DRAFT ENVIRONMENTAL IMPACT REPORT
STATE CLEARINGHOUSE NO. 2014121064

GROVE PARK MIXED-USE DEVELOPMENT

(PA No. 14-0069)

CITY OF WILDOMAR

RIVERSIDE COUNTY, CALIFORNIA

LSA

September 1, 2015

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CITY OF WILDOMAR

RIVERSIDE COUNTY, CALIFORNIA

Prepared for:

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September 1, 2015

The City of Wildomar has independently reviewed, analyzed, and exercised its judgment in the analysis contained in this Environmental Impact Report and supporting documentation pursuant to Section 21082 of the California Environmental Quality Act.

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1.0 EXECUTIVE SUMMARY

1.1 INTRODUCTION

This Draft Environmental Impact Report (EIR) (State of California Clearinghouse No. 2014121064) for the Grove Park Mixed-Use Development Project (Project) has been prepared by LSA Associates, Inc. (LSA) on behalf of the City of Wildomar (City) to identify and evaluate the potential environmental effects associated with the construction and operation of the proposed on-site uses.

This EIR has been prepared in accordance with the California Environmental Quality Act (CEQA)[1] and *Guidelines for California Environmental Quality Act*[2] *(CEQA Guidelines),* both of which regulate the preparation of EIRs. As required pursuant to *CEQA Guidelines* (Section 15123), this section of the EIR summarizes the proposed project; the environmental impacts and mitigation required to reduce or eliminate those impacts determined to be significant; areas of controversy known by the City including those raised by other agencies and the public; the issues to be resolved; and alternatives to the project that could reduce the extent and/or severity of the proposed project's environmental impacts. While this Executive Summary provides an overview of these issues, more detail is provided in subsequent sections of this EIR as follows:

- Project Description (Section 3.0).
- Environmental Impacts (Section 4.0).
- Other CEQA Topics (Section 5.0).
- Project Alternatives (Section 6.0).

1.2 PROPOSED PROJECT

The proposed project envisions the construction and occupation of a mixed (horizontal) use development. The approximately 19.4-acre property is divided into north and south sites of approximately 9.8 and 8.1 acres, respectively, and an approximately 1.4-acre detention basin. Proposed on-site development includes approximately 55,000 square feet (sf) of commercial/retail and office uses to be developed on northern portion of the site adjacent to Clinton Keith Road. Eight three-story multiple-family apartment buildings, containing 162 units, are to be developed on the southern portion of the site. The project includes an approximately 1.9-acre passive park and trailhead proposed directly south of the commercial development

[1] California Environmental Quality Act, California Public Resources Code, Division 13. Environmental Quality, §§ 21000 – 21189.3, January 1, 2015.

[2] California Code of Regulations, Chapter 3: Guidelines for the Implementation of the California Environmental Quality Act, §§ 15000 – 15387, January 1, 2015.

and preserves an approximately 1.3-acre natural open space area including a grove of coast live oaks. Table 1.A provides a summary of the project land uses.

Table 1.A: Project Development Summary

Area	Use	Acres	Units/Square Footage
North Site (Lot 1)	Office & Commercial/Retail	4.8	55,000 square feet
	Park	1.9	n/a
	Oak Grove Preserve	1.3	
	Slope	0.4	
	Public Roads	1.4	
	Total North Site	**9.8**	
South Site (Lot 2)	Apartments	6.8	162 units 735–1,281 square feet per unit
	Slope	0.6	n/a
	Public Roads	0.7	
	Total South Site	**8.1**	
Lot C	**Detention Basin**	**1.4**	
TOTAL		**19.4**	**162 units/55,000 square feet**

Sources: Conceptual Site Plan, Grove Park, KTGY Architecture and Planning, July 2015.

The project includes the 19.4 acres to be developed and approximately 2.0 acres along portions of the west and east property lines. These areas were included in the impact assessments to account for off-site disturbances from grading activities associated with the development of manufactured slopes and the Yamas Drive improvements.

A retention basin will be developed on approximately 1.4 acres at the southwestern corner of the property. Required on-site and off-site improvements include the installation and/or extension of circulation, access, storm water, and utility improvements, parking, and landscape features. The project includes an amendment to the City's existing General Plan land use designation and zone change for the northern 10 portion of the site.

The following project objectives have been identified:

- Establish a mixed-use community for Wildomar with a balance of land uses including commercial, multifamily housing, and recreation.
- Deliver an appropriately sized commercial center that provides a mix of retail and office uses with opportunities for employment growth and increased sales tax for Wildomar.
- Provide rental housing opportunities in a quality multifamily setting at a scale and character appropriate to the site and adjacent existing and future developments.

- Utilize architectural styles and design elements that reflect Wildomar's heritage, namely through the use of Ranch, Farmhouse, and Craftsman styles.
- Incorporate a public park within the project site for the overall Wildomar community.
- Preserve the existing on-site oak grove to the maximum extent feasible.
- Create a walkable community that provides convenient non-vehicular access from the residential area to the public park and commercial center.
- Implement a trail system for the project consistent with the Wildomar Multi-Use Trails Master Plan.

A detailed description of the project is included in Section 3.0 (Project Description) of this EIR.

1.3 ISSUES ADDRESSED AND AREAS OF CONTROVERSY TO BE RESOLVED

When a City determines that an EIR will clearly be required for a project, *CEQA Guidelines* (Section 15060), states further initial review can be skipped and work directly on the EIR may commence. Based on its review of the project, the City has determined the potential impacts resulting from the construction and/or operation of the project, including cumulative impacts, require preparation of an EIR. An Initial Study was not prepared for the project. In the absence of an Initial Study, the City analyzed the project's environmental impacts in an EIR related to the following issues:

- Aesthetics;
- Agricultural and Forestry Resources;
- Air Quality;
- Biological Resources;
- Cultural and Paleontological Resources;
- Geology and Soils;
- Greenhouse Gas Emissions and Global Climate Change;
- Hazards and Hazardous Materials;
- Hydrology and Water Quality;
- Land Use and Planning;
- Mineral Resources;
- Noise;
- Population, Housing, and Employment;
- Public Services;
- Recreation
- Transportation and Traffic; and
- Utilities and Service Systems.

The project's impact, the severity of any impact, and the mitigation required to reduce or eliminate the impacts relative to these environmental issues are addressed in Sections 4.1 through 4.17 and summarized in Table 1.D at the end of this section.

Issues of concern and/or controversy related to the project were further identified by the City through responses to the Notice of Preparations (NOPs), Public Scoping Meetings, and Native American Tribal Consultation.

1.3.1 Notice of Preparation

The objective of distributing an NOP is to solicit public comment, ensuring the full and appropriate examination of issues of concern in the EIR. The NOP was distributed to the State Clearinghouse, as well as to the agencies, organizations, and persons considered likely to be interested in the project and its potential impacts. Comments received regarding the NOP have been used to identify impacts that could result from implementation of the project. The NOP was distributed on December 22, 2014, for a 35-day review period ending on January 26, 2015. Due to pending litigation, City staff subsequently determined that the area of the proposed General Plan Amendment and Zone Change may need to be extended to the entire site. To provide notice of these possible changes to the project, a second NOP was distributed on June 11, 2015, for a 30-day public review period ending July 13, 2015. However, after the end of the review period for the second NOP, the litigation was settled and it was determined that a General Plan Amendment and Zone Change would not be required for the southern 10 acres of the site and the project description in the original NOP was accurate.

The NOPs, NOP distribution lists, and response letters are included in Appendix A of this Draft EIR. Table 1.B provides a general summary of NOP comments received by the City during each distribution. As appropriate, Table 1.B identifies in which section of the EIR each specific NOP comment has been addressed.

Table 1.B: Notice of Preparation Comments

Agency/ Organization/ Individual	Date	Summary of Comments	Addressed in Section(s) of the EIR
NOP No. 1: December 22, 2014–January 26, 2015			
Riverside County Fire Department (RCFD)	12/22/2014	The RCFD acknowledged receipt of NOP and requests a copy of EIR to review for impacts to public services.	Section 4.14
Governor's Office of Planning and Research (OPR)	12/29/2014	OPR provided a copy of the cover letter and documents sent to responsible agencies.	Not Applicable
South Coast Air Quality Management District (SCAQMD)	1/5/2015	The SCAQMD provided recommendations regarding the analysis and mitigation of potential air quality impacts.	Section 4.3
California Department of Transportation (Caltrans)	1/8/2015	Caltrans recommended methodology and analysis for the traffic study and requested to review the project specific traffic study.	Section 4.16

Table 1.B: Notice of Preparation Comments

Agency/ Organization/ Individual	Date	Summary of Comments	Addressed in Section(s) of the EIR
California Native American Heritage Commission (NAHC)	1/12/2015	The NAHC recommended that the EIR analyze and mitigate potential impacts to historical resources within the project area. The NAHC also recommended methodology, analysis, and mitigation that should be included in the EIR.	Section 4.5
Riverside County Flood Control and Water Conservation District (RCFCWCD)	1/13/2015	The RCFCWCD provided general project area and water district and suggested appropriate permits are obtained.	Section 4.9
California Department of Fish and Wildlife (CDFW)	1/14/2015	The CDFW provided information on existing habitat and species and mitigation measures to avoid sensitive biological resources, requested the project demonstrate consistency with MSHCP, and fully analyze cumulative impacts and project alternatives.	Section 4.4
Elsinore Valley Municipal Water District (EVMWD)	1/19/2015	The EVMWD identified utility connection and fee requirements related to the provision of water and wastewater conveyance.	Section 4.17
Pechanga Band of Luiseño Indians	1/22/2015	The Pechanga Band requested that archaeological and cultural resource evaluation be completed for the project in consultation and participation from the Pechanga Tribe.	Section 4.5
NOP No. 2: June 12–July 13, 2015			
Soboba Band of Luiseño Indians	6/17/2015	The Soboba Band stated the site is within its Traditional Use Areas and requested consultation with the City related to site development and participation in any future on-site archaeological monitoring.	Section 4.5
South Coast Air Quality Management District (SCAQMD)	6/18/2015	The SCAQMD provided recommendations regarding the analysis and mitigation of potential air quality impacts.	Section 4.3
CDFW	7/9/2015	The CDFW provided information on existing habitat and species and mitigation measures to avoid sensitive biological resources, requested the project demonstrate consistency with MSHCP, and fully analyze cumulative impacts and project alternatives.	Section 4,4
Pechanga Band of Luiseño Indians	1/22/2015 (re-sent previous letter)	The Pechanga Band requested that archaeological and cultural resource evaluation be completed for the project in consultation and participation from the Pechanga Tribe.	Section 4.5

Table 1.B: Notice of Preparation Comments

Agency/ Organization/ Individual	Date	Summary of Comments	Addressed in Section(s) of the EIR
Caltrans	7/14/2015	Caltrans encourages Transit Oriented Development, multi-modal accessibility, adoption of safe pedestrian and bicycle networks, and sustainable roadway design features. Additionally, a review of the project's hydrologic impacts to I-15 was requested.	Section 4.16

1.3.2 Public Scoping Meetings

Pursuant to *CEQA Guidelines* (Section 15082(c)), the City conducted a public scoping meeting, which was held to further determine the scope and content of the environmental analysis contained in the EIR. The public scoping meeting was held on January 19, 2015, at 6:00 p.m. at Wildomar City Hall. Copies of the NOP (including a project description) and the project's conceptual site plan were available to the public for review. City staff, the project applicant, and the EIR consultant were present during this meeting to provide information regarding the project and collect public comments. To solicit public comments related to the potential revisions to the project, a second public scoping meeting was held on June 29, 2015. Table 1.C provides a general summary of Public Scoping comments received on the project.

Table 1.C: Public Scoping Meetings Comments

Agency/ Organization/ Individual	Date	Comments	Addressed in Section(s) of the EIR
Scoping Meeting No. 1: January 19, 2015			
Ken Mayes	1/19/2015	Questions were asked about the type of land uses the project would include and the potential population increase due to the project. Comments were made about the designation and upkeep of the park, location of the trail, and quantity of parking spaces.	Sections 3.0, 4.10, 4.13, 4.15, and 4.16
Howard Kaner	1/19/2015	Concerns were expressed about the widening of Clinton Keith Road and the projected start date of construction.	Sections 4.16 and 3.0
Edward Velk	1/19/2015	Views were expressed about the connection of Yamas Drive to Salida Del Sol, traffic circulation, and off-site drainage.	Sections 4.16 and 4.9
Joseph Morabito	1/19/2015	A question was asked about the affordability of the future apartments.	Not a CEQA issue.
Eric Velk	1/19/2015	Questions were expressed about the proposed traffic circulation, the entrance to the project site, and a potential horse trail.	Sections 4.16 and 4.15

Table 1.C: Public Scoping Meetings Comments

Agency/ Organization/ Individual	Date	Comments	Addressed in Section(s) of the EIR
Dale Velk	1/19/2015	Expressions of approval for the project were made for the project. Views expressed included impact to drainage and who would be responsible for the installation of Yamas Drive.	Sections 4.9 and 4.16
Scoping Meeting No. 2: June 29, 2015			
Gary Andre	6/29/2015	Cited density standards detailed in the City's General Plan	Section 4.10

1.3.3 Tribal Consultation (SB 18)

As the project includes a General Plan Amendment, consultation with Native American Tribal Government(s) pursuant to applicable provisions of *Local and Inter-Governmental Consultation* (SB 18) is required. The City formally contacted the Pechanga Band of Luiseño Indians (Pechanga Band) for the SB 18 consultation meeting on April 1, 2015, and subsequently met with the Tribe fulfilling this requirement. The Tribe has additionally responded to the NOP distributed for the project. The Soboba Band of Luiseño Indians (Soboba Band) requested consultation in its NOP response and the City will likewise consult with them prior to taking any action on the project. As appropriate, issues raised during consultation with local Tribal governments have been incorporated into the EIR.

1.4 ALTERNATIVES TO THE PROPOSED PROJECT

An EIR must describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the project objectives, and would avoid or substantially lessen its significant effects (*CEQA Guidelines,* Section 15126.3). The EIR need not consider every conceivable alternative; rather it must consider a reasonable range of potentially feasible alternatives that "… foster informed decision making and public participation." The City, as Lead Agency, is responsible for selection the range of project alternatives and must disclose its reasoning for disclosing those alternatives.

The City has identified the following alternatives to the project. Section 6.0 (Alternatives) of this EIR provides a detailed description of each project alternative, assesses the potential environmental impacts associated with its construction and operation of each alternative, and provides justification for the selection of the "environmentally superior" alternative.

1.4.1 No Project Alternative

The No Project Alternative provides a comparison between the environmental impacts of the project in contrast to the environmental impacts that could result from not approving, or denying, the project. Under the No Project Alternative, the site would remain in its existing condition and no development would occur. Under this alternative, the project site would retain its existing General Plan and zoning designation and would remain undeveloped.

1.4.2 Multifamily Residential Alternative

Under this alternative, the northern portion of the site's General Plan designation would be changed from Business Park (BP) to Highest Density Residential (HHDR). This area's zoning would be changed from R-R (Rural Residential) to R-4 (Planned Residential). This alternative would allow the development of up to 96 multiple-family units on 4.8 acres along Clinton Keith Road. The proposed 162 multiple-family residential units on the southern portion of the site, retention basin, passive park, oak grove, manufactured slopes, and related features would be retained. Overall site development would total 258 multifamily dwellings, ancillary features, and site improvements.

1.4.3 Reduced Density Residential Alternative

The development plan for the northern portion of the site including a proposed General Plan Amendment and Zone Change would remain in effect under this alternative. The development of 55,000 square feet of office and commercial use would still take place. On the southern portion of the site, this alternative envisions a General Plan Amendment from Highest Density Residential (HHDR) to High Density Residential (HDR). This designation allows detached, small lot single-family and attached single-family homes, patio homes, zero lot line homes, multifamily apartments, duplexes, and townhouses and would reduce the overall residential density of the site. The potential for clustered development is provided for in this land use category. The density range is 8.0 to 14.0 dwelling units per acre. The retention basin, passive park, oak grove, manufactured slopes, and related features would be retained. Under this alternative, 90 single-family residences (3,500-square foot minimum lots, 12.5 dwelling units per acre) and 55,000 square feet of commercial/office uses would be developed on site.

1.4.4 Reduced Density Office/Commercial Alternative

The southern portion of the project site would be retained as proposed by the project. A General Plan Amendment and Zone Change on the northern portion of the site similar to the proposed project would occur. Using a minimal FAR of 0.2, the amount of development on the northern portion of the site would be approximately 41,000 square feet. For this alternative, this development potential is divided into 25,000 square feet of office space and 16,000 square feet commercial uses. This

alternative would retain the on-site oak grove, passive public park and trailhead, and retention basin.

1.4.5 Environmentally Superior Alternative

The Environmentally Superior Alternative is the one that would result in the fewest or least significant impacts. If the Environmentally Superior Alternative is the No Project Alternative, as in this case, then an Environmentally Superior Alternative must be selected from the remaining alternatives. While the No Project Alternative (No Build) would avoid all environmental impacts without any requirement for mitigation, it would not meet any of the stated project objectives.

The Reduced Density Office/Commercial Alternative would reduce the overall number of daily vehicle trips, which in turn would proportionally reduce the amount of air pollutants, greenhouse gas emissions, and noise generated during the operation of on-site uses. This alternative would not result in any impact greater than identified with the project and would reduce vehicle trips (although the impact would remain significant and unavoidable) and public service/utility demand. The Reduced Density Office/Commercial Alternative would result in the development of a mixed-use project, provide for a commercial/office center, increase employment opportunities in the City, would provide public amenities (park, trail, preserved open space), and would create a walkable project that provides an alternate residential option to local residents. Because it satisfies all of the primary project objectives (though not as fully as the proposed project), it has been selected as the Environmentally Superior Alternative.

1.5 SUMMARY OF IMPACTS, MITIGATION, AND LEVEL OF IMPACTS

Table 1.D provides a summary of the proposed project impacts, proposed mitigation measures, and the level of significance of each impact following the application of identified mitigation measures.

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Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
4.1 Aesthetics			
4.1.5.1 Scenic Vistas: While the project would obstruct views of the Sedco Hills to residents immediately south of the project site, it would not create a substantial permanent obstruction to viewsheds of scenic hills and ridgelines that are generally accessible to the public.	Less than significant	No mitigation is required.	
4.1.5.2 Scenic Highways: The site is not visible from any state scenic highway or scenic local road.	No impact	No mitigation is required.	
4.1.5.3 Visual Character: The site is consistent with surrounding development patterns and would preserve existing scenic resources (the on-site oak grove).	Less than significant	No mitigation is required.	
4.1.6.1 Light and Glare: Project lighting would be designed, installed, and maintained in a manner sufficient to maintain the viability of Palomar Observatory. Adherence to the applicable light pollution control measures is a standard requirement for all development in the City and would ensure that lighting impacts to Palomar Observatory are less than significant.	Less than	No mitigation is required.	
4.1.7 Cumulative Impacts: Cumulative projects would contribute to development that is consistent with planned uses in the project area.	Less than significant	No mitigation is required.	
4.2 Agriculture and Forestry Resources			
4.2.5.1 Loss or Conversion of Forest Land: The project would not affect existing forest or timberland.	No impact	No mitigation is required.	
4.2.5.2 Farmland Conversion: The project site does not contain Prime Farmland, Unique Farmland, or Farmland of Statewide Importance.	No impact	No mitigation is required.	

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
4.2.5.3 Existing Zoning and Williamson Act: The project site and adjacent properties are neither zoned for agriculture nor enrolled in Williamson Act contracts.	No impact	No mitigation is required.	
4.2.5.4 Conversion of Farmland to Non-Agricultural Uses: Neither the project site nor adjacent land are considered farmland or forest land, as shown on maps prepared by the California Department of Conservation. In addition, the project site and adjacent lands are not currently used for agriculture, nor is there evidence to suggest that they have been in the past.	No impact	No mitigation is required.	
4.2.7 Cumulative Agricultural and Forestry Resources: Since the project does not contain agricultural or forest resources, it would not contribute to a cumulative impact.	No impact	No mitigation is required.	
4.3 Air Quality			
4.3.5.1 Air Quality Management Plan Consistency: The project's proposed GPA would not materially affect the uses allowed to be developed on the site or the development intensities cited in the City's General Plan; therefore, it is consistent with the AQMP and no significant impact would occur.	No impact	No mitigation is required.	
4.3.5.2 Operational Regional Emissions: The increase of criteria pollutants as a result of the project would not exceed established SCAQMD daily emission thresholds. Project-related long-term air quality impacts would be less than significant.	Less than significant	No mitigation is required.	
4.3.5.3 Operational Localized Emissions: the project's operational-source emissions would not exceed applicable localized significance thresholds.	Less than significant	No mitigation is required.	

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
4.3.5.4 Long-Term CO "Hotspot" Impacts: Given the existing extremely low level of CO concentrations in the project area, anticipated project-related traffic is not expected to result in the CO concentrations exceeding the State or Federal CO standards; therefore, CO hotspot impacts would not occur.	Less than significant	No mitigation is required.	
4.3.5.5 Odors: While construction activities, application of architectural coatings and installation of asphalt may temporarily generate odors, these odors are not likely to be noticeable beyond the project boundaries. The project does not propose any such uses or activities that would result in potentially significant operational source odor impacts.	Less than significant	No mitigation is required.	
4.3.6.1 Construction-Related Regional Emissions: Under the assumed construction scenario, Project emissions will exceed the SCAQMD thresholds established for VOCs and NO_X. The exceedance of SCAQMD thresholds is a significant impact requiring mitigation.	Potentially significant	**4.3.6.1A** "Zero-Volatile Organic Compounds" paints (no more than 150 grams/liter of VOC) and/or High Pressure/Low Volume (HPLV) applications consistent with SCAQMD Rule 1113 shall be used during project construction. **4.3.6.1B** All rubber tired dozers and scrapers used during grading operations shall be California Air Resources Board (CARB) Tier 3 certified or better. **4.3.6.1C** Appropriate provisions detailed in SCAQMD Rule 403 shall be implemented for the duration of project construction. Fugitive dust suppression measures include but shall not be limited to the following: • All clearing, grading, earthmoving, or excavation activities shall cease when winds exceed 25 miles per hour;	Less than significant

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
		• The contractor shall ensure that all disturbed unpaved roads and disturbed areas within the project site are watered at least three (3) times daily during dry weather. Watering, with complete coverage of disturbed areas, shall occur at least three times a day, preferably in the mid-morning, afternoon, and after work is done for the day; and • The contractor shall ensure that traffic speeds on unpaved roads and project site areas are reduced to 15 miles per hour or less. **4.3.6.1D** On-site construction equipment shall be shut off at or prior to five minutes of idling.	
4.3.6.2 Construction-related Localized Emissions: localized emissions of PM_{10} and $PM_{2.5}$ at the nearest receptor would exceed the SCAQMD's thresholds. The exceedance of SCAQMD thresholds is a significant impact requiring mitigation.	Potentially significant	Previously identified **Mitigation Measures 4.3.6.1A** through **4.3.6.1D** address the incorporation of BACMs and applicable SCAQMD Rules to reduce the level of pollutants emitted during on-site construction activities. Specifically, adherence to provisions of Rule 403 will reduce PM_{10} emissions from on-site activities that have the potential to generate fugitive dust.	Less than significant
4.3.7 Cumulative Air Quality Impacts: Individual project-related construction and operational emissions that exceed SCAQMD thresholds for project-specific impacts would be considered cumulatively considerable. As previously noted, the project **will not** exceed the applicable SCAQMD regional threshold for construction and operational-source emissions. As such, the project will not result in a cumulatively considerable significant impact.	Less than significant	No mitigation is required.	

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
4.4 Biological Resources			
4.4.5.1 Adopted Policies and/or Ordinances: The City of Wildomar does not have a local tree ordinance or any other local ordinance that pertains to the protection of biological resources.	No impact	No mitigation is required.	
4.4.5.2 Adopted Habitat Conservation Plans: The project site is located within the Elsinore Area Plan of the MSHCP, and the Stephen's Kangaroo Rat Habitat Conservation Plan (SKR HCP). Implementation of the proposed project under the MSHCP requires compliance with the Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools (Section 6.1.2 of the MSHCP), the Guidelines Pertaining to the Urban/Wildlands Interface (Section 6.1.4 of the MSHCP), and the Burrowing Owl Survey Area (Section 6.3.2 of the MSHCP). The project would comply with all applicable provisions of the MSHCP. Because the project would be in compliance with the MSHCP and SKR HCP, impacts to adopted habitat conservation plans will be less than significant levels.	Less than significant	No mitigation is required.	
4.4.5.3 Candidate, Non-listed Sensitive, or Special-Status Plant Species – Paniculate tarplant: The paniculate tarplant is classified by the CNPS as a "plant of limited distribution – a watch list." However, according to documentation by Calflora and CNPS, the paniculate tarplant is widely distributed throughout Riverside County (PCR, 2013). In addition, this species is not covered or even considered for coverage under the MSHCP. Based on the distribution of this species within Riverside County, the lack of consideration of this	Less than Significant	No mitigation is required.	

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
species for coverage under the MSHCP, and the CNPS listing of 4, this species is not considered sensitive.			
4.4.6.1 Candidate, Non-listed Sensitive, or Special-Status Species: The project may impact sensitive species, including burrowing owl, during grading.	Potentially significant	**4.4.6.1A** A pre-construction burrowing owl survey shall be conducted by a qualified biologist prior to the start of ground-disturbing activities. The burrowing owl survey shall be conducted pursuant to the guidelines established by the California Department of Fish and Wildlife and shall require four site visits (two in the morning and two in the evening) to determine the on-site presence/absence of the species. The final survey shall occur no more than three days prior to the start of ground-disturbing activities. In the event this species is not identified on site, no further mitigation is required. If during the pre-construction burrowing owl survey, this species is found to occupy the site, Mitigation Measure 4.4.6.1B shall be required. **4.4.6.1B** If burrowing owls are identified during the survey periods, the City shall contact the California Department of Fish and Wildlife to develop a burrowing owl relocation and conservation strategy. Prior to ground-disturbing activities the project applicant shall take the following actions: • A minimum 75-meter (250-foot) buffer shall be provided around any active nest until fledging has occurred. Following fledging, owls may be passively relocated (use of one-way doors and collapse of burrows) by a qualified biologist. • If impacts to occupied (non-nesting) burrows are unavoidable, on-site passive relocation techniques, as approved by the CDFW, may be	Less than significant

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
		employed to encourage owls to move to alternative burrows outside of the impact area. • If relocation of the owls is approved for the site by the CDFW, the City shall require the developer to hire a qualified biologist to prepare a plan for relocating the owls to a suitable site. The relocation plan must include all of the following: - The location of the nest and owls proposed for relocation. - The location of the proposed relocation site. - The number of owls involved and the time of year when the relocation is proposed to take place. - The name and credentials of the biologist who will be retained to supervise the relocation. - The proposed method of capture and transport for the owls to the new site. - A description of site preparation at the relocation site (e.g., enhancement of existing burrows, creation of artificial burrows, one-time or long-term vegetation control). - A description of efforts and funding support proposed to monitor the relocation.	
4.4.6.2 Riparian Habitat or Other Sensitive Natural Communities: The project would result in the loss of MSHCP Riverine Areas.	Potentially significant	**4.4.6.2A** Prior to the issuance of any grading permit for permanent impacts in jurisdictional features, the project applicant shall obtain a Clean Water Act Section 404	Less than significant

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
		permit and/or an Approved Jurisdictional Determination from the USACE, a Clean Water Act Section 401 permit from the RWQCB, and a Streambed Alteration Agreement permit under Section 1602 of the California Fish and Game Code from the CDFW. The following shall be incorporated into the permitting, subject to approval by the regulatory agencies: 1. Off-site replacement and/or restoration of USACE/RWQCB jurisdictional "waters of the U.S."/"waters of the State" within the Santa Margarita Watershed at a ratio no less than 1:1 or within an adjacent watershed within Riverside County at a ratio no less than 2:1 for permanent impacts, and for any temporary impacts to restore the impact area to pre-project conditions (i.e., pre-project contours and revegetate where applicable). Off-site mitigation may occur on land acquired for the purpose of in-perpetuity preservation, or through the purchase of mitigation credits at an agency-approved off-site mitigation bank. 2. Off-site replacement and/or restoration of CDFW jurisdictional streambed and associated riparian habitat within the Santa Margarita Watershed at a ratio no less than 1:1 or within an adjacent watershed at a ratio no less than 2:1 for permanent impacts, and for any temporary impacts to restore the impact area to pre-project conditions (i.e., pre-project contours and revegetate where applicable). Off-site mitigation may occur on land acquired for the purpose of in-perpetuity preservation, or through the purchase of mitigation	

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
		credits at an agency-approved off-site mitigation bank. **4.4.6.2B** Prior to any development activity or the issuance of any permit or approval removing or encroaching upon oak trees on the project site (this generally includes the canopy drip-line of trees within the area of ground disturbance and trees subject to changes in hydrologic regime), an Oak Tree Mitigation Plan prepared by a certified arborist, registered professional forester, botanist, or landscape architect shall be submitted for review and approval by the City that includes: 1. A survey showing the location of oak trees 5 inches or more in diameter at breast height (DBH), as defined by Public Resources Code Section 21083.4(a). 2. The removal of all oak trees 5 inches or more DBH height shall be mitigated. Removal shall be mitigated by planting (or replanting) and maintaining oak trees. A minimum of three native oak trees of 5 gallons or larger size shall be planted for each oak tree removed that is greater than or equal to 5 inches DBH. The trees shall be planted in areas deemed appropriate by the Oak Tree Mitigation Plan, considering future lot development and interference with foundations, fencing, roadways, driveways, and utilities. Replanted oak trees shall be maintained for a period of seven years after they are planted. If any of the replanted oak trees die or become diseased, they shall be replaced and maintained for seven years after the new oak trees	

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
		are planted. 3. A replanting schedule and diagram for trees removed or encroached upon by the project shall be submitted to and approved by the City. Replanted trees shall be planted in areas deemed appropriate by the Oak Tree Mitigation Plan, considering future lot development and interference with foundations, fencing, roadways, driveways, and utilities. Trees planted shall be protected from livestock and other animals. 4. Oak tree protection measures for trees to be retained within the project site shall be included in construction specifications. Each oak tree to be preserved shall be surrounded by a tree zone identified by the drip-line of the tree. An orange plastic fence or other suitable type of fence shall be used to identify the tree zone during construction activities. No vegetation removal, soil disturbance, or other development activities shall occur within the tree zone in order to protect root systems and minimize compaction of the soil, unless authorized by the Oak Tree Mitigation Plan. 5. Conservation easements or funds for off-site oak woodlands conservation shall be proposed to and approved by the City.	
4.4.6.3 Jurisdictional Waters/Wetlands: The project would fill 0.07 acres of USACE/RWQCB jurisdictional drainages.	Potentially significant	Implementation of Mitigation Measure 4.4.6.2A	Less than significant
4.4.6.4 Wildlife Movement and Nesting/ Migratory Birds. The project site and surrounding area contain suitable nesting habitat for several	Potentially Significant	**4.4.6.4A** A pre-construction survey for nesting birds and migratory birds shall be conducted by a qualified biologist, no more than three (3) days prior to the	Less than significant

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
tree-, shrub-, and ground-nesting avian species, including the coastal California gnatcatcher.		initiation of construction activities. A qualified biologist shall survey the construction zone and a 250-foot radius surrounding the construction zone to determine whether these activities have the potential to disturb or otherwise harm nesting birds. If an active nest is located within 100 feet (250 feet for raptors) of construction activities, the project applicant shall establish an exclusion zone (no ingress of personnel or equipment at a minimum radius of 100 feet or 250 feet for raptors, around the nest). Alternative exclusion zones may be established through consultation with the CDFW and the USFWS. The exclusion zones shall remain in force until all young have fledged.	
4.4.7 Cumulative Biological Resources Impacts. The proposed project would not make a cumulatively considerable contribution to impacts on endangered or threatened species, riparian habitat or natural plant communities, jurisdictional waters, habitat fragmentation, wildlife movement, local policies and ordinances, or habitat conservation plans. There are no projects that would, in combination with the proposed project, produce a significant impact to non-listed sensitive species. Therefore, there are no significant cumulative impacts anticipated to occur that are associated with biological resources. With implementation of project-level mitigation measures, the project's contribution to cumulative biological impacts will be incremental and not be cumulatively considerable.	Less than significant	None required.	

