the outflow in order to mitigate for increased runoff due to the proposed development. In addition, the outlet structure would utilize a weir in combination with the orifices to restrict the outflow from the basin during larger storm events. This is necessary as a result of the deficient downstream storm drain facility (Center Street Storm Drain) which has capacity to convey up to the 25-year storm event. The basin in Lot A would attenuate the larger storm events and reduce outflow below a 25-year storm event. (Webb, 2014b, p. 3)

The portion of the site south of Spring Street would be split into two drainage areas. The northern portions of the site south of Spring Street would be conveyed to a low point located in the northwesterly corner, adjacent to Spring Street (Lot B). Catch basins would collect the flow and discharge the flows into a proposed infiltration basin in Lot B. The infiltration basin in Lot B would discharge into the Spring Street storm drain which also lacks capacity to convey flow for events larger than a 25-year event. The basin would provide water quality treatment for flows and mitigate for increased runoff and the deficient downstream facility. The basin in Lot B would rely on infiltration for water quality purposes and utilize an outlet structure to attenuate larger storm events. (Webb, 2014b, p. 4)

The remaining southerly portion of the site would drain to the southwesterly corner to a proposed low point. Flows would be collected and discharged into a proposed infiltration/extended detention basin within Lot C, in a similar fashion as described above for the other basins. The basin in Lot C also would outlet into the Spring Street storm drain facility. The basin would operate similarly to the other basins relying on infiltration to treat water quality flows and utilizing an outlet structure to attenuate

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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larger storm events to mitigate for increased runoff and avoid overtaxing the downstream facility which lacks capacity. (Webb, 2014b, p. 5)

As indicated in Table EA-10, *Existing vs. Proposed Hydrologic Conditions*, peak volume of flows would be reduced following implementation of the Project as compared to existing conditions for the 2-year, 24-hour and 10-year, 24-hour storm events. Thus, there would be no chance of increased erosion downstream as a result of Project runoff. The proposed water quality basins have been designed to remove pollutants, including sediments, prior to discharging runoff to downstream tributaries. Accordingly, because the Project has been designed to minimize changes to the site's existing topography and incorporates BMPs to ensure that erosion and sedimentation does not result in substantial erosion on- or off-site, impacts would be less than significant.

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 Santa Ana River Watershed and the Santa Ana River Subwatershed and is within the jurisdiction of the Santa Ana Regional Water Quality Control Board (RWQCB). Water quality information for the Santa Ana River Watershed is contained in the Santa Ana Region Basin Plan. (SARWQCB, 2008)

Table EA-10 Existing vs. Proposed Hydrologic Conditions

DRAINAGE BASIN	EXISTING CONDITION PEAK FLOW RATE		PROPOSED CONDITION PEAK FLOW RATE	
	<i>Storm Event and Duration</i>		<i>Storm Event and Duration</i>	
	<i>2-Year, 24-Hour</i>	<i>10-Year, 24-Hour</i>	<i>2-Year, 24-Hour</i>	<i>10-Year, 24-Hour</i>
A	1.39	7.29	1.38	5.67
B	0.58	3.05	0.34	2.22
C	0.22	1.15	0.19	0.77

Note: Refer to Figure 3-5 for the location of the drainage basins referenced in Table EA-10.
Source: Webb, 2014b.

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. As mentioned above, the Project site lies in the Santa Ana River Watershed. The receiving waters that the Project site is tributary to are Lake Evans, Reaches 3 and 4 of the Santa Ana River, and the Prado Basin Management Zone. There are no listed EPA Approved 303(d) listed impairments for Lake Evans. EPA Approved 303(d) listed impairments for the Santa Ana River include pathogens (Reaches 3 and 4) and metals (Reach 3 only). Impairments identified for the Prado Basin Management Zone include nutrients and pathogens. (Webb, 2014a, 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

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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. Compliance with the NPDES permit and the Water Quality Control Plan for the Santa Ana Region Basin involves the preparation and implementation of a 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 not violate any water quality standards or waste discharge requirements during construction activities. Thus, with mandatory adherence to the Project's SWPPP, water quality impacts associated with construction activities would be less than significant and no mitigation is required.

Post-Development Water Quality Impacts

Storm water pollutants commonly associated with the land uses proposed by the Project (i.e., residential, park, and open space) include bacterial indicators, nutrients, pesticides, sediments, trash/debris, and oil/grease (Webb, 2014a, p. 21). Based on current receiving water impairments (303(d) List) and allowable discharge requirements (United States Environmental Protection Agency's Total Maximum Daily Load List), the Project's pollutants of concern are nutrients and pathogens (Webb, 2014a, p. 7). To meet NPDES requirements, the Project's proposed storm drain system is designed to route first flush runoff to one of the three on-site water quality basins. The water quality basins have been sized to treat the first flush volumes from the developed portions of the site (refer to the Project's WQMP in Appendix J).

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 Appendix J of this IS/MND. The WQMP identifies structural controls (including the three detention basins) and programmatic controls (including educational materials for property owners, activity restrictions, common area litter control, street sweeping, drainage facility and maintenance, etc.) to minimize, prevent, and/or otherwise appropriately treat storm water runoff flows before they are discharged from the site. Mandatory compliance with the WQMP would ensure that the Project does not violate any water quality standards or waste discharge requirements during long-term operation. Therefore, with mandatory compliance with the Project's WQMP, water quality impacts associated with post-development activities would be less than significant and no mitigation is required.

c) No potable groundwater wells are proposed as part of the Project. Under existing conditions, the Project site contains two existing water wells located south of Spring Street. Both well sites occur along the southern alignment of Spring Street, with one well occurring near the western property line and the other near the eastern property line. The well pumps are not operating under existing conditions. The well sites would remain on the Project site but would not serve the proposed Project.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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The two wells are non-potable irrigation wells which would serve the proposed Spring Mountain Ranch Development located east of Mount Vernon Avenue (RHWC, 2014b).

The Project site is located within the Riverside Highland Water Company (RHWC) service area, which obtains its water resources exclusively from groundwater wells (RHWC, 2011, p. 5). The Basins of the Santa Ana River Watershed are among the most rigorously managed and regulated in the State. Planning and Management efforts evaluating groundwater needs and supplies have been established for most of the Basins within the watershed covering up to the next 20 to 40 years. (RHWC, 2011, p. 6) The Santa Ana Watershed Project Authority (SAWPA) adopted its 2005 Regional Groundwater Management Plan in May 2005, which identifies groundwater resources within the basin and establishes a management program to regulate such resources at a regional scale (SAWPA, 2005).

The RHWC adopted its 2010 Urban Water Management Plan (UWMP) in May 2011, which incorporates and is consistent with the 2005 Regional Groundwater Management Plan. The UWMP identifies the water district's anticipated future demands for potable water resources and the plans for meeting those demands. The UWMP demonstrates that, due to regional management of the groundwater resources, the RHWC has sufficient supplies to meet its existing and projected commitments through at least 2030 (RHWC, 2011, p. 31). Additionally, on July 10, 2014, the Riverside Highland Water Company issued a "Can Serve Letter" for the proposed Project, indicating that it has adequate capacity to serve the proposed Project from existing and planned sources (RHWC, 2014a). A copy of the "Can Serve Letter" is contained in Appendix M.

Thus, the Project's demand for domestic water service would not substantially deplete groundwater supplies such that there would be a net aquifer volume or a lowering of the local groundwater table level, and impacts would be less than significant.

Development of the Project site would increase impervious surface coverage on the site, which would in turn reduce the amount of direct infiltration of runoff into the ground. Approximately 50 percent (50%) of the Project site is proposed to be either ornamental landscaping, gravel, or native soil, and infiltration would occur over these areas (Webb, 2014a, p. 8). Although the Project would result in a substantial increase in impermeable surfaces on-site, the Project site does not provide for substantial amounts of groundwater recharge under existing conditions. Because of the geologic conditions and soils on the Project site not much water infiltrates into the groundwater table, which is over 50 feet deep (Petra, 2013a, p. 7). According to infiltration testing performed on the Project site by Petra Geotechnical, Inc. in December 2013, the native older alluvium soils present on the site are sufficiently dense to exhibit relatively low permeability. (Petra, 2013c, p. 2) Furthermore, the Project proposes three (3) extended detention basins. The bottom of the basins would be unlined, which would provide an opportunity for infiltration to the extent the underlying soil can accommodate. The detention basins would function to mitigate the increase runoff and for water quality treatment. The basins would achieve the maximum feasible level of infiltration and evapotranspiration (Webb, 2014a, p. 9).

Therefore, due to the geologic conditions on-site, depth to the existing groundwater table (i.e., over 50 feet), the incorporation of unlined extended detention basins to maximize infiltration at the site, and regional management efforts for groundwater resources, the Project would not 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, and impacts would be less than significant.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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d) Under existing conditions, the northern portion of the Project site between Center Street and Spring Street drains to the northwest corner of the site. An existing 66-inch reinforced concrete pipe (RCP) that runs along Center Street collects the runoff from the tributary area. (Webb, 2014b, p. 1) The portion of the Project site located south of Spring Street exhibits two separate drainage basins. Approximately half of the area drains to the north towards an open trapezoidal channel along the southern side of Spring Street. This concrete channel flows west where it terminates just east of California Ave at a concrete drop inlet. The flow collected in the existing Spring Street channel is discharged into an existing 60" RCP storm drain through the drop inlet. Runoff is then conveyed south through the 60" storm drain that parallels the railroad tracks along California Ave. The storm drain ultimately outlets into a rectangular channel that also collects the flow from Spring Brook Wash. The southern half of the southern portion of the site drains south towards Spring Brook Wash and continues west towards the rectangular channel. The rectangular channel is part of the Spring St. storm drain which connects to a 72" culvert that crosses California Avenue and the railroad tracks and discharges flows into an unimproved creek. (Webb, 2014b, pp. 4-5)

As previously shown on Figure 3-5, under proposed conditions, catch basins and underground storm drains would be installed to collect all runoff and discharge the flows into proposed water quality basins (infiltration/extended detention) within Lots A, B, and C. The streets would be used to convey flows in compliance with Riverside County requirements keeping the 10-year flow rate depth below the top of the curb and the 100-year flow rate within the right-of-way. Catch basins would be strategically located to ensure requirements are met. The proposed streets, water quality basins, and drainage facilities would provide adequate flood protection from the 100-year frequency storm event in accordance with Riverside County Flood Control District requirements. (Webb, 2014b, p. 3)

In addition, with implementation of the Project, the peak flow rate from each of the three proposed drainage basins would be reduced to below existing peak flow rates with construction of the detention basins in Lots A, B, and C. Specifically, runoff from the northern portion of the site (i.e., north of Spring Street) would discharge into the Center Street Storm Drain, which has capacity to convey up to the 25-year storm event. The proposed detention basin in Lot A would attenuate the large storm events and reduce outflow below a 25-year storm event. (Webb, 2014b, p. 3)

The portion of the site south of Spring Street would be split into two drainage areas. The northern portions of the site south of Spring Street would be conveyed to a low point located in the northwestern corner, adjacent to Spring Street (Lot B). Catch basins would collect the flow and discharge the flows into a proposed infiltration basin in Lot B. The infiltration basin in Lot B would discharge into the Spring Street storm drain which also lacks capacity to convey flow for events larger than a 25-year event. The basin would provide water quality treatment for flows and mitigate for increased runoff and the deficient downstream facility. The basin in Lot B would rely on infiltration for water quality purposes and utilize an outlet structure to attenuate larger storm events. (Webb, 2014b, p. 4)

The remaining southerly portion of the site would drain to the southwesterly corner to a proposed low point. Flows would be collected and discharged into a proposed infiltration/extended detention basin within Lot C, in a similar fashion as described above for the other basins. The basin in Lot C also would outlet into the Spring Street storm drain facility. The basin would operate similarly to the other basins relying on infiltration to treat water quality flows and utilizing an outlet structure to attenuate larger storm events to mitigate for increased runoff and avoid overtaxing the downstream facility which lacks capacity. (Webb, 2014b, p. 5)

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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Table EA-10 (previously presented) provides a side-by-side comparison of peak flows from the site during the 2-year, 24-hour and 10-year, 24-hour storm events. As shown, with implementation of the Project and the proposed water quality basins, peak runoff from the site during peak storm events would be decreased as compared to existing conditions. Because the existing drainage facilities that are downstream from the site under existing conditions are adequately sized to handle flows up to the 25-year storm event, and because the proposed water quality basins would attenuate post-development runoff to below the 25-year storm flows, the proposed Project would not create or contribute runoff which would exceed the capacity of existing or planned storm water drainage systems, and impacts would be less than significant. (Webb, 2014b, pp. 3-5)

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 during construction or long-term operation. Accordingly, implementation of the proposed Project would not create or contribute runoff that would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff. Thus, impacts would be less than significant and no mitigation is required.

e & f) Figure 3-3 (previously presented) depicts the existing approximate 100-year flood zone. As shown on Figure 3-3, no houses or structures are proposed within the existing flood zone; thus, the Project would not result in any impacts due to the placement of housing or structures within a 100-year flood zone.

As also shown on Figure 3-3, the Project has been designed to largely avoid improvements within this existing floodplain limit. The only improvements proposed by the Project that would encroach into the existing flood zone would be minor improvements to the knuckle at the corner of proposed Street "L" and "Street "O," and portions of the proposed regional trail that would occur primarily within the park site in Lot P. The portion of the proposed knuckle that would encroach into the existing flood zone would not require substantial amounts of grading as it would occur at a similar grade to existing conditions, and improvements within the flood zone would be limited to a small portion of the proposed 10-foot parkway (including a 5-foot curb-separated sidewalk) and a small area of travel lanes. Due to the limited area of encroachment into the flood zone and the minimal amount of grading required, construction of this roadway would not impede or redirect any flood flows. Similarly, because the 10-foot regional trail in the southern portions of the site would also require limited (if any) grading and would be constructed with decomposed granite materials that would not substantially affect site elevations, the proposed regional trail also has no potential to impede redirect flood flows.

There are no other structures proposed as part of the Project with the potential to impede or redirect flood flows. Thus, the Project would not place houses or structures within a 100-year flood hazard area that could impede or redirect flows, and impacts would be less than significant.

g) Mandatory compliance with the BMPs specified in the Project's WQMP contained as Appendix J to this IS/MND would ensure that the proposed Project does not result in any other impacts to water quality. There are no conditions associated with the proposed Project that would result in the substantial degradation of water quality beyond what is described above in the responses to Thresholds 25.a), 25.b), and 25.d). Thus, no additional impact would occur.

h) The three (3) proposed water quality basins that are designed to filter the Project's stormwater would be strategically placed at the downstream points of each of the Project site's three proposed drainage areas. Runoff from the Project site would be collected in these basins and filtered to remove

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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water pollutants before being discharged into offsite facilities and Springbrook Wash. These water quality BMPs are designed to drain within a maximum of 72 hours, which would preclude the attraction of vectors (e.g. mosquitos) and odors associated with standing water (Webb, 2014a, p. 9). The basins are an inherent part of the Project's design and, as such, the environmental effects associated with the construction and operation 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 an operation. 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 <input checked="" type="checkbox"/>	U - Generally Unsuitable <input type="checkbox"/>	R - Restricted <input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Changes in absorption rates or the rate and amount of surface runoff?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Changes in the amount of surface water in any water body?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Source: County of Riverside General Plan HAP Figure 8, *Highgrove Area Plan Flood Hazards*; Tentative Tract Map No. 36668; *Drainage Study Report*, Albert A. Webb Associates, November 2014; *Project Specific Water Quality Management Plan*, Albert A. Webb Associates, November 2014.

Findings of Fact:

a) Under existing conditions, the northern portion of the Project site between Center Street and Spring Street drains to the northwest corner of the site. An existing 66-inch reinforced concrete pipe (RCP) that runs along Center Street collects the runoff from the tributary area. (Webb, 2014b, p. 1) The portion of the Project site located south of Spring Street exhibits two separate drainage basins. Approximately half of the area drains to the north towards an open trapezoidal channel along the southern side of Spring Street. This concrete channel flows west where it terminates just east of California Ave at a concrete drop inlet. The flow collected in the existing Spring Street channel is discharged into an existing 60" RCP storm drain through the drop inlet. Runoff is then conveyed south though the 60" storm drain that parallels the railroad tracks along California Ave. The storm drain ultimately outlets into a rectangular channel that also collects the flow from Spring Brook Wash. The southern half of the southern portion of the site drains south towards Spring Brook Wash and continues west towards the rectangular channel. The rectangular channel is part of the Spring Street

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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storm drain which connects to a 72" culvert that crosses California Avenue and the railroad tracks and discharges flows into an unimproved creek (Springbrook Wash). (Webb, 2014b, pp. 4-5)

As previously shown on Figure 3-5, and as discussed under the analysis of Threshold 25.a), grading planned by the Project generally would maintain the site's existing topographic conditions. Streets proposed on-site would be used to convey flows in compliance with Riverside County requirements keeping the 10-year flow rate depth below the top of the curb and the 100-year flow rate within the right-of-way. Catch basins would be strategically located to ensure requirements are met. The proposed streets, water quality basins, and drainage facilities would provide adequate flood protection from the 100-year frequency storm event in accordance with Riverside County Flood Control District requirements. (Webb, 2014b, p. 3) As such, the Project would not alter the site's drainage pattern in a manner that would lead to flooding on-site, and impacts would be less than significant.

As previously shown on Figure 3-3, the only improvements proposed by the Project that would encroach into the existing flood zone associated with Springbrook Wash would involve minor improvements to the knuckle at the corner of proposed Street "L" and "Street "O," and portions of the proposed regional trail that would occur primarily within the park site in Lot P. The portion of the proposed knuckle that would encroach into the existing flood zone would not require substantial amounts of grading as it would occur at a similar grade to existing conditions, and improvements within the flood zone would be limited to a small portion of the proposed 10-foot parkway (including a 5-foot curb-separated sidewalk) and a small area of travel lanes. Due to the limited area of encroachment into the flood zone and the minimal amount of grading required, construction of this roadway would not substantially alter the existing drainage pattern of the Springbrook Wash. Similarly, because the 10-foot regional trail in the southern portions of the site would also require limited (if any) grading and would be constructed with decomposed granite materials that would not substantially affect flows within the Springbrook Wash. As such, improvements adjacent to the Springbrook Wash would not alter the existing drainage pattern of the Springbrook Wash in a manner that would result in flooding on- or off-site.