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
4.5 Cultural and Paleontological Resources			
4.5.5.1 Historic Resources: No historic structures or above-ground features were identified during field survey or the archival records search.	No impact	No mitigation is required.	
4.5.5.2 Human Remains: While no evidence exists to suggest the project site has been used in the past for human burials, on-site construction could uncover previously unknown buried human remains. If human remains were discovered, compliance with California State Health and Safety Code § 7050.5 would be required.	Less than significant	No mitigation is required.	
4.5.6.1 Archaeological Resources: While no cultural resources have been identified or previously recorded within the project site, 18 prehistoric archaeological sites, historic archaeological site, or historic buildings have been identified within one-mile of the proposed development; therefore, a potential exists that development activities may result in the unanticipated discovery of such resources on-site.	Potentially significant	**4.5.6.1A** If, during grading or construction activities, archaeological resources are discovered on the project site, work shall be halted immediately within 50 feet of the discovery and the resources shall be evaluated by a qualified archaeologist and the Pechanga and Soboba Bands (Tribes). Any unanticipated archaeological resources that are discovered shall be evaluated and a final report prepared by the qualified archaeologist. The report shall include a list of the resources discovered, documentation of each site/locality, and interpretation of the resources identified, and the method of preservation and/or recovery for identified resources. In the event the significant resources are recovered and if the qualified archaeologist and the Tribe(s) determine the resources to be historic or unique, avoidance and/or mitigation would be required pursuant to and consistent with CEQA Guidelines Sections 15064.5 and 15126.4 and Public Resources Code Section 21083.2 and the Cultural Resources Treatment and Monitoring Agreement required by Mitigation Measure 4.5.6.1B. This mitigation measure shall be incorporated in all	Less than significant

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
		construction contract documentation. **4.5.6.1B** At least 30 days prior to seeking a grading permit, the project applicant(s) shall contact the Pechanga and Soboba Bands (Tribes) to notify the Tribes of grading, excavation, and the monitoring program and to coordinate with the City of Wildomar and the Tribes to develop a Cultural Resources Treatment and Monitoring Agreement. The agreement shall include, but shall not be limited to, outlining provisions and requirements for addressing the treatment of cultural resources; project grading and development scheduling; terms of compensation for the monitors; treatment and location of final disposition of any cultural resources, sacred sites, and human remains discovered on the site; and establishing on-site monitoring provisions and/or requirements for professional Tribal monitors during all ground-disturbing activities. A copy of this signed agreement shall be provided to the Planning Director and Building Official prior to the issuance of the first grading permit. **4.5.6.1C** In the event agreement on the significance and/or mitigation of archaeological resources cannot be reached, these issues will be presented to the City of Wildomar Planning Director. The Planning Director shall make the determination based on the provisions of CEQA with respect to archaeological resources and shall take into account the religious beliefs, customs, and practices of both the Pechanga and the Soboba Bands (Tribes). Notwithstanding any other rights available under the law, the Planning Director's decision shall be appealable to the City Council of Wildomar. In the event the significant resources are recovered and if	

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
		the qualified archaeologist determines the resources to be historic or unique as defined by relevant State and local laws, avoidance and mitigation would be required pursuant to and consistent with Public Resources Code Section 21083.2 and CEQA Guidelines Sections 15064.5 and 15126.4. **4.5.6.1D** All cultural materials, with the exception of sacred items, burial goods, and human remains, which will be addressed in the Cultural Resources Treatment and Monitoring Agreement required by **Mitigation Measure 4.5.6.1B,** that are collected during the grading monitoring program and from any previous archeological studies or excavations on the project site shall be curated according to the current professional repository standards. The collections and associated records shall be transferred, including title, to a curation facility, which meets the standards set forth in 36 CRF Part 79 for federal repositories. **4.5.6.1E** All sacred sites, should they be encountered within the project site, shall be avoided and preserved as the preferred mitigation, if feasible as determined by a qualified archaeologist in consultation with the Tribe(s). To the extent that a sacred site cannot be feasibly preserved in place or left in an undisturbed state, mitigation measures shall be required pursuant to and consistent with Public Resources Code Section 21083.2 and CEQA Guidelines Sections 15064.5 and 15126.4. **4.5.6.1F** To address the possibility that cultural resources may be encountered during grading or construction, a qualified professional archeologist shall monitor all construction activities that could potentially	

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
		impact archaeological deposits (e.g., grading, excavation, and/or trenching). However, monitoring may be discontinued as soon the qualified professional is satisfied that construction will not disturb cultural resources.	
4.5.6.2 Paleontological Resources: While no known fossil beds exist on the site, the Pauba Formation, which underlies the western portion of the site, has produced fossils near the project site.	Potentially significant	**4.5.6.2A** Prior to the issuance of a grading permit, the project applicant(s) shall identify the qualified paleontologist to the City of Wildomar who has been retained to evaluate the significance of any inadvertently discovery paleontological resources. If paleontological resources are encountered during grading or project construction, all work in the area of the find shall cease. The project applicant shall notify the City of Wildomar and retain a qualified paleontologist to investigate the find. The qualified paleontologist shall make recommendations as to the paleontological resource's disposition to the City of Wildomar Planning Director. The recommendations shall follow procedures established by the Society of Vertebrate Paleontology (SVP) for assessment and mitigation of impacts to paleontological resources, which the Planning Director shall follow. The developer shall pay for all required treatment and storage of the discovered resources. **4.5.6.2B** A qualified paleontologist or paleontological monitor shall monitor all mass grading and excavation activities. Monitoring will be conducted in areas of grading or excavation in undisturbed formational sediments of the Pauba Formation. Paleontological monitors shall be equipped to salvage fossils as they are unearthed to avoid construction delays and to remove samples of sediment that are likely to contain the remains of small fossil invertebrates and vertebrates. The monitor must be empowered to	Less than significant

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
		temporarily halt or divert equipment to allow removal of abundant or large specimens in a timely manner. Monitoring may be reduced if the potentially fossiliferous units are not present in the subsurface, or if present, are determined on exposure and examination by qualified paleontological personnel to have low potential to contain fossil resources. **4.5.6.2C** Any recovered paleontological specimens shall be identified to the lowest taxonomic level possible and prepared for permanent preservation, including screen-washing of sediments to recover small invertebrates and vertebrates shall occur if necessary. **4.5.6.2D** Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage shall occur at an institutional repository approved by the City of Wildomar. The paleontological program shall include a written repository agreement prior to the initiation of mitigation activities. **4.5.6.2E** A final monitoring and mitigation report of findings and significance shall be prepared, including lists of all fossils recovered and necessary maps and graphics to accurately record their original location. The report, when submitted to and accepted by the City of Wildomar, shall signify satisfactory completion of the project program to mitigate impacts to any potential nonrenewable paleontological resources (i.e., fossils) that might have been lost or otherwise adversely affected without such a program in place.	
4.5.7 Cumulative Cultural and Paleontological Resources: Since this region contains	Potentially significant	Implementation of the mitigation measures outlined in this document, and other CEQA documents for	Less than Significant

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
archaeological, historical, and paleontological resources that have been found in the past, future development in the surrounding region may affect these resources as well.		development projects in the area, will reduce cumulative impacts to cultural resources.	
4.6 Geological Resources			
4.6.5.1 Fault Rupture: The project is not located within an Alquist Priolo Earthquake fault zone, and all active faults in the vicinity of the project are located far enough away that they do not pose a threat from fault rupture.	Less than significant	No mitigation is required.	
4.6.5.2 Ground Shaking: The site could experience moderate to severe ground shaking during an earthquake. However, design and construction in accordance with the current California Building Code (CBC) requirements is anticipated to address the issues related to potential ground shaking.	Less than significant	No mitigation is required.	
4.6.5.3 Seismic-Related Ground Failure: Potential for landslides and subsidence at the site is considered low. While the site has a moderate liquefaction potential, remedial grading is expected to reduce liquefaction potential to a very low level.	Less than significant	No mitigation is required.	
4.6.5.4 Landslides and Rockfalls: The site has low potential for landslides and rockfalls due to the lack of steep, unstable hillsides at or near the site.	Less than significant	No mitigation is required.	
4.6.5.5 Soil Erosion or Loss of Topsoil: Soils at the project site generally have a moderate erosion potential. As the project would be required to adhere to the conditions detailed in the NPDES Permit, the project-specific SWPPP and a WQMP.	Less than significant	No mitigation is required.	
4.6.5.6 Unstable Soils: Remedial excavation and	Less than	No mitigation is required.	

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
grading under the project would address the potential for expansive soils on site.	significant		
4.6.5.7 Septic Tanks: Septic tanks will not be used by the project.	Less than significant	No mitigation is required.	
4.6.7 Cumulative Geological and Soil Impacts: As more development occurs in the project area, each project will be required to mitigate its own identified geologic and soil constraints. Therefore, the project will not make a significant contribution to any cumulatively considerable impacts regarding geology or soils.	Less than significant	No mitigation is required.	
4.7 Greenhouse Gas Emissions and Climate Change			
4.7.5.1 Greenhouse Gas Plan, Policy, Regulation Consistency: The project is consistent with State, regional, and local policies regarding climate change. Therefore, the project would not conflict with any plans or policies created for the purpose of reducing greenhouse gas emissions. Impacts are less than significant.	Less than significant	No mitigation is required.	
4.7.5.2 Greenhouse Gas Emissions: With mitigation and regulatory developments, the project's GHG reduction would exceed the AB 32 reduction target of 28.5 percent.	Potentially significant	Implementation of Mitigation Measures 4.3.6.1A–D.	Less than significant
4.7.7 Cumulative Greenhouse Gas and Climate Change Emissions: The project's greenhouse gas emissions would not exceed any established thresholds, nor would the project conflict with any plan established for the purpose of reducing greenhouse gas emissions. As a result, the project's contribute to Global Climate Change is not considered cumulatively significant.	Less than significant	No mitigation is required.	

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
4.8 Hazards and Hazardous Materials			
4.8.5.1 Routine Transport, Use, or Disposal of Hazardous Materials and Reasonable Foreseeable Upset and Accident Conditions: Some limited transport of potentially hazardous materials, such as gasoline, diesel fuel, paints, solvents, and fertilizers, may occur during construction of the project. Compliance with applicable City management plans regarding hazardous waste shall ensure these materials are handled safely.	Less than significant	No mitigation is required.	
4.8.5.2 Located on a List of Hazardous Materials Sites: Two Leaking Underground Storage Tanks (LUST) listings were identified with a half mile radius of the property. Considering the distance, status and the topographical relation to the project site, the LUSTs are not considered to be a recognized environmental condition in connection with the project.	Less than significant	No mitigation is required.	
4.8.5.3 Within Two Miles of a Private Airport or Within an Airport Land Use Plan or Within Two Miles of a Public Airport: The project is not located within two miles of a public airport or within an airport land use plan. The project is also not located in the vicinity of a private airstrip.	Less than significant	No mitigation is required.	
4.8.5.4 Existing or Proposed School: The project is not located within one-quarter mile of an existing or proposed school. The handling of hazardous materials or emission of hazardous substances, if present, would have to be in accordance with the Hazardous Materials Business Emergency Plan as required by applicable local, State, and Federal	Less than significant	No mitigation is required.	

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
standards, ordinances, and regulations.			
4.8.5.5 Conflict with Emergency Response Plans: The project will be designed, constructed, and maintained in accordance with applicable standards associated with vehicular access, ensuring that adequate emergency access and evacuation will be provided. Construction activities that may temporarily restrict vehicular traffic would be required to implement appropriate measures to facilitate the passage of persons and vehicles through/around any required road closures.	Less than significant	No mitigation is required.	
4.8.5.6 Wildland Fire Risks: According to the Riverside County Land Information System and State Responsibility Area maps by CalFire, the project is not within a High Fire Area (subject to County Ordinance 787) or within any Fire Responsibility Area.	Less than significant	No mitigation is required.	
4.8.7 Cumulative Hazards and Hazardous Materials Impact: Significant cumulative impacts associated with the routine transport, use, and disposal of hazardous materials would not occur as these risks are largely site-specific and localized and therefore limited to the project site. The project would not combine with other projects to result in a cumulatively considerable impact with respect to potential hazards. Therefore, its contribution to any cumulative impacts related to hazards or hazardous materials is considered to be less than significant.	Less than significant	No mitigation is required.	
4.9 Hydrology and Water Quality			
4.9.5.1 Dam Inundation Impacts: The project is not located in a dam inundation zone or flood hazard area.	Less than significant	No mitigation is required.	

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
4.9.5.2 Seismic-Related Impacts: The project area is not at risk of inundation by a tsunami as it is located approximately 24 miles from the Pacific Ocean. The project site also not located near any enclosed body of water and could be subject to a seiche during a seismic event or hillside area making it susceptible to mudflows.	Less than significant	No mitigation is required.	
4.9.5.3 Groundwater: The project would reduce infiltration of storm water on site through the addition of impervious cover. The project is generally consistent with planned land uses in the project area and the use projection cited in the UWMP. The project site is not considered a groundwater recharge area by the City.	Less than significant	No mitigation is required.	
4.9.5.4 100-Year Flooding-Related Impacts: The project site is not at all within a 100-year flood zone.	Less than significant	No mitigation is required.	
4.9.6.1 Construction-Related Water Quality Impacts: Construction activities could increase sedimentation, erosion or increase sources of contamination, if not managed properly	Potentially significant	**4.9.6.1A** Prior to the issuance of grading permits, the project applicant shall submit evidence to the City that coverage under the SWRCB General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order 2009-0009-DWQ) has been obtained. As required by the General Permit, Project Applicant shall submit a Stormwater Pollution Prevention Plan (SWPPP) to the City of Wildomar, Riverside County Flood Control and Water Conservation District, and San Diego Regional Water Quality Control Board for review and approval. The SWPPP shall identify pre- and post-construction Best Management Practices (BMPs) intended to prevent the release of sediment and pollutants into downstream waterways and comply with all other requirements of the General Permit. BMPs to be	Less than significant

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
		implemented may include (but shall not be limited to) the following: • Sediment discharges from the site may be controlled by the following: sandbags, silt fences, straw wattles and temporary debris basins (if deemed necessary), and other discharge control devices. The construction and condition of the BMPs are to be periodically inspected by the RWQCB during construction, and repairs would be made as required. • Materials that have the potential to contribute non-visible pollutants to storm water must not be placed in drainage ways and must be placed in temporary storage containment areas. • All loose soil, silt, clay, sand, debris, and other earthen material shall be controlled to eliminate discharge from the site. Temporary soil stabilization measures to be considered include: covering disturbed areas with mulch, temporary seeding, soil stabilizing binders, fiber rolls or blankets, temporary vegetation, and permanent seeding. Stockpiles shall be surrounded by silt fences and covered with plastic tarps. • The SWPPP shall include inspection forms for routine monitoring of the site during the construction phase. • Additional required BMPs and erosion control measures shall be documented in the SWPPP. • The SWPPP would be kept on site for the duration of project construction and shall be available to the	

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
		local Regional Water Quality Control Board for inspection at any time.	
4.9.6.2 Operational-Related Water Quality Impacts: Runoff from developed surfaces may increase the pollution in stormwater runoff from the project site.	Potentially significant	**4.9.6.2A** Prior to the issuance of grading permits, the Project Applicant shall submit a final Water Quality Management Plan (WQMP) to the City of Wildomar, for review and approval, as required by SDRWQCB Order No. R9-2004-001 (MS4 Permit) and the current Riverside County Water Quality Management Plan for Urban Runoff. The project shall implement site design BMPs, source control BMPs, and treatment control BMPs as identified in the Water Quality Management Plan. This measure shall be implemented to the satisfaction of the City Public Works Department and Planning Division as appropriate.	Less than significant
4.9.6.3 Drainage Pattern and Capacity-Related Impacts: Implementation of the project would result in the construction of impervious surfaces, increasing the amount of runoff at the site.	Potentially significant	Development of facilities detailed in the WQMP prepared pursuant to Mitigation Measure 4.9.6.2A	Less than significant
4.9.7 Cumulative Hydrology and Water Quality Impacts: Development within the watershed will result in an increase in impervious surfaces, changes in the type and density of land use, and corresponding changes in the amount and characteristic of runoff characteristics. Future development will be required to comply with the applicable requirements of the NPDES permit program and water quality standards Continued development within the Elsinore Valley will put additional pressure on water supplies from the local groundwater basins, including the Elsinore and Temescal Valley basins. The land uses proposed for the site do not vary substantially from	Less than significant	No mitigation is required.	

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
those that were projected during preparation of the UWMP. EVMMD plans to use a variety of water sources, including imported water from the State Water Project and Colorado River Aqueduct. EVMD's ability to import water would prevent significant groundwater depletion with cumulative project in its service area. The drainage system for the proposed project will be designed so that peak flows from post-development runoff are captured by landscape features and BMPs like infiltration basins, and treated prior their discharge into storm drains and water bodies. Similar requirements will be placed on all other development in the vicinity of the project site by the City.			
4.10 Land Use and Planning			
4.10.5.1 Physically Divide an Established Community: The project does not include any physical structures that would divide the surrounding community. The project will connect to existing roadway system, as well as the future extension of Yamas Drive.	No impact	No mitigation is required.	
4.10.5.2 Conflict with Applicable Land Use Plans, Policies, or Regulations (Local): Project is generally consistent with the goals, objectives, and policies of the City's General Plan and other regional plans. The proposed General Plan Amendment and Zoning Change would not significantly affect the goals and objectives of the General Plan because it would result in uses that are similar to those envisioned in the General Plan. The overall pattern of development planned for the	Less than significant	No mitigation is required.	

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
area along Clinton Keith Road would not change.			
4.10.5.3 Conflict with Any Applicable Habitat or Natural Community Conservation Plan: The project site is within the Elsinore Area Plan of Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP). However, Project site is not within a cell, a designated cell group, or a subunit within the Elsinore Area Plan; therefore, conservation of land on the project site is not required pursuant to the MSHCP. The project does require compliance with the Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools (Section 6.1.2 of the MSHCP), the Guidelines Pertaining to the Urban/Wildlands Interface (Section 6.1.4 of the MSHCP), and the Burrowing Owl Survey Area (Section 6.3.2 of the MSHCP). The project is also within the Stephen's Kangaroo Rat Habitat Conservation Plan (SKR HCP) fee area. The project would therefore potentially conflict with provisions of the MSHCP and SKR HCP.	Potentially significant	Implementation of Mitigation Measures 4.4.6.1A-B, 4.4.6.2A-B and 4.4.6.4A.	Less than significant
4.10.7 Cumulative Land Use and Planning Impacts: The project would not have significant project-related impacts related to dividing an existing community, conflicts with applicable land use plans, policies, or regulations with approval of the proposed GPA or zone change, or conflict with an approved habitat conservation plan. While the project would represent a shift in land use designation for the project site, this shift does not represent a significant cumulative land use impact	Less than significant	No mitigation is required.	
4.11 Mineral Resources			
4.11.5.1 Loss of Statewide, Regional, or Locally	Less than	No mitigation is required.	

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
Important Mineral Resources: The site is within Mineral Resource Zone (MRZ)-3a, where mineral deposits are likely to exist but their significance is undetermined. The majority of Wildomar is also designated as MRZ-3a and occurs on similar geologic features. While it is possible that the site could yield mineral resources, the physical characteristics of the site provide no indication of a unique or valuable mineral resource. In addition, mining would be an incompatible land use with the surrounding residential neighborhoods. Therefore, impacts are less than significant.	significant		
4.11.7 Cumulative Mineral Resources Impacts: As population levels increase in the region, greater demand will be placed on mineral resources, especially sand and gravel. However, because the project site is not identified as a significant source of sand/gravel deposits or other mineral resources and development subsequent to the adoption of the proposed land use actions on any of the sites would not decrease the local or regional availability of mineral resources, potential future development of any of the sites would have no significant cumulative impacts on mineral resources.	Less than significant	No mitigation is required.	
4.12 Noise			
4.12.5.1 Airport Noise Impacts: The project is not located within two miles of an airport or private airstrip. Therefore, the proposed project would not have the potential to expose people to excessive noise levels from airport operations. Therefore, no significant noise impacts would occur regarding these issues from implementation of the proposed project.	Less than significant	No mitigation is required.	

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
4.12.5.2 Groundborne Vibration Impacts: Heavy construction equipment, such as large bull dozers, and haul trucks have the greatest potential of producing vibration impacts. The greatest potential vibration impacts would be experienced by the sensitive receptors located at the multifamily residences south of the project. The maximum potential vibration would be 75.6 VdB. The Federal Transit Administration's (FTA) maximum acceptable vibration standard is 80 VdB.As a result, the project site will not include nor require equipment, facilities, or activities that would result in a perceptible human response (annoyance). Impacts are less than significant.	Less than significant	No mitigation is required.	
4.12.5.3 Operational Noise Impacts: Based on representative noise measurements and the distance to on-site sensitive receivers (residential units), combined operational noise levels are projected to range from 50.4 to 51.2 dBA L_{eq}. While this level of operational noise would not exceed the City's daytime standard, the stated project activities will exceed the City's nighttime exterior noise standards of 45 dBA L_{eq} at the residential land uses within the project site. Based on the nature of uses (office and retail) of areas adjacent to the residential uses, parking lot and air conditioning unit activities would be limited during the sensitive nighttime hours of 10:00 p.m. to 7:00 a.m. While some parking lot vehicle movement may occur during nighttime hours, any such noise will likely be overshadowed by background traffic noise from Clinton Keith Road.	Less than Significant	No mitigation is required.	
4.12.6.1 Short-Term Construction Noise	Potentially	**4.12.6.1A** A noise mitigation plan shall be prepared and	Less than

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
Impacts: During this time, construction noise experienced by the closest sensitive receiver, 60 feet from the site, could reach up to 85.2 Leq dBA. The next closest receiver, at 147 feet away, could experience construction noise at levels up to 77.4 dBA.	significant	submitted to the City for review and approval prior to start of construction. The plan shall identify the location of construction equipment and how the noise from this equipment will be mitigated during construction of the project. Methods to mitigate construction noise may include (but shall not be limited to): - Install temporary noise control barriers, or equally effective noise protection measures, that provide a minimum noise level attenuation of 10 dBA when project construction occurs near existing noise-sensitive structures. The noise control barrier must present a solid face from top to bottom. The noise control barrier must be high enough and long enough to block the view of the noise source. Unnecessary openings shall not be made. The noise barriers must be maintained and any damage promptly repaired. Gaps, holes, or weaknesses in the barrier or openings between the barrier and the ground shall be promptly repaired - The noise control barriers and associated elements shall be completely removed and the site appropriately restored upon the conclusion of the construction activity. - During all project site construction, the construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards. The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise-sensitive receivers	Significant

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
		nearest the project site - The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receivers nearest the project site during all project construction. - The construction contractor shall limit haul truck deliveries to the same hours specified in the Clinton Keith Road (APN: 380-250-003) Traffic Impact Analysis with no more than 16 (two-way) haul trips per hour between 7:00 a.m. and 10:00 a.m., up to 30 (two-way) haul trips per hour between 10:00 a.m. and 2:00 p.m., and no more than 16 (two-way) haul trips per hour between 2:00 p.m. and 4:00 p.m. To the extent feasible, the plan shall denote haul routes that do not pass sensitive land uses or residential dwellings. **4.12.6.1B** Prior to approval of grading plans and/or issuance of building permits, plans shall include a requirement that noise-generating project construction activities shall occur between the permitted hours of 6:00 a.m. and 6:00 p.m. during the months of June through September, and between the hours of 7:00 a.m. and 6:00 p.m. during the months of October through May (Section 9.48.020). The project construction supervisor shall ensure compliance with the requirement and the City shall conduct periodic inspection at its discretion. **4.12.6.1C** The construction contractor shall post a	

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
		publicly visible sign with the telephone number and person to contact regarding noise complaints. The construction manager, within 72 hours of receipt of a noise complaint, shall either take corrective actions or, if immediate action is not feasible, provide a plan or corrective action to address the source of the noise complaint.	
4.12.6.2 Traffic Noise Impacts: Increased traffic on Yamas Drive would generate potentially significant increase in ambient noise. However, there are no off-site noise sensitive receivers adjacent to the segment of Yamas Drive. Traffic-noise at on-site residential uses may exceed interior noise levels established by the City.	Potentially significant	**4.12.6.2A** Buildings adjacent to Clinton Keith Road and Yamas Drive will require a Noise Level Reduction (NLR) of up to 24.3 dBA and a windows closed condition requiring a means of mechanical ventilation (e.g., air conditioning). In order to meet the City of Wildomar 45 dBA CNEL interior noise standards, the project plans shall include measures to achieve the following: - *Windows:* All windows and sliding glass doors shall be well fitted, with well weather-stripped assemblies and shall have a minimum sound transmission class (STC) rating of 27. Air gaps and rattling shall not be permitted. - *Doors:* All exterior doors shall be well weather-stripped solid core assemblies at least 1.25 inches thick. - *Roof: Roof sheathing of wood construction shall be well fitted or caulked* plywood of at least 0.5 inch thick. Ceilings shall be well fitted, well-sealed gypsum board of at least 0.5 inch thick. Insulation with at least a rating of R-19 shall be used in the attic space. - *Ventilation:* Arrangements for any habitable room shall be such that any exterior door or window can be kept closed when the room is in	Less than significant

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
		use. A forced air circulation system (e.g., air conditioning) shall be provided which satisfy the requirements of the Uniform Mechanical Code.	
4.12.7 Cumulative Noise Impacts: Although it is not possible to predict if contiguous properties may be constructed at the same time, individual projects will be required to adhere to applicable provisions of the City's Municipal Code to offset temporary construction noise impacts. The project's anticipated traffic volumes were utilized to determine existing, Year 2018, and Year 2035 traffic noise. Exterior noise level increases will largely be at the driveways to the project site on Yamas Drive and remain below exterior noise level criteria, the project will not create a subst antial permanent increase in traffic-related noise levels or expose persons to noise levels in excess of the exterior noise level standards. On-site operational noises are individual occurrences and are not typically additive in nature. Noise sources would have to be adjacent to or in close proximity to one another in order for individual noise sources to intermingle. Similarly, noise receivers would also have to be adjacent to or in close proximity to the noise generators. It is reasonable to conclude the owner/operator/occupant of adjacent properties would adhere to applicable provisions of the City's Municipal Code related to operational and nuisance noise from their respective properties	Less than significant	No mitigation is required	
4.13 Population and Housing:			
4.13.5.1 Population Growth: The project will	Less than	No mitigation is required.	

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
develop high density housing within the City, which will contribute to the "fair share" of housing required under the RHNA. Since this housing will be used to satisfy the requirements of the RHNA, and the placement of housing is consistent with the General Plan, population increase as a result of the project is not considered substantial. Therefore, the project will not induce a population increase above which has been planned for by the City.	significant		
4.13.5.2 Displace Substantial Housing/People: The project site is currently vacant and undeveloped. Since the site is currently not used for any dwelling purposes, there is no potential for the project to displace people or housing.	No impact	No mitigation is required.	
4.13.7 Cumulative Population and Housing Impacts: While the project would generate approximately 157 jobs and 356 residents, this growth has been anticipated by the General Plan and therefore not considered substantial. The project would contribute to the City's "fair share" of housing required under the RHNA. Therefore, the project would not significantly contribute to a City or regional cumulative housing or population impact.	Less than significant	No mitigation is required.	
4.14 Public Services and Facilities			
4.14.1.5 Police Services: The project would incrementally increase demand for police services. Since the project would only incrementally increase population in the service area, no new or physically altered law enforcement facilities are required. Payment of City development impact fees would offset any increase in demand for police services. Impacts are therefore less than significant.	Less than significant	No mitigation is required.	

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
4.14.2.5 Fire Protection: Since the project would only incrementally increase population in the service area, no new or physically altered law fire-fighting facilities are required. The proposed project would be required to be designed, constructed, and operated per applicable fire prevention/protection standards established by the City. Payment of City development impact fees would offset any increase in demand for fire-fighting services. Impacts are therefore less than significant.	Less than significant	No mitigation is required.	
4.14.3.5 Schools: The proposed project would generate a total of approximately 37 new students, who would attend schools in the Lake Elsinore Unified School District. While the project would increase enrollment at LEUSD schools, the projected increase is within the capacity of the schools. In addition, the LEUSD imposes development fees to help fund improvements to their facilities. With the payment of development fees, the project would have a less than significant impact.	Less than significant	No mitigation is required.	
4.14.4.5 Other Public Facilities: The project will incrementally increase demand for other public facilities. It is reasonable to conclude the payment of required fees, taxes, and other payments by the owners/occupants of the proposed development would sufficiently offset any incremental increase in demand or use of these facilities.	Less than significant	No mitigation is required.	
4.14.5 Cumulative Public Services and Facilities Impacts: The project, along with other local development, will create an incremental need for public services. Payment of identified impact fees will help reduce potential service impacts to less	Less than significant	No mitigation is required.	

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
than significant levels, and the project will not make a significant contribution to any cumulative impacts on public services.			
4.15 Recreation and Parks			
4.15.5.1 Increased Use of Existing Recreational Facilities: The project would include 3.1 acres of open space. This exceeds the City requirement of 0.0066 acres per dwelling unit or a total of 1.07 acres. The project proponent would be required to pay the Quimby Act fee and the City's park Development Impact Fee (DIF).	Less than significant	None mitigation is required.	
4.15.5.2 New or Physically Altered Recreation and Park Facilities: Since the environmental effects for the project site, including recreation facilities, are included as part of the entire analysis of environmental effects in the EIR, the construction or expansion of such areas would not result in an adverse physical effect on the environment beyond those analyzed for the overall development of the project.	Less than significant	None required	
4.15.7 Cumulative Recreation and Parks Impacts: Implementation of the proposed project in combination with cumulative projects in the area would increase use of existing parks and recreation facilities. However, as future residential development is proposed, the City will require developers to provide the appropriate amount of parkland or pay the in-lieu fees, which will contribute to future recreational facilities. Payment of these fees and/or implementation of facilities on a project-by-project basis would offset cumulative parkland impacts by providing funding for new	Less than significant	None required	

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
and/or renovated parks equipment and facilities. Therefore, the project would not contribute to a cumulative impact with respect to recreation facilities.			
4.16 Transportation and Traffic			
4.15.5.1 Air Traffic Patterns: The project does not include any use that would interfere with or alter air traffic volumes or otherwise affect air traffic patterns, nor does the project include any visual, electronic, or physical feature that would present a flight hazard to aircraft using Skylark Field or any other air facility	No impact	No mitigation is required.	
4.16.5.2 Design Features or Incompatible Uses: The design of project's circulation system does not include any sharp curves or dangerous intersections. Roadway improvements in and around the project site would be designed and constructed to satisfy all City requirements for street widths, corner radii, intersection control, site access requirements and internal circulation. As part of the City's standard plan check process, the final design of all roadways, intersections, and circulation within and adjacent to the project site would be reviewed by and subject to approval by City staff prior to issuance (as relevant) of any grading, construction, or occupancy permit.	Less than significant	No mitigation is required.	
4.16.5.3 Inadequate Emergency Access: The project would be designed, constructed, and maintained to provide required emergency/ evacuation access. As part of the development process, project plans will be submitted to law enforcement, fire protection, and/or other	Less than significant	No mitigation is required.	