As previously indicated in Table EA-10, with implementation of the Project and the proposed water quality basins, peak runoff from the site during peak storm events would be decreased as compared to existing conditions. Because the existing drainage facilities that are downstream from the site under existing conditions are adequately sized to handle flows up to the 25-year storm event, and because the proposed water quality basins would attenuate post-development runoff to below the 25-year storm flows, runoff from the proposed Project would not result in flooding hazards to any off-site properties. (Webb, 2014b, p. 3)

Therefore, because the Project would generally maintain the site's existing drainage pattern, avoid impacts to the Springbrook Wash, and would reduce storm flows from the site as compared to the existing condition during peak storm events, the proposed Project would not substantially alter the existing drainage pattern of the site or area, or substantially increase the rate or amount of surface runoff, in a manner that would result in flooding on- or off-site. Therefore, impacts would be less than significant.

b) 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. Approximately 50 percent (50%) of the Project site is proposed to be either ornamental landscaping, gravel, or native soil, and infiltration would occur over these areas (Webb, 2014a, p. 8). Although the Project would result in a substantial increase in impermeable surfaces on-site, the Project site does not provide for

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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substantial amounts of groundwater recharge under existing conditions. Because of the geologic conditions and soils on the Project site not much water infiltrates into the groundwater table, which is over 50 feet deep (Petra, 2013a, p. 7). According to infiltration testing performed on the Project site by Petra Geotechnical, Inc. in December 2013, the native older alluvium soils present on the site are sufficiently dense to exhibit relatively low permeability. (Petra, 2013c, p. 2) Furthermore, the Project proposes three (3) extended detention basins. The bottom of the basins would be unlined, which would provide an opportunity for infiltration to the extent the underlying soil can accommodate. The detention basins would function to mitigate the increase runoff and for water quality treatment. The basins would achieve the maximum feasible level of infiltration and evapotranspiration (Webb, 2014a, p. 9). Therefore, due to the geologic conditions on-site, depth to the existing groundwater table (i.e., over 50 feet), the incorporation of unlined extended detention basins to maximize infiltration at the site, and regional management efforts for groundwater resources, the Project would not result in substantial changes in absorption rates as compared to existing conditions, and impacts would be less than significant.

As previously indicated in Table EA-10, the Project's proposed extended detention basins would reduce flow rates from the site during peak storm events as compared to existing conditions. Moreover, because the Project does not propose to substantially modify the site's existing drainage pattern (as discussed in detail under the discussion and analysis of Threshold 25.a)), the Project would not affect the total volume of runoff from the site.

Based on the foregoing analysis, the Project would not result in changes in absorption rates or the rate and amount of surface runoff that could result in significant environmental effects, and impacts would be less than significant.

c) As indicated on HAP Figure 8, the Project site is not located near any Dam Hazard Zones (Riverside County, 2003b, Figure 8). Accordingly, the proposed Project would not expose people or structures to a significant risk of loss, injury, or death involving flooding as a result of a levee or dam. No impact would occur and no mitigation is required.

d) As discussed in detail under the discussion and analysis of Threshold 25.a), the site's existing drainage patterns would generally be maintained under the proposed Project, with flows from the northern portions of the site being conveyed to existing drainage facilities within Center Street and runoff from the southern portions of the Project site ultimately being conveyed to the Springbrook Wash. Although the Project's proposed extended detention basins would reduce peak flows from the site, the Project would not affect the total amount of flows from the site. Thus, the Project has no potential to result in changes in the amount of surface water in any water body, and no impact would occur.

Mitigation: No mitigation is required.

Monitoring: No mitigation is required.

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
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Source: RCIT; Project Application Materials; County of Riverside General Plan HAP Figure 3, *Highgrove Area Plan Land Use Plan*; Riverside County Ord. 348; Riverside General Plan 2025 Figure LU-10, *Land Use Policy Map*; County of Riverside Planning Department Staff Report, December 4, 2013.

Findings of Fact:

a) Under existing conditions, the Project site contains undeveloped land. With implementation of the proposed Project and approval of the GPA No. 01126 and CZ 07811, the site would be converted from disturbed undeveloped land to Medium Density Residential (MDR) land uses. Although the change from disturbed undeveloped land to residential uses represents a change to the site's existing use, environmental impacts associated with such conversion are evaluated throughout this IS/MND and mitigation measures are imposed where necessary to reduce potentially significant impacts to below a level of significance.

The Project site is designated by the Riverside County General Plan and the Highgrove Area Plan as "Community Development: Light Industrial (LI)". GPA 01126 proposes to amend the Riverside County General Plan Land Use Element and Highgrove Area Plan land use designations as they pertain to the site from "LI" to "Community Development: Medium Density Residential (MDR)" which would allow for development of the site with single-family detached and attached residences with a density range of 2.0-5.0 du/ac and lot sizes ranging from 5,500 SF. to 20,000 SF. (Riverside County, 2003a, Table LU 4).

In order to support the initiation of a proposed GPA it must be established that the proposal could possibly satisfy certain required findings subject to the development review process and final CEQA determination. The Administration Element of the General Plan explains that there are four categories of amendments. Each category has distinct findings that must be made. General Plan Amendment No. 1126 is an Entitlement/Policy General Plan Amendment (GPA) because it is changing the property's land use designation from Community Development: Light Industrial (CD:LI) to Community Development: Medium Density Residential (CD:MDR). The Administration Element of the General Plan explains that two findings must be made and at least one of five additional findings must be made to justify an entitlement/policy amendment.

The Administration Element of the General Plan and Section 2.4 of Ordinance No. 348 sets forth the required findings for Entitlement/Policy General Plan Amendments. GPA No. 1126 satisfies the required findings for the reasons set forth below.

- a) General Plan Amendment No. 1126 does not involve a change in or conflict with:
 - I. the Riverside County Vision;
 - II. Any General Principle set forth in General Plan Appendix B; or
 - III. Or any foundation component designation in the General Plan.
- b) The proposed amendment would either contribute to the achievement of the purpose of the General Plan or, at a minimum, would not be detrimental to them.
- c) Special circumstances or conditions have emerged that were unanticipated in preparing the Riverside County General Plan.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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The County of Riverside Planning Department Staff Report made the following findings for GPA No. 01126. (Riverside County, 2015)

First Required Finding: *The proposed change will not involve in or conflict with either the Riverside County Vision, any General Plan Principle as set forth in General Plan Appendix B, or alter any foundation component designation in the General Plan.*

I. The proposed change does not involve a change or conflict with the Riverside Vision. The proposed Project is consistent with the Riverside county Vision because of the following:

1. The County General Plan discusses many concepts which are broken into categories including housing, population growth, community, transportation, etc. Specifically, to identify a few key concepts, the Housing Portion of the Riverside County Vision states "Mixed-use development occurs at numerous urban concentrations in city spheres and unincorporated communities, many of which include residential uses." The proposed project site is located within the City Sphere of Riverside and located within a predominantly developed area. Existing land uses adjacent to the project site consist of single family dwellings to the east and west, an existing elementary school to the east, commercial businesses to the west, and industrial facilities to the north and south. By utilizing the existing vacant site for the continuation of single family residential development, it will assist in creating a mixed-use environment of varying uses and residential density (rural residential, medium density residential, and high density residential).
2. The Transportation Element of the Riverside County Vision outlines that the "Land use/transportation connection is a key part of the development process and has served to reduce the number of vehicle trips compared to earlier patterns of development".
3. Located along Center Street (north of project boundary) is an existing Riverside Transit Agency (RTA) bus line (Route No. 14) and the proposed Hunter Park Metrolink station located approximately 1 mile to the south of the project site. The proposed project would contribute to reducing vehicular trips and improving the land use/transportation connection through being located within close vicinity of public transit lines.

II. The proposed project will not conflict with any General Plan Principle set forth In the General Plan Appendix B.

Principles in General Plan Appendix B consist of seven categories of principals; these categories of principles consist of Community Development, Environmental Protection, Transportation, Community Design, Agricultural, Rural Development, and Economic Development. The project is consistent with these principles. There are two principles that specifically apply to this Project:

1. The first principles of note is within the Community Design category, more specifically the Community Variety, Choice, and Balance Principle:

Existing communities should be revitalized through the redevelopment of under-used, vacant, redevelopment and/or infill sites within existing urbanized areas. To the extent possible, attention should be focused on brownfields and other urban sites whose rehabilitation provides not only economic benefits but also environmental improvements.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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Currently, the proposed Project site is vacant and is intended for light industrial development. Through amending the General Plan Land Use Designation, the proposed residential development would utilize a vacant site and create a compatible use within close vicinity of surrounding residential land uses that are located to the east and west of the Project site.

2. The second principle of note is within the Transportation Category, more specifically the Pedestrian, Bicycle, and Equestrian Friendly Communities Principle.

Compact development patterns and location of higher density uses near community centers should allow services to be safely accessed by walking, bicycling, or other non-motorized means. Typically, walking is a feasible option within a one-quarter to one-half mile distance. Streets, pedestrian paths and bicycle paths should contribute to a system of fully-connected and intersecting routes. Their design should encourage safe pedestrian and bicycle use. Bicycle and pedestrian paths should be conveniently located and linked to commercial, public, educational, and institutional uses.

The proposed Project is located within walking distance of community centers and community designations including the adjacent Highgrove Elementary School located to the immediate east of the project site, Grand Terrace High School and Pico Park to the northwest, and Highgrove Community Park to the northeast of the project site.

- III. Finally, General Plan Amendment No. 1126 does not involve a conflict in any foundation component designation as the existing foundation component designation of Community Development will remain unchanged.

Second Required Finding: *The proposed amendment would either contribute to the achievement of the purposes of the General Plan or, at a minimum, would not be detrimental to them.*

One of the main purposes of the General Plan is for the logical development of the County. Land Use Policy No. 22.1 defines that one of the goals of the County is to "accommodate the development of single- and multi-family residential units in areas appropriately designated by the General Plan and area plan land use maps." Currently, the project site has a Land Use Designation of Community Development: Light Industrial (CD:LI) and a zoning classification of Manufacturing-Service Commercial (M-SC) and Industrial Park (I-P). The project is surrounded to the east and west by existing properties with residential land use designations. By amending the current Land Use Designation, the proposed project would create a logical continuation of Medium Density Residential (MDR) and would utilize existing infrastructure which services the existing residential developments that are located to the east and west of the project site. By amending the General Plan designation, the project would contribute to the achievement of the purpose and would not be detrimental to the General Plan.

Third Required Finding: *Special circumstances or conditions have emerged that were unanticipated in preparing the Riverside County General Plan.*

The proposed Project site is in unincorporated Riverside County but within the City of Riverside's Sphere of Influence and potential Highgrove Annexation area. At the time the County of Riverside General Plan was adopted in October 2003 the City of Riverside's General Plan designated the Project site that is within the City's potential annexation area as Industrial. The Riverside County

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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General Plan designated the site Industrial in order to be consistent with the City of Riverside's General Plan which was in effect at the time. In November of 2007, the City of Riverside adopted its General Plan 2025. The City's General Plan 2025 amended the land use designation of the project site that is within the City's potential annexation area from Industrial to Medium Density Residential. This change in land use designation by the City of Riverside in 2007 from Industrial to Medium Density Residential was unanticipated at the time of the County of Riverside's General Plan was prepared in 2003. Thus, GPA No. 1126 is intended to reflect this special circumstance by changing the site's land use designation to provide consistency with the City of Riverside General Plan.

In addition, historically the Highgrove area has been limited to ½ acre size lots since sewer service has not been available to the area. Through the approval of both the Spring Mountain Ranch (SP323) and Springbrook Estates (SP330) Specific Plans after the 2003 General Plan was adopted, sewer has become available to the greater area. Outlined in the Highgrove Area Plan, the concern over the provision of sewer services and potential for increases in density had been addressed and required that the following findings be made:

1. The existing level of public facilities and services available to serve the project is adequate for the more intense land use, or there is a reasonable assurance that an adequate level of services will be available in the near future; and,
2. The proposed land use designation is compatible with surrounding land uses and land use designations, and will not create future land use incompatibilities.

Adequate public facilities are available and will be provided by this project. The project as designed includes adequate separators between this project and the neighboring ½ acre developments and is compatible with the existing residential land uses which consist of Low Density Residential (LDR), Medium Density Residential (MDR), and High Density Residential (HDR).

Accordingly, and based on the foregoing analysis, although the Project would result in a substantial alteration of the present land use of an area, the Project satisfies the required findings of the Administration Element of the General Plan. Furthermore, the proposed residential land use designation would ensure consistency with the City of Riverside General Plan's pre-zoning designation for the site. Impacts associated with the conversion of the site from undeveloped land to that of a residential community have been evaluated throughout this IS/MND, and where necessary, mitigation measures have been identified to reduce Project impacts to a level below significant. Accordingly, impacts would be less than significant and mitigation would not be required.

b) As discussed under Threshold 27a), the proposed Project site is in unincorporated Riverside County but within the City of Riverside's Sphere of Influence and potential Highgrove Annexation area. Proposed GPA 01126 proposes to amend the Riverside County General Plan Land Use Element and HAP Land Use Plan land use designations as they pertain to the site from "LI" to "Community Development: Medium Density Residential (MDR)." At the time the County of Riverside General Plan was adopted in October 2003 the City of Riverside's General Plan designated the Project site that is within the City's potential annexation area as Industrial. The Riverside County General Plan designated the site Industrial in order to be consistent with the City of Riverside's General Plan which was in effect at the time. In November of 2007, the City of Riverside adopted its General Plan 2025. The City's General Plan 2025 amended the land use designation of the project site that is within the City's potential annexation area from Industrial to Medium Density Residential. Thus, GPA No. 1126 is intended to reflect this special circumstance by changing the site's land use

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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designation to provide consistency with the City of Riverside General Plan. With approval of GPA 01126, the Project's land use designation would be fully consistent with the City of Riverside General Plan's pre-zoning designation for the site. Furthermore, the proposed MDR land use designation also would be more compatible with the existing residential land uses to the east and west of the Project site. There are no components of the Project with a potential to adversely affect land use within any other adjacent cities or counties such that significant environmental impacts would result. Therefore, the proposed Project would not adversely affect land use within a city sphere of influence and/or within adjacent city or county boundaries, and no impact would occur.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

28. Planning	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
a) Be consistent with the site's existing or proposed zoning?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Be compatible with existing surrounding zoning?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be compatible with existing and planned surrounding land uses?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) Be consistent with the land use designations and policies of the Comprehensive General Plan (including those of any applicable Specific Plan)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Disrupt or divide the physical arrangement of an established community (including a low-income or minority community)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Source: Riverside County General Plan; RCIT; Project Application Materials; Riverside County Ordinance 348; Riverside County Ordinance No. 625; Riverside General Plan 2025 Figure LU-10, *Land Use Policy Map*; General Plan Figure 4, *Highgrove Area Plan Policy Areas*.

Findings of Fact:

a) Under existing conditions, the Project site is zoned for "Manufacturing-Service Commercial (M-SC)" and "Industrial Park (I-P)." The Project's proposed change of zone (CZ 07811) would change the zoning designation of the site to "One Family Dwellings (R-1)," which allows for development with one family dwellings and limited agricultural uses with minimum lot size requirements of 7,200 SF. The proposed R-1 zoning designation would be consistent with and would implement the site's proposed General Plan land use designation of MDR. Accordingly, impacts would be less than significant and no mitigation is required.

b) Zoning designations surrounding the Project site include One Family Dwellings (R-1) to the east and west; Manufacturing-Service Commercial (M-SC) to the north and south; Multiple Family Dwellings (R-2) adjacent to the northeast corner of the site, north of Center Street; General Commercial (C-1/C-P) near the northwest corner of the site, south of Center Street and west of California Avenue; Light-Heavy Agriculture (A-1-2½) adjacent to the southeast corner of the site; and the City of Riverside south of the site. Lands to the south of the Project site within the City of

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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Riverside are zoned for "Business and Manufacturing Park Zone (BMP)" with the lands nearest the Project site subject to a "Water Course Overlay Zone (WC)."

The Project proposes to develop the site with up to 200 single-family homes, recreational uses, detention basins, and open space. The proposed on-site land uses would be fully compatible with the R1 and R2 zoning designations that abut the site to the west, east, and northeast. In fact, the residential uses proposed as part of the Project would be more compatible with the existing residential uses to the east and west as compared to the light industrial land uses that are allowed under the property's current zoning designations. The Project also would be fully compatible with the existing commercial zoning designations located along Center Street. Although light industrial zoning designations occur north and south of the site, the Project would be separated from these sites by the Springbrook Wash to the south and by Center Street to the north. Although lands adjacent to the southeast corner of the Project site are zoned Light-Heavy Agriculture (A-1-2½), the proposed Project would be required to comply with Riverside County Ordinance No.625.1, which 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 use may cause said operation to become a nuisance. Ordinance No. 625.1 requires notification to future residents at the time homes on-site are purchased that agricultural operations are ongoing in the area and that such uses may not be the subject of nuisance complaints. With implementation of CZ 07811 and mandatory compliance with Riverside County Ordinance No. 625, the proposed Project would be consistent with existing surrounding zoning, and impacts would be less than significant requiring no mitigation.

c) Surrounding land uses include manufacturing-commercial warehouse buildings, several single-family homes, and vacant undeveloped land to the north of the Project site, north of Center Street. Springbrook Wash is located immediately south of the Project site, beyond which are several manufacturing-commercial warehouse buildings. Immediately east of the Project site, at the southeastern corner of Center Street and Garfield Avenue, is the Highgrove Elementary School. South of the school site is undeveloped land. East of the Project site and south of Spring Street are residential land uses. Located west of the Project site is an existing single-family residential neighborhood.

GPA 01126 proposes to re-designate the 65.2-acre site from "Light Industrial (LI)" to "Medium Density Residential (MDR), 2-5 dwelling units per acre (2-5 du/ac)". CZ 07811 proposes to change the zoning designation of the site to "One Family Dwellings (R-1)," which allows for development with single family dwellings and limited agricultural uses with minimum lot size requirements of 7,200 SF. The proposed R-1 zoning designation would be consistent with and would implement the site's proposed General Plan land use designation of MDR.

The residential uses proposed by the Project would be fully compatible with the existing residential communities located to the west, east, and northeast. The proposed residential uses also would be consistent with the existing elementary school that occurs along the site's eastern boundary. It should be noted that development of the property with residential land uses would be much more compatible with these existing surrounding residential and school uses as compared to development of the property with light industrial uses, as called for by the site's existing General Plan land use designation. Although manufacturing-commercial buildings occur north and south of the Project site, the site is separated from these uses by the Springbrook Wash and Center Street, which would provide for an adequate buffer between these disparate land uses. Additionally, the Project has been designed to avoid direct and indirect impacts to the Springbrook Wash. Accordingly, the Project

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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would be fully compatible with, or otherwise would not conflict with, the site's existing surrounding land uses.