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
emergency service providers (as appropriate) for review. Adherence to applicable existing requirements of the City, emergency service providers, and other agencies would reduce impacts associated with this issue to a less than significant level and no further discussion is required. The project is not expected to cause any significant impacts at study area intersections that may be used by emergency vehicles. With the installation of project improvements and full participation in the applicable fee programs, it is reasonable to conclude that the long-term emergency access features required for the project site and the City in general will be installed and appropriately maintained.			
4.16.5.4 Alternative Transportation: The project will install sidewalk improvements along Clinton Keith Road and the future extension of Yamas Drive to facilitate pedestrian access. In addition, the commercial component will be required to provide bicycle parking facilities pursuant to Section 17.188.060 of the Municipal Code. The project would be required to adhere to applicable City standards that support and/or facilitate alternative modes of transportation. Through the City's project review process, policies, plans, and/or programs, supporting alternative transportation would be reviewed and incorporated as applicable.	Less than significant	No mitigation is required.	
4.16.6.1 Conflict with Applicable Circulation Plan and Traffic and Level of Service Impacts –	Potentially significant	**4.16.6.1A Salida del Sol/Yamas Drive/Clinton Keith Road:** Install a traffic signal with protected left-turn	Less than significant

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
Existing Plus Project Condition: Under existing conditions one intersection will operate at an acceptable LOS (LOS D) during the p.m. peak hour. • Salida Del Sol/Yamas Drive/Clinton Keith Road (a.m. and p.m.). The addition of project traffic would increase peak hour trips such that the intersection would operate at an unacceptable LOS during both a.m. (LOS D) and p.m. (LOS E) peak hours. Consistent with City significant criteria.		phasing on the eastbound and westbound approaches of Clinton Keith Road and construct the intersection with the following geometrics: • Northbound Approach: One left-turn lane, one shared through/right-turn lane. • Southbound Approach: One left-turn lane, one shared through/right-turn lane. • Eastbound Approach: One left-turn lane, one shared through/right-turn lane. • Westbound Approach: One left-turn lane, one shared through/right-turn lane. The scope of required improvements at this location shall be reviewed and approved by the City Engineer and be consistent with all applicable City standards. **4.16.6.1B** Prior to the issuance of building permits, the project applicant shall submit evidence to the City that the Transportation Uniform Mitigation Fee (TUMF), Development Impact Fee (DIF), and/or fair-share contribution for the required improvements has been paid. As permitted by the City, payment of required fees may be offset by in-lieu fee credit derived by the applicant's installation of the improvement identified in **Mitigation Measure 4.16.6.1A**.	
4.16.6.2. Conflict with Applicable Circulation Plan and Traffic and Level of Service Impacts – Construction Traffic: Imported materials (soil) will be transported via dump trucks. Each truck will generate one inbound. To minimize the impact of construction truck traffic on the surrounding roadway network, it is recommended that trucks	Potentially Significant	**4.16.6.2A** Construction activity associated with soil import activities shall occur outside of the typical morning and evening peak commute hours (i.e., 7:00–9:00 a.m. and 4:00–6:00 p.m.). Prior to the issuance of grading permits, the project applicant shall submit to the City for review and	Less than Significant

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
utilize the most direct route between the site and I-15 via Clinton Keith Road. Soil import hauling activities would occur during off-peak hours (between 9:00 a.m. and 4:00 p.m.) in order to have minimal impact to the surrounding roadway network. Other construction traffic (e.g., equipment and building material delivery) may occur subject to the provisions of the Construction Management Plan.		approval, a Construction Traffic Management plan. Construction-related traffic (including soil import activity) shall operate on the routes and/or during the hours of operation defined in the Construction Traffic Management Plan.	
4.16.6.3. Conflict with Applicable Circulation Plan and Traffic and Level of Service Impacts – Opening Year (2018): Three intersections would operate at unsatisfactory LOS under the "Opening Year (2018)" condition: • George Avenue/Clinton Keith Road (LOS F during a.m. and p.m. peak hours); • Inland Valley Drive/Clinton Keith Road (LOS F during p.m. peak hour); and • Salida Del Sol/Yamas Drive/Clinton Keith Road (LOS F during a.m. and p.m. peak hours). The stated intersections operate at a deficient level both with and without the project. While the project would not result in an increase in the number of LOS-affected intersections, it will increase delay at these intersections by more than 5.0 seconds; therefore, the impacts at these intersections are significant.	Potentially Significant	**4.16.6.3A** Prior to the issuance of first occupancy permit, the project applicant shall submit evidence to the City that the Transportation Uniform Mitigation Fee (TUMF), and Development Impact Fee (DIF) payment for the following improvements have been made: • George Avenue/Clinton Keith Road: o Restripe the eastbound right-turn lane as a shared through/right-turn lane (TUMF/DIF); and o Construct a westbound shared through/right-turn lane (DIF). • Inland Valley Drive/Clinton Keith Road: o Construct an eastbound through lane (TUMF); and o Construct a westbound through lane (TUMF). • *As required by the City's Public Works Director:* o Provide traffic signal interconnection.	Less than Significant
4.16.6.4. Conflict with Applicable Circulation Plan and Traffic and Level of Service Impacts –	Potentially Significant	**4.16.6.4A** Prior to the issuance of first occupancy permit, the project applicant shall submit evidence to the	Less than Significant

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
General Plan Buildout (post-2035): The following intersections would operate at unsatisfactory LOS under the "General Plan Buildout (post-2035)" condition: • I-15 Northbound Ramps/Clinton Keith Road (LOS F during p.m. peak hours); • Salida del Sol/Yamas Drive/Clinton Keith Road (LOS F during a.m. and p.m. peak hours); • Yamas Drive/Prielipp Road (LOS E a.m. peak hour and LOS F p.m. peak hour); and • Elizabeth Lane/Prielipp Road (LOS F a.m. and p.m. peak hours). Compared to the "Without Project" condition, the project is not anticipated to cause any additional study area intersections to operate at an unacceptable LOS.		City that required Transportation Uniform Mitigation Fee (TUMF), Development Impact Fee (DIF), and/or fair-share contribution for cumulative project impacts have been made.	
4.16.6.5. Conflict with Applicable Circulation Plan and Traffic and Level of Service Impacts – Freeway Impacts. State highway facilities are anticipated to operate at unacceptable LOS without the project. Caltrans has exclusive control over State highway improvements and State highway improvements are, by and large, a matter of State-wide control. Although the project is not anticipated to directly result in an impact on the State facilities and these facilities would not meet Caltrans LOS standards even without development of the project, tthe addition of project traffic would contribute to these future deficiencies. This is a significant impact.	Potentially Significant	Because the City has no control over State facilities, and because the State facilities funded and planned to be developed under future traffic conditions are already anticipated to operate at LOS F even without the proposed project, there are no further improvements that can be imposed upon the project to mitigate its small cumulative contribution to significant impacts	Significant and Unavoidable

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
4.6.7. Cumulative Traffic Impacts: With the project-specific mitigation previously identified, project-related short-term and long-term impacts to intersections will be reduced to less than significant levels for "Existing with Project," "Opening Year (2018)," and "General Plan Buildout (post-2035)" conditions. As stated in Section 4.16.6.5, cumulative impacts related to State highway facilities are cumulatively significant	Potentially significant	For intersection and roadways, see Mitigation Measures 4.16.6.1.A-B, 4.16.6.2A, 4.16.6.3A and 4.16.6.4A. For freeway mainline impacts, no feasible mitigation exists.	Less than significant (Intersections and Roadways) Significant and Unavoidable (freeway)
4.17 Utilities and Service Systems:			
4.17.1.5.1 Water Supply and Water Treatment Facilities: Combined, the proposed uses would increase water demand by approximately 109,238 gpd (122.36 AFY). The EVMWD has identified a future target demand of 240 gpcd. Pursuant to Section 17.276.070 of the City's Municipal Code, future development allowed by the proposed General Plan is subject to the requirements of the EVMWD's Ordinance 185, which prohibits the waste or unreasonable use of water and encourages water conservation practices. Compliance with this ordinance is expected to reduce overall water demand. At the projected demand rate of 240 gpcd, the project would increase water demand within the EVMWD by 106,379 gpd or approximately 119.1 AFY. Based on its UWMP, the EVMWD's total potable water production capacity is currently 66,500 AFY, while the average production is 43,800 AFY. Since the project would use approximately 163.4 AFY per year, this would only incrementally increase demand and not require the construction of new	Less than significant	No mitigation is required	

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
water treatment facilities or expansion of existing facilities.			
4.17.1.5.2 Storm Water Drainage Requirements: The site's proposed storm drain systems are analyzed as part of this EIR. In addition, the increase in impervious cover would increase stormwater runoff. Development would be required to implement Best Management Practices (BMPs) so that post-construction flows do not exceed pre-construction flows. Therefore, development of the project would not result in construction or expansion stormwater drainage facilities.	Less than significant	No mitigation is required.	
4.17.1.7 Cumulative Impacts to Water Supply Services: The EVMWD's UWMP indicates it can provide long-term water supplies to its service area, including the project area. The EVMWD would have water supplies for projected growth through 2035 in wet, dry, and multiple-dry years. Therefore, cumulative impacts to water supply would be less than significant.	Less than significant	No mitigation is required.	
4.17.2.5.1 Wastewater Treatment Requirements: It is anticipated that all wastewater generated by the proposed project would be routed to and treated by the Regional Water Reclamation Facility (WRF). Compliance with condition or permit requirements established by the City, and waste discharge requirements at the WRF would ensure that discharges into the wastewater treatment facility system from the operation of the proposed project would not exceed applicable San Diego RWQCB wastewater treatment requirements. Expected	Less than significant	No mitigation is required.	

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
wastewater flows from the proposed project will not exceed the capabilities of the serving treatment plant, so no significant impact related to this issue would occur.			
4.17.2.5.2 Wastewater Treatment Capacity, New or Expanded Wastewater Treatment Facilities, and/or Wastewater Conveyance Facilities: the project would generate approximately 53,300 gallons of wastewater per day. This increase is well within the current treatment capacity of the Regional WRF. The project's increase in wastewater is equal to 1.97 percent of the WRF's remaining capacity. As the WRF has sufficient capacity, the project would not require the construction of new wastewater treatment facilities. No wastewater conveyance facilities that would serve the project are currently operating near or over capacity, and the project would only incrementally increase demand for wastewater conveyance. Therefore, impacts to wastewater treatment and conveyance are less than significant impact and no mitigation is required.	Less than significant	No mitigation is required.	
4.17.2.7 Cumulative Impacts to Wastewater Facilities: The project would not have a cumulatively significant impact on wastewater infrastructure because the project would not require the expansion of existing infrastructure; only connections to existing infrastructure would be required by the project. By adhering to the wastewater treatment requirements established by the San Diego RWQCB through the NPDES permit, wastewater from the project site that is processed through the Regional Collection System would	Less than significant	None required	

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
meet established standards. As the wastewater from all development within the service area of EVMWD would be similarly treated under the NPDES, no cumulatively significant exceedance of San Diego RWQCB wastewater treatment requirements would occur.			
4.17.3.5.1 Solid Waste Facilities: The project would generate approximately 205.81 tons of waste annually, or 1,243 pounds daily. The daily surplus capacity of El Sobrante Landfill is 9,663 tons. Project-generated waste would make up 0.0058 percent of daily surplus capacity at the landfill. As adequate daily surplus capacity exists at the receiving regional landfills, development of the project would not significantly affect current operations or the expected lifetime of the landfills serving the project area.	Less than significant	None required	
4.17.3.5.2 Solid Waste Reduction: The project would be required to comply with all applicable regulations for solid waste reduction, including AB 341, and AB 1327. The project could coordinate with the waste hauler to develop collection of recyclable materials for the project on a common schedule as set forth in applicable local, regional, and State programs. Therefore, a less than significant impact related to this issue would occur.	Less than significant	No mitigation is required.	
4.17.3.7 Cumulative Impacts to Solid Waste Services: Cumulative projects would result in increased generation of solid waste that would need to be processed at the El Sobrante and Lamb Canyon landfills, which have anticipated closure dates of January 2045 and April 2021, respectively.	Less than significant	No mitigation is required.	

Table 1.D: Grove Park Mixed-Use Project Environmental Impacts and Mitigation Summary

Issues/Impacts	Significance before Mitigation	Summary of Mitigation Measures	Significance after Mitigation
In addition to these landfills, five additional regional landfills are available to supplement disposal capacity. With planned expansion activities of landfills in the project vicinity and projected growth rates contained in the City's General Plan EIR, sufficient landfill capacity exists to accommodate future disposal needs through 2030. Therefore, development according to the City General Plan would not create demands for solid waste services that would exceed the capabilities of the County's waste management system. Impacts are less than significant.			

2.0 INTRODUCTION AND PURPOSE

This Environmental Impact Report (EIR) has been prepared utilizing information from City of Wildomar (City) planning and environmental documents, applicant-provided technical studies, and other publicly-available data. Alternatives to the proposed project are also discussed and mitigation measures that would offset, minimize, or otherwise avoid significant environmental impacts from the proposed project have been identified. This section of the EIR provides an overview of the California Environmental Quality Act (CEQA) process, outlines the document's format, summarizes public review of the EIR, describes the Mitigation Monitoring and Reporting Program (MMRP), identifies the environmental issues discussed in the EIR, and defines the parameters and data to be used in the analysis of cumulative impacts.

2.1 LEAD AGENCY

The City was incorporated on July 1, 2008, and is the "… public agency which has the principal responsibility for carrying out or approving the project." As such, it is the "Lead Agency" pursuant to *CEQA Guidelines* (Section 15367). CEQA requires the preparation of an EIR for any project that has the potential to significantly affect the environment.[1] Through its review, the City has determined the project may have a significant impact on the environment and therefore, has required the preparation of this EIR. CEQA requires the Lead Agency to prepare, process, and consider the information contained in the EIR prior to taking any discretionary[2] action on the project.

The EIR must be prepared directly by or under contract to the Lead Agency. LSA Associates, Inc. (LSA) has prepared this EIR under the direction of City staff. As permitted under *CEQA Guidelines* (Section 15084), when prepared by a party other than the Lead Agency, the EIR must be subjected to Lead Agency review and reflect the City's independent judgment.

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1 *CEQA Guidelines §15360*. "Environment" is defined as the physical conditions which exist within the areas that will be affected by a proposed project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historical or aesthetic significance. The area involved shall be that in which significant effects would occur either directly or indirectly as a result of the project. The "environment" includes both natural and man-made conditions.

2 *CEQA Guidelines §15357.* "Discretionary Project" is defined as a project that requires the exercise of judgment or deliberation when a public agency decides to approve or disapprove a particular activity, as distinguished from situations where the public agency merely has to determine where there has been conformity with applicable statutes, ordinances, or regulations.

2.2 OVERVIEW OF THE EIR PROCESS

CEQA Guidelines (Section 15002) states the basic purposes of the CEQA are to:

- Inform government decision-makers and the public about the potential significant environmental effects of proposed activities;
- Identify ways that environmental damage can be avoided or significantly reduced;
- Prevent significant, avoidable damage to the environment by requiring changes in projects through the use of alternatives or mitigation measures when the governing agency finds the changes to be feasible; and
- Disclose to the public the reasons why a governmental agency approved the project in the manner the agency chose if significant environmental effects are involved.

The Grove Park Mixed-Use Development envisions the development of approximately 55,000 square feet of retail/commercial and office uses and 162 multiple-family residential dwellings on 19.4 acres south of Clinton Keith Road, and satisfies the definition of a "project."

An EIR is an informational document used to inform public agency decision-makers and the public of the significant environmental effects of a project. The EIR contains a detailed description of the project under consideration, establishes the existing environmental conditions of the project site and adjacent areas, assesses the environmental effects that would result from the project, identifies measures to reduce or eliminate significant environmental impacts, and evaluates alternatives that may reduce the impacts associated with project development.

The standard[1] for EIR adequacy requires analysis that presents an adequate, complete, and good faith effort to provide decision-makers with the information to intelligently consider the environmental consequences of the project under consideration. While not requiring exhaustive evaluation, the EIR must include a "reasonably feasible" assessment of project impacts. Where disagreement amongst experts occurs, the EIR must detail the main points of disagreement.

The Draft EIR is distributed to public agencies and made available to the general public for review and comment. Upon completion of the public comment period, the Lead Agency prepares responses to comments received and, as appropriate, revises the EIR to accommodate minor corrections or modifications to the Draft EIR. The revised document, the Final EIR, must be certified by the Lead Agency's prior to or in conjunction with the decision to approve the project.

[1] *CEQA Guidelines §15151*.

The City and other agencies with the authority or responsibility to issue permits related to the project "responsible agencies"[1] will consider the information contained in this EIR in their evaluation of the project. The information presented in the EIR does not serve to control the decision(s) related to the project; rather, it is provided to foster informed decision-making and appropriate public participation.

2.3 EIR CONTENT AND FORMAT

To assist the reader's review of the document, the EIR is organized as follows:

Section 1.0 *Executive Summary* provides a summary of the project; identifies potentially significant impacts, mitigation measures, and the level of significance of each impact following mitigation; and project alternatives.

Section 2.0 *Introduction and Purpose* outlines the EIR document's format including technical appendices; describes the purpose of the EIR including the legal purpose of CEQA, the intended use of EIR, and the EIR's incorporated documents and referenced technical reports; summarizes the public review of the EIR to date; identifies environmental issues that are discussed; and defines the cumulative analysis provided in the EIR.

Section 3.0 *Project Description* details the geographical setting, project location, project setting, applicable land use and zoning designations, project characteristics, project objectives, and discretionary actions required to implement the proposed project.

Section 4.0 *Environmental Impact Evaluation* provides the detailed analysis of each environmental issue. Each evaluation of each issue follows the following format:

- *Summary.* Provides an introduction to the issue to be discussed, summarizing the content of the analysis to follow. This section will identify the specific reference material utilized in the environmental analysis.
- *Existing Setting*. Identifies the existing local and regional environmental conditions (natural and man-made) in existence at the time the EIR was prepared. Existing setting information provides the reader with the "baseline" from which future impacts

[1] *CEQA Guidelines §15381.* "Responsible Agency" means a public agency which proposes to carry out or approve a project for which a Lead Agency is preparing or has prepared an EIR or Negative Declaration and includes all public agencies other than the Lead Agency that have discretionary approval power over the project. Examples include the Regional Water Quality Control Board(s), South Coast Air Quality Management District, and the California Department of Fish and Wildlife.

are analyzed, and provides a standard against which to measure these impacts.

- *Existing Policies and Regulations.* Details the local, State, and Federal regulations, ordinances, and policies applicable to the issue area under discussion.
- *Methodology*. A brief summary of the methods and resources utilized in the preparation of the environmental analysis.
- *Thresholds of Significance*. Provides the criteria against which the relative significance of impacts resulting from project implementation are determined.
- *Impacts and Mitigation.* This discussion focuses on the potential short-term, long-term and cumulative impacts of the project. For these issues where no impact or a less than significant impact would occur, either no mitigation would be required or adherence to established regulations, standards, and policies would reduce sufficiently mitigate project impacts.

  For impacts determined to be significant, the measure(s) to reduce or eliminate the impact, as well as the level of impact upon implementation of any such measure(s), will be identified. Impacts that cannot be reduced to a less than significant level will be identified as "significant."
- *Cumulative Impacts.* This discussion focuses on the potential environmental effect of the proposed project combined with the effects of reasonably foreseeable cumulative projects within the project study area.

Table 1.D provides a comprehensive inventory of project impacts.

Section 5.0 *Other CEQA Topics* contains discussions of additional topics required by CEQA, including effects found to be significant and unavoidable, irreversible environmental changes caused by the project, and a discussion of project energy usage.

Section 6.0 *Alternatives* contains discussion of alternatives to development of the proposed project. As allowed by CEQA, the impacts of these alternatives are evaluated at a more general level than the analyses of the proposed project that is contained in Section 4.0. This section also evaluates the proposed effects of the No Project Alternative and identifies the environmentally superior alternative.

Section 7.0 This section identifies the references used in the preparation of the EIR, the persons contacted, and the other source material.

Section 8.0 This section identifies City and Consultant staff who participated in the preparation and review of the EIR.

Section 9.0 This section defines the acronyms and abbreviations used in the document, and definitions of terms used, including those specific to the project.

Appendices The Appendices contain the Notice of Preparation (NOP), NOP mailing list, NOP comment letters and responses, public scoping meeting information; the various technical studies that support the EIR analysis; referenced materials; and other relevant material utilized during the preparation of the EIR.

2.4 AREA-WIDE, REGIONALLY, OR STATEWIDE SIGNIFICANT PROJECT

CEQA Guidelines Section 15206 establishes the criteria for identifying projects of statewide, regional, or area-wide significance. Projects that include the adoption or amendment of a local general plan or general plan element or cause significant impacts (e.g., significant amounts of traffic or exceedance of State or Federal air quality standards) beyond the boundary of the jurisdiction in which the project is located are representative conditions that would be considered of area-wide, regional, or statewide significance. The EIR for such projects must be sent to the State Clearinghouse and the appropriate metropolitan area council of governments for review and comment.

The project proposes an amendment to the City's General Plan and is considered a regionally significant project; therefore, the EIR will be transmitted to the State Clearinghouse and the Southern California Association of Governments (SCAG), for review and comment.

2.5 DOCUMENTS INCORPORATED BY REFERENCE

CEQA Guidelines (Section 15150) permits the incorporation by reference of portions or all of other documents that provide information relevant to the project and the environmental analysis. Documents incorporated by reference must be available for public review at an office of the Lead Agency or other public building. The documents identified below are incorporated by reference, and where relevant, the information therein has been summarized throughout the EIR.

2.5.1 City of Wildomar Documents

- *City of Wildomar General Plan, 2008.*
- *City of Wildomar General Plan* Land Use Map, January 2014.
- City of Wildomar Zoning Map, amended December 2013.
- *City of Wildomar Municipal Code* (various chapters).

2.5.2 Technical Studies

A number of technical project-related reports have been prepared to assess specific issues that may result from the construction and operation of the project. As relevant, the EIR analysis is supported by information obtained from the following technical studies, which have been included as appendices to this EIR.

- *Clinton Keith Road (APN: 380-250-003) "Grove Park" Air Quality Impact Analysis, City of Wildomar,* Urban Crossroads, March 2, 2015. (Appendix B)
- *Biological Resources Assessment and Western Riverside County MSHCP Consistency Analysis, Clinton Keith Road APN 380-250-003*, PCR, November 2013. (Appendix C-1)
- *Determination of Biologically Equivalent or Superior Preservation, Grove Park APN 380-250-003,* PCR, January 2015. (Appendix C-2)
- *Cultural Resources Assessment, Clinton Keith Property (Grove Park Project), Wildomar, Riverside County, California,* BCR Consulting, LLC., March 9, 2015. (Appendix D)
- *Preliminary Geotechnical and Fault Rupture Hazard Investigation, Grove Park , APN 380-250-003 SW Corner Clinton Keith Road & Yamas Drive, Wildomar, California*, Geogon West, Inc., February 24, 2015. (Appendix E)
- *Clinton Keith Road (APN: 380-250-003) "Grove Park" Greenhouse Gas Analysis, City of Wildomar*, Urban Crossroads, March 2, 2015. (Appendix F)
- *Phase I Environmental Site Assessment, APN 380-250-003 and 380-250-023, Wildomar, CA*, Hillmann Consulting, August 31, 2012. (Appendix G)
- *Preliminary Hydrology and Hydraulics Study for Grove Park, City of Wildomar, California*, JLC Engineering and Consulting, Inc., March 16, 2015. (Appendix H-1)
- *Project Specific Water Quality Management Plan, Grove Park*, JLC Engineering and Consulting, Inc., February 27, 2015. (Appendix H-2)
- *Clinton Keith Road (APN: 380-250-003) "Grove Park" Noise Impact Analysis, City of Wildomar*, Urban Crossroads, March 11, 2015. (Appendix I)
- *Clinton Keith Road (APN: 380-250-003) "Grove Park" Traffic Impact Analysis, City of Wildomar*, Urban Crossroads, (revised) March 5, 2015. (Appendix J-1)
- *Grove Park Supplemental Freeway Segment and Ramp Section Operations Analysis*, Urban Crossroads, March 6, 2015. (Appendix J-2)

The documents incorporated by reference in this EIR are available for review at the following location:

Wildomar City Hall
Planning Department
23873 Clinton Keith Road, Suite 201
Wildomar, California 92595
Monday–Thursday 8:00 a.m.–5:00 p.m. (closed Fridays)

2.6 PUBLIC REVIEW PROCESS

2.6.1 Notice of Preparation

An Initial Study was not prepared for the project. Due to the nature and size of the proposed project, the EIR work effort skipped directly to the circulation of the NOP. The NOP was distributed to the State Clearinghouse, as well as agencies and organizations that may provide comment on the proposed project and the potential environmental impacts that may result from the construction and operation of the proposed on-site uses.

The NOP was distributed on December 22, 2014, for a 35-day review period ending on January 26, 2015. To reflect potential changes to the project, a second NOP was distributed on June 11, 2015, for a 30-day public review period ending July 13, 2015.

Comments received during the public review of the NOPs are detailed in previously referenced Table 1.B and were utilized to identify potential impacts addressed in Section 4.0 of this EIR.

2.6.2 Public Scoping Meeting

A public scoping meeting was held was held on January 19, 2015, at 6:00 p.m. at Wildomar City Hall to determine the scope and content of the environmental analysis contained in the EIR. City staff, the project applicant, and the EIR consultant were present during this meeting to provide information regarding the project and collect public comment. A second public scoping meeting was held on June 29, 2015. Table 1.C provides a summary of the comments received during each public scoping meeting.

2.6.3 Tribal Consultation

As the project includes a General Plan Amendment, consultation with Native American Tribal Government(s) pursuant to applicable provisions of *Local and Inter-Governmental Consultation* (Senate Bill [SB] 18) is required. The City formally contacted the Pechanga Band of Luiseño Indians (Pechanga Band) for the SB 18 consultation meeting on April 1, 2015. The Pechanga Band and the Soboba Band of Luiseño Indians (Soboba Band) have additionally responded to the NOP distributed for the project. While Native American consultation is not a CEQA issue, as

appropriate, issues raised during consultation with local Native American governments have been incorporated into the EIR.

2.6.4 Draft Environmental Impact Report

This EIR was distributed to responsible and trustee agencies, other affected agencies, and interested parties. Additionally, in accordance with Public Resources Code Section 21092(b)(3), the EIR has been provided to all parties who have previously requested copies. The Notice of Completion (NOC) and Notice of Availability (NOA) of the EIR have been distributed as required by CEQA. During the 45-day public review period, the Draft EIR and technical appendices have been made available for review. The Draft EIR will be available for review on the City's website (http://www.cityofwildomar.org/environmental-documents.asp) and at City Hall, Planning Department during the public review period.

Written comments and email comments related to this EIR should be addressed to:

Matthew C. Bassi
Planning Director
23873 Clinton Keith Road, Suite 201
Wildomar, California 92595
Phone: (951) 677-7751 x 213
Email: mbassi@cityofwildomar.org

After the 45-day public review period, written responses to all comments on the Draft EIR raised will be prepared. These responses will be available for review for a minimum of 10 days prior to the public hearings before the City's Planning Commission and City Council, at which time the certification of the Final EIR will be considered. The City will respond as appropriate to comments made at public hearings on the project and this EIR. The Final EIR (which will include the Draft EIR, the public comments and responses to the Draft EIR, and findings) will be included as part of the environmental record used during the consideration of the project by the City decision-makers.

2.7 MITIGATION MONITORING AND REPORTING PROGRAM

An MMRP will be prepared for this EIR to comply with the requirements of State law (Public Resources Code Section 21081.6). When mitigation measures are required to avoid or reduce the severity of significant impacts, State law requires the adoption of an MMRP. The monitoring program is intended to ensure compliance during implementation of the program. An MMRP will be adopted by the City Council concurrent with certification of the Final EIR for the proposed project.

2.8 CUMULATIVE IMPACTS

2.8.1 Definition of Cumulative Impact

CEQA defines cumulative effects as "two or more individual effects that, when considered together, are considerable or which compound or increase other environmental impacts" (*State CEQA Guidelines* Section 15130). The *Guidelines* further state that the individual effects can be the various changes related to a single project or the changes involved in a number of other closely related past, present, and reasonably foreseeable future projects (Section 15335). Substantial changes are anticipated to occur as the result of the increase in residents and employment growth of the proposed project, as well as growth in population, housing, and employment from development of other projects in the City of Wildomar and the surrounding region. Section 15130 of the *State CEQA Guidelines* requires that an EIR include a discussion of the potential cumulative impacts of a proposed project. The cumulative impact from several projects is the change in the environment that results from the incremental impact of the development when added to the impacts of other closely related past, present, and reasonably foreseeable or probable future developments. Cumulative impacts can result from individually minor, but collectively significant, developments taking place over a period of time. With respect to the analysis of cumulative impacts, CEQA generally requires the following:

(a) Cumulative impacts shall be discussed when the project's incremental effect is cumulatively considerable.

(b) The discussion of cumulative impacts shall reflect the severity of the impacts and their likelihood of occurrence, but the discussion need not provide as great detail as is provided of the effects attributable to the project. The discussion should be guided by the standards of practicality and reasonableness.

Pursuant to *CEQA Guidelines*, Section 15130, the assessment of cumulative impacts contained in EIRs is typically based on either: (i) past, present, and probable future projects, which are either approved or being considered for approval by the City or other municipalities (or anticipated to be submitted for consideration, including projects in the design phase or under construction); or (ii) growth projections set forth in regional plans, including regional modeling plans.

Table 2.A summarizes data provided by the City Planning Department pertaining to potential development projects that could contribute to cumulative environmental impacts.

Table 2.A: Cumulative Projects List

Map #[1]	Address	Land Use[2]	Size	Status
1	Lennar Residential (TTM 36497, APN: 380-280-004, 380-280-009 to 380-280-012)	SFDR	67 DU	Approved (Not Yet Under Construction)
2	Lesle Tract Map (TTM 36519, APN: 367-170-029)	SFDR	10 DU	Approved (Not Yet Under Construction)
3	CV Communities (TTM 25122, TTM 32078, APN: 380-080-008,380-080-009, 380-140-001)	SFDR	157 DU	Approved (Not Yet Under Construction)
4	Lennar North Ranch (TTM 32535, APNs: 380-110-005, 380-120-001 & -002, 380-100-004 through -006, 380-130-018	SFDR	84 DU	Approved (Not Yet Under Construction)
5	Rancon Medical & Retail Center (PM 36492, APN: 380-250-022) 3	Business Park General Office Medical Office Shopping Center Fast Food Restaurant w/ Drive through	267,450 SF 45,000 SF 33,400 SF 17,100 SF 3,000 SF	Active (in Process/Not Approved)
6	Cornerstone Church Pre-School Expansion (PUP No. 778) 4	Pre-School/Daycare	180 STU	Active (in Process/Not Approved)
7	Elm Street Subdivision (TTM 33840, APN: 376-043-027)	SFDR	14 DU	Active (in Process/Not Approved)
8	Wildomar Walmart	Free-Standing Discount Superstore Specialty Retail Fast Food Restaurant w/ Drive through	200,000 SF 3,900 SF 3,900 SF	Active (in Process/Not Approved)
9	McVicar Residential Project (TTM 32035, APN: 380-040-005, 380-040-007, 380-040-008, 380-040-012)	SFDR	49 DU	Active (in Process/Not Approved)
10	Inland Valley Medical (Case No. 08-0062, APN: 380-250-001, 380-250-012,3 80-250-013, 380-250-013, 380-250-015, 380-250-017)	Medical Office	39,000 SF	NA

Table 2.A: Cumulative Projects List

Map #[1]	Address	Land Use[2]	Size	Status
11	Auto Zone Retail Center (Case No. 10-0101, APN: 380-120-003, 380-120-004)	Automobile Parts Sale	29,767 SF	NA
12	Hoover Ranch Project (TTM 31895, APN: 380-160-020)	SFDR	51 DU	NA
13	Westpark Promenade Development (TPM 36122, APN: 376-410-013, 376-410-023, 376-410-025)	Apartments Shopping Center	322 DU 86,000 SF	Active (in Process/Not Approved)
14	Sienna Apartment Project (Case No. 13-0089, APN: 380-290-029)	Apartments	180 DU	Active (in Process/Not Approved)
15	Baxter Village Mixed Use	Commercial SFDR Apartments	75,000 SF 66 DU 204 DU	Active (in Process/Not Approved)
16	Prielipp Residential Development (APN: 380-250-023)	Multifamily Assisted Living	140 DU 86 DU	NA
17	Sehremelis PAR (TTM 29426, APN: 367-250-007)	SFDR	80 DU	NA
18	Spring Meadow Ranch PAR (Case No. 12-0399)	SFDR Community Center Area Open Space	1,192 DU 5.0 AC 42.0 AC	Active (in Process/Not Approved)
19	Subway (Case No. 10-0222, APN: 366-390-026, 366-390-027)	Specialty Retail	10,500 SF	Approved Under Construction
20	Orange Bundy (TPM 30522, APN: 367-100-024, 367-100-026)	Retail Fast Food Restaurant with Drive through Gas Station with Market	79,497 SF 1,500 SF 6 VFP	Approved (Not Yet Under Construction)
21	Oak Creek Canyon (Case No. 11-0261, TTM 36388)	SFDR Pharmacy Gas Station with Market and Car Wash Specialty Retail	275 DU 14,469 SF 8 VFP 2,550 SF	Approved (Not Yet Under Construction)
22	Bundy Canyon Plaza (Case No. 08-0179, TPM 32257, APN: 367-100-019)	Retail Fast Food with Drive through Gas Station with Market	33,800 SF 6,200 SF 12 VFP	Approved Under Construction
23	Lennar Homes Andalusia I (Case No. 12-0015, TTM 30839, 30939)	SFDR	55 DU	Approved Under Construction

Table 2.A: Cumulative Projects List

Map #[1]	Address	Land Use[2]	Size	Status
24	Meritage Homes (Case No. 11-0099, TTM 31499)	SFDR	74 DU	Approved Under Construction
25	Lennar Homes Andalusia 1 (Case No. 12-0401, TTM 31837, APN: 380-410-001 to 380-410-019, 380-411-001 to 380-411-025)	SFDR	44 DU	Approved Under Construction
26	Stable Lanes Retail Center (Case No. 08-0166, APN: 380-120-012, 380-120-013)	Commercial/Retail Daycare Facility	20,894 SF 9,305 SF	Approved Under Construction
27	Wildomar Square Retail Center (Case No. 08-0072, PM 36080, APN: 380-110-045)	Shopping Center	46,600 SF	Approved Under Construction
28	Rancon Monte Vista Residential (TTM No. 31409, APN: 367-110-007, 367-110-008)	SFDR	126 DU	Approved (Not Yet Under Construction)
29	Oak Springs Ranch Specific Plan No. 340	SFDR Apartments	103 DU 312 DU	NA
30	Diversified Pacific Homes (APN: 362-240-020, 023,029,031, and 032)[2]	SFDR	51 DU	Approved (Not Yet Under Construction)
31	Pacific Cove Inv. (APN: 367-140-007 and 367-140-011)[2]	SFDR Commercial/Office	70 DU TBD	Approved (Not Yet Under Construction)
32	Beazer Homes (APN: 380-060-007 and 380-060-008)[2]	SFDR	108 DU	Approved (Not Yet Under Construction)
33	Sycamore Academy Charter School[2]	Educational/Institutional	28,000 SF/401 STU	Active (In Process/Not Approved)
34	Space Creations Office and Daycare Facility (DPO-004-220)	Office Daycare	17,400 SF 15,350 SF	NA
35	Bear Creek Residential Development (DPA-011-3032)	SFDR Condominium/Townhouse	11 DU 90 DU	NA

Table 2.A: Cumulative Projects List

Map #[1]	Address	Land Use[2]	Size	Status
	TOTAL	SFDR Apartments/Condos Commercial/Retail Fast Food/Restaurants Gas Station General/Medical Offices Community/Open Space Area Day Care/Educational	2,687 DU 1,248 DU 620,077 SF 14,600 SF 26 VFP +402,250 SF 47 AC 52655 SF/ 581 STU	
	PROPOSED PROJECT	Multifamily Residential Commercial/Retail/Office	162 units 55,000 SF	

Sources: Grove Park Traffic Impact Study (Appendix J) and City of Wildomar Planning Department, Active Development Projects, May 2015.

1 See Figure 2.1.

2 Projects not included in the traffic study.

Notes: SF = square feet, DU = dwelling units, STU = students, VFP = vehicle fueling positions, TBD = to be determined, SDFR = single-family detached residential, AC = acre, NA = Not Available

Figure 2.1 details the locations of the cumulative projects.

It is expected that the cumulative impact analysis set forth in this EIR will be conservative and would tend to overstate cumulative impacts. The significance of a cumulative impact may be greater than the effects resulting from the individual actions if the effects of more than one action are additive.

Because of the nature of individual environmental factors, the cumulative area for each issue addressed in this EIR may not be identical. For example, the cumulative universe for air quality impacts is reasonably assumed to be the entire South Coast Air Basin, which is much larger than the cumulative universe for public service impacts (i.e., the service area of the various service providers). Criteria for evaluating the significance of adverse effects are identified for each environmental issue in Section 4.0. These criteria, which are based on resource sensitivity, quality, and quantity, are also instructive when evaluating whether the environmental effect resulting from implementation of a particular project is cumulatively considerable. The timing and duration of each activity is also an important consideration for evaluating the potential cumulative effects of activities that may occur only for a limited period. In such cases, a cumulative effect may occur only when two or more of the activities are occurring simultaneously.

The cumulative discussion for each environmental issue evaluates the proposed project together with (i) the reasonably foreseeable potential effects of other closely related past, present, and reasonably foreseeable or probable future development in the area of the project, and (ii) growth projections set forth in regional plans. Implementation of the mitigation measures identified in each section of the EIR will reduce the cumulative impact of the project to the extent feasible. In many cases,

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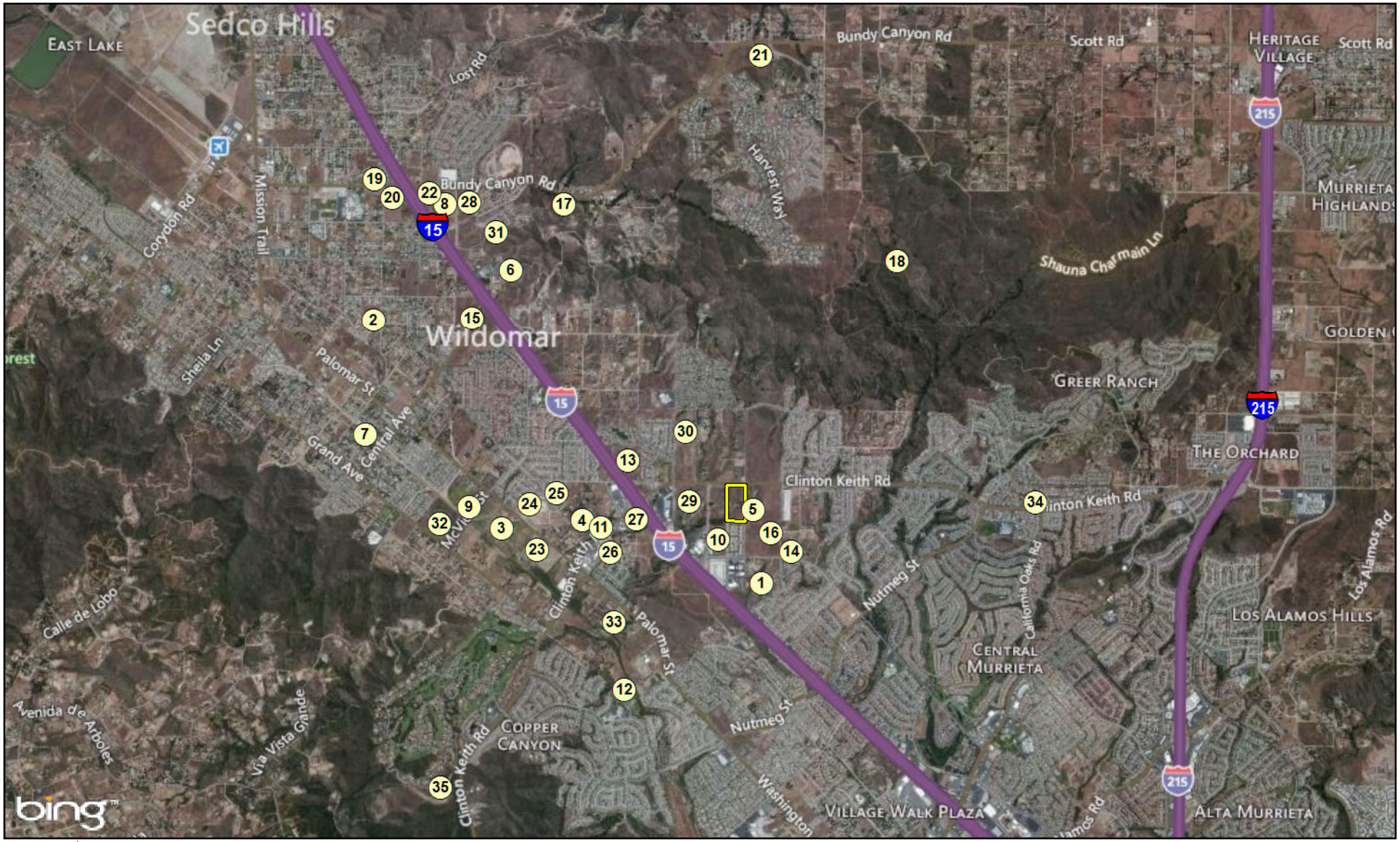

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Project Boundary

Cumulative Projects

N

0 2,500 5,000

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SOURCE: Bing Aerial, 2010; City of Wildomar, 2014

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FIGURE 2.1

Grove Park Mixed-Use Development
Environmental Impact Report

Cumulative Projects

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the mitigation measures result in reducing the project's cumulative impact to a less than significant level. The analyses indicate to what degree the project makes a significant contribution to cumulatively considerable impacts for each environmental issue (air quality, noise, traffic, etc.). It should be noted that the project Traffic Impact Analysis (TIA) used this same list of cumulative projects to estimate potential traffic impacts over time on local roadways and intersections (see Section 4.16, *Transportation and Traffic*). The traffic data in turn were used as a basis for modeling air quality and greenhouse gas emissions (see Sections 4.3, *Air Quality* and 4.7 *Greenhouse Gas and Global Climate Change*) and noise (see Section 4.12, *Noise*).

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3.0 PROJECT DESCRIPTION

3.1 OVERVIEW

The information in this section is provided pursuant to CEQA Guidelines (Section 15124) governing the identification of the project's location, features, and project objectives at a level of detail sufficient to evaluate environmental impacts.

3.2 PROJECT LOCATION

The project site is located in the southern portion of the city, within southwestern Riverside County. The rectangular-shaped parcel is located directly south of Clinton Keith Road, which intersects Interstates 15 and 215 (I-15 and I-215) approximately 0.85 mile west and 3.35 miles east of the site, respectively. The intersection of Clinton Keith Road and Salida Del Sol is at the northeastern corner of the site, while undeveloped property is located east of the site (Figure 3.1).

The approximately 19.4-acre project site currently consists of a single parcel (Assessor's Parcel Number [APN] 380-250-003) located in Section 31, Township 6 South, Range 3 West (San Bernardino Base and Meridian). The topography of the project site consists of gently rolling hills, sloping gently in a northeast to southwest direction. Elevations on site range from approximately 1,380 feet above mean sea level (amsl) along the northern boundary to approximately 1,330 feet above amsl along the southwestern boundary.

3.3 EXISTING LAND USE AND LAND USE DESIGNATIONS

The following discussion summarizes existing and adjacent land uses on site and in the project area and identifies the existing General Plan and zoning designations in the project area.

3.3.1 Existing Land Uses

3.3.1.1 Existing On-Site Conditions

The project site is undeveloped and consists primarily of disturbed fallow agricultural fields, with a smaller component of native vegetation dominated by California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), chamise (*Adenostoma fasciculatum*), and coast live oak (*Quercus agrifolia*). The project site supports four ephemeral drainage features and an earthen-bermed basin

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FIGURE 3.1

Grove Park Mixed-Use Development
Environmental Impact Report

Regional and Project Location

SOURCE: Google Earth, 2013; Riverside County, 2014.

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at the southwest corner of the project site. Artificial disturbances consist of recent mechanical disking, trenches excavated for geotechnical studies, and some modern trash dumping. No structures are located within the boundaries of the project site.

3.3.1.2 Adjacent

Santa Rosa Apartments, a multiple-family residential apartment development, is located directly south of the project site, while undeveloped land is located to both the east and west. Scattered rural residential uses are located north of Clinton Keith Road. In the project area, commercial/retail development is located farther to the west, adjacent to I-15. The Inland Regional Medical Center, medical office uses, and other office uses are located farther southwest and south of the project site along Inland Valley Drive and Prielipp Road. Residential development occurs on either side of Clinton Keith Road to I-215. The existing on-site and adjacent land uses are summarized in Figure 3.2 and Table 3.A.

Table 3.A: Existing On-site and Adjacent Land Uses and Land Use Designations

Location	Current Land Use	General Plan Land Use Designation	Zoning
On site	Undeveloped	Business Park (BP) & Highest Density Residential (HHDR)	Rural Residential (R-R) & Planned Residential (R-4)
North	Undeveloped & Rural Residential	Business Park	R-R & I-P (Industrial Park)
South	Multiple-family Residential	Very High Density Residential (VHDR)	R-3 (General Residential)
East	Undeveloped	Business Park	R-R & I-P
West	Undeveloped	Commercial Retail	C-P-S (Scenic Highway Commercial)

Sources: City of Wildomar General Land Use Map, January 2014; City of Wildomar Zoning Map, January 2015.

3.3.2. Existing General Plan Land Use Designations

The City's General Plan is the blueprint for future growth and development. The General Plan identifies the City's goals with respect to both built and natural environments, and establishes the policies and implementation measures to achieve the stated goals.

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FIGURE 3.2

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Project Site

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SOURCE: Google Earth, 2013; Riverside County, 2014.

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Grove Park Mixed-Use Development
Environmental Impact Report

On-site and Adjacent Land Use

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3.3.2.1 On-site

As detailed in previously referenced Table 3.A, the northern 10 acres of the project site is designated for Business Park (BP) uses in the City's General Plan. The Business Park designation envisions the development of "… Employee intensive uses, including research & development, technology centers, corporate offices, 'clean' industry and supporting retail uses."[1] The southern portion of the site is designated Highest Density Residential (HHDR), which anticipates the development of multi-storied, multiple-family residential development (apartments and/or condominiums) at a density of 20 or more units per acre.

3.3.2.2 Adjacent

The Commercial Retail (CR) designation to the west anticipates the development of local and regional serving retail and service uses, while the Very High Density Residential (VHDR) designation to the south is assigned to areas for single-family attached residences and multi-family dwellings (14–20 dwelling units per acre). Parcels to the north and east are assigned the BP designation while, to the southwest, property designated as Light Industrial (LI) envisions the development of "… Industrial and related uses including warehousing/distribution, assembly and light manufacturing, repair facilities, and supporting retail uses."

3.3.3. Existing Zoning Designations

The City's Zoning Ordinance (Wildomar Municipal Code, Title 17) regulates the type, scale and intensity of development that may occur in specific zoning districts.

3.3.3.1 On-site

The northern portion of the project site is currently zoned R-R (Rural Residential), which allows the development of large lot (0.5 (½) acre minimum) single-family residential, agricultural, commercial, and ancillary uses. The southern 9.0 acres is zoned R-4 (Planned Residential), which allows for a variety of residential types and compatible ancillary uses.

3.3.3.2 Adjacent

Properties to the north and east are zoned R-R (Rural Residential) and I-P (Industrial Park). The I-P zone allows the development of a variety of industrial, manufacturing, commercial, and service-oriented uses. To the south, the R-3 (General Residential) zone permits the development of a variety of multifamily residential uses, planned residential development, and other compatible ancillary uses. West of the project site, the C-P-S (Scenic Highway Commercial) zone allows for the development of a wide variety of commercial, retail, and service-oriented uses.

[1] City of Wildomar General Plan, Table LU 4, Land Use Designations Summary.

The existing on-site and adjacent General Plan land use and zoning designations are depicted in Figure 3.3.

3.4 PROJECT CHARACTERISTICS

3.4.1 Overall Development Concept

The proposed project envisions the construction of a mixed-use project. As summarized in Table 3.B and illustrated in Figure 3.4, the approximately 19+ acre property is divided into north (Lot 1) and south portions (Lot 2) of approximately 9.8 and 8.1 acres, respectively. A 1.4-acre detention basin will be located within Lot C at the southwestern corner of the site.

Table 3.B: Project Development Summary

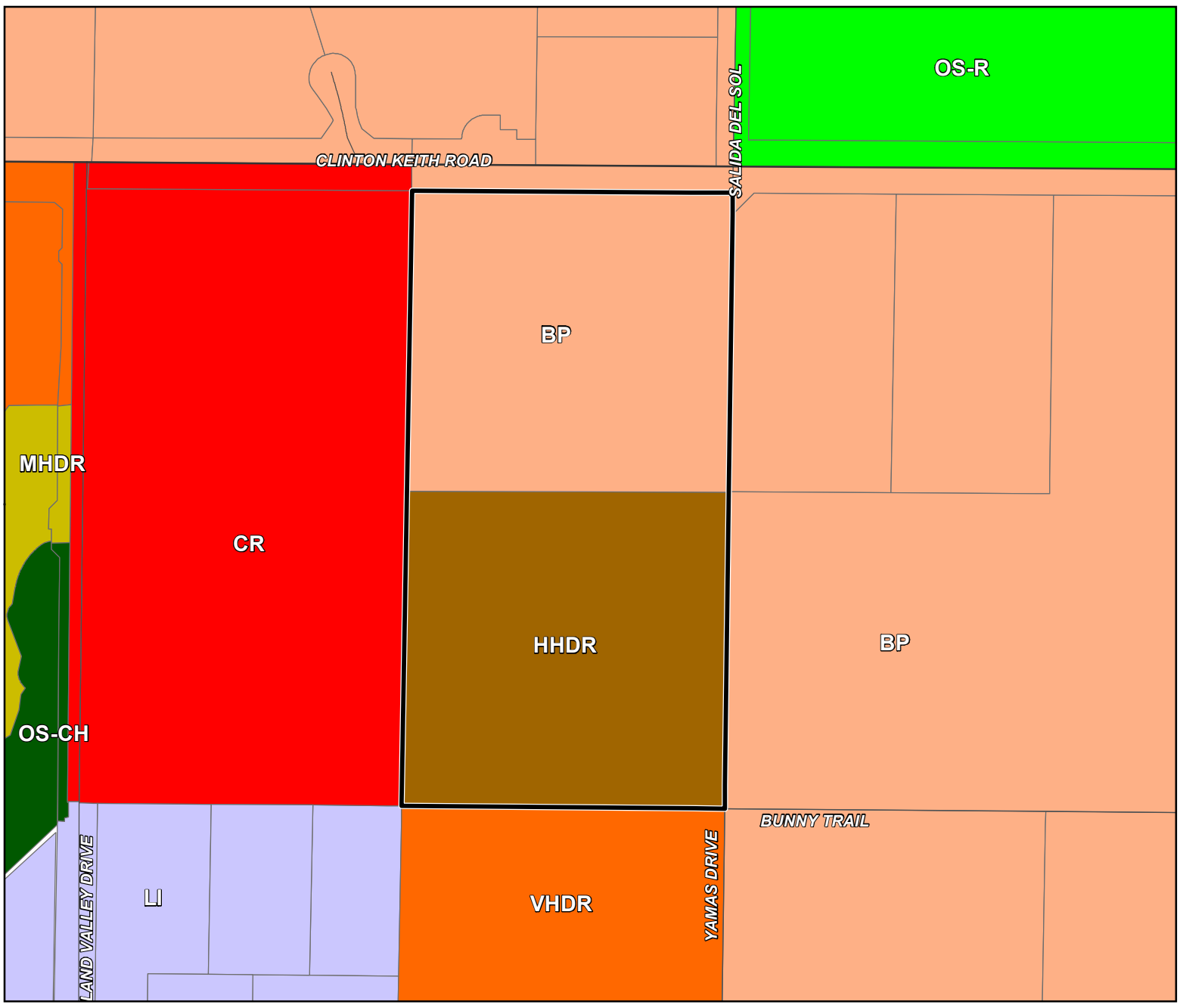
Area	Use	Acres	Units/Square Footage
North Site (Lot 1)	Office & Commercial/Retail	4.8	55,000 square feet
	Park	1.9	n/a
	Oak Preserve	1.3	
	Slope	0.4	
	Public Roads	1.4	
	Total North Site	**9.8**	
South Site (Lot 2)	Apartments	6.8	162 units 735–1,281 square feet per unit
	Slope	0.6	n/a
	Public Roads	0.7	
	Total South Site	**8.1**	
Lot C	Detention Basin/Slopes	**1.4**	
TOTAL		**19.4**	

Sources: Conceptual Site Plan, Grove Park, KTGY Architecture and Planning, July 2015.

The project includes the 19.4 acres to be developed and approximately 2.0 acres along portions of the west and east property lines. These areas were included in the impact assessments to account for off-site disturbances from grading activities associated with the development of manufactured slopes and the Yamas Drive improvements.

Proposed on-site development includes:

North site (Lot 1): Approximately 55,000 square feet (sf) of commercial/retail and office uses will be developed on 4.8 acres adjacent to Clinton Keith Road. Commercial development will include a two-story approximately 35,000 sf office building, two single-story “pad” buildings of approximately 6,000 sf each, and an approximately 8,000 sf retail building. Commercial/retail and office buildings elevations are depicted in Figure 3.5A.

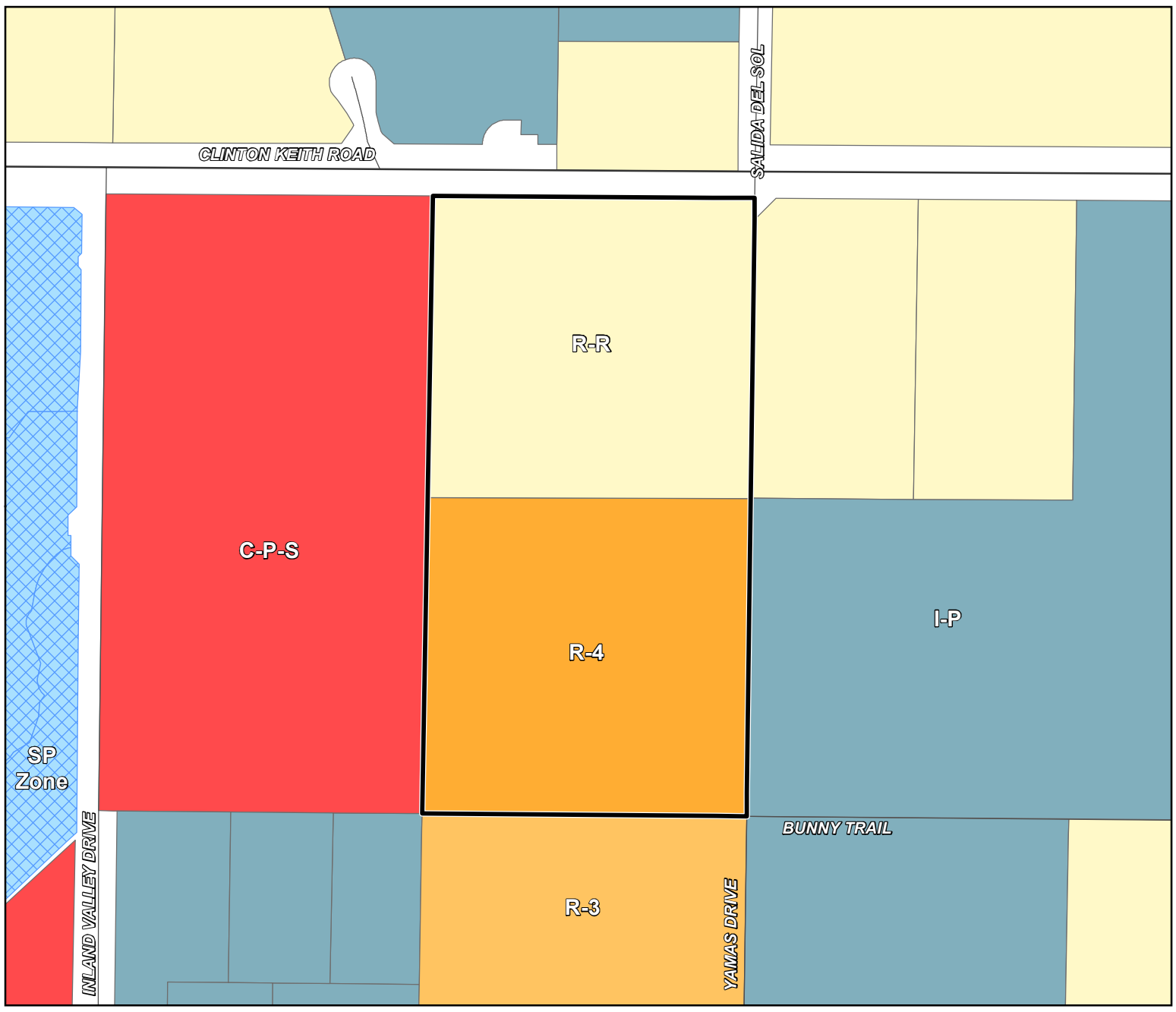


General Plan Land Use

- Project Site

General Plan Land Use

- BP, Business Park
- CR, Commercial Retail
- HHDR, Highest Density Residential
- MHDR, Medium High Density Residential
- VHDR, Very High Density Residential
- LI, Light Industrial
- OS-CH, Conservation Habitat
- OS-R, Open Space Recreation



Zoning

- Project Site

Zoning

- SP Zone, Specific Plan
- R-3, General Residential
- R-4
- R-R
- C-P-S, Scenic Highway Commercial
- I-P, Industrial Park

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N

0 150 300

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SOURCE: City of Wildomar General Plan Land Use Map (June 2014) and Zoning Map (November 2013).

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FIGURE 3.3

Grove Park Mixed-Use Development
Environmental Impact Report

Existing General Plan and Zoning Designation

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LSA

FIGURE 3.4

Grove Park Mixed-Use Development
Environmental Impact Report

Conceptual Site Plan

SOURCE: Urban Crossroads Air Quality Report, March 2015.

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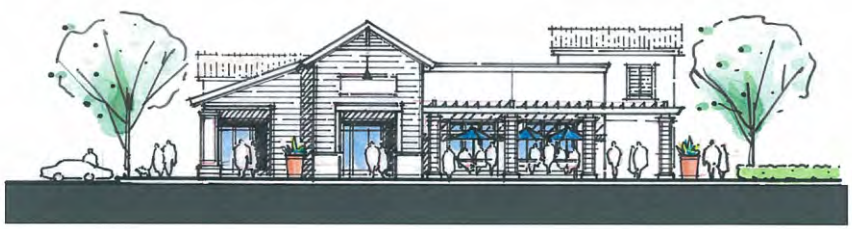

BLDG. A

BLDG. D

Commercial/Retail

BLDG. C

BLDG. B

Professional Office/Retail

LSA

FIGURE 3.5A

Grove Park Mixed-Use Development
Environmental Impact Report

Building Elevations

SOURCE: KTGY Group, Inc., 2014

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An approximately 1.9-acre passive park and trailhead is proposed directly south of the commercial development. No play structures or active recreation features are planned for this area. The existing on-site grove of coastal live oaks will be preserved to the maximum extent feasible on approximately 1.3 acres south of the proposed park.

South site (Lot 2): Eight three-story multiple-family apartment buildings will be developed on 6.8 acres of the south site. The residential mix envisioned includes 48 one-bedroom, 90 two-bedroom, and 24 three-bedroom units. The units will range in size from approximately 735 sf in the one-bedroom units to approximately 1,281 square feet in three-bedroom units. The residential area includes a clubhouse/ leasing office and an adjacent pool area. Vehicular access to the residential portion of the site will be from the future extension of Yamas Drive. Figure 3.5B illustrates the building elevations for the multiple-family buildings.

Detention Site (Lot C): A 1.4-acre detention basin will be constructed at the southwestern corner of the project site. This basin will accept drainage flows from Drainage Areas C, D, and F. The basin, its bottom at 1,332 feet, slopes (4:1) upward to the top (1,338 feet) of the surrounding berm and has a projected volume (capacity) of 64,422 cubic feet.

3.4.2 Land Use Changes

The proposed changes to General Plan Land Use and Zoning designations are detailed in Figure 3.6.

3.4.2.1 General Plan Amendment (GPA)

The project includes a proposal to change the General Plan Land Use designation on the northern portion of the site from Business Park (BP) to Commercial Retail (CR). As stated in Section 3.3.2, the CR land use designation allows for the development of local and regional serving retail and service uses.

3.4.2.2 Change of Zone (CZ)

The project proposes to change the zoning for the northern portion of the site from R-R (Rural Residential) to C-P-S (Scenic Highway Commercial) to accommodate the project's proposed commercial/retail uses.