The County of Riverside General Plan and City of Riverside General Plan identify future planned land uses within the Project vicinity. Riverside County General Plan land use designations surrounding the Project site include: Light Industrial (LI) to the north; Medium Residential (MDR) north of Spring Street and east of Garfield Avenue; Low Density Residential (LDR) south of Spring Street and east of Garfield Avenue; Rural Residential (R-R) adjacent to the southeast corner of the Project site; Open Space-Conservation (O-SC) near the southern boundary of the Project site; Medium Density Residential (MDR) west of the Project site from the southern corner of the Project site to near the northern corner of the Project site; and Commercial-Retail (CR) west of the Project site at the southwestern corner of Center Street at California Avenue. South of the Project site is the City of Riverside. Lands within the City of Riverside immediately south of the site are designated by the Riverside General Plan for "Business/Office Park (B/OP)." With exception of the property located east of the Project site and south of the existing school site, these land use designations are reflective of the existing land uses that surround the Project site. As noted in the analysis presented above, the Project would be compatible with, or otherwise would not conflict with, these existing or planned land uses. Additionally, undeveloped lands located along the eastern Project boundary are identified for future development with residential land uses; thus, the Project also would not conflict with any proposed land uses in the surrounding area.

Based on the foregoing analysis, the proposed Project would be compatible with existing and planned surrounding land uses, and impacts would be less than significant requiring no mitigation.

d) The Project site is designated by the Riverside County General Plan and the Highgrove Area Plan for "Community Development: Light Industrial (LI)". GPA 01126 proposes to amend the Riverside County General Plan Land Use Element and Highgrove Area Plan land use designations as they pertain to the site from "LI" to "Community Development: Medium Density Residential (MDR)" which would allow for development of the site with residential uses. (Riverside County, 2003a, Table LU 4). With approval of GPA 01126, the Project would be fully consistent with the property's General Plan land use designation.

Prior to commencement of the Riverside County Integrated Project (RICP), the County adopted the Highgrove Community Plan. Rather than duplicate efforts for the Highgrove area as part of the RICP, the County chose to incorporate the goals, issue statements, and policies of the Community Plan within the Highgrove Area Plan Land Use Plan except as necessary to reflect adoption of Specific Plan No. 323 (Spring Mountain Ranch). As shown on HAP Figure 4, *Highgrove Area Plan Policy Area*, the proposed Project is located within the Highgrove Community Policy Area (Riverside County, 2003b). An analysis of the Project's consistency with applicable policies from the Highgrove Community Policy Area is provided below in Table EA-11, *Project Consistency with the Highgrove Community Policy Area*. As indicated in Table EA-11, the Project would be consistent with, or otherwise would not conflict with, all applicable policies from the Highgrove Community Policy Area.

Table EA-11 Project Consistency with the Highgrove Community Policy Area

Highgrove Community Policy Area Policies				Discussion of Project Consistency
Community Plan Goals				
HAP 1.1	Development	applications shall incorporate to the maximum extent feasible elements of the existing orange groves as a design feature. The		Under existing conditions, there are no orange groves on the Project site. Accordingly, the Project would not conflict with this policy.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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Highgrove Community Policy Area Policies	Discussion of Project Consistency
<p>intent is to provide visual and other buffering that will sustain the traditional rural sense of place that has long defined Highgrove.</p>	
<p>HAP 1.2 Development applications shall include strategies for minimizing vehicle trips generated within a project's boundaries.</p> <ol style="list-style-type: none"> a. Wherever possible, the developer shall provide on-site amenities which will provide pedestrian, equestrian or bicycling options for making local trips of up to 2 miles one-way distance. b. The developer shall link these amenities to scenic recreational and transportation corridors in an effort to connect to known existing and planned area trip generators. c. In order to implement scenic recreational and transportation corridors and any regional trails proposed to connect thereto, development applicants shall provide easements for public access along a project's perimeter or within or along areas of the project otherwise traversed by rights-of-way dedicated to the public use. d. Designate the following as scenic recreational and transportation corridors: <ol style="list-style-type: none"> (1) Pigeon Pass Road, from Mount Vernon Avenue to its terminus in the vicinity of the closed Highgrove Landfill. e. Development applications that incorporate designated scenic recreational and transportation corridors within their project boundaries shall construct or cause to be constructed the following recreational and transportation amenities for the use and enjoyment of the general public, according to current applicable Riverside County standards: <ol style="list-style-type: none"> (1) A combination Class I bikeway and jogging trail. (2) An equestrian path. (3) Adequate vegetative or other buffering features between the above facilities to increase their attractiveness, to promote privacy, and to reduce any potential conflicts between uses. 	<p>The Project incorporates curb-separated sidewalks along all on-site roadways (except for Center Street), which would serve to promote pedestrian activity. Additionally, each of the on-site roadways would accommodate bicycles. The on-site roadway network also has been designed to provide safe and convenient access between Center Street and the Springbrook Wash, where regional trail facilities are accommodated on-site to connect to off-site portions of the trail. The on-site portions of the 20-foot regional trail would be placed in a public use easement as part of future final map applications. The Project site is located approximately 0.9 mile west of Pigeon Pass Road and would not be prominently visible from this roadway, demonstrating the Project would not adversely affect scenic views from Pigeon Pass Road. Based on the foregoing analysis, the Project would be consistent with Policy HAP 1.2.</p>
<p>HAP 1.3 Development applications that propose more intense residential uses than otherwise allowed within the Highgrove Area Plan Land Use Plan, must satisfy the following, in addition to those policies specified under the appropriate residential density category above:</p> <ol style="list-style-type: none"> a. If a project area is greater than 40 acres in size, then a specific plan application must be submitted. b. Near natural open space amenities like the Box Springs Mountains and the Springbrook Wash, 	<p>The Project proposes a General Plan Amendment to change the site's General Plan land use designation from LI to MDR. As shown on Figure 2-5, land located immediately northeast of the site is designated for High Density Residential (HDR) development, which is a more intense residential land use than is proposed by the Project. The property currently designated for HDR is located within the Highgrove Community Policy Area. Accordingly, the Project does not propose more intense residential uses than otherwise allowed within the Highgrove Area Plan Land Use Plan. Moreover,</p>

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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Highgrove Community Policy Area Policies	Discussion of Project Consistency
<p>clustering of dwelling units shall be encouraged to promote protection of scenic values and provision of recreational open space. The minimum lot size to be allowed in a cluster development shall be 7,200 square feet.</p>	<p>the Project does not propose any deviations from the County's R-1 zoning ordinance. The TTM proposes single family homes on minimum 7,200 s.f. lots, provides a setback from the Springbrook Wash, and a detailed landscaping plan is proposed that shows amenities in all common areas. Thus, there would be no benefit to the County or any environmental benefits with preparing a specific plan. Therefore, Policy HAP 1.3 is not applicable to the proposed Project.</p>
<p>HAP 1.4 Development applications for commercial or industrial projects at locations designated for residential uses within the Highgrove Area Plan Land Use Plan must satisfy the following requirements, in addition to those specified under the "Commercial" or "Industrial" policies described in the Local Land Use Policies section.</p> <ul style="list-style-type: none"> a. The project shall be buffered with landscaping, berms, additional setbacks or other features necessary to reduce the impacts on adjacent residential uses. b. Approval of a General Plan amendment is required. 	<p>The Project does not involve development applications for commercial or industrial land uses. Accordingly, Policy HAP 1.4 is not applicable to the proposed Project.</p>
General Policies - Administrative	
<p>HAP 2.1 The Land Use Plan associated with the Highgrove Area Plan determines the location, extent, density, and intensity of land uses.</p>	<p>GPA 01126 proposes to amend the Riverside County General Plan Land Use Element and HAP Land Use Plan land use designations as they pertain to the site from "LI" to "MDR." With approval of GPA 01126, the Project would be consistent with the HAP Land Use Plan, thereby demonstrating consistency with Policy HAP 2.1.</p>
<p>HAP 2.2 The Highgrove Area Plan constitutes a portion of the Riverside County General Plan. In addition to the Highgrove Community Policy Area, all countywide policies, objectives, programs, and standards in the Riverside County General Plan apply in the determination of General Plan consistency for a land use development proposal.</p>	<p>Riverside County reviewed the proposed Project and determined the Project would be consistent with, or otherwise would not conflict with, all applicable HAP and General Plan policies, objectives, programs, and standards. Accordingly, the Project is consistent with Policy HAP 2.2.</p>
<p>HAP 2.3 Prior to approval of any proposed amendments that would permit more intense usage of a specific site, findings must be made that:</p> <ul style="list-style-type: none"> a. The existing level of public facilities and services available to serve the project is adequate for the more intense land use, or there is a reasonable assurance that an adequate level of services will be available in the near future; and b. The proposed land use designation is compatible with surrounding land uses and land use designations, and will not create future land use incompatibilities. 	<p>GPA 01126 proposes to amend the Riverside County General Plan Land Use Element and HAP Land Use Plan land use designations as they pertain to the site from "LI" to "MDR." MDR land uses represent a less intense use than LI land uses. Nonetheless, the Project site would be adequately served by public facilities and services, as demonstrated by the discussion and analysis presented throughout this IS/MND. The proposed MDR land use also would be more compatible with existing residential neighborhoods located immediately east and west of the site. Accordingly, the Project would be consistent with Policy HAP 2.3.</p>
<p>HAP 2.4 Continue collaborative jurisdictional efforts with surrounding jurisdictions for the long-range planning of the Highgrove community.</p>	<p>Policy HAP 2.4 provides direction to County staff and decision-makers, and is not applicable to the proposed Project.</p>

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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Highgrove Community Policy Area Policies	Discussion of Project Consistency
General Policies – Design and Environmental	
<p>HAP 3.1 Any building constructed within the Hazardous Fire Area shall be constructed with fire retardant roofing material as described in the Uniform Building Code and shall comply with the special construction provisions contained in the Riverside County Fire Code Standards (Ordinance 787). Any wood shingles or shakes shall have a Class B (or better) rating and shall be approved by the Riverside County Fire Department prior to installation.</p>	<p>According to HAP Figure 9, <i>Wildfire Susceptibility</i>, the Project site is not located within a Hazardous Fire Area. Accordingly, Policy HAP 3.1 is not applicable to the proposed Project.</p>
<p>HAP 3.2 The installation of water efficient fixtures and drought tolerant landscaping and the use of reclaimed water for landscaping, dust control, and other uses not involving human consumption are encouraged as means of conserving water in the area.</p>	<p>The Project would be required to install water efficient fixtures in compliance with Title 24 requirements. Additionally, the Project's proposed landscape plan is consistent with County Ordinance No. 859 (Water Efficient Landscape Requirements Ordinance), which requires substantial reductions in the amount of water used in landscaping. Additionally, the only reclaimed water facilities available in the Project vicinity are the existing reclaimed water line that would extend from the existing on-site wells to serve the Spring Mountain Ranch Development; there is insufficient capacity from the existing well sites to meet the Project's irrigation demands, and no other facilities are available in the area to serve the Project with reclaimed water. Accordingly, the Project would be consistent with Policy HAP 3.2.</p>
<p>HAP 3.3 Review development applications for projects along the Springbrook Wash to ensure that they complement the wash's function as a natural open space, wildlife, and recreation corridor.</p>	<p>As depicted on TTM 36668, the Project has been designed to preserve the on-site portions of the Springbrook Wash as natural open space, and proposed residential uses would be buffered from the wash by a proposed 2.9-acre park site. A regional trail also is accommodated within the park and connects to off-site portions of this trail. Accordingly, and in conformance with Policy HAP 3.3, the Project would complement the wash's function as a natural open space, wildlife, and recreation corridor.</p>
<p>HAP 3.4 Roads crossing drainage channels shall provide for proper drainage.</p>	<p>The Project does not propose any roadway improvements that traverse drainage channels. Accordingly, Policy HAP 3.4 is not applicable to the proposed Project.</p>
<p>HAP 3.5 The Riverside County Flood Control and Water Conservation District shall review developments proposed within areas subject to flooding, including the Springbrook Wash. Land use types and intensities permitted shall recognize and mitigate local flooding problems.</p>	<p>In conformance with Policies HAP 3.5 and HAP 3.6, the proposed Project and the Project's drainage study report (Appendix I) have been reviewed by the RCFCWCD, which determined that the proposed residential units would be adequately protected from flood hazards. The Project also would reduce peak runoff rates during peak storm events, thereby ensuring the Project has no potential to create flooding problems on- or off-site.</p>
<p>HAP 3.6 Developments proposed in areas near identified flood hazard areas, which could substantially increase surface runoff or provide substantial additional sources of polluted runoff, shall be reviewed by the Riverside County Flood Control and Water Conservation District. Land use types and intensities</p>	

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

Highgrove Community Policy Area Policies	Discussion of Project Consistency
permitted shall recognize and mitigate surface runoff quality or quantity problems.	
HAP 3.7 Development adjacent to the Springbrook Wash shall be limited to the bluffs overlooking the wash itself. A development application proposing any alteration of the wash's banks must obtain prior approval of the Riverside County Flood Control and Water Conservation District.	The Project has been designed so as to avoid impacts to the banks of the Springbrook Wash. The proposed residential units are situated on the upland portions of the site and would be buffered from the Springbrook Wash by a proposed 2.9-acre park site. Accordingly, the Project would be consistent with Policy HAP 3.7.
HAP 3.8 Development projects within the Highgrove Community Policy Area shall implement best management practices for urban pollutant runoff as prescribed by the Santa Ana Regional Drainage Area Management Plan (SAR-DAMP) and its supplements.	In compliance with the SAR-DAMP, the Project has incorporated BMPs as part of the Project-specific WQMP (Appendix I). Project-related BMPs would be enforced as conditions of approval for future implementing development applications. Accordingly, the Project would be consistent with Policy HAP 3.8.
General Policies – Recreational Trails	
HAP 4.1 The Riverside County General Plan's Regional Trails Map and the Highgrove Area Plan trails maps depict conceptual trail alignments. The precise alignment of a trail shall be based on the physical characteristics of the area. Where practical, trails have been aligned along road rights-of-way and flood control and utility easements.	According to HAP Figure 7, <i>Trails and Bikeway System</i> , a Regional Trail is planned to traverse the Project site in a northeast to southwest orientation, with an additional segment extending easterly near Spring Street. The Project proposes to accommodate a regional trail extending along the southern edge of Spring Street and extending south along Street "G" towards the proposed park site in Lot P. The on-site portion of this trail would connect to off-site portions of the trail towards the southwest. Additional trail access is available off-site along California Street. Accordingly, and in conformance with Policy HAP 4.1, the Project would be consistent with the trail designations shown on HAP Figure 7.
HAP 4.2 Trails will be developed in accordance with current Riverside County design criteria, standards, and practices. Function, safety, and scenic quality are the main criteria for their location and design.	The proposed on-site regional trail has been designed to consist of a 10-foot trail within a 20-foot easement or extended parkway, in conformance with current County design criteria, standards, and practices. The County has reviewed the proposed trail design and determined that it demonstrates function, safety, and scenic quality. Accordingly, the Project would be consistent with Policy HAP 4.3.
HAP 4.3 In order to implement any non-motorized regional multipurpose trails represented in these policies, trail routes will need to be acquired. The County's Regional Park and Open Space District will be responsible for the development and maintenance of such trails. Proposed new non-motorized regional multi-purpose trails for Highgrove include the following: a. Along Spring Street, from Michigan Avenue easterly to near the easterly terminus of its publicly dedicated right of way, turning northerly to connect to Center Street near its easterly terminus, and continuing generally easterly to the Box Springs Mountains. (Implementation of this facility and its continuation along Center Street on the opposite side of the Box Springs Mountains could eventually permit a connection	The proposed regional trail will be maintained either by the Regional Park and Open Space District or by the County of Riverside Landscape Maintenance District. The Project site is not located along any of the roadway segments specified by this policy as requiring trails. Accordingly, the Project would be consistent with Policy HAP 4.3.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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Highgrove Community Policy Area Policies	Discussion of Project Consistency
<p>to Reche Canyon Road, already designated a regional multi-purpose trail in the Riverside County Comprehensive General Plan.)</p> <p>b. From the Box Springs Mountains, at a point of connection with the facility cited in the policy above, continuing generally southerly, crossing Pigeon Pass Road, and connecting to Box Springs Mountain Park.</p> <p>c. Along Mount Vernon Avenue, from Main Street to its intersection with Pigeon Pass Road.</p> <p>d. From the Gage Canal, within or along the Springbrook Wash to Mount Vernon Avenue, continuing through or along the wash to a point of connection with the current terminus of Serpentine Road.</p>	
<p>HAP 4.4 Proposed new bike trails for Highgrove include the following:</p> <p>a. A Class II facility on Center Street, from Iowa Avenue to Michigan Avenue. (Implementation of this facility is important to pursuing an eventual connection to the Santa Ana River.)</p> <p>b. A Class II facility on Mount Vernon Avenue, from Main Street to Palmyrita Avenue.</p> <p>c. A Class II facility on California Avenue, from Center Street to the City of Riverside's incorporated limits.</p> <p>d. A Class II facility on Iowa Avenue, from Main Street to the City of Riverside's incorporated limits.</p> <p>e. A Class II facility on Main Street, from Michigan Avenue to Mount Vernon Avenue.</p> <p>f. A Class II facility on Michigan Avenue, from Main Street to Spring Street.</p> <p>g. A Class II facility on Spring Street, from Michigan Avenue to Mount Vernon Avenue.</p>	<p>The portion of Center Street that occurs along the site's frontage is currently built out, with exception of the addition of 6 feet of additional landscaped parkway that would be accommodated by the Project. According to HAP Figure 6, <i>Circulation</i>, Center Street is designated as a Secondary Highway, which is required by General Plan Figure C-4, <i>Street Classification Cross-Sections</i>, to include two 12-foot travel lanes and an 8-foot bike lane along both halves of the roadway. Similarly, Spring Street is designed to the County's standard of a Collector, which would accommodate one 12-foot travel lane and an 8-foot bike lane along both sides of the roadway. Although the Project site abuts California Avenue, no improvements to this roadway are proposed by or required of the proposed Project. Accordingly, the Project would be consistent with Policy HAP 4.4.</p>
<p>HAP 4.5 Diamond-shaped warning signs indicating "Warning: Horse Crossing" or depicting the equivalent international graphic symbol shall be installed where practicable at locations where regional or community trails as described in these policies cross public roads with relatively high amounts of traffic. Priority should be given to Center Street, Pigeon Pass Road, and roadways with more than two striped lanes. At signalized intersections, special equestrian push buttons (located at heights usable by persons riding on horseback) will be considered and installed where appropriate. As resources permit, consideration should be given to the placement of signs along those public rights-of-way identified as regional or community trail alignments alerting motorists to the possible presence of equestrian, bicycle, and pedestrian (i.e., non-motorized) traffic.</p>	<p>The on-site portions of the proposed regional trail would not cross any public roadways. Additionally, no new signalized intersections are proposed by the Project. Accordingly, the Project would not conflict with Policy HAP 4.5.</p>
<p>Local Land Use Policies – Urban Residential Development</p>	