3.4.3 Site Preparation and Grading

The site currently slopes in a northeast to southwest direction, with the elevations ranging from approximately 1,380 feet to 1,330 feet amsl. Proposed pad elevations for the commercial/retail buildings on the northern portion of the site range from

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Apartment Building

LSA

FIGURE 3.5B

Grove Park Mixed-Use Development
Environmental Impact Report

Building Elevations

SOURCE: KTGY Group, Inc., 2014

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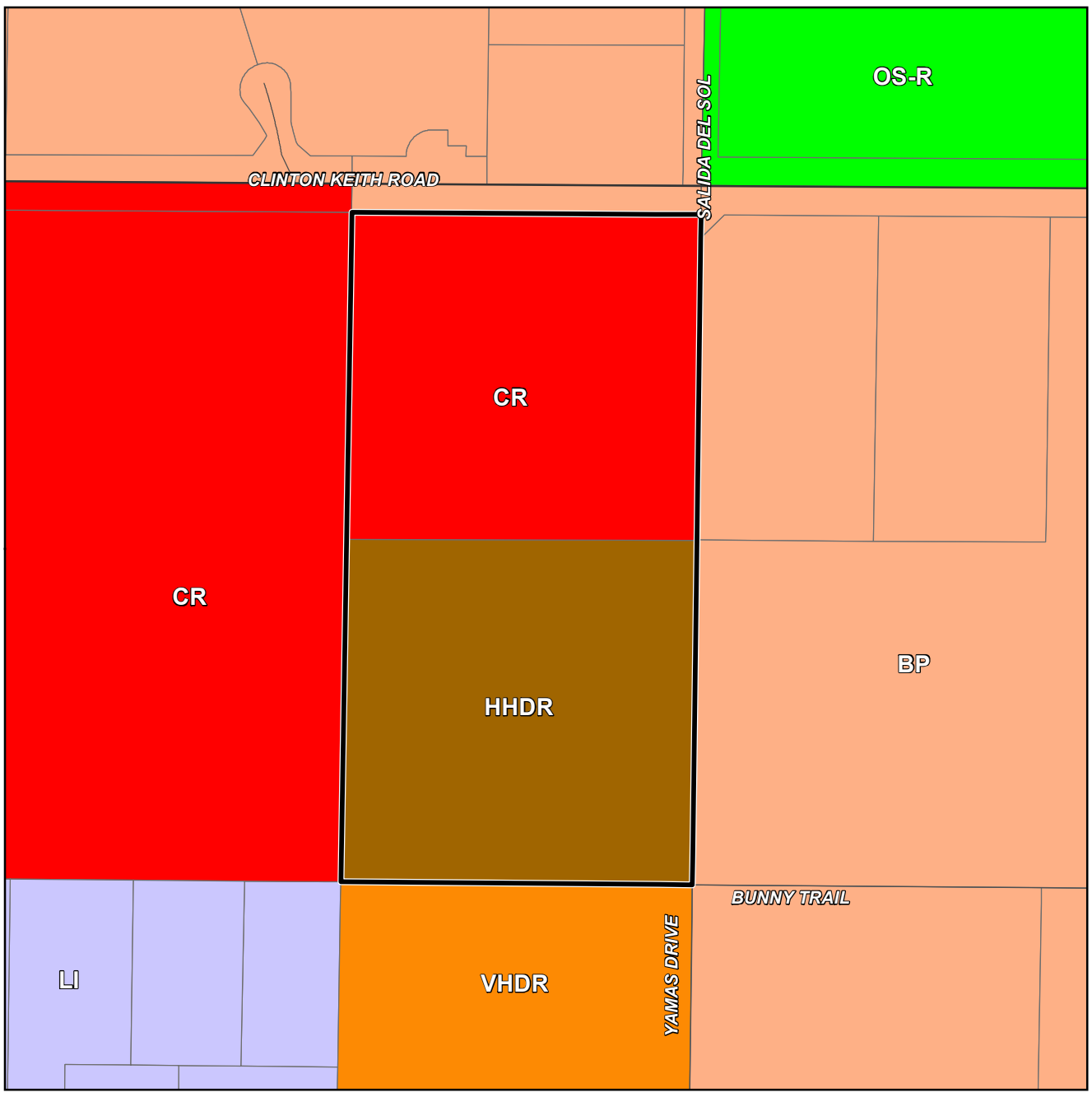

Proposed General Plan Land Use

- Project Site

Genral Plan Land Use

- BP, Business Park
- CR, Commercial Retail
- HHDR, Highest Density Residential
- LI, Light Industrial
- OS-R, Open Space Recreation
- VHDR, Very High Density Residential

Proposed Zoning

- Project Site

Zoning

- C-P-S, Scenic Highway Commercial
- I-P, Industrial Park
- R-3, General Residential
- R-4
- R-R

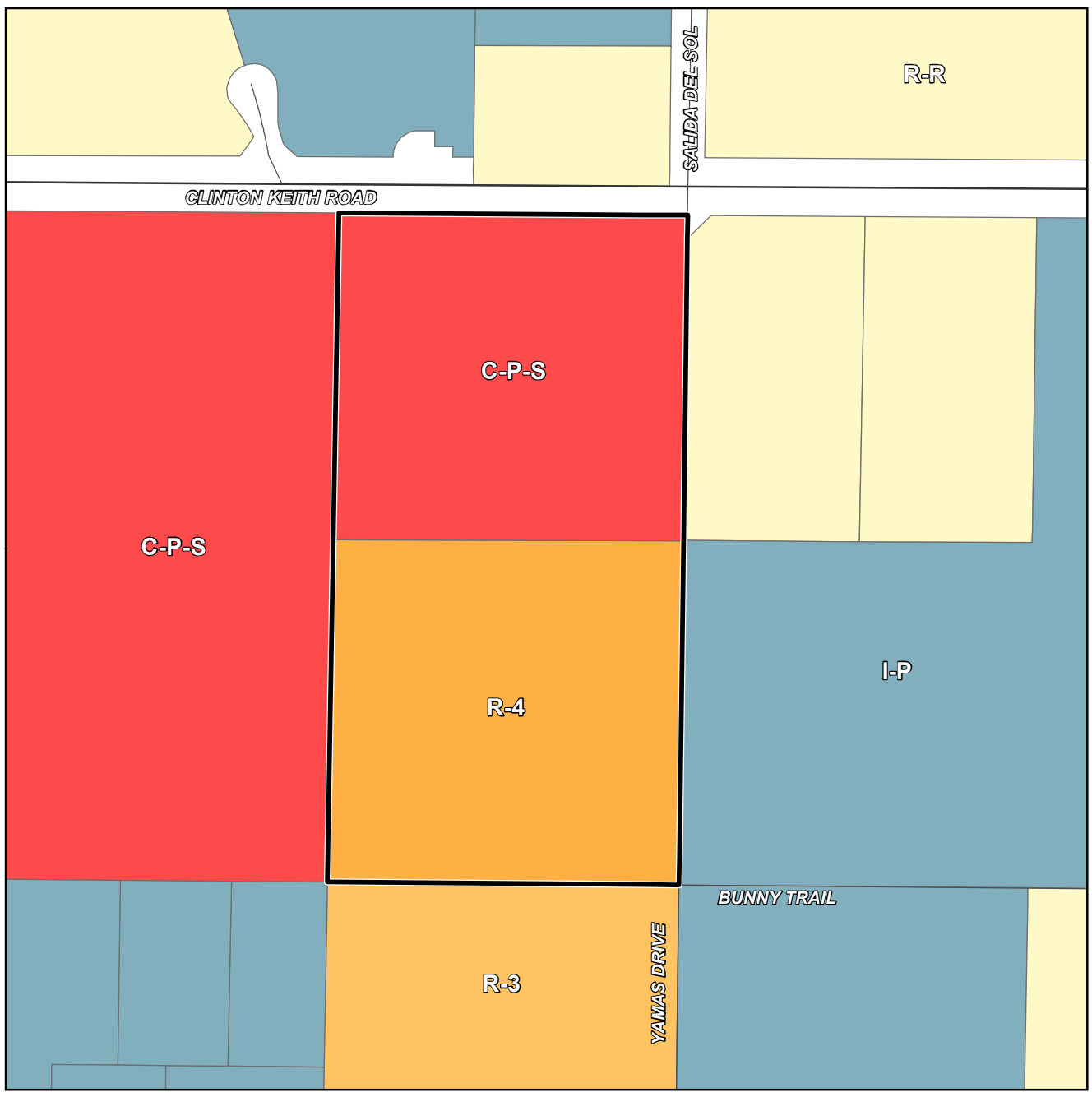

FIGURE 3.6

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SOURCE: City of Wildomar General Plan Land Use Map (June 2014) and Zoning Map (November 2013).

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Grove Park Mixed-Use Development
Environmental Impact Report

Proposed General Plan and Zoning Designation

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1,371 to 1,376 feet amsl, while the pad elevations for the apartment buildings on the southern portion of the site will be at 1,341 to 1,346 feet amsl. Areas of 2:1 slope will generally separate the commercial/retail area from other proposed on-site uses. The bottom of the proposed retention basin at southwest corner of the project site is at elevation 1,332 feet amsl.

While the majority of site will be graded, the existing oak grove will be preserved to the maximum extent feasible. Grading will commence with the removal of all existing vegetation from the area to be graded. Debris such as wood and root structures will be exported from the site and will not be mixed with fill material. Based on the Conceptual Grading Plan and Site Plan, development of the site will require the excavation (cut) and placement (fill) of approximately 67,200 cubic yards (cy) and 145,500 cy of material, respectively. Preparation of the project site will require the net import of approximately 78,300 cy of material. Grading activities are anticipated to last approximately 75 working days, and will employ a variety of equipment, including excavators, graders, water trucks, dozer, scrapers, and tractors/backhoes working up to eight hours per day.

3.4.4 Utilities and Storm Water Management

The project will require the extension of utility services to the proposed on-site uses. Actions associated with the extension of utility service include, but are not limited to providing new utility connections, adjusting utility alignments, and/or upgrading existing utility features. As there is a variety of utility lines currently located in existing roadway rights-of-way, it is not anticipated that the major expansion of water or wastewater systems will be required.

3.4.4.1 Water

Water to the project site will be provided by the Elsinore Valley Municipal Water District (EVMWD). Currently, domestic water line(s) are located in Clinton Keith Road. The project would connect to water lines located in Clinton Keith Road and the future extension of Yamas Drive.

On-site and off-site water conveyance improvements will be designed and constructed per the applicable standards established by the City and EVMWD and will conform to all appropriate fire-flow requirements required by the Riverside County Fire Department (RCFD).

3.4.4.2 Wastewater

Wastewater conveyance service to the project site will be provided by the EVMWD. Currently, sanitary sewer line(s) are located in Clinton Keith Road. The project would connect to sanitary sewer lines located in Clinton Keith Road and the future extension of Yamas Drive.

Wastewater generated during occupation of the project will be conveyed by new and existing sanitary sewer lines to wastewater treatment facilities operated by the EVMWD. All sanitary sewer improvements will be designed and constructed per the applicable guidelines established by the City and the EVMWD.

3.4.4.3 Storm Water Management

Within the project site, storm water and water quality management features will be installed subject to applicable City requirements. The City, being subject to provisions of the Municipal Separate Storm Sewer System (MS4) Permit issued by the San Diego Regional Water Quality Control Board (RWQCB), requires that development and municipal activities within its jurisdiction implement appropriate storm water pollution control measures. Construction-related storm water management measures will be implemented by a City approved Storm Water Pollution Prevention Plan (SWPPP).

Post-development, the project site will be divided into eight Drainage Management Areas (DMAs). The project will incorporate a bioretention planter, two sand filter basins, natural self-retaining area(s), and five subsurface retention systems to manage and treat storm water flows. As necessary, subsurface storm drains, inlet devices, and other features will be installed to convey flows between and through DMAs.

Table 3.C and Figure 3.7 identify the location of DMAs and storm water management features associated with the project.

Table 3.C: Storm Water Management Features

Drainage Management Area	Location	Use	Storm Water Management Features
A	Eastern ⅔ northern portion	Commercial/Retail & Park	Bioretention Planter A Subsurface systems A-1, -2 and -3
B	Western ⅓ northern portion	Commercial	Subsurface system B
C	Western ⅓ southern portion	Apartments	Sand filter basin C and D Subsurface basin C
D	Southeast corner of site	Apartments	Same as for DMA C
E	Western edge of site	Future Yamas Drive	Self-retaining area (oak grove preserve)
F	Western edge of site	Future Yamas Drive	Same as for DMA C
G	Western edge of site	Oak grove preserve	Self-retaining area
H	Slope between northern and southern portions	Slope	Self-retaining area

Sources: Project Specific Water Quality Management Plan (Preliminary), JLC Engineering and Consulting, June 16, 2014.

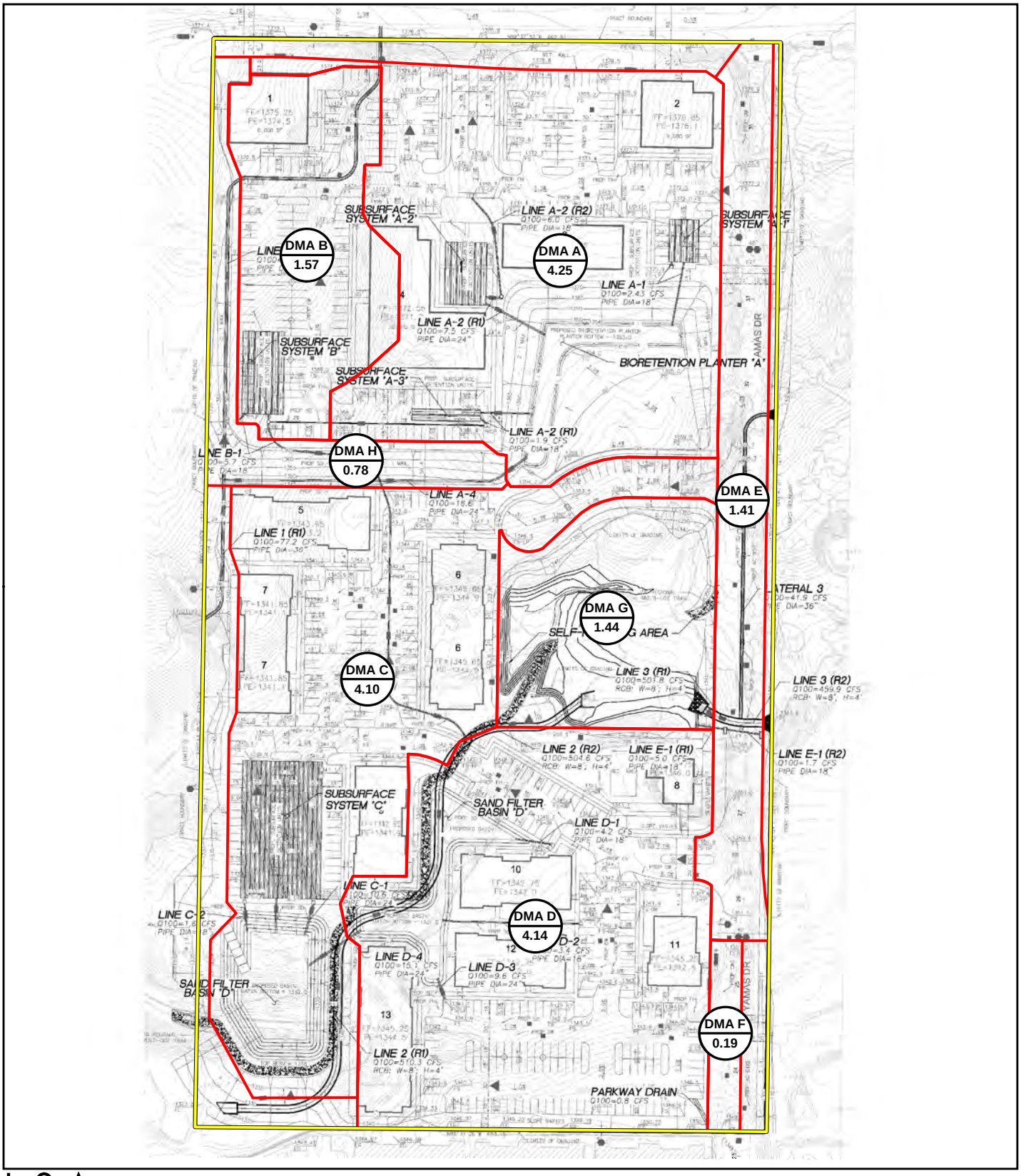

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FIGURE 3.7

N

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Project Site

DMA Watershed Boundary

DMA X
X.XX
DMA Area
Acreage

Grove Park Mixed-Use Development
Environmental Impact Report

Proposed Drainage Management Areas and Stormwater Facilities

SOURCE: Project Specific Water Quality Management Plan, JCL Engineering & Consulting, Inc., June 16, 2014

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3.4.4.4 Other Utilities

Occupation of the proposed on-site uses will require connection to other utility providers, including electricity, natural gas, and communication.

3.4.5 Access, Circulation, and Parking

Primary access to the proposed commercial/retail uses will be from Clinton Keith Road with a secondary access point provided from the future extension of Yamas Drive. Vehicular access to the park, trailhead, and residential component of the project will be from Yamas Drive only. Roadway improvements, driveways, traffic control, and internal circulation will be constructed consistent with respective cross-sections cited in the City's General Plan Circulation Element and the requirements of the City's Public Works Department. The following proposed improvements are detailed in Figure 3.8.

3.4.5.1 Roadway Improvements

Improvements to roadways adjacent to the project site include:

- *Clinton Keith Road:* Construct Clinton Keith Road at its ultimate half-section width as an Urban Arterial Highway (152-foot right-of-way) between the project's western boundary and Salida Del Sol/Yamas Drive. Improvements along the project's frontage (south side of Clinton Keith Road) would be those required by final conditions of approval for the proposed project and applicable City standards.
- *Yamas Drive:* Construct Yamas Drive at its ultimate half-section width as a Collector (74-foot right-of-way) from Clinton Keith Road to the project's southern boundary. Improvements along the project's frontage (west side of Yamas Drive) would be those required by final conditions of approval for the proposed project and applicable City standards.

3.4.5.2 Site Access Improvements

Construction of the following on-site and/or adjacent improvements would occur in conjunction with project development activity or as needed for project access purposes.

- *Clinton Keith Road driveway:* Stop control.
- *Salida del Sol/Yamas Drive/Clinton Keith Road:* Install a traffic signal.
- *Yamas Drive (commercial access):* Stop control.
- *Yamas Drive (park and trailhead access):* Stop control.
- *Yamas Drive (residential access):* Stop control.

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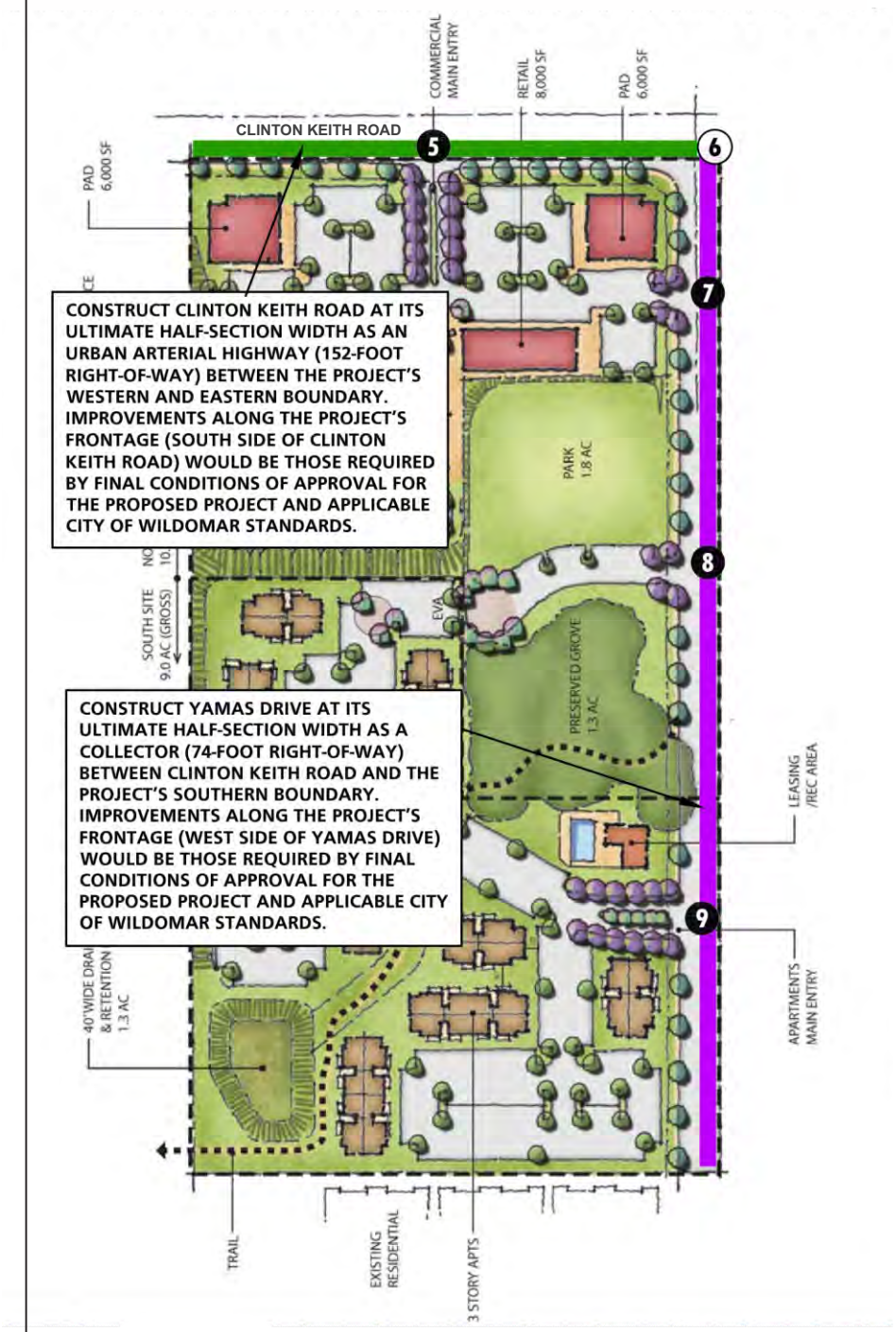

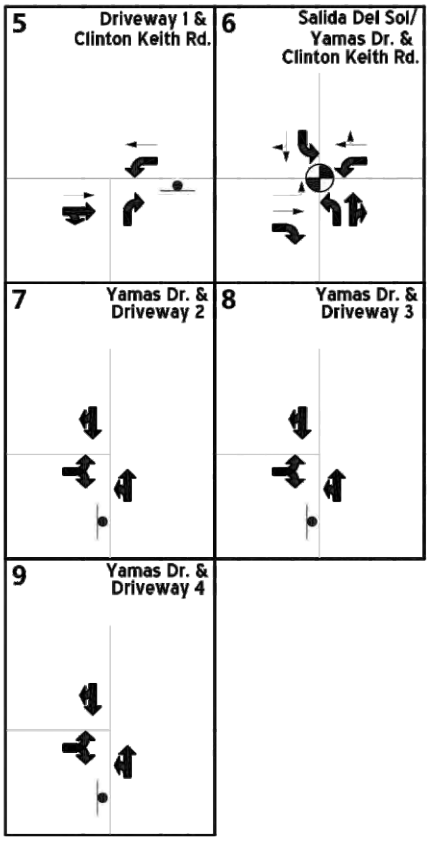

ON-SITE TRAFFIC SIGNING AND STRIPING SHOULD BE IMPLEMENTED IN CONJUNCTION WITH DETAILED CONSTRUCTION PLANS FOR THE PROJECT SITE.

SIGHT DISTANCE AT EACH PROJECT ACCESS POINT SHOULD BE REVIEWED WITH RESPECT TO STANDARD CALTRANS AND CITY OF WILDOMAR SIGHT DISTANCE STANDARDS AT THE TIME OF PREPARATION OF FINAL GRADING, LANDSCAPE AND STREET IMPROVEMENT PLANS.

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= TRAFFIC SIGNAL
= STOP SIGN
= EXISTING LANE
= LANE IMPROVEMENT
= URBAN ARTERIAL (152-FOOT R.O.W.)
= COLLECTOR (74-FOOT R.O.W.)

FIGURE 3.8

Grove Park Mixed-Use Development
Environmental Impact Report

Proposed Circulation and Access Improvements

SOURCE: Urban Crossroads Traffic Report, June 2014

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3.4.5.3 Parking

The Conceptual Site Plan identifies 286 and 329 parking spaces in the north (commercial/retail) and south (residential) portions of the project site, respectively. Parking areas will be configured to conform fully to applicable provisions of the City's Municipal Code (Chapter 17.188 – Off-Street Vehicle Parking Standards).

3.4.6 Landscaping, Open Space, and Lighting

3.4.6.1 Landscaping

The landscape concept for the project envisions a variety of accent trees along the frontages of Clinton Keith Road and Yamas Drive, and a mixture of canopy and buffer trees throughout the site's parking areas, adjacent to buildings, and along the western and southern boundaries. Shrubs and groundcover will underlay trees throughout the site's landscaped areas. A 'California Friendly Landscape Corridor' will extend from the park area, through the oak grove preserve, and along the community trail to the southwestern corner of the site. Natural materials such as cobblestone, crushed rock, decomposed granite, course organic bark mulch, and drought-tolerant turf will be utilized throughout landscaped area.

Enriched pavement (e.g., interlocking pavers or stamped concrete), enhanced entry landscaping, and primary entry monument signage will be provided at the Clinton Keith Road entrance. Secondary community entry monument signage will be provided along Yamas Drive. Monument signage will be accented by boulders, low walls, and/or hedges per City design requirements. A pedestrian plaza, with enriched pavement, canopy trees, and seating will provide a focal point near the proposed office building. Views of parking areas from adjacent streets will be screened by three-foot tall masonry walls, landscaped earthen berms, and/or hedges.

The landscape, irrigation, and related improvements will be designed, installed, and maintained per applicable requirements relating to water efficiency, fire-safety, and 'California-friendly' landscaping. Review of the project's landscaping concept is subject to the City's Design Review Process. The conceptual landscape plan is illustrated in Figures 3.9A through 3.9C.

3.4.6.2 Open Space

An approximately 1.9-acre passive public park and trailhead is proposed directly south of the commercial development. No play structures or active recreation features are planned for this area. The northern edge of the park area will act as a bioretention planter, accepting storm water flows from the DMA.

The existing grove of coast live oaks located along the western edge of the project site will be preserved in place. This 1.3-acre area will remain in its current

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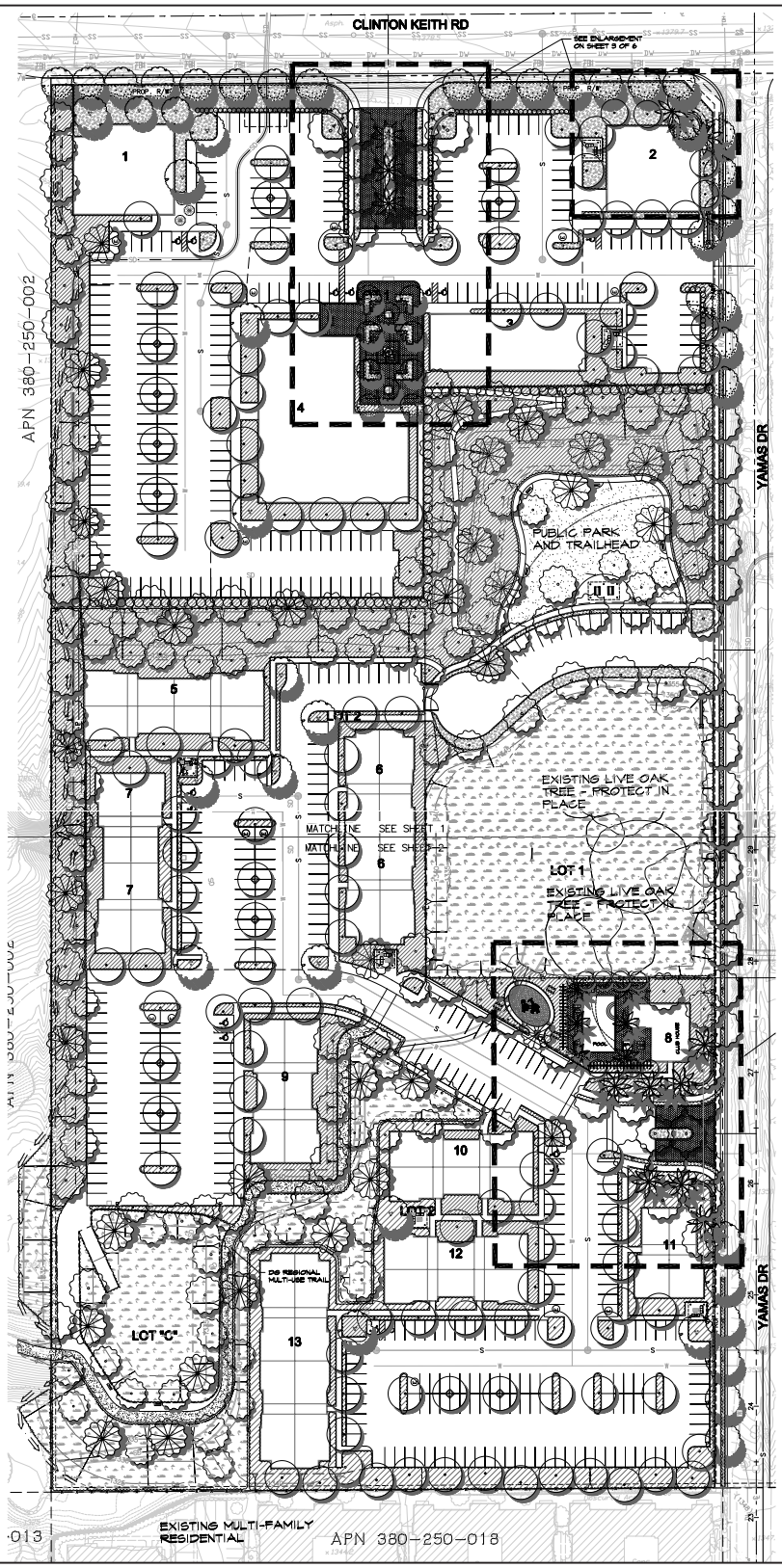

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FIGURE 3.9A

Grove Park Mixed-Use Development
Environmental Impact Report

Conceptual Landscape Plan

SOURCE: RBF, 2015.

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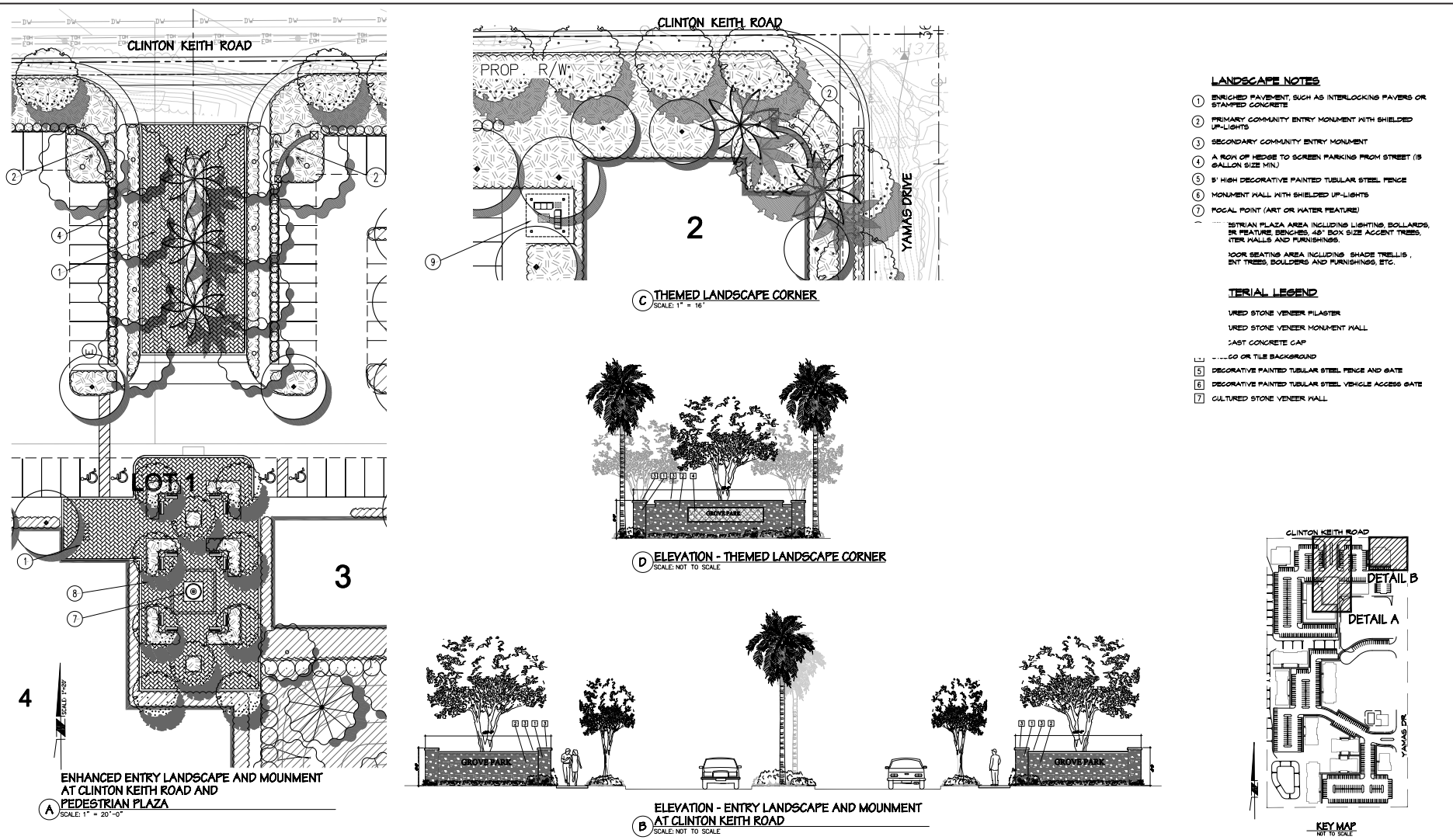

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FIGURE 3.9B

Grove Park Mixed-Use Development
Environmental Impact Report

Conceptual Landscape Plan

SOURCE: RBF, 2015

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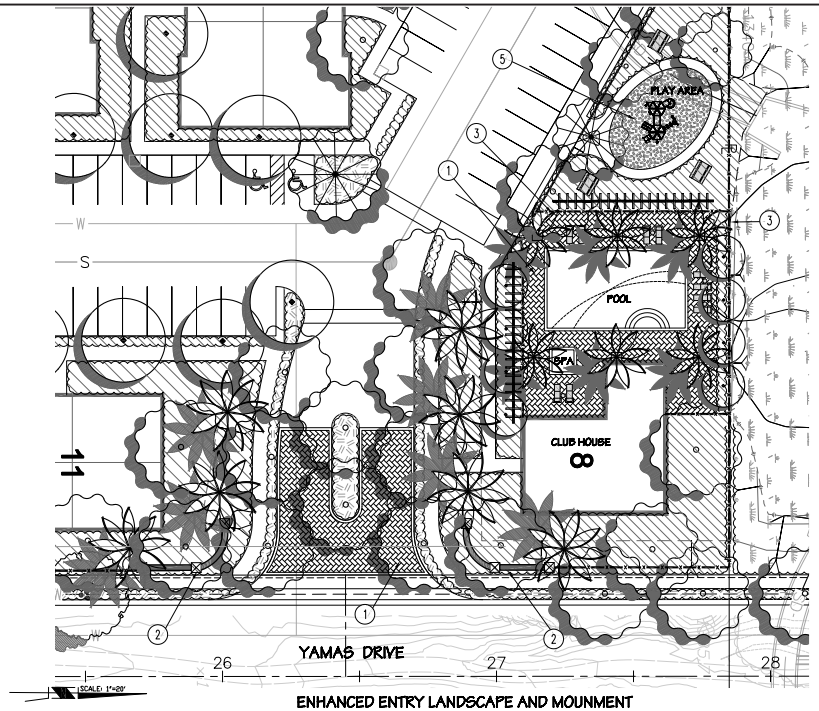


ENHANCED ENTRY LANDSCAPE AND MOUNMENT AT YAMAS DRIVE AND POOL AND PLAY AREA
SCALE: 1" = 20'-0"
SEE ELEVATION BELOW

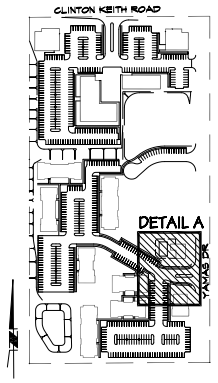
LANDSCAPE NOTES

1. ENRICHED PAVEMENT, SUCH AS INTERLOCKING PAVERS OR STAMPED CONCRETE
2. PRIMARY COMMUNITY ENTRY MONUMENT WITH SHIELDED UP-LIGHTS
3. 5' HIGH DECORATIVE PAINTED TUBULAR STEEL FENCE SEE DETAIL A ON SHEET 5
4. POOL AREA INCLUDING VINE TRELLIS, ACCENT TREES, BBQ, FIRE PIT, LIGHTING, SEAT WALLS AND SHADE TRELLIS , ETC.
5. PLAY AREA INCLUDING TOT LOT, BBQ, TRELLIS, PICNIC TABLES AND BENCHES, ETC.

MATERIAL LEGEND

1. CULTURED STONE VENEER PILASTER
2. CULTURED STONE VENEER MONUMENT WALL
3. PRECAST CONCRETE CAP
4. STUCCO OR TILE BACKGROUND
5. DECORATIVE PAINTED TUBULAR STEEL FENCE AND GATE
6. DECORATIVE PAINTED TUBULAR STEEL VEHICLE ACCESS GATE
7. CULTURED STONE VENEER WALL

ELEVATION - ENHANCED ENTRY LANDSCAPE AND MOUNMENT AT YAMAS DRIVE
SCALE: NOT TO SCALE



KEY MAP
NOT TO SCALE

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FIGURE 3.9C

Grove Park Mixed-Use Development
Environmental Impact Report

Conceptual Landscape Plan

SOURCE: RBF, 2015

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undeveloped condition to the maximum extent feasible. Storm water flows from the DMA will be directed to this natural, undisturbed area via an outlet structure adjacent to Yamas Drive and will continue to an inlet structure located at the southwest corner of the oak grove preserve.

A decomposed granite trail will lead from the southwest corner of the oak grove preserve and will continue through the southern multifamily portion of the development to the southwest corner of the site. The trail is consistent with the City's Multi-Use Trail Plan and will implement the portion of the Jon Rodarme Regional Trail on site. The multifamily development will include a resident clubhouse and adjacent pool/spa as well as a tot lot and barbeque/fire-pit area.

3.4.6.3 Lighting

Lighting at locations and density to provide necessary nighttime security and safety for residents, as well as the employees and patrons of the proposed commercial/retail, is component of the project. The lighting will be located, installed, and maintained per applicable City requirements outlined in Chapter 8.64 (*Light Pollution*) of the Wildomar Municipal Code.

3.5 PROJECT OBJECTIVES

The primary project objective is the development of the site with uses that are consistent with the policies and development guidelines established by the City. Specifically the project objectives are:

- Establish a mixed-use community for Wildomar with a balance of land uses including commercial, multifamily housing and recreation.
- Deliver an appropriately sized commercial center that provides a mix of retail and office uses with opportunities for employment growth and increased sales tax for Wildomar.
- Provide rental housing opportunities in a quality multifamily setting at a scale and character appropriate to the site and adjacent existing and future developments.
- Utilize architectural styles and design elements that reflect Wildomar's heritage, namely through the use of ranch, farmhouse and craftsman styles.
- Incorporate a public park within the project site for the overall Wildomar community.
- Preserve the existing on-site oak grove to the maximum extent feasible.
- Create a walkable community that provides convenient non-vehicular access from the residential area to the public park and trailhead and commercial center.

- Implement a trail system for the project consistent with the Wildomar Multi-Use Trails Master Plan.

3.6 REQUIRED ACTIONS AND PERMITS

Development of the project as proposed will require a number of discretionary and non-discretionary actions, permits, and/or related consultations included below.

3.6.1 City Actions and Permits

As established in *CEQA Guidelines* Section 15124(d)(2), "If a public agency must make more than one decision on a project, all its decisions subject should be listed." Actions necessary to fully develop the site as proposed include:

- Certification of the EIR;
- Approval of a General Plan Amendment from Business Park (BP) to Commercial Retail (CR) for the northern portion of the site;
- Approval of a Change of Zone from R-R (Rural Residential) to C-P-S (Scenic Highway Commercial) on the northern portion of the site;
- Approval of Tentative Parcel Map 36673 to divide the 19.4-acre property into three lots; and
- Plot Plan for development of the north and south portions of the site.

In addition to these discretionary actions, the project will require City review and approval of construction, grading, drainage, and related permits to allow for the development of project features and facilities.

3.6.2 Other Required Actions

CEQA Guidelines Section 15124(d)(1) further requires the City, to the extent the information is known, include a list of the agencies that are expected to use the EIR in their decision-making process, a list of permits and other approvals required to implement the project, and a list of related environmental review/consultation requirements established by Federal, State, or local law, regulation and/or policy. Based on the project as proposed, the additional actions that may be required include, but are not limited to the following:

- San Diego Regional Water Quality Control Board;
- California Department of Fish and Wildlife;
- U.S. Army Corps of Engineers; and
- Requisite approval from utility providers (connection permits/work permits).

4.0 ENVIRONMENTAL IMPACT EVALUATION

This Draft EIR addresses potential environmental impacts associated with the following issue areas:

4.1	Aesthetics	4.10	Land Use and Planning
4.2	Agriculture and Forestry Resources	4.11	Mineral Resources
4.3	Air Quality	4.12	Noise
4.4	Biological Resources	4.13	Population and Housing
4.5	Cultural Resources	4.14	Public Services
4.6	Geology and Soils	4.15	Recreation
4.7	Greenhouse Gas Emissions and Global Climate Change	4.16	Transportation and Traffic
4.8	Hazards and Hazardous Materials	4.17	Utilities and Service Systems
4.9	Hydrology and Water Quality		

The analysis relative to each environmental issue will include the following:

- A description of the existing setting relative to each environmental issue;
- A summary of policies and regulations relevant to the specific environmental issue;
- The identification of the significance thresholds against which the project's impact will be measured;
- An evaluation of project-specific impacts and a determination of significance based on identified threshold;
- A description of proposed project design features and/or standard conditions that will help reduce the level of any potential impact;
- An identification of feasible measures to minimize any significant environmental effect;
- A determination of the level of significance after mitigation measures are implemented; and
- Cumulative impacts.

Where appropriate, the Plans, Policies, Programs (PPPs) or Standard Conditions applicable to the project (including regulatory requirements of Federal, State, or local law which effectively reduce environmental impacts) have been identified. The Project Design Features (PDFs specifically intended to reduce or avoid impacts

(e.g., water quality treatment basins) have been identified in relevant impact discussions.

Mitigation Measures (MMs) are the requirements imposed on the project to reduce the significance of identified impacts.

Where appropriate, the application of the PPPs and PDFs has been accounted for in the assessment of impacts for each issue area. MMs have been identified to minimize the project's impact(s) on the environment. MMs have been identified for those significant impacts that could to be reduced to less than significant levels. All three types of measures described above will be required during implementation of the project.

The environmental analysis provided in Sections 4.1 through 4.17 focuses on changes in the existing physical environment and identifies the direct, indirect, and cumulative impacts associated with development of the project.

4.1 AESTHETICS

This section describes the existing aesthetic condition of the project area and analyzes potential impacts of the proposed project relative to views, and light and glare. The project site plan and supporting materials contain sufficient detail as to the general appearance and locations of buildings to evaluate the potential aesthetic impacts of the proposed development.

The following analysis is based on information gathered during a site visit conducted by LSA Associates, Inc. on January 13, 2015, as well as the project application materials. In addition, the following reference documents were used:

- *Visual Impact Assessment for Highway Projects,* Federal Highway Administration (FHWA), March 2010. Publication Number FHWA-HI-88-054.
- *City of Wildomar General Plan*, adopted July 2008.

4.1.1 Existing Setting

4.1.1.1 Project Area

The proposed project is located in the southern portion of the City, within southwestern Riverside County. The City, including the project site, is located in a valley surrounded by scenic backdrops of hillsides and mountains ridges. The Santa Ana Mountains and the Sedco hills line the western and northern boundaries of the City, which is characterized by rural residences along hillside areas and a more intense concentration of residential, commercial, and employment uses between Interstate 15 (I-15) and Grand Avenue. The community is expanding easterly of I-15, especially along Clinton Keith and Bundy Canyon Roads. The project is located in this area of growth, situated directly south of Clinton Keith Road, approximately 0.85 mile east of I-15.

The project site contains rolling topography punctuated by four steeper ephemeral drainage features. The site slopes toward the southwest from Clinton Keith Road. Elevations on site range from approximately 1,380 feet above mean sea level (amsl) along the northern boundary to approximately 1,330 feet amsl along the southwestern boundary. The majority of site has been recently plowed and is sparsely vegetated with ruderal (weed) species. Native vegetation makes up a smaller portion of site cover, and is concentrated in the drainage features. Native vegetation species include California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), chamise (*Adenostoma fasciculatum*), and coast live oak (*Quercus agrifolia*). Most of the coast live oaks on site are clustered in a grove located in the eastern portion of the site.

The project site is currently undeveloped. Site disturbances consist of recent mechanical disking, trenches excavated for geotechnical studies, an earthen basin at the southwest corner of the project site, and some modern trash dumping. A homeless

camp also exists within the oak grove. No structures are located within the boundaries of the project site. According to the Phase I Environmental Site Assessment (Appendix G), the site has been almost entirely undeveloped since before 1938, which is the earliest that aerial photographs are available. The exceptions include the presence of possible beehives on the property starting prior to 1938 and ending before 1953, and the presence of a small area of development in 2005. No evidence of development was observed during the site visit.

A multifamily residential development (Santa Rosa Apartment Homes) is located directly south of the project site, while undeveloped land is located to both the east and west. Scattered rural residential uses and a veterinary clinic are located north of Clinton Keith Road. Based on a review of aerial photographs, the multifamily development south of the site was constructed between 2006 and 2009. The apartments are two stories in height. A similar multifamily residential development exists west of the project site. To the north, the rural residences consist of scattered single-story homes interspersed with undeveloped land. Single-family suburban residential developments are northeast and northwest of the project site.

The current General Plan land use category of the project site is Business Park (BP) in the northern half and Highest Density Residential (HHDR) in the southern half. The northern 10.3 acres of the project site are currently zoned R-R (Rural Residential), which allows the development of large lot (0.5 acre minimum) single-family residential, agricultural, commercial, and ancillary uses. The southern 9.0 acres are zoned Planned Residential (R-4), which allows for a variety of residential types and compatible ancillary uses.

4.1.1.2 Existing Viewsheds and Scenic Resources

In general, scenic resources include areas that are visible to the general public and considered visually attractive. Scenic resources can include natural landmarks and prominent or unusual features of the landscape. Scenic vistas are typically views of natural or open spaces such as mountains, hills, lakes, rivers, or canyons. However, urban settings that define the aesthetic character of a community can also be considered scenic vistas (Perea, 2010). According to the City General Plan (City of Wildomar, 2008):

> *Scenic backdrops include hillsides and ridges that rise above urban or rural areas or highways. Scenic vistas are points, accessible to the general public, that provide a view of the countryside*.

Viewsheds are used as tools in identifying all the views a project could potentially affect. A viewshed is the surface area visible from a given location or series of locations (FHWA, 1983). A viewshed can also be all the surface area from which a given viewpoint can be seen. A viewshed can be divided into three components: the foreground, midground, and background. Table 4.1.A provides a summary of the existing viewsheds to and from the project site. Figure 4.1.1 provides the site photo

key map showing the direction from which the site photos shown in Figures 4.1.2A through 4.1.2C where taken.

Table 4.1.A: Existing Viewsheds in the Project Area

Vantage Point	Characteristics of Views		
	Foreground	Midground	Background
North from project site	Clinton Keith Road, undeveloped land, trees	Rural residences, trees, veterinary clinic	The Sedco Hills
East from project site	Undeveloped land with shrubs, grasses, scattered trees	Grassy vacant land, rural residences	Mature treetops and power lines, the Sedco Hills, the San Jacinto Mountains
South from project site	Multifamily residences, trees	Tops of mature trees	Santa Ana Mountains
West from project site	Vacant land with grasses and shrubs	Mature trees and multifamily residential housing	Santa Ana Mountains
North from the southern project boundary	Earthen detention basin with scattered small trees	Rolling hills with grasses and some shrubs on hillsides	Rural residential housing and the Sedco Hills
East from the western project boundary	Vacant land with rolling hills. Mostly grassy with shrubs on hillsides	Oak grove, vacant land with grasses and shrubs	Rural residences, mature trees and the Sedco Hills
South from Clinton Keith Road (northern project boundary)	Vacant land with rolling hills, drainages. Mostly grassy with shrubs on hillsides	Multifamily residences and mature trees	Santa Ana Mountains
West from the eastern project boundary	Vacant land with rolling hills. Mostly grassy with shrubs on hillsides.	Multifamily residences and mature trees	Santa Ana Mountains

4.1.1.3 Lighting and Visibility

The project site does not contain any lighting as it is undeveloped. Light sources adjacent to the project include streetlights, headlights of vehicles on Clinton Keith Road, and parking lot lights in the multifamily housing to the south of the site.

4.1.1.4 NOP/Scoping Comments

Several members of the public commented during the public scoping process; however, no public or agency comments related to aesthetics, the scenic condition of the site or project area, or lighting were provided during the scoping meetings or NOP comment periods.

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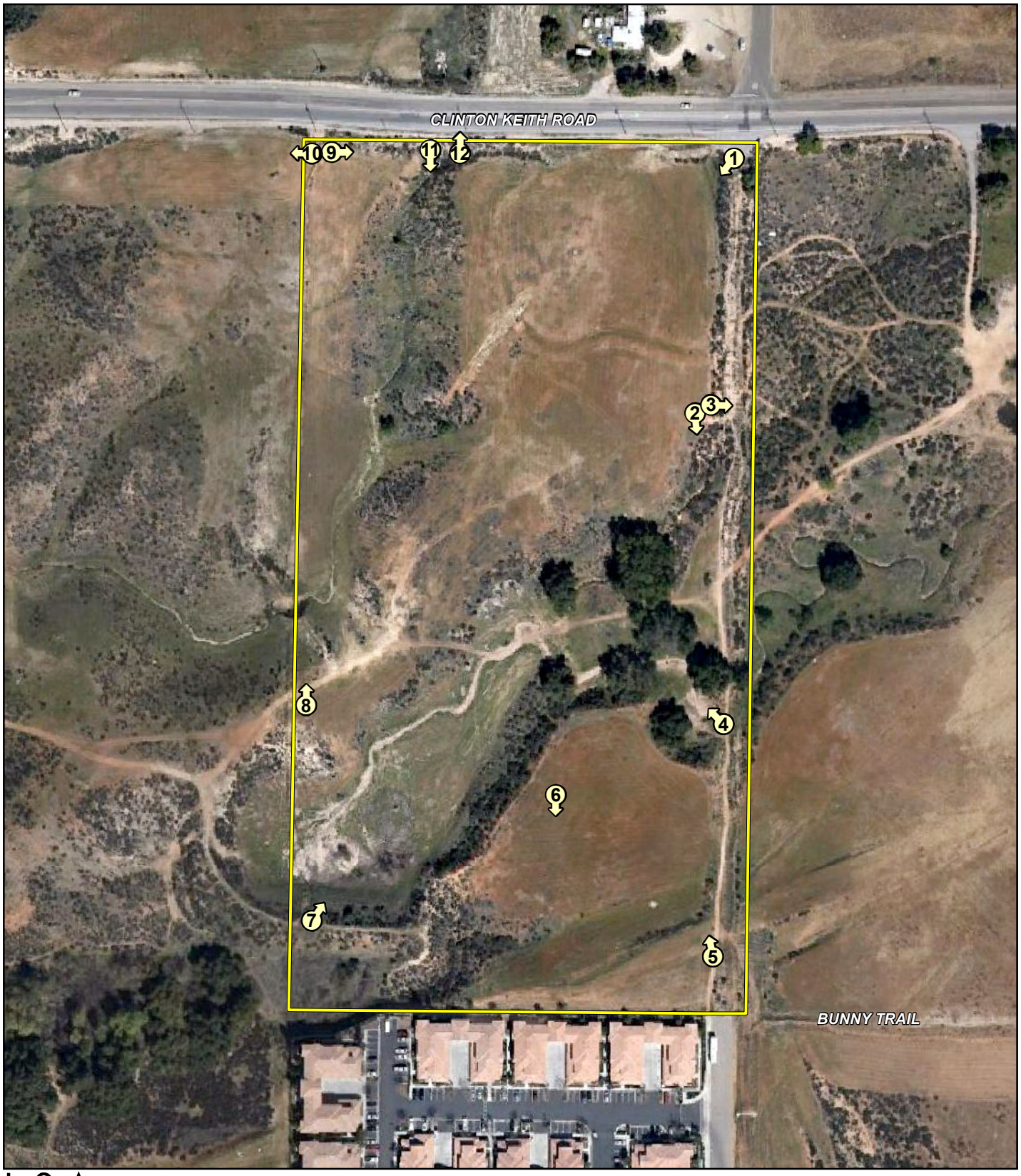

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Project Boundary

Photograph location and direction taken

FIGURE 4.1.1

Grove Park Mixed-Use Development
Environmental Impact Report

Photograph Location Key Map

SOURCE: Google Earth, 2013; Riverside County, 2014.

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PHOTOGRAPH 1: *View looking southwest from the northeast corner of the project site toward the Santa Ana Mountains.*

PHOTOGRAPH 2: *View looking south from the eastern border of the project site toward the on-site oak grove, with the Santa Ana Mountains in the background.*

PHOTOGRAPH 3: *View looking east from the eastern border of the site across vacant land.*

PHOTOGRAPH 4: *Oak grove in the eastern portion of the project site.*

LSA

FIGURE 4.1.2A

Grove Park Mixed-Use Development
Environmental Impact Report

Site Photographs

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PHOTOGRAPH 5: *View looking north from the eastern border of the project site toward the Sedco Hills.*

PHOTOGRAPH 6: *View south from the center of the project site toward neighboring multifamily residential housing.*

PHOTOGRAPH 7: *View northeast from the southwest corner of the project site across the on-site detention basin, with the Sedco Hills in the background.*

PHOTOGRAPH 8: *View north from the western border of the project site across a drainage area, with the Sedco Hills in the background.*

LSA

FIGURE 4.1.2B

Grove Park Mixed-Use Development
Environmental Impact Report

Site Photographs

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PHOTOGRAPH 9: *View east along Clinton Keith Road from the northwest corner of the project site.*

PHOTOGRAPH 10: *View west along Clinton Keith Road from the northwest corner of the project site toward the Santa Ana Mountains.*

PHOTOGRAPH 11: *View south from the northern border of the project site across an on-site drainage area, with the Santa Ana Mountains in the background.*

PHOTOGRAPH 12: *View north from the northern border of the project site across Clinton Keith Road, with the Sedco Hills in the background.*

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FIGURE 4.1.2C

Grove Park Mixed-Use Development
Environmental Impact Report

Site Photographs

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4.1.2 Existing Policies and Regulations

4.1.2.1 City of Wildomar General Plan Policies

The following policies pertain to aesthetics and are applicable to the proposed project. Note that these goals and policies are only listed here by number with a brief summary, but each is presented in its entirety in Table 4.1.B later in this section with an evaluation of the project's consistency with the stated goals and policies.

Mt. Palomar Nighttime Lighting

ELAP 10.1 Adhere to the lighting requirements of the City of Wildomar for standards that are intended to limit light leakage and spillage that may interfere with the operations of the Palomar Observatory.

ELAP 13.1 Protect Interstate 15 and State Route 74 from change that would diminish the aesthetic value of adjacent properties through adherence to the Scenic Corridors sections of the General Plan Land Use and Circulation Elements.

Land Use

LU 13.1 Preserve and protect outstanding scenic vistas and visual features for the enjoyment of the traveling public.

LU 13.8 Avoid the blocking of public views by solid walls.

LU 19.4 Encourage that structures be designed to maintain the environmental character in which they are located.

LU 22.10 Require that residential units/projects be designed to consider their surroundings and to visually enhance, not degrade, the character of the immediate area.

LU 23.6 Require that commercial projects abutting residential properties protect the residential use from the impacts of noise, light, fumes, odors, vehicular traffic, parking, and operational hazards.

LU 23.9 Require that commercial development be designed to consider their surroundings and visually enhance, not degrade, the character of the surrounding area.

LU 26.10 Require that mixed-use developments be designed to mitigate potential conflicts between uses, considering such issues as noise, lighting, security, trash, and truck, and automobile access.

Scenic Resources

OS 9.3 Maintain and conserve superior examples of native trees, natural vegetation, stands of established trees, and other features for ecosystem, aesthetic, and water conservation purposes.

OS 9.4 Conserve the oak tree resources in the City.

OS 21.1 Identify and conserve the skylines, view corridors, and outstanding scenic vistas within the City of Wildomar.

4.1.2.2 City of Wildomar Municipal Code (Chapter 8.64: Light Pollution)

8.64.010 The purpose of this chapter is to provide regulations for outdoor lighting that will:

A. Preserve the access to the dark night sky enjoyed by Wildomar residents and residents of surrounding communities.

B. Reduce light pollution in order to support astronomical activity and protect the viability of the Palomar Observatory.

C. Minimize adverse off-site impacts of lighting such as light trespass, an obtrusive light, particularly in residential neighborhoods.

D. Conserve energy and resources to the greatest extent possible.

E. Ensure adequate lighting for the safety, security, and well-being of persons engaged in outdoor nighttime activities.

The Chapter 8.64.010 further provides direction regarding the design, installation and maintenance of lighting as follows:

8.64.020 Applicability

8.64.030 Prohibitions

8.64.090 Lighting Output and Shielding Requirements

8.64.100 Rated Color Temperature

8.64.110 Curfew Requirements

8.64.120 Illumination of Signs

8.64.140 Lighting of Rights-of-Way

8.64.150 Residential Lighting Provisions

8.64.160 Compliance

4.1.3 Methodology

Visual impacts are determined by assessing the degree of change in visual resources and predicting the response of viewers to the change (FHWA). Visual impacts can be beneficial or detrimental. While any evaluation of visual impacts is subjective, aesthetic standards for a project can be found in community document such as the General Plan, zoning code, and design requirements; values expressed in these documents can be used to evaluate changes in view within a particular community.

For the purposes of CEQA compliance, this analysis of visual impacts will focus on changes in the visual character[1] of the project site that would result from the development of the proposed on-site uses, the visual compatibility of on-site and adjacent uses, changes in vistas and viewsheds, and new sources of light and glare. Changes in on-site aesthetics (visual character and compatibility) are assessed by comparing the expected appearance of the project to the existing site appearance and visual character of adjacent uses. Factors such as the blending/contrasting of new buildings, density, height, bulk, and setbacks are considered in this comparison. Changes in views and viewshed are considered in terms of the presence of scenic resources, the degree of obstruction, and the permanence of the obstruction. In addition, the anticipated appearance of the project and its changes to viewsheds is compared to applicable General Plan, zoning code, and design requirements.

In addition to values and standards from community documents, viewer response is predicted by considering the locations of viewers in the project area. Viewers can be either stationary (residents at adjacent housing structures) or mobile (motorists along adjacent roadways and site visitors). For the project, the nearest stationary visual receptors are residents at the multifamily housing directly south of the project. Residents located in the multifamily housing west and rural residences north of the project site may also be affected by visual impacts of the project. Mobile viewers of the site include motorists on Clinton Keith Road, which runs along the northern boundary of the site, and other nearby roadways.

4.1.4 Thresholds of Significance

4.1.4.1 CEQA Thresholds

Appendix G of the State *CEQA Guidelines* recognizes the following significance thresholds related to aesthetics. Based on these significance thresholds, a project would have a significant impact on aesthetic resources if it would result in:

- A substantial adverse effect on a scenic vista;
- Substantial damage to scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a State scenic highway;
- Substantial degradation of the existing visual character or quality of the site and its surroundings; and/or
- A new source of substantial light or glare that would adversely affect daytime or nighttime views in the area.

[1] Visual character includes attributes such as form, line, color, texture, and is used to describe, not evaluate; that is, these attributes are neither considered good nor bad. However, a change in visual character can be evaluated when it is compared with the viewer response to that change. Changes in visual character can be identified by how visually compatible a proposed project would be with the existing condition by using visual character attributes as an indicator.

4.1.4.2 Project Design Features

The project includes the following features that relate to aesthetic resources:

- An approximately 1.8-acre passive park is proposed directly south of the commercial development. The existing 1.3-acre grove of coast live oaks shall be preserved within the adjacent natural open space area to the maximum extent feasible. Storm water flows from will be directed to this natural, undisturbed area via an outlet structure adjacent to Yamas Drive and will continue to an inlet structure located at the southwest corner of the oak grove preserve.
- A 'California Friendly Landscape Corridor' will extend from the passive park area, through the oak grove preserve, and along the community trail to the southwestern corner of the site. Natural materials such as cobblestone, crushed rock, decomposed granite, coarse organic bark mulch, and drought-tolerant turf will be utilized throughout landscaped area.

4.1.5 Less than Significant Impacts

The following potential impacts were determined to be less than significant. In each of the following issues, either no impact would occur or adherence to established regulations, standards, and policies would reduce potential impacts to a less than significant level. In either instance, no mitigation would be required.

4.1.5.1 Scenic Vistas

Threshold	Would the proposed project have a substantial adverse effect on a scenic vista?

Views (foreground, midground) in the immediate project vicinity include undeveloped land, some rural single-story development, and two two-story multifamily housing developments. In the background, viewsheds from the project site include the Santa Ana Mountains to the west and the Sedco Hills to the north.

The project site is located along Clinton Keith Road, in an area that has experienced a surge of residential growth; the two multifamily housing developments were both constructed within the past 10 years.

The project would replace undeveloped land with mixed-use development. Building elevations are depicted in Figures 3.5A–C. Rural residences to the north would have views of commercial/retail and office uses instead of vacant land; however, there would be minimal obstruction of scenic backdrops of the Santa Ana Mountains. There may be partial temporary obstruction of mountain ridgelines for motorists on Clinton Keith Road due to their proximity to the development. Views from the west would include parking areas, the on-site retention basin, and some commercial/retail buildings. Viewers in the multifamily development immediately to the south would

have views of parking areas, the retention basin, and three-story multifamily housing buildings.

Viewers in dwelling units immediately south of the project would have long-range views of the Sedco Hills permanently obstructed due to the height of buildings and the upslope location of the project site. Because the viewpoints that are obstructed by the project are not publicly accessible and are only available to a limited number of residents of the multifamily development, they do not constitute a scenic vista as described by the City General Plan. Since the project would not create a substantial permanent obstruction to viewsheds of scenic hills and ridgelines that are generally accessible to the public, it would not have a significant impact to scenic vistas.

4.1.5.2 Scenic Highways

Threshold	Would the proposed project substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway and/or local scenic road?

The project site is located 0.85 mile east of I-15, which is eligible to be designated as a state scenic highway (City of Wildomar 2008, Figure C 9; Caltrans 2012). Due to the presence of intervening buildings and mature trees, the site is not visible from I-15. The site contains no rock outcroppings or historic buildings. The oak tree grove on site would be preserved to the maximum extent feasible within the 1.3-acre natural open space area included in the site design. Therefore, there would be no impact to scenic resources within a state scenic highway.

4.1.5.3 Visual Character

Threshold	Would the proposed project substantially degrade the existing visual character or quality of the site and its surroundings?

Under the project, the existing undeveloped land would be graded and developed for the proposed commercial/retail and residential uses. As previously noted, most of the site is currently disturbed by periodic plowing and vegetated with nonnative annual grasses. The site also contains a man-made earthen basin and has been used for dumping of human-generated waste. As a result, the site is not considered a significant aesthetic resource.

The project would preserve the existing oak grove as part of a 1.3-acre open space area that includes other examples of native California vegetation. The improvements proposed by the project would be required to adhere to the City's zoning and design standards, which would make them compatible with the surrounding visual character. Multifamily housing complexes already exist to the west and south of the project site, and the site is zoned for developed uses. Because the site is consistent with surrounding development patterns and would preserve existing scenic

resources (the on-site oak grove), impacts to the visual character of the site and surroundings are considered less than significant.

Compliance with Existing Regulations and Standard Conditions of Approval. As Table 4.1.B shows, the anticipated visual changes of the project site are generally consistent with General Plan policies and objectives in the City Area Plan, Land Use, and Open Space Elements regarding visual resources.

Table 4.1.B: General Plan Consistency Analysis

General Plan Goals and Targets	General Plan Consistency Analysis
ELAP 10.1. Adhere to the lighting requirements of the City of Wildomar for standards that are intended to limit light leakage and spillage that may interfere with the operations of the Palomar Observatory.	**Consistent.** Per Mitigation Measure 4.1.6.1, the project shall comply with standards that are intended to limit light leakage and spillage that may interfere with the operations of the Palomar Observatory.
Land Use	
LU 13.1. Preserve and protect outstanding scenic vistas and visual features for the enjoyment of the traveling public.	**Consistent.** The project will not substantially alter vistas and visual features that are accessible to motorists and pedestrians.
LU 13.8. Avoid the blocking of public views by solid walls.	**Consistent.** The project does not proposed any solid walls.
LU 19.4. Encourage that structures be designed to maintain the environmental character in which they are located.	**Consistent.** Project structures will be compatible with the surrounding visual character, as discussed in Section 4.1.5.3.
LU 22.10. Require that residential units/projects be designed to consider their surroundings and to visually enhance, not degrade, the character of the immediate area.	**Consistent.** The project shall comply with City design standards.
LU 23.6. Require that commercial projects abutting residential properties protect the residential use from the impacts of noise, light, fumes, odors, vehicular traffic, parking, and operational hazards.	**Consistent.** The commercial and residential uses of the project are separated by slopes, park space, and a trail area.
LU 23.9. Require that commercial development be designed to consider their surroundings and visually enhance, not degrade, the character of the surrounding area.	**Consistent.** The project shall comply with City design standards.
Open Space	
OS 9.3. Maintain and conserve superior examples of native trees, natural vegetation, stands of established trees, and other features for ecosystem, aesthetic, and water conservation purposes.	**Consistent.** The existing oak grove shall be preserved as part of a 1.3-acre open space area.
OS 9.4. Conserve the oak tree resources.	**Consistent.** The existing oak grove shall be preserved as part of a 1.3-acre open space area.
OS 21.1. Identify and conserve the skylines, view corridors, and outstanding scenic vistas within the City of Wildomar.	**Consistent.** The project will not substantially obstruct any scenic vistas.

Source: *City of Wildomar General Plan* July 2008.

In summary, the project's design features and compliance with the City's zoning and design regulations would ensure that all impacts related to visual character are less than significant.

4.1.5.4 Light and Glare

Threshold	Would the proposed project create a new source of substantial light or glare that would adversely affect daytime or nighttime views in the area?

The site is currently undeveloped and does not generate light or glare. Light sources adjacent to the project include streetlights, headlights of vehicles on Clinton Keith Road, and residential, vehicle, and parking lot lights in the multifamily housing to the south of the site. Glare is a daytime occurrence typically resulting from light reflecting off polished surfaces and affecting viewers. Impacts of glare from reflective surfaces most often affect viewers in nearby moving vehicles.

Chapter 8.64 (Light Pollution) of the City's Municipal Code establishes regulations for outdoor lighting that preserve the access to the dark night sky; reduce light pollution in order to support astronomical activity and protect the viability of the Palomar Observatory; minimize off-site lighting impacts; conserve energy; and provide for an adequate level of lighting for the safety and security of persons engaged in nighttime activities. The applicant for a development permit that includes outdoor lighting fixtures is required to submit plans indicating the location and type of illuminating feature; a description of the illuminating feature; photometric showing the angle of cutoff or light emissions; and calculations sufficient to demonstrate compliance with the established lumen cap.