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

Highgrove Community Policy Area Policies	Discussion of Project Consistency
<p>HAP 5.1 Additional VHDR, HDR, or MHDR residential uses shall be located within Highgrove's western urban core. VHDR uses shall be allowed only as a component of a transit-oriented mixed-use development as specified in the policy below. HDR or MHDR uses shall be allowed either as a component of a transit-oriented mixed-use development as specified in the policy below; or on parcels with appropriate existing zoning whose development applications can satisfy all other applicable policies below.</p>	<p>The Project proposes to implement MDR land uses, and does not propose any VHDR, HDR, or MHDR land uses. Accordingly, Policy HAP 5.1 is not applicable to the proposed Project.</p>
<p>HAP 5.2 Provide amenity features in conjunction with all VHDR, HDR, and MHDR developments. This may include a local park, jogging trail, or other open space feature for the use and enjoyment of residents.</p>	<p>The Project proposes to implement MDR land uses, and does not propose any VHDR, HDR, or MHDR land uses. Accordingly, Policy HAP 5.21 is not applicable to the proposed Project.</p>
<p>HAP 5.3 VHDR, HDR, MHDR, and MDR developments located adjacent to lower density residential uses shall provide transitional buffers, such as larger lot sizes along the boundary, setbacks similar to those of the adjoining rural development, block walls, landscaped berms, or a wall combined with landscaping to enhance its appearance.</p>	<p>The Project proposes to implement MDR land uses with minimum 7,200 s.f. lot sizes. To the west of the Project site is an existing residential community with lot sizes as small as 6,700 s.f. in size, while the existing residential community to the east of the site and south of Spring Street has been developed with lot sizes of approximately 20,000 s.f. in size. Six-foot community walls, which would consist of block walls with pilasters and creeping fig, would be provided along the eastern and western boundaries of the site, in conformance with Policy HAP 5.3.</p>
<p>HAP 5.4 MDR developments shall provide open space, neighborhood parks, or recreational areas to serve the needs of their residents.</p>	<p>In conformance with Policy HAP 5.4, the Project has been designed to include 2.67 acres of natural open space and two community park sites on 4.01 acres. The Project's 200 residential dwelling units would produce an estimated future population of 602 residents. Based on the County's required park standard of 5.0 acres per 1,000 new residents, the future population on-site would generate a demand for 3.01 acres of parkland. Accordingly, the proposed recreational amenities on-site are adequate to meet the recreational needs of future site residents.</p>
<p>HAP 5.5 All MDR, MHDR, HDR, VHDR, HHDR land uses require a full range of public services, as described in the Land Use Element of the Riverside County General Plan, including adequate and available circulation, water service from the City of Riverside Water Utilities OR Riverside Highland Water Company's distribution system (as applicable), sewage collection, and utilities including electricity and telephone (and, usually, natural gas and cable television) service.</p>	<p>The Project would be provided water service from the Riverside Highland Water Company, and adequate facilities are available in the surrounding area to serve the Project with sewer service, electricity, natural gas, telephone, and cable service. Accordingly, the Project would be consistent with Policy HAP 5.5.</p>
<p>HAP 5.6 All subdivisions proposing development at MDR, MHDR, HDR, VHDR, and HHDR densities must be part of improvement districts of water and sewer districts which are authorized to provide water and sewer service, or must provide evidence of an agreement with another entity for provision of sewer service. Commitments for water and sewer service</p>	<p>The Project would be provided water service by the Riverside Highland Water Company, while sewer service would be provided by the City of Riverside. The Riverside Highland Water Company has confirmed it has adequate capacity to serve the Project (refer to Appendix M). Additionally, adequate capacity exists or will exist at the Riverside Water</p>

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

Highgrove Community Policy Area Policies	Discussion of Project Consistency
<p>must be confirmed by the entities responsible for providing these services. Adequate and available water supply and sewage treatment capacities must exist at the time of construction to meet the demands of the proposed project.</p>	<p>Quality Control Plant (RWQCP) to serve the proposed Project (refer to the discussion and analysis of Threshold 46.b)). Accordingly, the Project would be consistent with Policy HAP 5.6.</p>
<p>HAP 5.7 Development applications for transit-oriented mixed use development projects must satisfy the requirements of the VHDR, HDR, MHDR, MDR, Commercial or Industrial policies of this Plan, according to the uses incorporated within the project. In addition, such applications must satisfy the following requirements:</p> <ol style="list-style-type: none"> The project shall be located within one-half mile of a future Highgrove transit station site. The project shall aggressively promote alternatives to vehicular traffic, by project design and amenities that encourage pedestrian and bicycle patronage. The project's residential component shall have a maximum residential density of 20 dwelling units per acre (VHDR). In its design and construction, this residential component shall implement measures appropriate to mitigate exterior noise and interior noise at levels consistent with its proximity to railroad rights-of-way or other significant noise sources. The project shall include a retail component that is centrally located, serves transit employees/passengers, the project's inhabitants, and potentially the greater Highgrove community. Approval of a specific plan application is required. 	<p>The Project is not a transit-oriented mixed use development. Accordingly, Policy HAP 5.7 is not applicable to the proposed Project.</p>
<p>Local Land Use Policies – Rural Density Residential Development</p>	
<p>The Project does not propose rural density residential development; accordingly, these policies are not applicable to the proposed Project.</p>	
<p>Local Land Use Policies – Industrial</p>	
<p>The Project does not propose industrial development; accordingly, these policies are not applicable to the proposed Project.</p>	
<p>Local Land Use Policies – Rural Mountainous Areas</p>	
<p>The Project does not propose rural mountainous land uses; accordingly, these policies are not applicable to the proposed Project.</p>	
<p>Local Land Use Policies – Open Space-Conservation Areas</p>	
<p>The Project site is not designated as an Open Space-Conservation area; accordingly, these policies are not applicable to the proposed Project.</p>	

Additionally, the Project site is located within the sphere of influence for the City of Riverside. The HAP incorporates policies specific to properties located within the City of Riverside sphere of influence. As indicated in Table EA-12, *Project Consistency with HAP City of Riverside Sphere of Influence Policies*, the Project would be consistent with all applicable HAP policies related to the City's sphere of influence.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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Riverside County staff also reviewed the Project for conformance with all additional policies of the County's General Plan and the HAP, and determined that the Project would be consistent with, or otherwise would not conflict with, all applicable policies. In addition, the Project is not located within a Specific Plan. Based on the foregoing analysis, the Project would be consistent with the land use designations and policies of the Comprehensive General Plan, and impacts would be less than significant.

Table EA-12 Project Consistency with HAP City of Riverside Sphere of Influence Policies

HAP Riverside Sphere of Influence Policies	Discussion of Project Consistency
HAP 11.1 Sanitary sewer service shall be provided to any new lots smaller than one acre in gross area tentatively approved through tract map or parcel map applications following the adoption of this General Plan. If sewer service is not available, a 1-acre minimum lot size shall be required.	The Project would be served with sanitary sewer service from the City of Riverside. Accordingly, the Project would be consistent with Policy HAP 11.1.
HAP 11.2 The County shall work with representatives of the City of Riverside to provide for the establishment of development standards comparable to those required by the City. Such development standards may include, but are not necessarily limited to, design standards, density, street widths, setbacks, landscaping (including reverse frontage landscaping), residential lot development (including subdivision design and grading), parking, and undergrounding of utilities.	Policy HAP 11.2 provides direction to County staff and decision-makers, and is not applicable to the proposed Project.
HAP 11.3 The County shall implement standards to provide that new development occurring in unincorporated areas will "pay its own way." The County will establish programs that will be continuing obligations of the County (utilizing Community Facilities Districts, County Service Areas, or other ongoing funding mechanisms subject to the requirements of Proposition 218) to provide for community parks, recreation programs, and libraries. The use of homeowners' associations will be limited to services or facilities serving only that specific group of property owners.	Policy HAP 11.2 provides direction to County staff and decision-makers, and is not applicable to the proposed Project.
HAP 11.4 Development applications subject to the California Environmental Quality Act (CEQA) located within the City of Riverside sphere of influence shall be forwarded to the City for review. If the development application requires zoning that would be inconsistent with the City's General Plan, a meeting shall be arranged among City staff, County staff, and the applicant to jointly review the subject development application, in order to develop a joint set of conditions/requirements.	In conformance with Policy HAP 11.4, a copy of the Project's MND will be forwarded to the City of Riverside for review during the MND's 20-day public review period. The City of Riverside General Plan designates the Project site for development with MDR land uses, and the Project would be consistent with the City's designation. Accordingly, the Project would comply with Policy HAP 11.4.

e) Under existing conditions, existing residential communities occur to the east and west of the Project site. Although the Project would be located between these existing communities, the Project would effectively serve as an extension of the surrounding residential uses. The Project has been

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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designed to accommodate appropriate pedestrian, bicycle, equestrian, and vehicular access through the site. There are no components of the proposed Project that would obstruct access or neighborhood cohesiveness between these existing surrounding communities. Additionally, the proposed residential land uses would be similar in character to the existing residential uses to the east and west. Accordingly, the proposed Project would not disrupt or divide the physical arrangement of an established community (including a low-income or minority 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Be an incompatible land use located adjacent to a State classified or designated area or existing surface mine?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Expose people or property to hazards from proposed, existing or abandoned quarries or mines?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Source: General Plan EIR Figure 4.12.1, *Mineral Resource Areas*; Project Application Materials.

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 General Plan Figure 4.12.1, *Mineral Resources Areas*, 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). According to the California Department of Conservation California Surface Mining and Reclamation Policies and Procedures, lands designated as MRZ-3 are defined as areas of undetermined mineral resource significance (CDC, 2000, p. 3). Furthermore, the Project site is not identified as an important mineral resource recovery site by the 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. Thus, no impact would occur.

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 no known active or abandoned mining or quarry operations on lands abutting the Project site. Accordingly, implementation of the proposed Project would not result in an incompatible use located adjacent to a State classified or designated area or existing surface mine. In addition, implementation

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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of the proposed Project would not expose people or property to hazards from proposed, existing, or abandoned quarries or mines. Thus, no impact would occur and no mitigation is required.

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: County of Riverside HAP Figure 4 Highgrove Area Plan Policy Areas; County of Riverside HAP Figure 5, Highgrove Area Plan March Air Reserve Base Airport Influence Policy Area; 2014 March Air Reserve Base Inland Port Airport Land Use Compatibility Plan, ALUC Staff Report for Case ZAP1122MA15; Google Earth 2014.

Findings of Fact:

a) The nearest airport to the Project site is the Flabob Airport which is located approximately 6.8 miles southwest of the Project site. Flabob airport is a small public use airport. Flabob Airport is a small public use airport and the Project site not located in an airport land use plan covering the Flabob airport (ALUC, 2004). The Project site also is located approximately 15.2 miles northwest of the March Air Reserve Base. According to County of Riverside General Plan HAP Figure 4 and County of Riverside HAP Figure 5, the Project site was not located within the March Air Reserve Base Airport Influence Policy Area or within any airport safety zone areas at the time the County's General Plan was adopted. (Riverside County, 2003b). However, based on the more recently updated 2014 March Air Reserve Base/Inland Port (MARB/IP) Airport Land Use Compatibility Plan, the southern portion of the Project site, south of Spring Street, is located in the MARB/IP Airport Compatibility Zone E (ALUC, 2014). The County of Riverside Airport Land Use Commission (ALUC) conducted a hearing on the Project on July 9, 2015, and determined that the Project is consistent with the 2014 MARB/IP Land Use Compatibility Plan, and that the Project site falls outside of the 60 CNEL contour relative to aircraft noise. ALUC indicated that standard construction for new homes is presumed to provide adequate sound attenuation, and the Project does not require special mitigation for aircraft generated noise. (ALUC, 2015)

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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b) The Project site is located 6.8 miles from the nearest airport (Flabob airport), which is a public use airport addressed above under threshold 30.a). There are no private airstrips located within two miles of the Project site. Accordingly, no impact would occur and no mitigation is required.

Mitigation: No mitigation is required.
Monitoring: No monitoring is required.

31. Railroad Noise

NA A B C D

Source: General Plan Noise Element Appendix I; County of Riverside General Plan HAP Figure 6 Highgrove Area Plan Circulation; *Noise Impact Analysis, Urban Crossroads*, November 13, 2014; Google Earth 2014.

Findings of Fact:

The nearest active railroad tracks are located approximately 867 feet from the western boundary of the Project site and run north and south parallel to Transit Avenue. Due to its proximity to the existing rail lines, the Project would experience some background noise impacts from railroad operations. The County of Riverside General Plan Noise Element requires that noise-sensitive land uses be constructed beyond the 65 dBA CNEL contour along railroad lines. Appendix I of the County's General Plan identifies railroad noise contours based on the distance to the railroad tracks. The 65 dBA CNEL noise contour extends to 648 feet and the 60 dBA CNEL noise contour extends to 1,929 feet. Accordingly, the Project site lies outside the 65 dBA CNEL noise contour and within the 60 dBA noise contour at a distance of 867 feet from the railroad tracks. (Riverside County, 2003a) Thus, future on-site homes may be exposed to noise from train horns, but the noise impacts from railroad noise would be less than significant because the Project site would not be exposed to railroad-related noise exceeding the County General Plan Noise Element standard of 65 dBA. (Urban Crossroads, 2014c, p. 47)

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; Google Earth 2014; HAP Figure 6, *Highgrove Area Plan Circulation; Noise Impact Analysis, Urban Crossroads*, November 13, 2014.

Findings of Fact: The nearest highway to the Project site is Interstate 215 (I-215) located approximately 0.65 miles west of the Project site. Due to intervening development and topography, vehicular traffic from I-215 would not expose future on-site residents to noise levels in excess of County General Plan standards and no impact would occur. Impacts from other roadways in the Project vicinity are addressed separately under Threshold 34.c).

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
33. Other Noise				
NA <input checked="" type="checkbox"/> A <input type="checkbox"/> B <input type="checkbox"/> C <input type="checkbox"/> D <input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Source: On-site Inspection; Project Application Materials, Google Earth 2014; *Noise Impact Analysis, Urban Crossroads*, November 13, 2014.

Findings of Fact: Two existing non-potable irrigation wells are located on the south side of Spring Street, immediately east of California Avenue and west of Garfield Avenue. The non-potable irrigation well pumps are not operating under existing conditions. Both of these well pad sites would remain on the Project site but would not serve the proposed Project and instead are planned to serve the proposed Spring Mountain Ranch Development located east of Mt. Vernon Avenue. When operational, the non-potable irrigation wells operate up to 12 to 15 hours during the daytime hours of 7:00 AM to 10:00 PM and operate during additional hours of 11:30 PM to 5:30 PM during the summer months. (RHWC, 2014b) Urban Crossroads measured short-term noise levels at two on-site measurement locations near each of the well pad sites. Location L1 was located approximately 30 feet north of the non-potable irrigation well that exists in the northwest portion of the site south of Spring Street. Location L2 was located approximately 30 feet north of the non-potable irrigation well that exists in the northeast portion of the Project site south of Spring Street. (Urban Crossroads, 2014c, p. 25)

As noted above, the well pumps are not operating under existing conditions. Operational noise impacts from the wells would be most noticeable when the irrigation pumps are activated, due to the noise from the 200 horsepower (hp) motors and 400 amperage (amps) electrical panels within each well pad site. Because the non-potable irrigation wells are not operating under existing conditions, to estimate the on-site operational noise impacts associated with the non-potable irrigation wells, Urban Crossroads collected reference noise level measurements in October 2014 from an existing well pad site in the Coachella Valley Water District (CVWD). At a distance of 30 feet from the reference well noise source, the measurements produced an unmitigated exterior reference noise level of 56.5 dBA Leq. While the specific noise levels at the Project site would depend on the actual operation of the irrigation wells and the intensity and hours of operation, the reference noise level of 56.5 dBA Leq was used by Urban Crossroads for the analysis of on-site future operational activity of the two non-potable irrigation well pumps. (Urban Crossroads, 2014c, pp. 53-54)

The Project proposes a 6-foot community wall with pilasters along the side yards of residential homes that abut the well pad sites, which would serve to reduce noise levels affecting these three individual homes by approximately 5.1 dBA. With construction of the planned community walls, the operational noise level impacts associated with the irrigation wells are expected to remain below the daytime exterior noise level standards of 55 dBA Leq for residential land uses. Thus, stationary noise impacts associated with the two non-potable irrigation wells affecting future site residents would be less than significant. (Urban Crossroads, 2014c, p. 5)

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
b) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Exposure of persons to or generation of excessive ground-borne vibration or ground-borne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Source: Riverside County Ordinance No. 847 Regulating Noise; *Noise Impact Analysis, Urban Crossroads*, November 13, 2014.

Findings of Fact:

a) The Project proposes residential land uses. Residential land uses are not typically associated with a substantial permanent increase in ambient noise levels above pre-existing levels. The only potential for the Project to create a substantial permanent increase in ambient noise levels is the result of future traffic generated by the proposed Project which could cause or contribute to increased traffic-related noise levels at off-site locations. The background ambient noise levels in the Project vicinity are dominated by transportation-related noise associated with the arterial roadway network and railroad operations associated with the railroad tracks located approximately 867 feet from the western boundary of the Project site.

Because all roadways in the Project's study area are existing roadways that produce traffic-related noise, the potential significance of the Project's impact to existing sensitive receptors along roadway segments would vary based on the existing noise levels that occur along each roadway segment. Table EA-13, *Significance of Cumulative Noise Impacts*, presents the significance of the Project's vehicular-related impacts in relation to the existing noise conditions of area roadways.

Table EA-13 Significance of Cumulative Noise Impacts

Without Project Noise Level (CNEL)	Project Related Significant Impact
< 60 dBA	5 dBA or more
60 - 65 dBA	3 dBA or more
> 65 dBA	1.5 dBA or more

Federal Interagency Committee on Noise (FICON), 1992
(Urban Crossroads, 2014c, pp. Table 4-1)

Table EA-14, *Project-Related Off-site Traffic Noise Impacts for Existing Conditions*, presents a comparison of the existing without and with Project conditions CNEL noise levels. Table EA-14 shows that the unmitigated exterior noise levels are expected to range from 54.2 to 70.2 dBA CNEL. Existing with Project noise level contours are expected to range from 56.2 to 70.3 dBA CNEL. Overall the Project is expected to generate an unmitigated exterior noise level increase of up to 2.9 dBA CNEL in one location, Spring Street west of proposed Street "G" (Driveway 2), where an existing single family home is located. As shown in Table EA-14, this existing home is currently exposed to noise levels of 58.3 dBA CNEL under existing conditions. Based on the significance criteria presented in Table EA-13, the Project's increase of 2.9 dBA CNEL would represent a less-than-significant impact since the without Project noise levels are below 60 dBA and the Project does not

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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produce a readily perceptible 5 dBA or greater Project related noise level increase. (Urban Crossroads, 2014c, p. 45)

Table EA-15, *Year 2018 Off-Site Project Related Traffic Noise Impacts*, presents a comparison of the Year 2018 without and with Project conditions CNEL noise levels. Table EA-15 shows that the unmitigated exterior noise levels are expected to range from 56.1 to 71.1 dBA CNEL, while the Year 2018 with Project conditions noise level contours are expected to range from 57.7 to 71.2 dBA CNEL. As shown on Table EA-15 the Project is expected to generate an unmitigated exterior noise level increase of up to 2.0 dBA CNEL at Spring Street, west of Street "G" (Driveway 2). As indicated in Table EA-15, this home would be exposed to noise levels of up to 60.4 dBA CNEL without the addition of Project traffic. Based on the significance criteria presented in Table EA-13, this increase is considered less than significant since the without Project noise levels are between 60 to 65 dBA and the Project does not produce a barely perceptible 3 dBA or greater Project-related noise level increase for Year 2018 conditions. (Urban Crossroads, 2014c, p. 45)

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

Table EA-14 Project-Related Off-site Traffic Noise Impacts for Existing Conditions

ID	Road	Segment	Adjacent Land Use ¹	CNEL at Adjacent Land Use (dBA)			Potential Significant Impact ²
				No Project	With Project	Project Addition	
1	Stephens Av.	s/o Center St.	Commercial	64.1	64.4	0.3	No
2	Highgrove Pl.	s/o Center St.	Industrial	61.6	61.9	0.3	No
3	Iowa Av.	n/o Center St.	Business/Office Park	66.9	67.0	0.1	No
4	Iowa Av.	s/o Center St.	Industrial	68.1	68.2	0.1	No
5	Iowa Av.	n/o W Citrus St.	Business/Office Park	67.8	68.0	0.2	No
6	Iowa Av.	s/o W Citrus St.	Business/Office Park	67.7	67.9	0.2	No
7	Iowa Av.	n/o Palmyrita Av.	Business/Office Park	68.0	68.1	0.1	No
8	Iowa Av.	n/o Columbia Av.	Business/Office Park	69.3	69.5	0.2	No
9	Iowa Av.	s/o Columbia Av.	Public Park	69.9	70.0	0.1	No
10	Iowa Av.	n/o Marlborough Av.	Public Park	69.7	69.8	0.1	No
11	Iowa Av.	s/o Marlborough Av.	Business/Office Park	69.7	69.9	0.2	No
12	Iowa Av.	n/o Spruce St.	Business/Office Park	70.2	70.3	0.1	No
13	Iowa Av.	s/o Spruce St.	Medium-High Density Res.	69.7	69.8	0.1	No
14	Garfield Av.	s/o Center St.	Medium Density Residential	54.2	56.2	2.0	No
15	Garfield Av.	n/o Spring St.	Medium Density Residential	54.2	56.2	2.0	No
16	Center St.	w/o Stephens Av.	Medium Density Residential	66.0	66.1	0.1	No
17	Center St.	e/o Stephens Av.	Medium Density Residential	65.9	66.2	0.3	No
18	Center St.	w/o Iowa Av.	Business/Office Park	66.6	67.0	0.4	No
19	Center St.	e/o Iowa Av.	Industrial	65.1	66.1	1.0	No
20	Center St.	w/o Driveway 1	Medium Density Residential	63.8	64.5	0.7	No
21	Center St.	e/o Driveway 1	Medium Density Residential	63.8	64.1	0.3	No
22	Spring St.	w/o Driveway 2	Medium Density Residential	58.3	61.2	2.9	No
23	Spring St.	e/o Driveway 2	Medium Density Residential	58.3	59.5	1.2	No
24	Palmyrita Av.	e/o Iowa Av.	Business/Office Park	57.4	57.4	0.0	No
25	Columbia Av.	w/o Iowa Av.	Business/Office Park	67.3	67.4	0.1	No
26	Spruce St.	w/o Iowa Av.	Medium-High Density Res.	66.6	66.7	0.1	No
27	Spruce St.	e/o Iowa Av.	High Density Residential	66.2	66.3	0.1	No

1. Source: City of Riverside General Plan Land Use/Urban Design Element, November 2007.

2. Significance of Cumulative Impacts (refer to Table EA-13).
(Urban Crossroads, 2014c, Table 7-7)

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

Table EA-15 Year 2018 Off-Site Project Related Traffic Noise Impacts

ID	Road	Segment	Adjacent Land Use ¹	CNEL at Adjacent Land Use (dBA)			Potential Significant Impact ²
				No Project	With Project	Project Addition	
1	Stephens Av.	s/o Center St.	Commercial	65.9	66.1	0.2	No
2	Highgrove Pl.	s/o Center St.	Industrial	63.5	63.8	0.3	No
3	Iowa Av.	n/o Center St.	Business/Office Park	67.5	67.5	0.0	No
4	Iowa Av.	s/o Center St.	Industrial	68.6	68.8	0.2	No
5	Iowa Av.	n/o W Citrus St.	Business/Office Park	68.3	68.5	0.2	No
6	Iowa Av.	s/o W Citrus St.	Business/Office Park	68.3	68.5	0.2	No
7	Iowa Av.	n/o Palmyrita Av.	Business/Office Park	68.5	68.7	0.2	No
8	Iowa Av.	n/o Columbia Av.	Business/Office Park	70.4	70.6	0.2	No
9	Iowa Av.	s/o Columbia Av.	Public Park	70.8	70.9	0.1	No
10	Iowa Av.	n/o Marlborough Av.	Public Park	70.7	70.8	0.1	No
11	Iowa Av.	s/o Marlborough Av.	Business/Office Park	70.7	70.8	0.1	No
12	Iowa Av.	n/o Spruce St.	Business/Office Park	71.1	71.2	0.1	No
13	Iowa Av.	s/o Spruce St.	Medium-High Density Res.	70.5	70.6	0.1	No
14	Garfield Av.	s/o Center St.	Medium Density Residential	58.6	59.5	0.9	No
15	Garfield Av.	n/o Spring St.	Medium Density Residential	58.3	59.2	0.9	No
16	Center St.	w/o Stephens Av.	Medium Density Residential	66.8	66.8	0.0	No
17	Center St.	e/o Stephens Av.	Medium Density Residential	67.6	67.8	0.2	No
18	Center St.	w/o Iowa Av.	Business/Office Park	68.4	68.7	0.3	No
19	Center St.	e/o Iowa Av.	Industrial	68.0	68.5	0.5	No
20	Center St.	w/o Driveway 1	Medium Density Residential	67.3	67.6	0.3	No
21	Center St.	e/o Driveway 1	Medium Density Residential	67.2	67.4	0.2	No
22	Spring St.	w/o Driveway 2	Medium Density Residential	60.4	62.4	2.0	No
23	Spring St.	e/o Driveway 2	Medium Density Residential	60.6	61.2	0.6	No
24	Palmyrita Av.	e/o Iowa Av.	Business/Office Park	56.1	57.7	1.6	No
25	Columbia Av.	w/o Iowa Av.	Business/Office Park	68.8	68.9	0.1	No
26	Spruce St.	w/o Iowa Av.	Medium-High Density Res.	67.2	67.3	0.1	No
27	Spruce St.	e/o Iowa Av.	High Density Residential	66.8	66.8	0.0	No

1. Source: City of Riverside General Plan Land Use/Urban Design Element, November 2007.

2. Significance of Cumulative Impacts (refer to Table EA-13).
(Urban Crossroads, 2014c, Table 7-8)

Table EA-16, *Year 2035 Off-Site Project Related Traffic Noise Impacts*, presents a comparison of the Year 2035 without and with Project conditions CNEL noise levels. Table EA-16 shows that the unmitigated exterior noise levels are expected to range from 59.5 to 74.1 dBA CNEL while the Year 2035 with Project conditions noise level contours are expected to range from 60.4 to 74.2 dBA CNEL. As shown on Table EA-16 the Project is expected to generate an unmitigated exterior noise level increase of up to 0.9 dBA CNEL at Garfield Avenue north of Spring Street. As indicated on Table EA-16, this home would be exposed to noise levels of up to 58.3 dBA CNEL without the addition of Project traffic. Based on the significance criteria presented in Table EA-13, this increase is considered less than significant since the without Project noise levels are below 60 dBA and the Project does not produce a readily perceptible 5 dBA or greater Project related noise level increase. (Urban Crossroads, 2014c, p. 45)

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

Table EA-16 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
				No Project	With Project	Project Addition	
1	Stephens Av.	s/o Center St.	Commercial	67.2	67.4	0.2	No
2	Highgrove Pl.	s/o Center St.	Industrial	64.6	64.8	0.2	No
3	Iowa Av.	n/o Center St.	Business/Office Park	69.0	69.0	0.0	No
4	Iowa Av.	s/o Center St.	Industrial	72.3	72.3	0.0	No
5	Iowa Av.	n/o W Citrus St.	Business/Office Park	72.8	72.9	0.1	No
6	Iowa Av.	s/o W Citrus St.	Business/Office Park	72.7	72.8	0.1	No
7	Iowa Av.	n/o Palmyrita Av.	Business/Office Park	73.1	73.2	0.1	No
8	Iowa Av.	n/o Columbia Av.	Business/Office Park	73.5	73.6	0.1	No
9	Iowa Av.	s/o Columbia Av.	Public Park	74.1	74.1	0.0	No
10	Iowa Av.	n/o Marlborough Av.	Public Park	74.1	74.1	0.0	No
11	Iowa Av.	s/o Marlborough Av.	Business/Office Park	74.1	74.2	0.1	No
12	Iowa Av.	n/o Spruce St.	Business/Office Park	74.1	74.2	0.1	No
13	Iowa Av.	s/o Spruce St.	Medium-High Density Res.	73.0	73.1	0.1	No
14	Garfield Av.	s/o Center St.	Medium Density Residential	59.7	60.4	0.7	No
15	Garfield Av.	n/o Spring St.	Medium Density Residential	59.5	60.4	0.9	No
16	Center St.	w/o Stephens Av.	Medium Density Residential	68.3	68.4	0.1	No
17	Center St.	e/o Stephens Av.	Medium Density Residential	68.9	69.1	0.2	No
18	Center St.	w/o Iowa Av.	Business/Office Park	69.6	69.8	0.2	No
19	Center St.	e/o Iowa Av.	Industrial	69.2	69.6	0.4	No
20	Center St.	w/o Driveway 1	Medium Density Residential	67.6	67.9	0.3	No
21	Center St.	e/o Driveway 1	Medium Density Residential	67.6	67.8	0.2	No
22	Spring St.	w/o Driveway 2	Medium Density Residential	62.4	63.1	0.7	No
23	Spring St.	e/o Driveway 2	Medium Density Residential	62.4	62.8	0.4	No
24	Palmyrita Av.	e/o Iowa Av.	Business/Office Park	62.6	62.6	0.0	No
25	Columbia Av.	w/o Iowa Av.	Business/Office Park	71.9	72.0	0.1	No
26	Spruce St.	w/o Iowa Av.	Medium-High Density Res.	67.4	67.5	0.1	No
27	Spruce St.	e/o Iowa Av.	High Density Residential	70.6	70.6	0.0	No

1. Source: City of Riverside General Plan Land Use/Urban Design Element, November 2007.

2. Significance of Cumulative Impacts (refer to Table EA-13).
(Urban Crossroads, 2014c, Table 7-9)

Based on the foregoing analysis, the proposed Project would not result in a substantial permanent increase in ambient noise levels in the Project vicinity above levels existing without the Project, and impacts would be less than significant.

b) The Project's only potential to result in a substantial temporary or periodic increase in noise levels would be during short-term construction activities, as long-term operation of the Project as a residential community would not result in the generation of any measurable temporary or periodic noise increases.

Riverside County Ordinance 847, *Regulating Noise*, indicates that noise sources associated with any private construction activity located within 0.75 mile from an inhabited dwelling is prohibited between the hours of 6:00 PM and 6:00 AM during the months of June through September and between the

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hours of 6:00 PM and 7:00 AM during the months of October through May. The County of Riverside does not specify exterior noise level limits for construction-related noise impacts. (Urban Crossroads, 2014c, p. 57)

As defined in Riverside County Ordinance No. 847, a sensitive receptor is a land use that is identified as sensitive to noise, including, but not limited to, residences, schools, hospitals, churches, rest homes, cemeteries, or public libraries. Sensitive noise receivers in the vicinity of the Project site were analyzed by Urban Crossroads to assess the off-site construction noise level impacts. As a result of this analysis, nine (9) noise receiver locations were identified as follows: (Urban Crossroads, 2014c, p. 51)

- R1: Location R1 is located approximately 100 feet southwest of the Project site and represents residential land uses on Prospect Avenue.
- R2: Location R2 represents the existing residential homes located approximately 74 feet west of the Project Site north of Spring Street.
- R3: Location R3 represents the residential uses located approximately 74 feet west of the Project site and south of Center Street.
- R4: Location R4 represents the existing residential homes located approximately 134 feet north of the Project site and north of Center Street.
- R5: Location R5 represents the existing residential homes located approximately 117 feet northeast of the Project site near the intersection of Center Street and Garfield Avenue.
- R6: Location R6 represents Highgrove Elementary School, located approximately 82 feet east of the Project site, near the intersection of Center Street and Garfield Avenue.
- R7: Location R7 represents the existing residential homes located approximately 1,030 feet east of the Project site, on Michigan Avenue.
- R8: Location R8 represents the existing residential homes located approximately 57 feet southeast of the Project site, south of Spring Street on Sweetser.
- R9: Location R9 represents existing residential homes located approximately 109 feet southeast of the Project site, on Keown Court.

The Project construction noise impacts would include both short-term mobile equipment and long-term stationary equipment. Short-term mobile construction activities (e.g., nail guns, hammers, power saws, drills, etc.) generated throughout the Project site are not staged or stationary. During construction, all of the long-term construction equipment (generators, compressors, pumps) staging activities would be located in areas that would create the greatest distance between construction-related noise sources and the noise sensitive receptors (as required by Mitigation Measure M-N-3). It is expected that the Project construction activities would consist primarily of short-term mobile equipment.

In addition to the on-site construction activities, planned off-site improvements include construction of a ten-inch water line within the existing improved alignment in Center Street extending from proposed

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Street A approximately 1,900 feet to the east to the existing intersection of Center Street and Michigan Avenue. In addition, the Project would be required to construct an eight-inch water line within the existing Spring Street from the juncture of proposed Street G and Spring Street approximately 720 feet to the east. Off-site improvements are expected to occur over a period of approximately 3 weeks. Similar to the proposed water improvements on-site, the off-site water line installations would require trenching, installation of the water line, backfilling, and repaving. Nearby sensitive noise receivers on Center Street west of Michigan Avenue include single-family residential homes north and south of Center Street, Highgrove Elementary School, and the Highgrove Library. (Urban Crossroads, 2014c, p. 58)

Tables 11-1 through 11-6 of the Project's Noise Impact Analysis (IS/MND Appendix K) indicate the construction noise levels for each phase of construction. The analysis shows that the highest construction noise level impacts would occur during grading construction activities at the edge of the Project site. As shown on Table EA-17, *Construction Equipment Noise Level Summary*, the Project's unmitigated peak construction noise levels are expected to range up to 86.1 dBA Leq. (Urban Crossroads, 2014c, p. 58)

Table EA-17 Construction Equipment Noise Level Summary

Noise Receiver ¹	Distance To Property Line (In Feet)	Construction Phase Hourly Noise Level (dBA Leq)						
		Site Prep.	Grading	Trenching	Building	Arch. Coating	Paving	Peak ²
R1	100'	76.9	81.2	75.3	76.7	68.0	74.8	81.2
R2	74'	79.5	83.8	77.9	79.3	70.6	77.5	83.8
R3	74'	79.5	83.8	77.9	79.3	70.6	77.5	83.8
R4	134'	74.4	78.6	72.8	74.2	65.5	72.3	78.6
R5	117'	75.5	79.8	74.0	75.4	66.6	73.5	79.8
R6	82'	78.6	82.9	77.0	78.4	69.7	76.6	82.9
R7	1,030'	56.7	60.9	55.1	56.5	47.7	54.6	60.9
R8	57'	81.8	86.1	80.2	81.6	72.9	79.7	86.1
R9	109'	76.2	80.4	74.6	76.0	67.3	74.1	80.4

¹ Noise receiver locations are shown on Exhibit 9-A.

² Estimated construction noise levels during peak operating conditions. (Urban Crossroads, 2014c, Table 11-7)

To control noise impacts associated with the construction of the proposed Project, the County has established limits to the hours of operation. Section 9.52.020 of the County's Noise Regulation ordinance indicates that noise sources associated with any private construction activity located within one-quarter of a mile from an inhabited dwelling is prohibited between the hours of 6:00 p.m. and 6:00 a.m., during the months of June through September, and 6:00 p.m. and 7:00 a.m., during the months of October through May. While the County of Riverside limits the hours of construction activity, it does not specifically address construction noise limits. The Project would be conditioned to comply with Section 9.52.020 of the County's Noise Ordinance pursuant to Mitigation Measure M-N-1. (Urban Crossroads, 2014c, p. 58)

The temporary construction-related noise impacts are expected to create temporary and intermittent high-level noise at receivers surrounding the Project site when certain construction activities occur near the Project boundary. Construction noise is temporary, intermittent and of short duration and

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would not present any long-term impacts. 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 through M-N-4 have nonetheless been imposed on the Project to reduce to the maximum feasible extent Project-related construction noise levels affecting nearby sensitive receptors.

Therefore, because the Project would be required to comply with the timing restrictions specified by Section 9.52.020 of the County's Noise Regulation ordinance, the County of Riverside does not identify any construction noise level standards, and the Project would implement design measures to reduce noise affecting nearby sensitive receptors to the maximum possible extent, impacts would be less than significant.

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 units located east and west of the Project site and the existing Highgrove Elementary School located adjacent to the Project site's eastern boundary, while additional sensitive receptors may be located along study area roadway segments that would experience increased traffic levels as a result of the Project. 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.

Short-Term Construction-Related Noise

As discussed and analyzed under Threshold 34.b) construction noise is temporary, intermittent and of short duration and would not present any long-term impacts. Because construction activities would be limited to the hours of 6:00 PM and 6:00 AM during the months of June through September and between the hours of 6:00 PM and 7:00 AM during the months of October through May, as required by Riverside County Ordinance No. 867, impacts resulting from short-term construction activities are less than significant. Although impacts would be less than significant, Mitigation Measures M-N-1 through M-N-4 have nonetheless been imposed on the Project to reduce to the maximum feasible extent Project-related construction noise levels affecting nearby sensitive receptors. Accordingly, impacts during construction of the proposed Project would be less than significant.