The development of commercial/retail, office, and residential uses would create new sources of light and glare. The City's building permit process ensures a project's compliance with City zoning and design standards, including the installation of lighting features. Compliance with the City's requirements, as established in Municipal Code would sufficiently ensure no significant light or glare impact in the project would result from the development of the proposed on-site uses; therefore, no mitigation is warranted.

The project site is located approximately 28 miles northwest of the Palomar Observatory. All development within the City is subject to Chapter 8.64 (Light Pollution) of the Municipal Code. As one of the stated purposes of Chapter 8.64 is to support astronomical activity at Palomar Observatory, project lighting would be designed, installed, and maintained in a manner sufficient to maintain the viability of Palomar Observatory. Adherence to the applicable light pollution control measures is a standard requirement for all development in the City and would ensure that lighting impacts to Palomar Observatory are less than significant. No mitigation is warranted.

4.1.6 Significant Impacts

No significant aesthetic, visual resource, or lighting-related impact was determined to be significant; therefore, no mitigation is required.

4.1.7 Cumulative Impacts

Cumulative development would further alter the viewsheds and visual character in the project area. As required by the City, the design of future projects would be reviewed for consistency with local plans and policies regarding aesthetics. Although the development of the project would partially obstruct views of the Sedco Hills and Santa Ana Mountains from certain vantage points near the project structures, vistas would not be completely obstructed from other viewpoints in the project area. Future development would be required to adhere to City General Plan policies regarding the preservation of scenic vistas.

No significant scenic resources have been identified in the project area. In addition, cumulative projects would contribute to development that is consistent with planned uses in the project area. Compliance with the City's General Plan standards, and the City's Municipal Code standards would ensure that the project in combination with other projects in the area would not result in significant impacts upon scenic vistas, scenic resources, and visual character. As a result, the project would create a less than significant cumulative impact on local scenic vistas, scenic resources, and visual character.

Cumulatively, more lighting would be introduced into the area by proposed, existing, and future development. Developed uses with similar lighting impacts are located directly south of the site and farther to the west. The project site is located in an urbanizing area adjacent to Clinton Keith Road. The proposed uses are consistent with the pattern of ongoing development along Clinton Keith Road. As with past and proposed future development, cumulative lighting-related impacts would be reduced through adherence to applicable City lighting standards. No cumulatively significant lighting impact would result from implementation of the proposed project.

4.2 AGRICULTURAL AND FORESTRY RESOURCES

This section discusses the project's effect on agricultural and forestry resources. It focuses on applicable State, regional, and local policies regarding agricultural resources and the conversion of farmland to non-agricultural uses. The analysis contained in this section is based on the following reference documents:

- *A Guide to the Farmland Mapping and Monitoring Program,* California Department of Conservation, Division of Land Resources Protection, 2004 Edition.
- *Web Soil Survey.* Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. Accessed October 23, 2014.
- Multipurpose Open Space Element, *City of Wildomar General Plan*, adopted July 2008.

4.2.1 Existing Setting

4.2.1.1 Agricultural Designations and Use

The project site is a 19.4-acre undeveloped parcel. The site's soils are sandy and formed from granitic alluvium. The soils mapped on site include Hanford sandy loam, 2 to 15 percent slopes; Monserate sandy loam, 8 to 15 percent slopes, eroded; Monserate sandy loam, 15 to 25 percent slopes, severely eroded; Placentia fine sandy loam, 5 to 15 percent slopes; Ramona and Buren sandy loams, 15 to 25 percent slopes, severely eroded; Ramona and Buren loams, 5 to 15 percent slopes, eroded.

The project site has not been previously used for agricultural purposes. According to the Phase I ESA (Appendix G),[1] the site has been almost entirely undeveloped since before 1938, which is the earliest that aerial photographs are available. The exceptions include the presence of possible beehives on the property starting prior to 1938 and ending before 1953, and the presence of a small area of development in 2005. In addition, the site is not designated for agricultural use under the City General Plan or Zoning Ordinance.

The California Department of Conservation (DOC), the Farmland Mapping and Monitoring Program (FMMP)[2] compiles important farmland maps for each county within the State. Maps and statistics are produced biannually using a process that integrates aerial photo interpretation, field mapping, a computerized mapping system, and public review. The entire project site is designated "Other Land" under

[1] *Phase I Environmental Site Assessment, APNs 380-250-003 and 380-250-023, Wildomar, CA*. Hillmann Consulting, LLC. August 31, 2012.

[2] A Guide to the Farmland Mapping and Monitoring Program, California Department of Conservation, Division of Land Resources Protection, 2004 Edition.

the FMMP map for Riverside County (2010). Other Land is land not included in any other mapping category, and can include low density rural developments and vacant land that is surrounded by urbanized uses. Other Land has no agricultural use or value. The project site is not designated as Prime, Unique, Statewide Important of Locally Important Farmland.

4.2.1.2 California Land Conservation Act (Williamson Act)

The California Land Conservation Act of 1965, also referred to as the Williamson Act, is a non-mandated State program administered by counties and cities for the preservation of agricultural land. This program enables local governments to enter into contracts with private landowners to restrict specific parcels of land to agricultural or related open space use. In return, landowners receive much lower property tax assessments than normal because the assessments are based upon farming and open space uses rather than full market value. According to California Department of Conservation map for Riverside County (Sheet 1 of 3, 2012), there are no Williamson Act contracts on or adjacent to the project site.

4.2.1.3 Forest Resources

Public Resource Code Section 12220(g)) defines forest land is:

> "… land that can support 10-percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits."

According to the California Department of Forestry and Fire Protection, there are no areas designated as forest land or timberland on the project site. Figure OS-3 in the Wildomar General Plan also confirms that there is no forest land in the City of Wildomar.

4.2.1.4 NOP/Scoping Comments

No public or agency comments were made about agricultural issues during the public scoping meetings or the NOP comment periods.

4.2.2 Existing Policies and Regulations

4.2.2.1 City of Wildomar General Plan Policies

There are no policies pertaining to agriculture that are applicable to the project, because it is not designated as an agricultural land use in the General Plan. The following policies pertain to forestry resources. Note that these policies are only listed here by number with a brief summary, but this policy is evaluated later in this section against the project's consistency with the stated policy.

Open Space:

OS 8.2 Support conservation programs to reforest privately held forest lands.

ELAP 18.1 Protect viable oak woodlands through adherence to the Oak Tree Management Guidelines adopted by the City of Wildomar and the Vegetation section of the Multipurpose Open Space Element of the General Plan.

4.2.3 Thresholds of Significance

Appendix G of the *CEQA Guidelines* recognizes the following significance thresholds related to agricultural resources. Based on these significance thresholds, potential impacts to agricultural resources could be considered significant if the proposed project would:

- Conflict with existing zoning for agricultural use, or a Williamson Act contract;
- Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220[g]), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104[g]);
- Result in the loss of forest land or conversion of forest land to non-forest use;
- Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use; and/or
- Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program (FMMP) of the California Resources Agency, to non-agricultural use.

4.2.4 Methodology

The methodological analysis underlying this section of the EIR consists of the following:

- Identify the FMMP designation of the site;
- Identify existing and proposed General Plan land use designations and zoning for the site and adjacent areas to determine potential conflicts between agricultural and non-agricultural uses; and
- Finally, use Natural Resource Conservation Service (NRCS) data to further analyze any potential impacts to agricultural resources.

For forest land analysis, the City General Plan and Zoning Ordinance were considered in order to determine whether the project would conflict with forest or timberland zoning.

4.2.5 Less than Significant Impacts

The following potential impacts were determined to be less than significant. In each of the following issues, either no impact would occur or adherence to established regulations, standards, and policies would reduce potential impacts to a less than significant level. In either instance, no mitigation would be required.

4.2.5.1 Loss or Conversion of Forest Land

Threshold	Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code Section 12220(g)), timberland (as defined by Public Resources Code Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?
Threshold	Would the project result in the loss of forest land or conversion of forest land to non-forest use?

The project site is currently zoned for Rural Residential (R-R) and Planned Residential (R-4) uses. The project proposes to rezone the northern portion of the site to Scenic Highway Commercial (C-P-S). The project does not propose a zone change that would convert existing forest or timberland to urban uses.

On-site, coast live oak trees in this community grow close together along the east-central portion of the site with their canopies occasionally touching. The shrub layer underneath is poorly developed likely due to historic livestock grazing. Some non-native species found in the understory included olive, tocalote, shortpod mustard, ripgut brome, and other brome grasses. Coast live oak woodland occupies 0.81 acre within the on-site portion of the project and 0.01 acre off site.

The coast live oaks on site will be preserved to the maximum extent feasible. During development a limited number of oaks located outside the oak preserve will be removed to facilitate the construction of buildings or project features. The City does not have a tree-preservation ordinance or other requirement for the specific preservation of oak trees. Mitigation to address the biological resource impacts related to the limited removal of oak trees is identified in Section 4.4 (Biological Resources) of this EIR.

The on-site trees do not constitute forest or timberland pursuant to Public Resource Code Section 1220(g)), nor is the site zoned for forest or timberland production; therefore, no significant impact to forest or timberland resources would occur. No mitigation is warranted.

Project Design Features. To the extent feasible, the project shall preserve on-site oak trees as part of a 1.3-acre open space area.

4.2.5.2 Farmland Conversion

Threshold	Would the project result in the conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural land use?

The California Resources Agency has mapped the entire project site as Other Land. Other Land is land that does not fall into any other FMMP category and therefore is not considered to be valuable for agricultural uses. Surrounding land to the north, east, and west is also mapped as Other Land. Urban and Built Up Land is mapped south of the project site. Some land directly to the northeast of the project site is considered Farmland of Local Importance; however, neither the project site nor adjacent properties is currently used for agriculture nor were they used for agriculture in the past, per the Phase 1 ESA. Development of proposed on-site uses would not preclude agricultural use of adjacent Farmland of Local Importance. Therefore, the project would not result in the conversion of Farmland to non-agricultural uses and there would be no impact.

4.2.5.3 Existing Agricultural Zoning and Williamson Act Contract Land

Threshold	Would the project conflict with existing zoning for agricultural use or a Williamson Act contract?

There is no land enrolled in Williamson Act contracts either on the project site or on any adjacent properties. Neither the project site nor any adjacent properties is zoned or General Plan designated for agricultural uses. Because the project would not conflict with any Williamson Act contracts or existing zoning designations, no impact related to this issue would occur; therefore, no mitigation is required.

4.2.5.4 Conversion of Farmland to Non-Agricultural Uses

Threshold	Would the project involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use, or conversion of forest land to non-forest use?

Neither the project site nor adjacent land is considered farmland or forest land, as shown on maps prepared by the DOC. In addition, the project site and adjacent lands are not currently used for agriculture, nor is there evidence to suggest that they have been in the past. Therefore, the project would not result in the conversion

of farmland to non-agricultural use or the conversion of forest land to non-forest use. No impacts related to this issue would occur.

4.2.6 Significant Impacts

The project would not have any impact relative to agricultural or forestry resources.

4.2.7 Cumulative Impacts

The DOC Office of Land Conservation publishes a Farmland Conversion Report every two years as part of its FMMP. These reports document by acreage land use conversion for each California County. The most recent data are for the 2008–2010 period, during which Riverside County experienced a net loss of 3,300 acres of Prime Farmland, 567 acres of Farmland of Statewide Importance, 1,742 acres of Unique Farmland, and gained 721 acres of Farmland of Local Importance (total loss equals 4,888 acres). However, the loss of 19.4 acres of “Other” land that has not been and is not currently utilized for agriculture would not contribute to loss of agricultural land in the County or State; therefore, no significantly cumulative agricultural impact would occur.

There is no forest or timber land on or adjacent to the site. Implementation of the project would not result in any loss of forest resources. Therefore, the project could not contribute to cumulative impacts related to forest resources.

4.3 AIR QUALITY

The following analysis provides an overview of the local and regional air quality environment, the physical setting of the project area, and the air quality regulatory framework. This section evaluates potential air quality impacts by examining the short-term construction and long-term operational impacts associated with the project. The following discussion is based in part on the following project-specific study:

- *Clinton Keith Road (APN: 390-250-003) "Grove Park" Air Quality Analysis, City of Wildomar,* Urban Crossroads, March 2, 2015. (Appendix B).

The evaluation was prepared in accordance with the standards, procedures and methodologies established in the South Coast Air Quality Management District (SCAQMD) *CEQA Air Quality Handbook* (SCAQMD 1993) and utilized the latest CalEEMod computer program developed and maintained by the SCAQMD. Air quality data posted by the California Air Resources Board (CARB) and the U.S. Environmental Protection Agency (EPA) web sites are included to document the local air quality environment.

4.3.1 Existing Setting

The CARB coordinates and oversees both State and Federal air pollution control programs in California and, in conjunction with the EPA and local air districts, maintains air quality monitoring stations throughout the State. Based on meteorological and topographical factors of air pollution, the CARB has divided the State into 15 air basins. The City is located in the South Coast Air Basin (Basin), a broad geographic area that encompasses the coastal plain and connecting broad inland valleys and low hills. The Basin includes Orange County and the non-desert portions of Los Angeles, Riverside and San Bernardino Counties This area is bounded on the west by the Pacific Ocean and on the north and east by the San Gabriel, San Bernardino, and San Jacinto Mountains.

Regional air quality in the Basin is overseen by the SCAQMD. The SCAQMD develops and adopts Air Quality Management Plans (AQMPs), which serve as a blueprint to bring the Basin into compliance with Federal and State clean air standards and adopts rules to reduce emissions from various sources, including specific types of equipment, activities, processes, and products.

4.3.1.1 Climate and Meteorology

Air quality in the project area is not only affected by various emission sources (mobile and stationary), but also by atmospheric conditions such as wind speed, wind direction, temperature, rainfall, and amount of sunshine. The combination of topography, low mixing height, abundant sunshine, and urban emissions create the worst air pollution conditions in the nation. The regional climate has a substantial influence on air quality in

the Basin. Due to a decreased marine influence, the eastern portion of the Basin shows greater variability in average annual minimum and maximum temperatures. January is the coldest month throughout the Basin, with average minimum temperatures of 47°F in downtown Los Angeles and 36°F in San Bernardino. All portions of the Basin have recorded maximum temperatures above 100°F. Although the climate of the region can be characterized as semi-arid, the air near the land surface is quite moist on most days because of the presence of a marine layer. This shallow layer of sea air is an important modifier of Basin climate. Humidity restricts visibility in the Basin, and the conversion of sulfur dioxide to sulfates is heightened in air with high relative humidity. The marine layer provides an environment for that conversion process, especially during the spring and summer months. The annual average relative humidity is 71 percent along the coast and 59 percent inland. Periods of heavy early morning fog are frequent and low stratus clouds are a characteristic feature. These effects decrease with distance from the coast.

More than 90 percent of the region's rainfall occurs from November through April. The annual average rainfall varies from approximately 9 inches in Riverside to 14 inches in downtown Los Angeles. Monthly and yearly rainfall totals are extremely variable. Summer rainfall usually consists of widely scattered thunderstorms near the coast and slightly heavier shower activity in the eastern portion of the Basin with frequency being higher near the coast. Due to its generally clear weather, about three-quarters of available sunshine is received in the Basin. The remaining one-quarter is absorbed by clouds. The ultraviolet portion of this abundant radiation is a key factor in photochemical reactions. On the shortest day of the year there are approximately 10 hours of possible sunshine, and on the longest day of the year there are approximately 14.5 hours of possible sunshine.

The direction and speed of wind determines the horizontal dispersion and transport of air pollutants. Throughout the Basin, winds are characteristically light although the speed is somewhat greater during the dry summer months than during the rainy winter season. During the late autumn to early spring the Basin is subjected to wind flows associated with storms moving through the region from the northwest. Strong, dry, offshore winds ("Santa Anas") generally occur during this period. During the dry season, which coincides with the periods of maximum photochemical smog concentrations, the windflow is typified by daytime onshore sea breeze and nighttime offshore drainage wind. Summer wind flows are created by pressure differences between the relatively cold ocean and the unevenly heated and cooled land surfaces. Wind patterns across the region are characterized by westerly and southwesterly on-shore winds during the day and easterly or northeasterly breezes at nights.

During periods of low inversions and low wind speeds, air pollutants generated in urbanized areas are transported predominantly onshore into eastern areas of the Basin. In the winter, the greatest pollution problems are carbon monoxide (CO) and oxides of nitrogen (NO_X), because of extremely low inversions and air stagnation during the night and early morning hours. In the summer, the longer daylight hours and the brighter

sunshine combine to cause a reaction between hydrocarbons and NO_X to form photochemical smog.

4.3.1.2 Regional Air Quality

The CARB and EPA use the data collected at monitoring stations to classify air basins as attainment, nonattainment, nonattainment transitional, or unclassified, based on air quality data for the most recent three calendar years compared with the Ambient Air Quality Standards (AAQS). Existing air quality is measured at established SCAQMD air quality monitoring stations. Air quality is evaluated in the context of ambient air quality standards. These standards are the levels of air quality that are considered safe, with an adequate margin of safety, to protect the public health and welfare. Table 4.3.A details National Ambient Air Quality Standards (NAAQS) and California Ambient Air Quality Standards (CAAQS) currently in effect.

The CAAQS are more stringent than the NAAQS. Indirect sources of pollution are generated when minor sources collectively emit a substantial amount of pollution. Examples of this would be the motor vehicles at intersections, malls, and on highways. The California Clean Air Act (CCAA) provides the SCAQMD with the authority to manage transportation activities at indirect sources. The SCAQMD also regulates stationary sources of pollution throughout its jurisdictional area. Direct emissions from motor vehicles are regulated by the CARB.

The determination of whether a region's air quality is healthful or unhealthful is determined by comparing contaminant levels in ambient air samples to the State and Federal standards presented in Table 4.3.A. The air quality in a region is considered to be in attainment by the state if the measured ambient air pollutant levels for ozone (O_3,) carbon monoxide (CO), sulfur dioxide (SO_2), nitrogen dioxide (NO_2), inhalable particulate matter (PM_{10}), and fine particulate matter ($PM_{2.5}$) are not equaled or exceeded at any time in any consecutive three-year period; and the Federal standards (other than O_3, PM_{10}, $PM_{2.5}$, and those based on annual averages or arithmetic mean) are not exceeded more than once per year. The O_3 standard is attained when the fourth highest eight-hour concentration in a year, averaged over three years, is equal to or less than the standard. For PM_{10}, the 24 hour standard is attained when 99 percent of the daily concentrations, averaged over three years, are equal to or less than the standard. Nonattainment areas are imposed with additional restrictions, as required by the EPA. The air quality data are also used to monitor progress in attaining air quality standards.

At most monitoring stations in 2013, the Federal and State AAQSs were exceeded on one or more days for O_3, PM_{10}, and $PM_{2.5}$. No areas within the Basin exceeded Federal or State standards for NO_2, SO_2 CO, sulfates or lead. Table 4.3.B identifies the attainment status for the criteria pollutants in the Basin.

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Table 4.3.A: Ambient Air Quality Standards

Pollutant	Averaging Time	California Standards[1]		Federal Standards[2]		
		Concentration[3]	Method[4]	Primary[2,5]	Secondary[2,6]	Method[7]
Ozone (O_3)	1-Hour	0.09 ppm (180 µg/m^3)	Ultraviolet Photometry	—	Same as Primary Standard	Ultraviolet Photometry
	8-Hour	0.07 ppm (137 µg/m^3)		0.075 ppm (147 µg/m^3)		
Respirable Particulate Matter (PM_{10})	24-Hour	50 µg/m^3	Gravimetric or Beta Attenuation*	150 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	20 µg/m^3		—		
Fine Particulate Matter ($PM_{2.5}$)	24-Hour	No Separate State Standard		35 µg/m^3	Same as Primary Standard	Inertial Separation and Gravimetric Analysis
	Annual Arithmetic Mean	12 µg/m^3	Gravimetric or Beta Attenuation*	12 µg/m^3	15 µg/m^3	
Carbon Monoxide (CO)	8-Hour	9.0 ppm (10 mg/m^3)	Non-Dispersive Infrared Photometry (NDIR)	9 ppm (10 mg/m^3)	None	Non-Dispersive Infrared Photometry (NDIR)
	1-Hour	20 ppm (23 mg/m^3)		35 ppm (40 mg/m^3)		
	8-Hour (Lake Tahoe)	6ppm (7 mg/m^3)		—		
Nitrogen Dioxide (NO_2)	Annual Arithmetic Mean	0.030 ppm (56 µg/m^3)	Gas Phase Chemiluminescence	0.053 ppm (100 µg/m^3)	Same as Primary Standard	Gas Phase Chemiluminescence
	1-Hour	0.18 ppm (338 µg/m^3)		100 ppb		
Lead (Pb)[8]	30-Day Average	1.5 µg/m^3	Atomic Absorption	—	—	High Volume Sampler and Atomic Absorption
	Calendar Quarter	—		1.5 µg/m^3	Same as Primary Standard	
	Rolling 3-Month Average	—		0.15 µg/m^3		
Sulfur Dioxide (SO_2)	Annual Arithmetic Mean	—	Ultraviolet Fluorescence	0.030 ppm (80 µg/m^3)	—	Spectrophotometry (Pararosaniline Method)
	24-Hour	0.04 ppm (105 µg/m^3)		0.14 ppm (80 µg/m^3)	—	
	3-Hour	—		—	0.5 ppm (1300 µg/m^3)	
	1-Hour	0.25 ppm (655 µg/m^3)		75 ppb	—	
Visibility-Reducing Particles Sulfates	8-Hour	Extinction coefficient of 0.23 per kilometer—visibility of 10 miles or more (0.07-30 miles or more for Lake Tahoe) due to particles when relative humidity is less than 70%. Method: Beta Attenuation and Transmittance through Filter Tape.		**No Federal Standards**		
Sulfates	24-Hour	25 µg/m^3	Ion Chromatography			
Hydrogen Sulfide	1-Hour	0.03 ppm (42 µg/m^3)	Ultraviolet Fluorescence			
Vinyl Chloride[8]	24-Hour	0.01 ppm (26 µg/m^3)	Gas Chromatography			

Source: California Air Resources Board (June 4, 2013).

Notes

1 California standards for ozone; carbon monoxide (except Lake Tahoe); sulfur dioxide (1 and 24 hour); nitrogen dioxide; suspended particulate matter, PM_{10}; and visibility reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

2 National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. The ozone standard is attained when the fourth-highest 8-hour concentration in a year, averaged over 3 years, is equal to or less than the standard. For PM_{10}, the 24 hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than 1. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over 3 years, are equal to or less than the standard. Contact U.S. EPA for further clarification and current federal policies.

3 Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25˚C and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25˚C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

4 Any equivalent procedure that can be shown to the satisfaction of the CARB to give equivalent results at or near the level of the air quality standard may be used.

5 National Primary Standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

6 National Secondary Standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

7 Reference method as described by the EPA. An “equivalent method” of measurement may be used but must have a “consistent relationship to the reference method” and must be approved by the EPA.

8 The CARB has identified lead and vinyl chloride as ‘toxic air contaminants’ with no threshold level of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

Table 4.3.B: Attainment Status of Criteria Pollutants in the South Coast Air Basin

Pollutant	State	Federal
1-hour Ozone (O_3)	Nonattainment	No Standard
8-hour Ozone (O_3)	Nonattainment	Nonattainment
PM_{10}	Nonattainment	Attainment
$PM_{2.5}$	Nonattainment	Nonattainment
Carbon Monoxide (CO)	Attainment	Attainment
Nitrogen Dioxide (NO_2)	Nonattainment	Unclassified/Attainment
Sulfur Dioxide (SO_2)	Attainment	Attainment
Lead (Pb)	Attainment	Attainment

Sources: Table 2-2, *Clinton Keith Road (APN: 390-250-003) "Grove Park" Air Quality Analysis,* City of Wildomar, Urban Crossroads, March 2, 2015 and http://www.arb.ca.gov/desig/adm/adm.htm.

4.3.1.3 Local Air Quality

Relative to the project site, the nearest long-term air quality monitoring site in relation to the project for O_3, CO, and NO_2 is carried out at the Lake Elsinore monitoring station located approximately 7.25 miles northwest of the project site. Data for PM_{10} was obtained from the Perris Valley monitoring station located approximately 13 miles north of the project site, while data for $PM_{2.5}$ was obtained from the Metropolitan Riverside County 2 monitoring station located approximately 26 miles northwest of the project site. It should be noted that the Perris Valley and Metropolitan Riverside County 2 monitoring stations were utilized in lieu of the Lake Elsinore monitoring station only where data were not available from the nearest monitoring site. Table 4.3.C presents the most recent (2011–2014) four years of data available for these stations. The number of days ambient air quality standards were exceeded for the study area, which is was considered to be representative of the local air quality, is also identified in Table 4.3.C.[1]

Table 4.3.C: Project Area Air Quality Monitoring Summary 2011–2014*

Pollutant	Standard	2011	2012	2013	2014
Carbon Monoxide (CO)					
Maximum 1-hr concentration		1.7	2.7	0.7	1.9
Number of days exceeded:	State: > 20 ppm	0	0	0	0
	Federal: > 35 ppm	0	0	0	0
Maximum 8-hr concentration (ppm)		0.7	0.7	0.4	1.4
Number of days exceeded:	State: ≥ 9.0 ppm	0	0	0	0
	Federal: ≥ 9.0 ppm	0	0	0	0
Ozone (O_3)					
Maximum 1-hr concentration		0.133	0.111	0.102	0.104
Number of days exceeded:	State: > 0.09 ppm	19	10	—	0
	Federal: >0.12 ppm	1	0	0	0
Maximum 8-hr concentration (ppm)		0.106	0.089	0.082	0.086
Number of days exceeded:	State: > 0.07 ppm	45	32	—	—
	Federal: > 0.075 ppm	1	17	3	6
Number of days exceeding Health Advisory	≥ 0.015 ppm	28	0	0	0
Inhalable (≤ 10 microns) Particulate Matter (PM_{10})					
Maximum 24-hr concentration ($\mu g/m^3$)		65	62	70	87

[1] Data for SO_2 have been omitted as attainment is regularly met in the Basin and few monitoring stations measure SO_2 concentrations.

Table 4.3.C: Project Area Air Quality Monitoring Summary 2011–2014*

Pollutant	Standard	2011	2012	2013	2014
Number of samples exceeding standard:	State: > 50 µg/m^3	01	1	—	—
	Federal: > 150 µg/	65	0	0	0
Annual arithmetic mean (µg/m^3)		60	26.5	—	—
Number of samples		3	60	57	60
Fine (≤ 2.5 microns) Particulate ($PM_{2.5}$)					
Maximum 24-hr concentration (µg/m^3)		51.6	30.2	33.4	30.9
Number of days exceeded:	Federal: > 35 µg/m^3	2	2	0	0
Annual arithmetic mean (µg/m^3)		11.8	11.4	11.6	10.9
Number of samples		112	104	26	110
Nitrogen Dioxide (NO_2)					
Maximum 1-hr concentration (ppm)		0.0503	0.048	0.038	0.045
Number of days exceeded:	State: > 0.18 ppm	0	0	0	0
Annual arithmetic mean concentration (ppm)		0.0096	0.0102	—	—

Source: Table 2-3, Clinton Keith Road (APN: 390-250-003) "Grove Park" Air Quality Analysis, City of Wildomar, Urban Crossroads, March 2, 2015.
* O_3, CO, and NO_2 data from the Lake Elsinore monitoring station, data for PM_{10} from the Perris Valley monitoring station, and $PM_{2.5}$ data from the Metropolitan Riverside County 2 monitoring station.
— = data not available from either SCAQMD or EPA.
µg/m^3 = micrograms per cubic meter
ppm = parts per million

Criteria pollutants are those pollutants that are regulated through the development of human health and/or environmentally based criteria for setting permissible levels. Criteria pollutants and their typical sources are identified below. The generalized effects these criteria pollutants have on human health are summarized in Table 4.3.D.

Table 4.3.D: Generalized Summary of Health Effect of the Major Criteria Air Pollutants

Pollutant	Health Effects	Examples of Sources
PM_{10}	Increased respiratory disease Lung damage Premature death	Cars and trucks (especially diesel), fireplaces, wood stoves, windblown dust from roadways, agriculture, and construction activities
O_3	Breathing difficulties Lung damage	Formed by chemical reactions of air pollutants in the presence of sunlight; common sources are motor vehicles, industries, and consumer products
CO	Chest pain in heart patients, headaches, nausea, reduced mental alertness, and death at very high levels	Any source that burns fuel, such as cars, trucks, construction and farming equipment, and residential heaters and stoves.
NO_2	Lung damage	See CO sources

Table 4.3.D: Generalized Summary of Health Effect of the Major Criteria Air Pollutants

Pollutant	Health Effects	Examples of Sources
Toxic air contaminants	Cancer, chronic eye, lung, or skin irritation; neurological and reproductive disorders	Cars and trucks; industrial sources such as chrome platers; neighborhood businesses such as dry cleaners and service stations; and building materials and products

Carbon Monoxide (CO) is a colorless, odorless gas produced by the incomplete combustion of carbon-containing fuels, such as gasoline or wood. CO concentrations tend to be the highest during the winter morning, when little to no wind and surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, unlike ozone, motor vehicles operating at slow speeds are the primary source of CO in the Basin. The highest ambient CO concentrations are generally found near congested transportation corridors and intersections.

Sulfur Dioxide (SO_2) is a colorless, extremely irritating gas or liquid. It enters the atmosphere as a pollutant mainly as a result of burning high sulfur-content fuel oils and coal and from chemical processes occurring at chemical plants and refineries. When SO_2 oxidizes in the atmosphere, it forms sulfates (SO_4). Collectively, these pollutants are referred to as sulfur oxides (SO_X).

Nitrogen Oxides (Oxides of Nitrogen or NO_X) consist of nitric oxide (NO), nitrogen dioxide (NO_2) and nitrous oxide (N_2O) and are formed when nitrogen combines with oxygen. Nitrogen oxides are typically created during combustion processes, and are major contributors to smog formation and acid deposition. NO_2 is a criteria air pollutant, and may result in numerous adverse health effects; it absorbs blue light, resulting in a brownish-red cast to the atmosphere and reduced visibility. Of the seven types of nitrogen oxide compounds, NO_2 is the most abundant in the atmosphere. As ambient concentrations of NO_2 are related to traffic density, commuters in heavy traffic may be exposed to higher concentrations of NO_2 than those indicated by regional monitors.

Ozone (O_3) is a highly reactive and unstable gas that is formed when volatile organic compounds (VOCs) and NO_X, both byproducts of internal combustion engine exhaust, undergo slow photochemical reactions in the presence of sunlight. Ozone concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable to the formation of this pollutant.

PM_{10} (Particulate Matter less than 10 microns) is a major air pollutant consisting of tiny solid or liquid particles of soot, dust, smoke, fumes, and aerosols. The size of the particles (about 0.0004 inch or less) allows them to easily enter the lungs where they may be deposited, resulting in adverse health effects. PM_{10} also causes visibility reduction and is a criteria air pollutant.

$PM_{2.5}$ (Particulate Matter less than 2.5 microns) is a similar air pollutant consisting of tiny solid or liquid particles that are 2.5 microns or smaller (often referred to as fine particles). These particles are formed in the atmosphere from primary gaseous emissions that include sulfates formed from SO_2 release from power plants and industrial facilities and nitrates that are formed from NO_X release from power plants, automobiles and other types of combustion sources. The chemical composition of fine particles depends on location, time of year, and weather conditions. $PM_{2.5}$ is a criteria air pollutant.

Lead (Pb) is a heavy metal that is highly persistent in the environment. In the past, the primary source of lead in the air was emissions from vehicles burning leaded gasoline. As a result of the removal of lead from gasoline, there have been no violations at any of the SCAQMD's regular air monitoring stations since 1982. Currently, emissions of lead are limited to stationary sources such as lead smelters. It should be noted that the project is not anticipated to generate a quantifiable amount of lead emissions. Lead is a criteria air pollutant.

Volatile Organic Compounds (VOC) are hydrocarbon compounds (any compound containing various combinations of hydrogen and carbon atoms) that exist in the ambient air. VOCs contribute to the formation of smog through atmospheric photochemical reactions and/or may be toxic. Compounds of carbon (also known as organic compounds) have different levels of reactivity; that is, they do not react at the same speed or do not form ozone to the same extent when exposed to photochemical processes. VOCs often have an odor, and some examples include gasoline, alcohol, and the solvents used in paints. Exceptions to the VOC designation include carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate. VOCs are a criteria pollutant since they are a precursor to O_3, which is a criteria pollutant. The SCAQMD uses the terms VOC and ROG (see below) interchangeably.