On-Site Traffic-Related Noise Impacts

An on-site exterior noise impact analysis was completed to determine the traffic noise exposure and to identify potential necessary noise abatement measures for the proposed Project. It is expected that the primary source of noise impacts to the Project site would be traffic noise from Center Street and Spring Street. The Project also would experience some background traffic noise impacts from Garfield Avenue and the Project's internal streets; however, due to the distance, topography and low traffic volume/speed, traffic noise from these roads would not make a significant contribution to the noise environment. (Urban Crossroads, 2014c, p. 47)

For noise sensitive uses, the Riverside County General Plan indicates that exterior noise levels should remain below 65 dBA CNEL and that interior noise levels should remain below 45 dBA CNEL. In order to evaluate future noise levels impacting the Project site, roadway noise levels from vehicular traffic were calculated using the Federal Highway Administration (FHWA) Traffic Noise Prediction Model. The on-site traffic noise calculations are provided in Appendix 8.1 of the Project's Noise Impact Analysis (IS/MND Appendix K). As shown in Table EA-18, *Exterior Noise Levels (CNEL)*,

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based on the FHWA traffic noise prediction model, the future unmitigated exterior noise levels would range from 65.3 dBA CNEL along Spring Street and 69.1 dBA CNEL along Center Street. With the recommended noise barriers, the mitigated future noise levels would range from 59.7 dBA CNEL along Spring Street and 64.7 dBA CNEL along Center Street. (Urban Crossroads, 2014c, p. 47) Because proposed on-site lots would be exposed to unmitigated exterior noise levels in excess of 65 dBA CNEL, a potentially significant impact would occur.

Table EA-18 Exterior Noise Levels (CNEL)

Lot	Roadway	Unmitigated Noise Level (dBA CNEL)	Mitigated Noise Level (dBA CNEL)	Barrier Height (Feet)	Top Of Barrier Elevation (Feet)
48	Center St.	69.1	63.3	5.0'	978.1'
51	Center St.	69.1	64.7	5.0'	982.1'
2	Center St.	69.1	63.3	5.0'	988.4'
5	Center St.	69.1	63.3	5.0'	993.3'
8	Center St.	69.1	64.2	5.0'	996.4'
36	Spring St.	67.0	63.9	4.0'	983.6'
33	Spring St.	67.0	61.6	4.0'	986.9'
30	Spring St.	67.0	63.8	4.0'	990.1'
28	Spring St.	67.0	63.9	4.0'	994.9'
25	Spring St.	67.0	63.9	4.0'	999.7'
22	Spring St.	67.0	63.1	4.0'	1002.5'
151	Spring St.	67.0	63.9	4.0'	989.5'
154	Spring St.	67.0	62.8	4.0'	992.7'
132	Spring St.	65.4	59.7	5.0'	998.3'
135	Spring St.	65.4	61.1	5.0'	1001.8'
138	Spring St.	65.3	61.3	4.0'	1010.9'

(Urban Crossroads, 2014d, pp. Table 8-1)

However, and as shown on Figure 3-14, the Project has been designed to include 6-foot solid block Community Walls with pilasters along the Project's frontage with both Center Street and Spring Street. As indicated in Table EA-18, with construction of minimum 4- and 5-foot barriers, noise levels on-site would be reduced to below the General Plan's exterior noise standard of 65 dBA CNEL. Accordingly, and with construction of the required community walls, impacts would be less than significant.

Interior Noise Levels

To ensure that the interior noise levels 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 facade and the noise reduction of the structure. Typical building construction will provide a Noise Level Reduction (NLR) 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

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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 assemblies free of cut outs or openings. (Urban Crossroads, 2014c, p. 48)

Table EA-19, *First Floor Interior Noise Impacts (CNEL)*, and Table EA-20, *Second Floor Interior Noise Impacts (CNEL)*, show that the future first and second floor interior noise levels are estimated to range from 58.7 dBA CNEL to 68.3 dBA CNEL, indicating that homes facing Center Street and Spring Street would require a windows closed condition and a means of mechanical ventilation (e.g. air conditioning).

Table EA-19 First Floor Interior Noise Impacts (CNEL)

Lot	Noise Level at Façade ¹	Required Interior Noise Reduction ²	Estimated Interior Noise Reduction ³	Upgraded Windows ⁴	Interior Noise Level ⁵
48	62.1	17.1	25	No	37.1
51	63.7	18.7	25	No	38.7
2	62.1	17.1	25	No	37.1
5	62.1	17.1	25	No	37.1
8	63.2	18.2	25	No	38.2
36	62.2	17.2	25	No	37.2
33	62.3	17.3	25	No	37.3
30	62.0	17.0	25	No	37.0
28	62.0	17.0	25	No	37.0
25	62.0	17.0	25	No	37.0
22	62.3	17.3	25	No	37.3
151	62.1	17.1	25	No	37.1
154	61.4	16.4	25	No	36.4
132	58.7	13.7	25	No	33.7
135	60.3	15.3	25	No	35.3
138	60.1	15.1	25	No	35.1

1 Exterior noise level at the façade 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, 2014c, Table 8-2)

As shown on Table EA-20, the future unmitigated noise levels at the second floor building façade are expected to range from 58.7 to 63.7 dBA CNEL. As shown on Table EA-20, the future noise levels at the second floor building façade are expected to range from 64.7 to 68.3 dBA CNEL. Accordingly, in the absence of mitigation, future interior noise levels would exceed the County's interior noise standard. This is evaluated as a potentially significant impact for which mitigation would be required.

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Table EA-20 Second Floor Interior Noise Impacts (CNEL)

Lot	Noise Level at Façade ¹	Required Interior Noise Reduction ²	Estimated Interior Noise Reduction ³	Upgraded Windows ⁴	Interior Noise Level ⁵
48	68.3	23.3	25	No	43.3
51	68.3	23.3	25	No	43.3
2	68.3	23.3	25	No	43.3
5	68.3	23.3	25	No	43.3
8	68.3	23.3	25	No	43.3
36	66.1	21.1	25	No	41.1
33	66.1	21.1	25	No	41.1
30	66.0	21.0	25	No	41.0
28	66.0	21.0	25	No	41.0
25	66.0	21.0	25	No	41.0
22	66.1	21.1	25	No	41.1
151	66.1	21.1	25	No	41.1
154	66.0	21.0	25	No	41.0
132	64.7	19.7	25	No	39.7
135	64.7	19.7	25	No	39.7
138	64.7	19.7	25	No	39.7

- 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, 2014c, Table 8-3)

As shown on Table EA-19 and Table EA-20, the first and second floor interior noise level analysis shows that the County of Riverside 45 dBA CNEL interior noise level standards would be met using standard windows with a minimum STC rating of 27. This requirement has been imposed on the Project as Mitigation Measure M-N-5. With implementation of the required mitigation, the Project would meet the County's interior noise standard of 45 dBA CNEL, and impacts would be reduced to below a level of significance.

Off-Site Project-Related Traffic Noise Impacts

An analysis of the Project's potential to result in off-site traffic-related noise impacts is presented above under the discussion and analysis of Threshold 34.a). As concluded therein, the Project would not result in any direct or cumulatively significant off-site traffic-related noise impacts with the addition of Project traffic to existing traffic volumes, under future 2018 conditions, or under long-term 2035 conditions. Accordingly, impacts would be less than significant requiring no mitigation.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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d) As noted under the discussion and analysis of Threshold 31) the western boundary of the Project site is located approximately 867 feet east of existing active railroad lines. The FTA establishes criteria for ground-borne vibration causing human annoyance due to railroad operations depending on their frequency of use. Based on the FTA criteria, the railroad operational events near the Project site are determined to be infrequent events with fewer than 30 vibration events of the same kind per day. This category includes most commuter rail branch lines. The impact vibration level for infrequent events is 80 Vibration Decibels (VdB) for residences and buildings where people normally sleep. The City of Riverside General Plan Circulation Element, Figure CCM-5, identifies the nearest operational railroad corridor as the proposed Perris Valley Metrolink Line potential alignment. For conventional commuter railroad systems, the FTA establishes a recommended buffer of 200 feet for land use Category 2 (residential). Because the Project site is located beyond the 200 foot distance for vibration impacts, the vibration levels from nearby railroad operations would not be perceptible at the Project site boundary. (Urban Crossroads, 2014c, p. 33)

Additionally, Project construction activities have the potential to result in varying degrees of temporary ground vibration, depending on the type of construction activities and equipment used. It is expected that ground-borne vibration from Project construction activities would be localized and intermittent. As listed in Table 6-6 of the Project's Noise Impact Analysis (IS/MND Appendix K), according to the FTA 2006 Transit Noise and Vibration Impact Assessment, vibration decibels (VdB) at 25 feet are 58 VdB for small bulldozers, 79 VdB for jackhammers, 86 VdB for loaded trucks, and 87 VdB for large bulldozers (Urban Crossroads, 2014c, Table 6-6). Construction activities that are expected to occur within the Project site include grading and trenching, which have the potential to generate low levels of ground-borne vibration.

As indicated on Table EA-21, *Construction Equipment Vibration Levels*, 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 57 feet to 1,030 feet from the Project site, construction vibration levels are expected to approach 76.3 VdB. Using the construction vibration assessment methods provided by the FTA, the proposed Project would not include or require equipment, facilities, or activities that would result in perceptible human response (annoyance). Project construction activities are not anticipated to generate vibration levels exceeding the FTA maximum acceptable vibration standard of 80 VdB. Further, impacts at the site of the closest sensitive receptor are unlikely to be sustained during the entire construction period, but would occur rather only during the times that heavy construction equipment is operating proximate to the Project site perimeter. Furthermore, the Project would be required to comply with the timing restrictions specified in County Ordinance 847 which would be enforced as part of Mitigation Measure M-N-1). (Urban Crossroads, 2014c, pp. 66-67) Accordingly, Project construction vibration-related impacts would be less than significant.

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Table EA-21 Construction Equipment Vibration 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	100'	39.9	60.9	67.9	68.9	68.9	No
R2	74'	43.9	64.9	71.9	72.9	72.9	No
R3	74'	43.9	64.9	71.9	72.9	72.9	No
R4	134'	36.1	57.1	64.1	65.1	65.1	No
R5	117'	37.9	58.9	65.9	66.9	66.9	No
R6	82'	42.5	63.5	70.5	71.5	71.5	No
R7	1,030'	9.6	30.6	37.6	38.6	38.6	No
R8	57'	47.3	68.3	75.3	76.3	76.3	No
R9	109'	38.8	59.8	66.8	67.8	67.8	No

¹ Noise receiver locations are shown on Exhibit 9-A.
² Based on the Vibration Source Levels of Construction Equipment included on Table 6-6.
³ Does the Peak Vibration exceed the FTA maximum acceptable vibration standard of 80 (VdB)? (Urban Crossroads, 2014c, Table 11-8)

Mitigation:

- M-N-1: (Condition of Approval 60.Planning.026) Prior to issuance of grading or building permits, the County shall ensure that the grading or building plans include a note requiring compliance with the timing restrictions specified by Section 9.52.020 of the County's Noise Regulation ordinance (Riverside County Ordinance No. 847).
- M-N-2: (Condition of Approval 60.Planning.027) Prior to issuance of grading or building permits, the County shall ensure that grading and/or buildings plans include a note requiring the construction contractor to equip all construction equipment, fixed or mobile with properly operating and maintained mufflers, consistent with manufacture's standards. This note also shall be specified in bid documents issued to perspective construction contractors.
- M-N-3: (Condition of Approval 60.Planning.028) Prior to issuance of grading or building permits, the County shall ensure that grading and/or buildings plans include a note requiring the construction contractor to locate equipment staging in areas that would create the greatest distance between the construction-related noise sources and noise sensitive receptors nearest the Project site during all phases of construction. The note also shall require construction contractor(s) to place all stationary equipment so that emitted noise is directed away from the noise sensitive receptors nearest the Project site. This note also shall be specified in bid documents issued to perspective construction contractors.
- M-N-4: (Condition of Approval 60.Planning.029) Prior to issuance of grading or building permits, the County shall ensure that grading and/or buildings plans include a note requiring the construction contractor to limit haul truck deliveries to the same hours specified for construction equipment (between the hours of 6:00 AM and 6:00 PM during the months of June through September and 7:00 AM and 6:00 PM during the months of October through May. This note also shall be specified in bid documents issued to perspective construction contractors.

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- M-N-5: (Condition of Approval 80.Planning.29) Prior to building permit final inspection for Lots facing Center Street and Spring Street (Lot Nos. 1 through 8; 22 through 29; 30 through 36; 48 through 52; 132 through 138; and 151 through 156), the Riverside Building and Safety Department shall ensure that the affected lots have been provided with 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 standard, the proposed Project shall provide the affected lots with the following or equivalent noise mitigation measures:
- a) 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. Air gaps and rattling shall not be permitted.
 - b) All exterior doors shall be well weather-stripped solid core assemblies at least 1.75-inches thick.
 - c) Roof sheathing of wood construction shall be well fitted or caulked plywood of at least 0.50-inche thick. Ceilings shall be well fitted, well-sealed gypsum board of at least 0.50-inch thick. Insulation with at least a rating of R-19 shall be used in the attic space.
 - d) 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) which satisfy the requirements of the Uniform Mechanical Code shall be provided.

Monitoring:

- M-N-1: The County shall review future grading and building plans prior to the issuance of permits for compliance with this measure.
- M-N-2: The County shall review future grading and building plans prior to the issuance of permits for compliance with this measure.
- M-N-3: The County shall review future grading and building plans prior to the issuance of permits for compliance with this measure.
- M-N-5: Prior to the issuance of building permits, the County shall review proposed building plans for compliance with the identified requirements.

POPULATION AND HOUSING Would the project

35. Housing

- | | | | | |
|---|--------------------------|--------------------------|--------------------------|-------------------------------------|
| a) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Create a demand for additional housing, particularly housing affordable to households earning 80% or less of the County's median income? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere? | <input type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> | <input checked="" type="checkbox"/> |

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
d) Affect a County Redevelopment Project Area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
e) Cumulatively exceed official regional or local population projections?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Source: Project Application Materials, RCIT; General Plan, General Plan Housing Element.

Findings of Fact:

a & c) Under existing conditions, there are no existing homes on-site, nor is the site occupied by any people. The Project proposes to develop the site with 200 single-family dwellings, which would provide for new housing opportunities within the County. Thus, implementation of the proposed Project would not displace housing or people, necessitating the construction of replacement housing elsewhere. No impact would occur.

b) The Project is a proposed residential community and would provide for 200 new homes providing housing for a projected 602 residents. 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. Thus, 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. No impact would occur.

d) According to Riverside County's "Map My County," the Project site and off-site impact areas are not located within or adjacent to any County Redevelopment Project Areas (RCIT, 2015). Thus, the Project has no potential to affect a County Redevelopment Project area. No impact would occur.

e) The Project site is designated by the Riverside County General Plan and the Highgrove Area Plan for "Community Development: Light Industrial (LI)". GPA 01126 proposes to amend the Riverside County General Plan Land Use Element and Highgrove Area Plan land use designations as they pertain to the site from "LI" to "Community Development: Medium Density Residential (MDR)" which would allow for development of the site with residential homes. (Riverside County, 2003a).

Development of the Project site with up to 200 single-family homes would result in an increased population of approximately 602 persons. However, and based on the Assumptions and Methodology reported in Appendix E to the County's General Plan, implementation of the site's existing Light Industrial land use designation would yield a probable future light industrial building area of approximately 863,394 s.f., which in turn would support up to 838 jobs. The participation rate reported in Appendix E to the General Plan, which is the percent of the total population that is either employed or not employed but actively seeking employment, is 44.86% for Riverside County. Thus, the 838 jobs that would result from implementation of light industrial land uses for the site would support up to 1,868 new residents in the County. (Riverside County, 2003a, Appendix E) Because regional and local population projections rely, in part, on land uses proposed as part of the County's General Plan, and because the Project would reduce the amount of future residents that could be supported by the site as compared to the site's existing General Plan land use designations, the Project would not cumulatively exceed any official regional or local population projections.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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Accordingly, the Project's direct and cumulative impacts associated with population inducement would be less than significant.

f) The proposed Project would develop the property with 200 single-family residential homes. According to the rates utilized in the Riverside County General Plan (3.01 persons per household), the proposed Project would be expected to accommodate an estimated future population of approximately 602 residents (Riverside County, 2003a, p. Appendix E). However, and as noted under the discussion and analysis of Threshold 35.e), under the site's existing General Plan land use designation of LI, the Project site could support up to 838 jobs and up to 1,868 new residents in the County. Thus, the Project would result in a future population increase associated with the site that is less than what could have occurred with implementation of the site's existing LI land use designation.

It is unlikely that the proposed Project would induce off-site population growth because the Project site is surrounded by existing or planned development. In addition, none of the improvements planned as part of the proposed Project (e.g. improvements to Center Street, Spring Street, Garfield Avenue, on-site local streets and off-site infrastructure improvements to construct water lines in Center Street and Spring Street) would remove impediments to growth such that nearby, undeveloped properties would be induced to convert to urban uses. Although the proposed Project would be required to construct a ten-inch water line within the existing improved alignment in Center Street approximately 1,900 feet to the east of the proposed intersection of Street "A" and Center Street to the existing intersection of Center Street at Michigan Avenue and an eight-inch water line within the existing Spring Street approximately 720 feet to the east of the future intersection of Street "G" at Spring Street, these facilities would not induce substantial growth in the area because water service is currently available to all undeveloped properties in the area (though some additional infrastructure may be required). It is unlikely that implementation of the proposed Project would induce substantial population growth either directly or indirectly beyond what is proposed by the Riverside County General Plan.

Additionally, 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 to the environment; however, mitigation measures are provided in this IS/MND to address all impacts associated with the Project's population to less-than-significant levels. Accordingly, the Project's 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

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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Source: General Plan Safety Element; Ord. No. 659 (Establishing Development Impact Fees).

Findings of Fact:

The Riverside County Fire Department provides fire protection services to the Project area. Pursuant to the Riverside County Fire Department Fire Protection and Emergency Medical Master Plan, the Project would be considered a "Category II-Urban" development, 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 Highgrove Fire Station (Station No. 19), located approximately 0.25 miles east of the Project site at 469 Center Street in the community of Highgrove. Thus, the Project site is adequately served by fire protection services under existing conditions. In addition, the Project has been reviewed by the Riverside County Fire Department, which determined that the Project would be served by adequate fire protection services in accordance with the Riverside County Fire Department Fire Protection and Emergency Medical Master Plan.

Development of the proposed Project would affect 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. Furthermore, the Project would be required to comply with the provisions of the County's Development Impact Fee (DIF) Ordinance (Riverside County Ordinance 659), which requires a fee payment to assist the County in providing for fire protection services. Payment of the DIF fee would ensure that the Project provides fair share funds for the provision of additional public services, including fire protection services, which may be applied to fire facilities and/or equipment, to offset the incremental increase in the demand for fire protection services that would be created by the Project.

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

Mitigation:

Although Project-related impacts associated with the provision of new or physically altered fire protection facilities would be less than significant, Mitigation Measure M-PS-1 is recommended to ensure compliance with the provisions of the County's DIF Ordinance (Ordinance 659).

M-PS-1 (Condition of Approval 10.Planning.012) The Project shall comply with County's Development Impact Fee (DIF) Ordinance, which requires payment of a development mitigation fee to assist in providing revenue that the County can use to improve public facilities and/or equipment, to offset the incremental increase in the demand for public services that would be created by the Project. Prior to building permit final inspection, the Project Applicant shall pay fees in accordance with the County's Ordinance 659.

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

M-PS-1 The Riverside County Building and Safety Department shall ensure that appropriate fees have been paid in accordance with County Ordinance No. 659 prior to building permit final inspection for each residential dwelling unit within Tentative Tract Map No. 36668.

37. Sheriff Services

Source: General Plan; Ord. No. 659 (Establishing Development Impact Fees).

Findings of Fact:

Riverside County Sheriff's Department provides community policing to the Project area via the Jurupa Valley Sherriff's Station located approximately 8.2 miles southwest of the Project site at 7477 Mission Boulevard Jurupa Valley, CA. (Riverside County Sheriff's Department, 2014) The Riverside County Sheriff's Department has set a minimum level of service standard of 1.0 deputy per 1,000 people.

According to the rates utilized in the Riverside County General Plan (3.01 persons per household), the proposed Project would be expected to accommodate an estimated future population of approximately 602 residents. (Riverside County, 2003a, Appendix E, p. 2). As the population and use of an area increases, additional financing of equipment and manpower needs are required to meet the increased demand. The proposed Project would result in an increase in the cumulative demand for services from the Riverside Sheriff's Department. To maintain the desirable level of service, buildout of the proposed Project would generate a need for less than one deputy. The proposed Project would not result in the need for new or expanded physical sheriff facilities because the addition of less than 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 or cumulative basis because the Project would not create the need to construct a new Sheriff station or physically alter an existing station. The Project and other cumulative developments would be required to comply with the provisions of the County's DIF Ordinance (Ordinance 659), 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 the Project's required payment of DIF fees.

Mitigation:

Although Project-related impacts associated with of new or physically altered sheriff protection facilities would be less than significant, the Project applicant shall pay DIF fees as required by Mitigation Measure M-PS-1.

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

The Riverside County Building and Safety Department shall ensure that appropriate fees have been paid in accordance with County Ordinance No. 659 prior to building permit final inspection for each residential dwelling unit within Tentative Tract Map No. 36668.

38. Schools

<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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Source: Riverside County GIS (Riverside County, 2013); California Senate Bill 50 (Greene).

Findings of Fact:

The proposed Project would be served by the Riverside Unified School District (RUSD). Future students generated by the Project would attend the Highgrove Elementary School located immediately east of the site's eastern boundary; University Heights Middle School, located 1.3 miles south of the Project site; and the Grand Terrace High School, located 0.25 mile north of the Project site.

Buildout of the proposed Project would result in an increase in demand for school services as compared to existing conditions. Table EA-22, *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 by the Riverside County General Plan EIR (Riverside County, 2003a). As shown, implementation of the proposed Project would result in approximately 74 new elementary school students, 40 new middle school students, and 49 new high school students.

Table EA-22 Project-Related School Services Demand

School Type	Project Units	Student Generation Factor	Total Number of Students
Elementary	201	0.369	74
Middle School	201	0.201	40
High School	201	0.246	49
Total Project-Related Students:			163

(Riverside County, 2003c, Table 4.15.E)

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 the 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:

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

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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M-PS-2: (Condition of Approval 80.Planning.011) The Project shall comply with the Leroy F. Greene School Facilities Act of 1998 (Senate Bill 50), which requires payment of a school impact fee on a per dwelling unit basis to assist in providing revenue that school districts (including RUSD) can use to ensure the adequate provision of public education facilities and services to service new development. Prior to the issuance of building permits, the Project Applicant shall pay required impact fees to the RUSD following RUSD protocol for impact fee collection.

Monitoring:

M-PS-2 The Riverside County Building and Safety Department shall ensure that appropriate fees have been paid in accordance with Senate Bill 50 prior to building permit final inspection for each residential dwelling unit within Tentative Tract Map No. 36668.

39. Libraries

Source: General Plan; Ord. No. 659 (Establishing Development Impact Fees).

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. There are no library facilities or expansion of library facilities proposed as part of the Project.

Although the use of the internet has resulted in decreased demand being placed on library services nation-wide, the County continues to maintain its standards for book titles and library square footage. To attain the County's minimum level of service standard of 1.2 titles-per-capita, the Project-generated population would require an additional 722 book titles. To attain the County of Riverside standard of 0.5 square feet of library space per capita, the Project would create the demand for 301 square feet of additional library space.

The Project's projected population was accounted for by the General Plan EIR, which assumed development of the site with Light Industrial (LI) land uses. As discussed under Threshold 35.e), under the site's existing General Plan land use designation of LI, the Project site could support up to 838 jobs and up to 1,868 new residents in the County, as compared to the 602 new residents anticipated to result from the proposed Project. As noted in the General Plan EIR, "the increase in the County's tax base and the availability of State funding will provide the funding for the future need" of book titles and library space (Riverside County, 2003c, p. 4.15-6). Additionally, the Project would be required to comply with the provisions of the County's DIF Ordinance (Ordinance 659), 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 and future tax revenue generated by the Project's 200 single-family homes would ensure that Project-related impacts to library services would be less than significant.

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

Although Project-related impacts associated with of new or physically altered library facilities would be less than significant, the Project Applicant shall pay DIF fees as required by Mitigation Measure M-PS-1.

Monitoring:

The Riverside County Building and Safety Department shall ensure that appropriate fees have been paid in accordance with County Ordinance No. 659 prior to building permit final inspection for each residential dwelling unit within Tentative Tract Map No. 36668.

40. Health Services

Source: General Plan, General Plan EIR; Ord. No. 659 (Establishing Development Impact Fees).

Findings of Fact:

The proposed Project would accommodate additional population in the community of Highgrove and would thereby result in an increased demand for medical facilities. The provision of private health care is largely based on economic factors and demand and is beyond the scope of analysis required for this IS/MND. However, and as noted under the discussion and analysis of Threshold 35.e), under the site's existing General Plan land use designation of LI, the Project site could support up to 838 jobs and up to 1,868 new residents in the County. Thus, the Project would result in a future population increase associated with the site that is less than what could have occurred with implementation of the site's existing LI land use designation, thereby reducing the site's demand for health services. As described in the Riverside County General Plan EIR, "the increase in total population at build-out is not substantial because the increase in the County's tax base will provide additional funding for [public] medical facilities that will be determined by periodic medical needs assessments" (Riverside County, 2003c, p. 4.15-29) Additionally, mandatory compliance with County Ordinance No. 659 requires a development impact fee payment to the County that is partially allocated to public health services and facilities. As such, impacts to public medical facilities and resources associated with the proposed Project would be less than significant.

Mitigation:

Although Project-related impacts associated with of new or physically altered health services facilities would be less than significant, the Project Applicant shall pay DIF fees as required by Mitigation Measure M-PS-1.

Monitoring:

Monitoring shall occur as specified above for Mitigation Measure M-PS-1.

RECREATION

41. Parks and Recreation

a) Would the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Source: RCIT; Ord. No. 460, Section 10.35 (Regulating the Division of Land – Park and Recreation Fees and Dedications); Ord. No. 659 (Establishing Development Impact Fees); Parks & Open Space Department Review; General Plan Figure 7, *Highgrove Area Plan Trails and Bikeway System*.

Findings of Fact:

a) The proposed Project would develop the property with 200 single-family detached homes. According to the rates utilized in the Riverside County General Plan (3.01 persons per household), the proposed Project would be expected to accommodate an estimated future population of approximately 602 residents. (Riverside County, 2003a, Appendix E, p. 2). Based on a park standard of five acres per 1,000 residents (as per California Government Code § 66477), the Project would generate a demand for approximately 3.01 acres of parkland. The proposed Project would provide two (2) park sites on 4.01 acres; accordingly, adequate recreational facilities would be accommodated on-site, and there would be no need to expand off-site recreational facilities as a result of the Project. Environmental impacts associated with the construction of the on-site parks have been evaluated throughout this IS/MND, and where appropriate mitigation measures have been identified to reduce impact to below significance. Accordingly, impacts due to the construction or expansion of recreational facilities would be less than significant.

b) As noted in the analysis of Threshold 41.a), the proposed Project would accommodate 4.01 acres of parkland on-site, which is more than adequate to meet the future recreational demands of Project residents. Because adequate recreational facilities are accommodated on-site, it can be reasonably concluded that future Project residents would not utilize existing neighborhood or regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. Accordingly, impacts would be less than significant.

c) According to RCIT, the Project site is located within a County Service Area (CSA) 126, which provides funding for parks and recreation, sheriff, and landscaping services. However, as noted in the analysis of Threshold 41.a), the Project would provide adequate parkland on-site to meet the parkland demands of future Project residents. Accordingly, the payment of Quimby fees would not be required, and no impact would occur.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

42. Recreational Trails	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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Source: General Plan Figure 7, *Highgrove Area Plan Trails and Bikeway System*.

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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Findings of Fact:

According to the HAP Figure 7, *Highgrove Area Plan Trails and Bikeway System*, a Regional Trail is planned to traverse through the Project site. As shown on Figure 3-3, and discussed in Section 3.0, *Project Description*, a regional trail would be accommodated along the southern alignment of Spring Street from the site's eastern boundary to Street G, and south within Street G to the proposed on-site park, where off-site trail connections would be provided by others in the future. Impacts associated with the construction of this on-site regional trail have been evaluated throughout this IS/MND, and, where necessary, mitigation measures have been imposed on the Project to reduce impacts to below a level of significance. Furthermore, the proposed on-site alignment of the regional trail is consistent with the alignments shown on HAP Figure 7. Accordingly, impacts associated with recreational trails would be less than significant.

Mitigation: No mitigation is required.

Monitoring: No monitoring is required.

TRANSPORTATION/TRAFFIC Would the project

	Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
43. Circulation	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Alter waterborne, rail or air traffic?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g. farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) Cause an effect upon, or a need for new or altered maintenance of roads?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Cause an effect upon circulation during the project's construction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
h) Result in inadequate emergency access or access to nearby uses?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
i) Conflict with adopted policies, plans or programs regarding public transit, bikeways or pedestrian facilities, or otherwise substantially decrease the performance or safety	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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of such facilities?

Source: Riverside County GIS; *Bixby-Highgrove Residential Traffic Impact Analysis*, Urban Crossroads, July 2, 2014 (Appendix L); *2011 Riverside County Congestion Management Program*, Riverside County Transportation Commission, December 14, 2011; 2014 March Air Reserve Base Inland Port Airport Land Use Compatibility Plan, ALUC Staff Report for Case ZAP1122MA15.

Findings of Fact:

a) In order to assess the Project's potential to result in significant impacts to the surrounding circulation system, a Project-specific traffic impact analysis (TIA) was conducted for the Project. A copy of the TIA is provided as Appendix L to this IS/MND. It should be noted that the TIA analyzes the construction of 219 detached single-family homes whereas the Project proposes only 200 homes; thus, the analysis of impacts to traffic provided below represents a conservative estimate of Project-related impacts to the circulation system. Additionally, the TIA refers to the intersection of Street "A" at Center Street as "Driveway 1" and the intersection of Street "G" at Spring Street as "Driveway 2." Please refer to the TIA in Appendix L for a discussion of traffic-related terms and methodologies.

Existing Conditions

Based on the scope of the proposed Project, a study area was established encompassing a total of 13 intersections, as summarized in Table EA-23, *Intersection Analysis Locations*. The study locations include all intersections where the Project is anticipated to contribute 50 or more peak hour trips. The Project is anticipated to contribute less than 50 peak hour trips to the intersections of Garfield Avenue at Center Street and Garfield Avenue at Spring Street; nonetheless, due to the proximity of these intersections to the Project site, these intersections were nonetheless included in the analysis. (Urban Crossroads, 2014d, p. 4) Table 2-5 of the TIA (IS/MND Appendix L) presents the applicable LOS threshold for the intersections identified in Table EA-23. Additionally, the Project would not contribute 100 or more one-way peak hour trips to the I-215 mainline segments north and south of Center Street, indicating the Project has no potential to impact these segments based on CalTrans' guidelines; however these mainline segments nonetheless have been included in the analysis for disclosure purposes. (Urban Crossroads, 2014d, p. 6).

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

Table EA-23 Intersection Analysis Locations

ID	Intersection Location	Jurisdiction
1	Stephens Avenue / Center Street	County of Riverside
2	Highgrove Place / Center Street	County of Riverside
3	Iowa Avenue / Center Street	County of Riverside
4	Iowa Avenue / Citrus Street West	City of Riverside
5	Iowa Avenue / Citrus Street East	City of Riverside
6	Iowa Avenue / Palmyra Avenue	City of Riverside
7	Iowa Avenue / Columbia Avenue	City of Riverside
8	Iowa Avenue / Marlborough Avenue	City of Riverside
9	Iowa Avenue / Spruce Street	City of Riverside
10	Driveway 1 / Center Street	County of Riverside
11	Driveway 2 / Spring Street	County of Riverside
12	Garfield Avenue / Center Street	County of Riverside
13	Garfield Avenue / Spring Street	County of Riverside

(Urban Crossroads, 2014d, Table 1-1)

In order to assess the existing conditions of the study area, AM peak hour traffic volumes were determined by collecting count data over a two hour period from 7:00 to 9:00 AM in February of 2014. Similarly, the PM peak hour traffic volumes were identified by counting traffic volumes in the two hour period from 4:00 to 6:00 PM in February of 2014. The weekday AM and PM peak hour count data is representative of typical weekday peak hour traffic conditions in the study area. Table EA-24, *Intersection Operations Analysis for Existing (2014) Conditions*, summarizes the existing level of service (LOS) at the three study area intersections. The intersection operations analysis results indicate that all existing study area intersections are currently operating at acceptable LOS during the peak hours with the exception of the following:

- Stephens Avenue / Center Street – LOS "D" AM and PM peak hours
- Highgrove Place / Center Street – LOS "D" PM peak hour only
- Iowa Avenue / Marlborough Avenue – LOS "E" AM peak hour only
- Iowa Avenue / Spruce Street – LOS "E" PM peak hour only

Additionally, the analysis determined that for existing conditions, no traffic signals were found to be warranted. However, a traffic signal is recommended at the intersection of Highgrove Place at Center Street to partially address the existing LOS deficiency. (Urban Crossroads, 2014d, pp. 35-38, and Table 3-3)

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

Table EA-24 Intersection Operations Analysis for Existing (2014) Conditions

#	Intersection	Traffic Control	Intersection Approach Lanes ¹												Delay ² (Secs)		Level of Service		Acceptable LOS
			Northbound			Southbound			Eastbound			Westbound			AM	PM	AM	PM	
			L	T	R	L	T	R	L	T	R	L	T	R					
1	Stephens Av. / Center St.	TS	0	1	0	0	1	0	0	1	1	0	1	d	36.3	38.0	D	D	C
2	Highgrove Pl. / Center St.	CSS	0	1	1	0	1	0	0	1	1	0	1	0	20.8	30.7	C	D	C
3	Iowa Av. / Center St.	TS	1	2	0	1	2	0	1	2	0	1	1	1	44.6	49.0	D	D	D
4	Iowa Av. / Citrus St. West	TS	1	2	1	1	2	0	0	1	0	0	1	1	21.7	28.2	C	C	C
5	Iowa Av. / Citrus St. East	TS	0	2	0	1	2	0	0	0	0	1	0	1	22.7	26.6	C	C	C
6	Iowa Av. / Palmyrita Av.	TS	1	2	0	1	2	1	1	1	0	1	1	1	39.7	43.4	D	D	D
7	Iowa Av. / Columbia Av.	TS	2	2	1	2	2	1	2	2	1	2	2	1	###	###	F	F	D
8	Iowa Av. / Marlborough Av.	TS	1	2	0	1	2	1	1	1	0	1	1	1	64.3	45.6	E	D	D
9	Iowa Av. / Spruce St.	TS	1	2	0	1	2	1	1	2	0	1	2	0	40.9	49.0	D	D	D
10	Driveway 1 / Center St.	--	Future Intersection												--	--	--	--	C
11	Driveway 2 / Spring St.	--	Future Intersection												--	--	--	--	C
12	Garfield Av. / Center St.	AWS	0	1	0	0	0	0	0	2	d	0	2	0	11.3	8.8	B	A	C
13	Garfield Av. / Spring St.	CSS	0	0	0	0	1	0	0	1	0	0	1	0	12.7	9.4	B	A	C

Bold = Does not meet jurisdictional standards (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

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. AWS = All-Way Stop; CSS = Cross-street Stop; TS = Traffic Signal (Urban Crossroads, 2014d, Table 3-1)

Project Trip Generation and Distribution

Trip generation represents the amount of traffic which is both attracted to and produced by a development. Determining traffic generation for a specific project is therefore based upon forecasting the amount of traffic that is expected to be both attracted to and produced by the specific land uses being proposed for a given development. (Urban Crossroads, 2014d, p. 43)

A summary of the Project's trip generation is shown in Table 3-3, *Project Trip Generation Summary*, in the introduction to this IS/MND. The trip generation rates are based upon data collected by the Institute of Transportation Engineers (ITE) Trip Generation Manual, 9th Edition, 2012. As shown on Table 3-3, implementation of the proposed Project would result in the generation of approximately 2,085 daily trip-ends per day with 164 trips occurring during the morning peak hour and 219 trips occurring during the evening peak hour. (Urban Crossroads, 2014d, p. 43)

Trip distribution is the process of identifying the probable destinations, directions, or traffic routes that will be utilized by Project traffic. The potential interaction between the planned land uses and surrounding regional access routes are considered, to identify the route where the Project traffic would distribute. The Project trip distribution was developed based on anticipated travel patterns to and from the Project site for the traffic associated with the proposed residential use. Exhibit 4-1 of the TIA (IS/MND Appendix L) shows the trip distribution patterns for the Project. (Urban Crossroads, 2014d, p. 44)

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

Future year traffic forecasts have been based upon two years of background (ambient) growth at 2% per year for 2018 traffic conditions. The total ambient growth is 8.24% for 2018 traffic conditions (compounded growth of two percent per year over four years or 1.024 years). This ambient growth rate is added to existing traffic volumes to account for area-wide growth not reflected by cumulative development projects. Ambient growth has been added to daily and peak hour traffic volumes on surrounding roadways, in addition to traffic generated by the development of future projects that have been approved but not yet built and/or for which development applications have been filed and are under consideration by governing agencies. (Urban Crossroads, 2014d, p. 44)

According to information published by the Riverside County Information Technology GIS staff as input to the Southern California Association of Governments (SCAG) Regional Transportation Plan (2012), the population of Western Riverside County is projected to increase by 41% in the period between 2010 and 2035, or a compounded rate of approximately 1.38% annually. During the same period, employment in Western Riverside County is expected to increase by 112% or 3.06% compounded annually. (Urban Crossroads, 2014d, p. 47)

Therefore, the use of an annual growth rate of 2.0 percent would appear to accurately approximate the anticipated regional growth in traffic volumes in the County of Riverside, especially when considered along with the addition of project-related traffic and traffic generated by other known development projects. As such, the growth in traffic volumes assumed in the Project's TIA (IS/MND Appendix L) would tend to overstate as opposed to understate the potential deficiencies to traffic and circulation. (Urban Crossroads, 2014d, p. 47)

Cumulative Development Traffic

CEQA guidelines require that other reasonably foreseeable development projects which are either approved or being processed concurrently in the study area also be included as part of a cumulative analysis scenario. A cumulative project list was developed for the purposes of this analysis through consultation with planning and engineering staff from the County of Riverside, City of Riverside, and the City of Grand Terrace. Exhibit 4-3 of the Project's TIA (IS/MND Appendix L) illustrates the cumulative development location map. A summary of cumulative development projects and their proposed land uses are shown on TIA Table 4-3. If applicable, the traffic generated by individual cumulative projects was manually added to both the Existing Plus Ambient Plus Cumulative (EAPC) and Horizon Year forecasts to ensure that traffic generated by the listed cumulative development projects in TIA Table 4-3 are reflected as part of the background traffic. (Urban Crossroads, 2014d, p. 47)

Traffic Forecasts

To provide a comprehensive assessment of the potential project-related and cumulative traffic deficiencies, two types of analyses, "buildup" and "buildout," were performed. The "buildup" method was used to approximate traffic forecasts for Existing plus Project (E+P), Existing plus Project plus Ambient (EAP), and EAPC traffic conditions. The E+P traffic conditions include existing traffic in addition to the traffic generated by the proposed Project. The EAP traffic conditions include existing traffic, background traffic growth, and the traffic generated by the proposed Project. The EAPC traffic conditions include background existing traffic, background traffic growth, traffic generated by other cumulative development projects within the study area, and the traffic generated by the proposed Project. The "buildout" approach is used to forecast the Horizon Year Without and With Project traffic conditions of the study area. (Urban Crossroads, 2014d, p. 47)

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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EAP (2018) and EAPC (2018) Conditions

The "buildup" approach combines existing traffic counts with a background ambient growth factor to forecast EAP and EAPC traffic conditions. An ambient growth factor of 8.24% accounts for background (area-wide) traffic increases that occur over time up to the year 2018 from the year 2014 (compounded two percent per year growth over a four year period). Traffic volumes generated by the Project and other cumulative development projects are then added to assess the EAP and EAPC traffic conditions. The 2018 roadway networks are similar to the existing conditions roadway network with the exception of future driveways proposed to be developed by the Project. (Urban Crossroads, 2014d, pp. 47-48)

The EAP and EAPC traffic analysis includes the following traffic conditions, with the various traffic components:

- EAP Conditions
 - Existing counts
 - Ambient growth traffic (8.24%)
 - Project traffic

- EAPC Conditions
 - Existing counts
 - Ambient growth traffic (8.24%)
 - Cumulative Development traffic
 - Project traffic

Horizon Year (2035) Volume Development

Traffic projections for Horizon Year Without Project conditions were derived from the Riverside County Traffic Analysis Model (RivTAM) using accepted procedures for model forecast refinement and smoothing. The Horizon Year Without and With Project traffic conditions analyses are utilized to determine if improvements funded through regional transportation mitigation fee programs, such as the Transportation Uniform Mitigation Fee (TUMF), County of Riverside DIF, or other approved funding mechanism can accommodate the long-range cumulative traffic at the target LOS identified in the County of Riverside General Plan. If the "funded" improvements can provide the target LOS, then the Project's payment into these existing fee programs shall be considered as cumulative improvements through the conditions of approval. (Urban Crossroads, 2014d, p. 48)

In some instances, the RivTAM model zone structure is not designed to provide accurate turning movements along arterial roadways unless refinement and reasonableness checking is performed. Horizon Year Without Project turning volumes were compared to EAPC less Project traffic turning volumes in order to ensure a minimum growth of ten percent as a part of the refinement process, where applicable. The minimum growth includes any additional growth between EAPC traffic conditions and Horizon Year Without Project traffic conditions that is not accounted for by the traffic generated by cumulative development projects and the ambient growth between Existing and EAPC traffic conditions. (Urban Crossroads, 2014d, p. 48)

Existing Plus Project Traffic Conditions (E+P)

Level of service calculations were conducted for the study area intersections to evaluate their operations under E+P conditions. As shown in Table EA-25, *Intersection Operations Analysis Summary for E+P Conditions*, no additional intersections were found to operate at an unacceptable LOS under E+P traffic conditions beyond those identified for existing conditions. The intersection

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

operations analysis worksheets for E+P traffic conditions are included in Appendix "5.1" of the TIA (IS/MND Appendix L). (Urban Crossroads, 2014d, p. 57) Accordingly, Project impacts under E+P conditions would be less than significant on a direct basis, although the contribution of Project traffic to the following intersections under E+P conditions are evaluated as cumulatively significant impacts for which mitigation would be required:

- Stephens Avenue / Center Street – AM and PM peak hours
- Highgrove Place / Center Street – PM peak hour only
- Iowa Avenue / Columbia Avenue – AM and PM peak hours
- Iowa Avenue / Marlborough Avenue – AM peak hour only

Table EA-25 Intersection Operations Analysis Summary for E+P Conditions

#	Intersection	Traffic Control ³	Intersection Approach Lanes ¹								Existing (2014)				E+P				Acceptable LOS				
			NB		SB		EB		WB		Delay ² (Secs)		Level of Service		Delay ² (Secs)		Level of Service						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM		AM	PM		
1	Stephens Av. / Center St.	TS	0	1	0	0	1	0	0	1	1	0	1	d	36.3	38.0	D	D	37.5	39.3	D	D	C
2	Highgrove Pl. / Center St.	CSS	0	1	1	0	1	0	0	1	1	0	1	0	20.8	30.7	C	D	23.1	41.3	C	E	C
3	Iowa Av. / Center St.	TS	1	2	0	1	2	0	1	2	0	1	1	1	44.6	49.0	D	D	45.4	49.8	D	D	D
4	Iowa Av. / Citrus St. West	TS	1	2	1	1	2	0	0	1	0	0	1	1	21.7	28.2	C	C	21.1	28.0	C	C	C
5	Iowa Av. / Citrus St. East	TS	0	2	0	1	2	0	0	0	0	1	0	1	22.7	26.6	C	C	22.7	27.2	C	C	C
6	Iowa Av. / Palmyrita Av.	TS	1	2	0	1	2	1	1	1	0	1	1	1	39.7	43.4	D	D	40.2	44.7	D	D	D
7	Iowa Av. / Columbia Av.	TS	2	2	1	2	2	1	2	2	1	2	2	1	124.1	164.6	F	F	126.4	164.6	F	F	D
8	Iowa Av. / Marlborough Av.	TS	1	2	0	1	2	1	1	1	0	1	1	1	64.3	45.6	E	D	65.7	49.2	E	D	D
9	Iowa Av. / Spruce St.	TS	1	2	0	1	2	1	1	2	0	1	2	0	40.9	49.0	D	D	41.4	50.1	D	D	D
10	Driveway 1 / Center St.	CSS	0	1	0	0	0	0	0	2	0	0	2	0	--	--	--	--	13.1	12.1	B	B	C
11	Driveway 2 / Spring St.	CSS	0	1	0	0	1	0	0	1	0	0	1	0	--	--	--	--	11.1	11.3	B	B	C
12	Garfield Av. / Center St.	AWS	0	1	0	0	0	0	0	2	d	0	2	0	11.3	8.8	B	A	11.7	8.8	B	A	C
13	Garfield Av. / Spring St.	CSS	0	0	0	0	1	0	0	1	0	0	1	0	12.7	9.4	B	A	13.7	9.7	B	A	C

Bold = Does not meet jurisdictional standards (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; 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. AWS = All-Way Stop; CSS = Cross-street Stop; TS = Traffic Signal
(Urban Crossroads, 2014d, Table 5-1)

Implementation of Mitigation Measure M-TR-1, which requires participation in the County TUMF and DIF program, and Mitigation Measure M-TR-2, requiring the Project Applicant to pay fees in accordance with the City of Riverside Traffic Signal and Railroad Mitigation Fee program, would fully mitigate the Project's cumulatively considerable impacts to the four intersections listed above as having a deficient LOS under existing conditions.

For E+P conditions, no unsignalized study area intersections are anticipated to meet peak hour volumes based, or the CalTrans planning level (ADT volume based) traffic signal warrants. However,

Potentially Significant Impact	Less than Significant with Mitigation Incorporated	Less Than Significant Impact	No Impact
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a traffic signal is recommended at the intersection of Highgrove Place at Center Street to partially address the existing LOS deficiency. The Project's cumulative contribution to a need for a traffic signal at this intersection would be mitigated to a level below of significance with implementation of Mitigation Measure M-TR-1, requiring payment of appropriate TUMF fees. (Urban Crossroads, 2014d, p. 57, Table 1-5, and Table 5-3)

Table EA-26, *Basic Freeway Segment Analysis for E+P Conditions*, provides the E+P mainline directional volumes for the AM and PM peak hours for the I-215 Freeway at Center Street interchange. As shown on Table EA-26, the I-215 Freeway segments analyzed for this study are anticipated to operate at an acceptable LOS (i.e., LOS "D" or better) during the peak hours for E+P traffic conditions. E+P basic freeway segment analysis worksheets are provided in Appendix "5.3" to the Project's TIA (IS/MND Appendix L). (Urban Crossroads, 2014d, p. 57) Accordingly, impacts to freeways under E+P conditions would be less than significant.

Table EA-26 Basic Freeway Segment Analysis for E+P Conditions

Scenario	Direction	Mainline Segment	Volume		Lanes ¹	Density ²		LOS	
			AM	PM		AM	PM	AM	PM
Existing Plus Project	I-215 SB	South of Center Street	3,513	3,477	3	18.9	18.7	C	C
	I-215 NB	South of Center Street	5,272	5,211	3	31.4	30.8	D	D

1. Number of lanes is in the specified direction and is based on existing conditions.
2. Density is measured by passenger cars per mile per lane (pc/mi/ln). (Urban Crossroads, 2014d, Table 5-2)

Year 2018 Existing Plus Ambient Plus Project Traffic Conditions (EAP)

Level of service calculations were conducted for the study intersections to evaluate their operations under EAP conditions with existing roadway and intersection geometrics consistent with existing conditions plus the addition of Project access driveways. As shown in Table EA-27, *Intersection Operations Analysis Summary for EAP (2018) Conditions*, the same intersections previously identified to operate at an unacceptable LOS for Existing traffic conditions are also anticipated to operate at an unacceptable LOS for EAP traffic conditions. However, the addition of 8.24% ambient growth along with Project traffic also results in a new PM peak hour LOS deficiency at the intersection of Iowa Avenue at Spruce Street, in addition to those deficiencies previously identified for Existing and E+P traffic conditions. This is evaluated as a significant direct impact of the Project for which mitigation would be required. (Urban Crossroads, 2014d, p. 65) Implementation of Mitigation Measure M-TR-3, which requires the Project Applicant to work with the City of Riverside Public Works Department to accommodate a 120 second cycle length for the traffic signal timing, would reduce the Project's impact to this intersection to below a level of significance (Urban Crossroads, 2014d, Tables 1-5 and 6-3).

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

Table EA-27 Intersection Operations Analysis Summary for EAP (2018) Conditions

#	Intersection	Traffic Control ¹	Intersection Approach Lanes ²								Existing (2014)				EAP (2018)				Acceptable LOS				
			NB		SB		EB		WB		Delay ² (Secs)		Level of Service		Delay ² (Secs)		Level of Service						
			L	T	R	L	T	R	L	T	R	L	T	R	AM	PM	AM	PM		AM	PM		
1	Stephens Av. / Center St.	TS	0	1	0	0	1	0	0	1	1	0	1	d	36.3	38.0	D	D	38.9	41.0	D	D	C
2	Highgrove Pl. / Center St.	CSS	0	1	1	0	1	0	0	1	1	0	1	0	20.8	30.7	C	D	25.7	54.8	D	F	C
3	Iowa Av. / Center St.	TS	1	2	0	1	2	0	1	2	0	1	1	1	44.6	49.0	D	D	46.9	53.1	D	D	D
4	Iowa Av. / Citrus St. West	TS	1	2	1	1	2	0	0	1	0	0	1	1	21.7	28.2	C	C	22.7	28.4	C	C	C
5	Iowa Av. / Citrus St. East	TS	0	2	0	1	2	0	0	0	0	1	0	1	22.7	26.6	C	C	22.8	26.9	C	C	C
6	Iowa Av. / Palmyra Av.	TS	1	2	0	1	2	1	1	1	0	1	1	1	39.7	43.4	D	D	41.8	46.7	D	D	D
7	Iowa Av. / Columbia Av.	TS	2	2	1	2	2	1	2	2	1	2	2	1	124.1	164.6	F	F	137.4	174.9	F	F	D
8	Iowa Av. / Marlborough Av.	TS	1	2	0	1	2	1	1	1	0	1	1	1	64.3	45.6	E	D	79.2	61.9	E	E	D
9	Iowa Av. / Spruce St.	TS	1	2	0	1	2	1	1	2	0	1	2	0	40.9	49.0	D	D	43.2	56.9	D	E	D
10	Driveway 1 / Center St.	CSS	0	1	0	0	0	0	0	2	0	0	2	0	--	--	--	--	13.6	12.4	B	B	C
11	Driveway 2 / Spring St.	CSS	0	1	0	0	1	0	0	1	0	0	1	0	--	--	--	--	11.3	11.4	B	B	C
12	Garfield Av. / Center St.	AWS	0	1	0	0	0	0	0	2	d	0	2	0	11.3	8.8	B	A	12.5	9.0	B	A	C
13	Garfield Av. / Spring St.	CSS	0	0	0	0	1	0	0	1	0	0	1	0	12.7	9.4	B	A	14.3	9.8	B	A	C

Bold = Does not meet jurisdictional standards (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; 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. AWS = All-Way Stop; CSS = Cross-street Stop; TS = Traffic Signal (Urban Crossroads, 2014d, Table 6-1)

For EAP traffic conditions, there are no additional intersections anticipated to warrant a traffic signal beyond the recommended signalization of Highgrove Place at Center Street as identified above for Existing and E+P traffic conditions (Urban Crossroads, 2014d, p. 65).

Table EA-28, *Basic Freeway Segment Analysis for EAP (2018) Conditions*, provides the EAP mainline directional volumes for the AM and PM peak hours for the I-215 Freeway at Center Street interchange. As shown on Table EA-28, the I-215 Freeway segments are anticipated to operate at an acceptable LOS (i.e., LOS "D" or better) during the peak hours for EAP traffic conditions. EAP basic freeway segment analysis worksheets are provided in TIA Appendix "6.3" (IS/MND Appendix L). Thus, the Project would result in less-than-significant freeway mainline impacts under EAP (2018) conditions. (Urban Crossroads, 2014d, p. 69)

Year 2018 Existing Plus Ambient Plus Project Plus Cumulative Traffic Conditions (EAPC)

Level of service calculations were conducted for the study intersections to evaluate their operations under EAPC conditions with existing roadway and intersection geometrics consistent with those described under TIA Section 7.1. As shown in Table EA-29, *Intersection Operations Analysis Summary for EAPC (2018) Conditions*, the following study area intersections are anticipated to operate at an unacceptable LOS under EAPC traffic conditions in addition to those previously identified as deficient under Existing, E+P, and EAP traffic conditions: Iowa Avenue at Center Street,

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Table EA-28 Basic Freeway Segment Analysis for EAP (2018) Conditions

Scenario	Direction	Mainline Segment	Volume		Lanes ¹	Density ²		LOS	
			AM	PM		AM	PM	AM	PM
EAP (2018)	I-215 SB	South of Center Street	3,272	3,238	3	17.6	17.4	B	B
	I-215 NB	South of Center Street	4,910	4,853	3	28.4	28.0	D	D

1. Number of lanes is in the specified direction and is based on existing conditions.
2. Density is measured by passenger cars per mile per lane (pc/mi/lane). (Urban Crossroads, 2014d, Table 6-2)

Table EA-29 Intersection Operations Analysis Summary for EAPC (2018) Conditions

#	Intersection	Traffic Control ³	Intersection Approach Lanes ¹												Delay ² (Secs)		Level of Service		Acceptable LOS
			Northbound			Southbound			Eastbound			Westbound			AM	PM	AM	PM	
			L	T	R	L	T	R	L	T	R	L	T	R					
1	Stephens Av. / Center St.	TS	0	1	0	0	1	0	0	1	1	0	1	d	62.2	53.7	E	D	C
2	Highgrove Pl. / Center St.	CSS	0	1	1	0	1	0	0	1	1	0	1	0	43.2	>100.0	E	F	C
3	Iowa Av. / Center St.	TS	1	2	0	1	2	0	1	2	0	1	1	1	74.5	58.1	E	E	D
4	Iowa Av. / Citrus St. West	TS	1	2	1	1	2	0	0	1	0	0	1	1	28.5	22.8	C	C	C
5	Iowa Av. / Citrus St. East	TS	0	2	0	1	2	0	0	0	0	1	0	1	27.8	22.9	C	C	C
6	Iowa Av. / Palmyrita Av.	TS	1	2	0	1	2	1	1	1	0	1	1	1	69.0	69.8	E	E	D
7	Iowa Av. / Columbia Av.	TS	2	2	1	2	2	1	2	2	1	2	2	1	140.6	152.3	F	F	D
8	Iowa Av. / Marlborough Av.	TS	1	2	0	1	2	1	1	1	0	1	1	1	94.0	93.8	F	F	D
9	Iowa Av. / Spruce St.	TS	1	2	0	1	2	1	1	2	0	1	2	0	46.7	69.1	D	E	D
10	Driveway 1 / Center St.	CSS	0	1	0	0	0	0	0	2	0	0	2	0	18.7	21.5	C	C	C
11	Driveway 2 / Spring St.	CSS	0	1	0	0	1	0	0	1	0	0	1	0	12.0	12.1	B	B	C
12	Garfield Av. / Center St.	AWS	0	1	0	0	0	0	0	2	d	0	2	0	36.1	12.7	E	B	C
13	Garfield Av. / Spring St.	CSS	0	0	0	0	1	0	0	1	0	0	1	0	18.3	11.0	C	B	C

Bold = Does not meet jurisdictional standards (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; 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. AWS = All-Way Stop; CSS = Cross-street Stop; TS = Traffic Signal
(Urban Crossroads, 2014d, Table 7-1)

and Iowa Avenue at Palmyrita Avenue. (Urban Crossroads, 2014d, p. 73) Project impacts to these intersections represent a cumulatively significant impact for which mitigation would be required. It should be noted the Project would not contribute 50 or more peak hour trips to the intersection of