Reactive Organic Gases (ROG), similar to VOC, are also precursors in forming ozone and consist of compounds containing methane, ethane, propane, butane, and longer chain hydrocarbons, which are typically the result of some type of combustion/ decomposition process. Smog is formed when ROG and NO_X react in the presence of sunlight. ROGs are a criteria pollutant since they are a precursor to O_3, which is a criteria pollutant. The SCAQMD uses the terms ROG and VOC interchangeably.

4.3.1.4 Sensitive Land Uses in the Project Area

Sensitive receptors include residences, schools, medical offices, convalescent facilities, and similar uses that are sensitive to air pollutants. The nearest sensitive receptors are the multifamily residences located directly south of the project site. In addition to these residences, multifamily uses are also located approximately 750 west of the site. Inland Regional Medical Center is located approximately 1,200 feet southwest of the project site, while single-family residences are located approximately 1,500 feet to the east. Scattered rural residential uses are located

north of Clinton Keith Road, approximately 80 to 400 feet north of the project boundary.

4.3.1.5 NOP and Scoping Responses

The SCAQMD responded (January 2 and June 18, 2015) to the NOPs, identifying the requirements for air quality analyses and the availability of data to assist in the preparation of such efforts. The SCAQMD comment letters are included in Appendix A to this EIR.

No issues related to the project's effects on local or regional air quality were expressed by the public at the Public Scoping Meetings.

4.3.2 Existing Policies and Regulations

4.3.2.1 Federal Regulations

The EPA is responsible for setting and enforcing the NAAQS for O_3, CO, NOx, SO_2, PM_{10}, and lead. The EPA has jurisdiction over emissions sources that are under the authority of the federal government including aircraft, locomotives, and emissions sources outside state waters. The EPA also establishes emission standards for vehicles sold in states other than California. Automobiles sold in California must meet the stricter emission requirements of the CARB.

The Federal Clean Air Act (CAA) establishes Federal air quality standards, the NAAQS (see previously referenced Table 4.3.A) and specifies future dates for achieving air quality compliance. The CAA further mandates that states submit and implement State Implementation Plans (SIPs) for those areas not meeting these standards. The SIPs must include pollution control measures that demonstrate how the NAAQS will be met. The 1990 amendment to the CAA requires that areas not meeting NAAQS demonstrate reasonable further progress toward attainment and incorporate sanctions for failure to attain or meet specific attainment milestones. Each state is required to adopt an implementation plan outlining pollution control measures to attain the Federal standards in nonattainment areas of the state. The CARB is responsible for incorporating air quality management plans for local air basins into an SIP, which is approved by the EPA.

In April 2003, the EPA was cleared by the White House Office of Management and Budget (OMB) to implement the eight-hour ground-level O_3 standard. The EPA issued the proposed rule implementing the eight-hour O_3 standard in April 2003. The EPA completed final eight-hour nonattainment status on April 15, 2004. The EPA issued the final $PM_{2.5}$ implementation rule in fall 2004. The EPA issued final designations on December 15, 2004.

4.3.2.2 State Regulations

The CARB is responsible for ensuring implementation of the CCAA, responding to the CAA, and for regulating emissions from consumer products and motor vehicles. The CCAA mandates achievement of the maximum degree of emissions reductions possible from vehicular and other mobile sources in order to attain CAAQS by the earliest practical date. The CARB established the CAAQS for all pollutants for which the Federal Government has NAAQS. Additional standards for sulfates, visibility-reducing particles, hydrogen sulfide, and vinyl chloride have been established; however, they are not considered to be a regional air quality problem at this time. Hydrogen sulfide and vinyl chloride are not measured at any monitoring stations in the Basin. Generally, the CAAQS are more stringent than the NAAQS.

4.3.2.3 Regional Regulations

The 1976 Lewis Air Quality Management Act established the SCAQMD and other air districts throughout the State. Significant authority for air quality control within them has been granted to local air districts that regulate stationary source emissions and develop local nonattainment plans. Local air quality management districts, such as the SCAQMD, regulate air emissions from commercial and light industrial facilities. All air pollution control districts have been formally designated as attainment or non-attainment for each CAAQS. Serious non-attainment areas are required to prepare AQMPs that include specified emission reduction strategies in an effort to meet clean air goals. These plans are required to include:

- Application of Best Available Retrofit Control Technology to existing sources;
- Developing control programs for area sources (e.g., architectural coatings and solvents) and indirect sources (e.g., motor vehicle use generated by residential and commercial development);
- A district permitting system designed to allow no net increase in emissions from any new or modified permitted sources of emissions;
- Implementing reasonably available transportation control measures and ensuring a substantial reduction in growth rate of vehicle trips and miles traveled;
- Significant use of low-emissions vehicles by fleet operators;
- Sufficient control strategies to achieve a five percent or more annual reduction in emissions or 15 percent or more in a period of three years for ROGs, NO_X, CO and PM_{10}. However, air basins may use alternative emissions reduction strategies that achieve a reduction of less than five percent per year under certain circumstances.

The SCAQMD and the Southern California Association of Governments (SCAG) are responsible for formulating and implementing the AQMP for the Basin. The primary purpose of an AQMP is to bring the area into compliance with Federal and State air quality standards. Every three years, the SCAQMD prepares a new AQMP, updating

the previous plan and having a 20-year horizon. The SCAQMD adopted the 2012 AQMP in December 2012 and forwarded it to the CARB for review and approval. The CARB approved the AQMP on January 23, 2013, and forwarded it to the EPA.

The AQMP proposes policies and measures currently contemplated by responsible agencies to achieve Federal standards for healthful air quality in the areas under its jurisdiction. The AQMP addresses Federal planning requirements and incorporates significant new scientific data, primarily in the form of updated emissions inventories, ambient measurements, new meteorological episodes, and new air quality modeling tools. The 2012 AQMP uses assumptions regarding land use and population growth to generate its air quality projections. For example, it assumed that development will be constructed in accordance with population growth projections identified by the SCAG's 2012 Regional Transportation Plan (RTP).

The Final 2012 AQMP proposes a comprehensive program for the attainment of Federal $PM_{2.5}$ standards, and updates the Basin's progress toward meeting the Federal 8-hour ozone standards. This Final Plan builds upon the approaches taken in the 2007 AQMP.

4.3.2.4 City General Plan Policies

Local jurisdictions have the authority and responsibility to reduce air pollution through its police power and decision-making authority. Specifically, the City is responsible for the assessment and mitigation of air emissions resulting from its land use decisions. The City is also responsible for the implementation of transportation control measures as outlined in the AQMP. Examples of such measures include bus turnouts, energy-efficient streetlights, and synchronized traffic signals. In accordance with CEQA requirements and the CEQA review process, the City assesses the air quality impacts of new development projects, requires mitigation of potentially significant air quality impacts by conditioning discretionary permits and monitors and enforces implementation of such mitigation. Air-quality related policies outlined in the City's General Plan include:

AQ 1.1 Promote and participate with regional and local agencies, both public and private, to protect and improve air quality.

AQ 1.2 Support the Southern California Association of Government's (SCAG) Regional Growth Management Plan by developing intergovernmental agreements with appropriate governmental entities.

AQ 1.3 Participate in the development and update of those regional air quality management plans required under Federal and State law, and meet all standards established for clean air in these plans.

AQ 1.4 Coordinate with the SCAQMD and MDAQMD to ensure that all elements of air quality plans regarding reduction of air pollutant emissions are being enforced.

AQ 1.5 Establish and implement air quality, land use and circulation measures that improve not only the County's environment but the entire region's.

AQ 1.6 Establish a level playing field by working with local jurisdictions to simultaneously adopt policies similar to those in the Air Quality Element.

AQ 1.7 Support legislation which promotes cleaner industry, clean fuel vehicles and more efficient burning engines and fuels.

AQ 1.8 Support the introduction of Federal, State or regional enabling legislation to permit the County to promote inventive air quality programs, which otherwise could not be implemented.

AQ 1.9 Encourage, publicly recognize and reward innovative approaches that improve air quality.

AQ 1.10 Work with regional and local agencies to evaluate the feasibility of implementing a system of charges (e.g., pollution charges, user fees, congestion pricing and toll roads) that requires individuals who undertake polluting activities to bear the economic cost of their actions where possible.

AQ 1.11 Involve environmental groups, the business community, special interests, and the general public in the formulation and implementation of programs that effectively reduce airborne pollutants.

AQ 2.1 The County land use planning efforts shall assure that sensitive receptors are separated and protected from polluting point sources to the greatest extent possible.

AQ 2.2 Require site plan designs to protect people and land uses sensitive to air pollution through the use of barriers and/or distance from emissions sources when possible.

AQ 2.3 Encourage the use of pollution control measures such as landscaping, vegetation and other materials, which trap particulate matter or control pollution.

AQ 3.1 Allow the market place, as much as possible, to determine the most economical approach to relieve congestion and cut emissions.

AQ 3.2 Seek new cooperative relationships between employers and employees to reduce vehicle miles traveled.

AQ 3.3 Encourage large employers and commercial/industrial complexes to create Transportation Management Associations.

AQ 3.4 Encourage employee rideshare and transit incentives for employers with more than 25 employees at a single location.

AQ 4.1 Encourage the use of building materials/methods which reduce emissions.

AQ 4.2 Encourage the use of efficient heating equipment and other appliances, such as water heaters, swimming pool heaters, cooking equipment, refrigerators, furnaces and b oiler units.

AQ 4.3 Encourage centrally heated facilities to utilize automated time clocks or occupant sensors to control heating.

AQ 4.4 Require residential building construction to comply with energy use guidelines detailed in Title 24 of the California Administrative Code.

AQ 4.5 Require stationary pollution sources to minimize the release of toxic pollutants.

AQ 4.6 Require stationary air pollution sources to comply with applicable air district rules and control measures.

AQ 4.7 To the greatest extent possible, require every project to mitigate any of its anticipated emissions which exceed allowable emissions.

AQ 4.9 Require compliance with SCAQMD Rules 403 and 403.1, and support appropriate future measures to reduce fugitive dust emanating from construction sites.

AQ 5.1 Utilize source reduction, recycling and other appropriate measures to reduce the amount of solid waste disposed of in landfills.

AQ 5.2 Adopt incentives and/or regulations to enact energy conservation requirements for private and public developments.

AQ 5.4 Encourage the incorporation of energy-efficient design elements, including appropriate site orientation and the use of shade and windbreak trees to reduce fuel consumption for heating and cooling.

Other General Plan air quality policies related to the proposed project are detailed in other sections of the EIR.

4.3.3 Methodology

Evaluation of air quality impacts associated with the proposed project includes the following:

- Determine the short-term construction air quality impacts based on SCAQMD emissions thresholds;
- Determine the long-term air quality impacts, including vehicular traffic, on both on-site and off-site air quality sensitive uses based on SCAQMD emissions thresholds; and
- Determine the required mitigation measures to reduce short-term and long-term on-site air quality impacts from all sources.

A number of modeling tools are available to assess air quality impacts of projects. In addition, certain air districts, such as the SCAQMD, have created guidelines and requirements to conduct air quality analysis. SCAQMD's current guidelines, *CEQA Air Quality Handbook*, April 1993, were followed in the assessment of air quality impacts for the proposed project. The air quality models identified in the document are outdated; therefore, the California Emissions Estimator Model Version 2013.2.2 (CalEEMod) was used to estimate project-related construction and operation emissions in this air quality assessment.

The SCAQMD has established that impacts to air quality are significant if there is a potential to contribute or cause localized exceedances of the NAAQS/CAAQS; therefore, the analysis makes also uses methodology included in the SCAQMD *Final Localized Significance Threshold Methodology.*

Localized air quality impacts (i.e., higher CO concentrations [CO hot spots] near intersections or roadway segments in the project vicinity) would be small and less than significant due to the generally low ambient CO concentrations (2.7 parts per million [ppm] versus the State one-hour CO standard of 20.0 ppm and 0.7 ppm versus the State eight-hour CO standard of 9.0 ppm) in the project area. In addition, more stringent vehicle emissions standards in the past 20 years have lowered potential for CO "hot spots". CO concentrations in the project vicinity have steadily declined since the adoption of these standards, and "hot spots" could not be generated even in very busy intersections. Due to these considerations, a project-specific analysis was not required for local CO "hot spots."

A discussion of the methodology utilized during the preparation of the project's air quality analysis is provided in the Appendix B (*Air Quality Impact Analysis*).

4.3.3.1 Types of Impacts

Direct Impacts. Direct impacts are the result of the project itself (from its construction and operation) in the form of project activity and trips generated by the project. For example, construction emissions (e.g., equipment exhaust, wind erosion, and vehicle exhaust) and trips to and from the project site (e.g., vehicle exhaust and tire wear) represent direct impacts.

Indirect Impacts. Indirect impacts are the result of changes that would not occur without the project. In the case of the proposed project, indirect impacts on the surrounding community can be generated in many ways: nearby construction of roadways (or roadway modifications) and other infrastructure to support the subdivision, construction and operation of development, changes in traffic/circulation patterns that result in increased congestion/delays, etc.

Cumulative Impacts. Cumulative impacts are direct and indirect impacts to which the project contributes. A given project has a cumulative impact with all other area development projects, from the standpoint of each type of impact (cumulative construction emissions, residential natural gas consumption, solvent use, transportation emissions, congestion, etc.).

Conformity Impacts. A project is non-conforming if it conflicts with or delays implementation of any applicable attainment or maintenance plan. A project is conforming if it complies with the applicable rules and regulations, complies with all proposed control measures that are not yet adopted from the applicable plan(s), and is consistent with the growth forecasts in the applicable plan(s) (or is directly included in the applicable plan).

4.3.4 Thresholds of Significance

Appendix G of the *State CEQA Guidelines* recognizes the following significance thresholds related to air quality. Based on these significance thresholds, potential impacts to air quality could be considered significant if the proposed project would:

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

4.3.4.1 Regional Thresholds for Construction Emissions

The following significance thresholds for construction activities have been established by the SCAQMD. Activities that exceed these thresholds should be considered to have an individual and cumulatively significant air quality impact:

- 75 pounds per day of VOC.
- 100 pounds per day of NO_X.
- 550 pounds per day of CO.
- 150 pounds per day of PM_{10}.
- 150 pounds per day of SO_2.

- 55 pounds per day of $PM_{2.5}$.
- 3 pounds per day of lead.

4.3.4.2 Regional Thresholds for Operational Emissions

Projects with operation-related emissions that exceed any of the emission thresholds listed below would have an individual and cumulatively significant air quality impact:

- 55 pounds per day of ROG/VOC.
- 55 pounds per day of NO_X.
- 550 pounds per day of CO.
- 150 pounds per day of PM_{10}.
- 150 pounds per day of SO_2.
- 55 pounds per day of $PM_{2.5}$.
- 3 pounds per day of lead.

4.3.4.3 Air Pollutant Standards for CO with Localized Effects

The significance of localized project impacts under CEQA depends on whether ambient CO levels in the vicinity of the project are above or below State and Federal CO standards. If ambient levels are below the standards, a project is considered to have a significant impact if project emissions result in an exceedance of one or more of these standards. If ambient levels already exceed a State or Federal standard, project emissions are considered significant if they increase one-hour CO concentrations by 1.0 ppm or more or eight-hour CO concentrations by 0.45 ppm or more. The Basin (with the exception of Los Angeles County) meets State and Federal attainment standards for CO; therefore, the proposed project would have a significant CO impact if project emissions result in an exceedance of State or Federal one-hour or eight-hour standard. The following emission concentration standards for CO apply to the proposed project:

- California State one-hour CO standard of 20.0 ppm.
- California State eight-hour CO standard of 9.0 ppm.

4.3.4.4 Local Significance Thresholds

For this project, the appropriate Source Receptor Area (SRA) is the Lake Elsinore area (SRA 25) and local air quality conditions are evaluated based on data from the Lake Elsinore Monitoring station, located approximately 7.25 miles northwest of the project site. As identified previously, the nearest sensitive receptors are located approximately directly south of the project site; therefore, use of the minimum Local

Significance Thresholds (LSTs) distance at 25 meters (82.0 feet) is appropriate. Assuming daily maximum ground disturbance of 3.0 acres and 25 meters to the closest sensitive receptors, the SCAQMD localized significance threshold would be:

- 279.67 pounds per day of NO_X.
- 1,388.83 pounds per day of CO.
- 9.0 pounds per day of PM_{10}.
- 5.33 pounds per day of $PM_{2.5}$.

Use of the LSTs for a five-acre site for operational activities is more stringent and appropriate, because emissions would occur in a more concentrated area closer to the nearest receptor (as compared to what would actually occur). The SCAQMD LST for operational activities would be:

- 371.0 pounds per day of NO_X.
- 1,965.0 pounds per day of CO.
- 4.0 pounds per day of PM_{10}.
- 2.0 pounds per day of $PM_{2.5}$.

4.3.5 Less than Significant Impacts

The following impacts were determined to be less than significant. In each of the following issues, either no impact would occur (therefore, no mitigation would be required) or adherence to established regulations, standards, and policies would reduce impacts to a less than significant level.

4.3.5.1 Air Quality Management Plan Consistency

Threshold	Would the proposed project conflict with or obstruct implementation of the applicable air quality plan?

To meet ambient air quality standards, the SCAQMD works directly with the SCAG, county transportation commissions, local governments and State and Federal agencies to reduce emissions from stationary, mobile, and indirect sources. The SCAQMD for formulates the AQMP for the Basin. The current AQMP for the Basin was adopted by the SCAQMD on December 7, 2012, and approved by the CARB on January 23, 2013. The 2012 AQMP incorporates the latest scientific and technological information and planning assumptions, including the 2012 Regional Transportation Plan/Sustainable Communities Strategies and updated emission inventory methodologies for various source categories. The AQMP is based on assumptions provided by CARB and SCAG related to the most recent motor vehicle[1]

[1] EMFAC modeling, which is CARB's tool for estimating emissions from on-road vehicles.

and demographic information. The 2012 AQMP assumes that development associated with general plans, specific plans, residential projects, and wastewater facilities will be constructed in accordance with the population growth projections identified by SCAG. The 2012 AQMP further assumes that this development will implement strategies to reduce emissions generated during the construction and operational phases of development.

A consistency determination plays an essential role in local agency project review by linking local planning and unique individual projects to the air quality plans. It fulfills the CEQA goal of fully informing local agency decision-makers of the environmental costs of the project under consideration at a stage early enough to ensure that air quality concerns are addressed. Only new or amended General Plan elements, Specific Plans, and significantly unique projects need to undergo a consistency review due to the air quality plan strategy being based on projections from local General Plans. The project includes a proposal to change the General Plan Land Use designation on the northern portion of the site from Business Park (BP) to Commercial Retail (CR). The Commercial Retail (CR) land use designation allows for the development of local and regional serving retail and service uses.

The SCAQMD has the following consistency criteria:

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

  The violations that Consistency Criterion No. 1 refers to are the CAAQS and NAAQS. CAAQS and NAAQS violations would occur if LSTs were exceeded. As evaluated as part of the project LST analysis, with utilization of Best Available Control Measures (BACMs) and implementation of Mitigation Measures (MMs), during construction, the project will not exceed applicable LSTs. Similarly, the project's mitigated regional construction source emissions will not exceed applicable regional thresholds established by the SCAQMD, and a less than significant impact is expected. Project-related operational emissions would not exceed applicable LSTs. According to Criterion 1, the project would not conflict with the AQMP.
- **Consistency Criterion No. 2:** The proposed project would not exceed the assumptions in the 2012 AQMP or increments based on the year of project build-out phase.

The 2012 AQMP demonstrates that the applicable ambient air quality standards can be achieved within the timeframes required under Federal law. Growth projections from local general plans adopted by cities in the district are provided to the SCAG, which develops regional growth forecasts, which are then used to develop future air quality forecasts for the AQMP. Development consistent with the growth projections in the City are considered to be consistent with the AQMP.

Implementation of the proposed project would require a General Plan Amendment that would change the General Plan designations for a portion of the project site from Business Park (BP) to Commercial Retail (CR). The Business Park designation envisions the development of "… Employee intensive uses, including research & development, technology centers, corporate offices, 'clean' industry and supporting retail while the Commercial Retail (CR) designations allows the development of commercial retail uses at a neighborhood, community and regional level, as well as for professional office and tourist-oriented commercial uses." The project's proposed General Plan Amendment would not materially affect the uses allowed to be developed on the site; therefore, the proposed change is consistent with the AQMP and no significant impact would occur. The development proposed for the southern portion of the site is consistent with the existing General Plan designation. The project would not result in or cause NAAQS or CAAQS violations. No mitigation is warranted.

4.3.5.2 Operational Regional Emissions

Threshold	Would the proposed project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in nonattainment under an applicable Federal or State ambient air quality standard? For long-term operations, the applicable daily thresholds are: • 55 pounds of ROC/VOC; • 55 pounds of NO_X; • 550 pounds of CO; • 150 pounds of PM_{10}; • 55 pounds per day of $PM_{2.5}$; and • 150 pounds of SO_X.

Project-related operational criterial pollutant emissions are expected from the following sources:

- Area Sources
  - Emissions from the evaporation of solvents in paints, varnishes, primers, and other surface coatings that may be used in the course of project maintenance.
  - Release of organic compounds contained in consumer products such as detergents, cleaning compounds, polishes, personal care products, and lawn and garden products. The organic compounds contained, when released into the atmosphere, can react to form O_3 and other photochemically reactive pollutants.
  - Emissions from the use of hearths and fireplaces.

  - Emissions related to fuel consumption and evaporation of unburned fuel during the use of landscape maintenance equipment including lawnmowers, shredders/grinders, chain saws, trimmers, etc.

- Energy Sources
  - Emissions of pollutants resulting from the generation of electricity and consumption of natural gas.[1]

- Mobile Sources
  - The project's operational air pollutant emissions will be derived primarily from the vehicle trips generated by the project. Vehicle trip characteristics detailed in the traffic impact analysis prepared for the project.[2] Factors utilized in the estimation of project-related operational air quality impacts are the overall daily trip generation and the project's effect on peak hour volumes and traffic operations in the project vicinity.
  - Road dust and tire wear particulates resulting from vehicle travel on roadways in the project area.

Long-term operational emissions associated with the project during summer and winter are detailed in Tables 4.3.E and 4.3.F, respectively. As identified in these tables, the increase of criteria pollutants as a result of the project would not exceed established SCAQMD daily emission thresholds. Project-related long-term air quality impacts would be less than significant and no mitigation is required.

Table 4.3.E: Summary of Peak Operational Emissions (Summer)

Year	Emissions (pounds per day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area Source	12.70	0.16	13.55	7.10e-4	0.29	0.29
Energy Source	0.07	0.58	0.26	3.71e-3	0.05	0.05
Mobile Source	9.65	26.88	97.39	0.27	18.41	5.52
Maximum daily emissions	**22.42**	**27.62**	**111.20**	**0.27**	**18.75**	**5.52**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

Source: Table 3-6, *Clinton Keith Road (APN: 390-250-003) "Grove Park" Air Quality Analysis, City of Wildomar*, Urban Crossroads, March 2, 2015.

[1] Electrical generating facilities for the project are either located outside the region (State) or offset through the use of pollution credits (RECLAIM) for generation within the Basin. Criteria pollutant emissions from the off-site generation of electricity are generally excluded from the evaluation of significance and only natural gas use is considered. The emissions associated with natural gas use were calculated using CalEEMod.

[2] *Clinton Keith Road (APN: 380-250-003) Traffic Impact Analysis City of Wildomar, CA*, Urban Crossroads, March 5, 2015.

Table 4.3.F: Summary of Peak Operational Emissions (Winter)

Year	Emissions (pounds per day without Mitigation)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Area Source	12.70	0.16	13.55	7.10e-4	0.29	0.29
Energy Source	0.07	0.58	0.26	3.71e-3	0.05	0.05
Mobile Source	9.41	27.97	92.53	0.25	18.42	5.19
Maximum daily emissions	**22.18**	**28.71**	**106.35**	**0.25**	**18.75**	**5.52**
SCAQMD Regional Threshold	55	55	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

Source: Table 3-6, *Clinton Keith Road (APN: 390-250-003) "Grove Park" Air Quality Analysis, City of Wildomar*, Urban Crossroads, March 2, 2015.

Impact 4.3.5.3: Operational Localized Emissions

Threshold	Would the proposed project exceed the SCAQMD localized significance threshold of: • 371.0 pounds per day of NO_X. • 1,965.0 pounds per day of CO. • 4.0 pounds per day of PM_{10}. • 2.0 pounds per day of $PM_{2.5}$.

Local Significance Thresholds represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable Federal or State ambient air quality standard at the nearest residence or sensitive receptor. LSTs apply to CO, NO_2, PM_{10}, and $PM_{2.5}$. The SCAQMD produced look-up tables for projects less than or equal to five acres in size. Projects with boundaries located closer than 25 meters (82 feet) to the nearest receptor should use the LSTs for receptors located at 25 meters. At this distance, the LST provides for a conservative, i.e., "health protective" standard of care. Use of the LSTs for a five-acre site for operational activities is appropriate since this would result in more stringent LSTs because emissions would occur in a more concentrated area and closer to the nearest sensitive receptor than what would actually occur.

The LST analysis includes on-site sources only; however, the CalEEMod outputs do not separate on-site and off-site emissions from mobile sources. The localized emissions presented in Table 4.3.G represent all on-site project-related area (stationary) sources and 5 percent of the project-related mobile sources.[1] As detailed in Table 4.3.G, the modeling based on these assumptions demonstrates that the project's operational-source emissions would not exceed applicable LSTs. The

[1] Considering that the weighted trip length used in CalEEMod for the project is approximately 14.7 miles, 5 percent of this total would represent an on-site travel distance for each car and truck of approximately one mile or 5,280 feet, thus the 5 percent assumption is conservative and would tend to overstate the actual impact.

project's operational localized air quality impacts would be less than significant; therefore, no mitigation is required.

Table 4.3.G: Summary of Operational Localized Emissions

Operational Activity	Emissions (pounds per day)			
	NO_x	CO	PM_{10}	$PM_{2.5}$
Maximum daily emissions	**2.14**	**18.68**	**1.26**	**0.60**
SCAQMD Localized Threshold	371.00	1,965.00	4.00	2.00
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**

Source: Table 3-10*, Clinton Keith Road (APN: 390-250-003) "Grove Park" Air Quality Analysis, City of Wildomar,* Urban Crossroads, March 2, 2015.

4.3.5.4 Long-Term CO "Hotspot" Impacts

Threshold	Would the proposed project violate any air quality standard or contribute substantially to an existing or projected air quality violation? For CO, the applicable thresholds are: • California State one-hour CO standard of 20.0 ppm; and • California State eight-hour CO standard of 9.0 ppm.

Typically, high CO concentrations are associated with roadways or intersections operating at unacceptable levels of service or with extremely high traffic volumes. In areas with high ambient background CO concentrations, modeling is recommended, to determine a project's effect on local CO levels. Vehicular trips associated with the proposed project would contribute to traffic levels at intersections and along roadway segments in the project vicinity. Localized air quality impacts would occur when emissions from vehicular traffic increase in local areas as a result of the proposed project. The primary mobile-source pollutant of local concern is CO, which is a direct function of vehicle idling time and, thus, traffic flow conditions. CO transport is extremely limited and disperses rapidly with distance from the source under normal meteorological conditions; however, under certain extreme meteorological conditions, CO concentrations proximate to a congested roadway or intersection may reach unhealthful levels affecting local sensitive receptors (residents, schoolchildren, the elderly, hospital patients, etc.). Over the past three years (2011-2013), the highest one-hour ambient CO concentration monitored at the Lake Elsinore station was 2.7 ppm (2012), which is below the State standard of 20.0 ppm (see previously referenced Table 4.3.C). The highest 8-hour concentration for the same period, 0.7 ppm (2011 and 2012) is also below the State eight-hour standard of 9.0 ppm.

The highest CO concentrations would normally occur during peak traffic hours; therefore, CO impacts calculated under peak traffic conditions represent a worst-case analysis. CO monitoring analyses have typically revealed that a project would have to increase traffic volumes at a single intersection by more than 44,000

vehicles per hour (or 24,000 vehicles per hour when horizontal/vertical air does not mix) in order to generate a significant CO impact.[1] The project is estimated to generate a net total of approximately 2,691 net trip-ends per day on a typical weekday.[2] Given the existing extremely low level of CO concentrations in the project area, anticipated project-related traffic is not expected to result in the CO concentrations exceeding the State or Federal CO standards; therefore, CO hotspot impacts would not occur. Localized air quality impacts related to mobile-source emissions would be less than significant and no mitigation is required.

4.3.5.5 Odors

Threshold	Would the proposed project create objectionable odors affecting a substantial number of people?

Various diesel-powered vehicles and other equipment used during on-site construction would create odors. While construction activities, application of architectural coatings and installation of asphalt may temporarily generate odors, these odors are not likely to be noticeable beyond the project boundaries.

Substantial odor-generating sources include land uses such as agricultural activities, feedlots, wastewater treatment facilities, landfills or various heavy industrial uses. The project does not propose any such uses or activities that would result in potentially significant operational source odor impacts. Potential sources of operational odors generated by the project would include disposal of miscellaneous residential, office, and commercial refuse. SCAQMD Rule 402 prohibits the discharge of air from any source that causes injury, nuisance, or annoyance to the health, safety, or comfort of the public. Additionally, consistent with City requirements, all project-generated refuse would be stored in covered containers and removed at regular intervals in compliance with solid waste regulations. Potential operational-source odor impacts are therefore considered less than significant and no mitigation is required.

4.3.6 Significant Impacts

Impact 4.3.6.1 Construction-Related Regional Emissions

On-site construction activities would result in the emission of criteria pollutants in excess of applicable standards.

Threshold	Would the proposed project result in a cumulatively considerable net increase of any criteria pollutant for which the project region is in non-attainment under an applicable Federal or State ambient air quality

[1] Page 31, *Clinton Keith Road (APN: 390-250-003) "Grove Park" Air Quality Analysis, City of Wildomar, Urban Crossroads, March 2, 2015*

[2] *Clinton Keith Road (APN: 380-250-003) Traffic Impact Analysis City of Wildomar, CA*, Urban Crossroads, March 5, 2015.

standard?

For construction operations, the applicable daily thresholds are:

- 75 pounds of ROC/VOC;
- 100 pounds of NO_X;
- 550 pounds of CO;
- 150 pounds of PM_{10};
- 55 pounds of $PM_{2.5}$; and
- 150 pounds of SO_2.

Construction activities associated with the project will result in emissions of CO, VOCs, NO_X, SO_X, PM_{10}, and $PM_{2.5}$. Construction-related emissions are expected from the following activities:

- Grading;
- Building Construction;
- Architectural Coatings (Painting);
- Construction Workers Commuting; and
- Paving.

Construction is expected to commence in January 2017 and will last through July 2018. Table 4.3.H shows construction duration by phase. The construction schedule utilized in the analysis represents a "worst-case" analysis scenario; should construction occur any time after the stated dates, emission factors for construction decrease as the analysis year increases. While mix of construction equipment utilized may vary due to site-specific needs, the assumptions provided represent a reasonable approximation of on-site construction activities. The duration of construction activity was developed based on a 2018 opening year and past project experience. Associated equipment was estimated based on CalEEMod defaults. A detailed summary of construction equipment assumptions by phase is provided in Table 4.3.I.

Table 4.3.H: Construction Duration

Phase	Duration (working days)
Grading	75
Building Construction	300
Paving	20
Architectural Coating	45

Source: Table 3-2, *Clinton Keith Road (APN: 390-250-003) "Grove Park" Air Quality Analysis, City of Wildomar*, Urban Crossroads, March 2, 2015.

Table 4.3.I: Construction Equipment Assumptions

Activity	Equipment	Number	Hours per day
Grading	Excavators	2	8
	Graders	1	8
	Water Trucks	1	8
	Rubber Tired Dozers	1	8
	Scrapers	2	8
	Tractors/Loaders/Backhoes	2	8
Building Construction	Cranes	1	8
	Forklifts	3	8
	Generator Sets	1	8
	Tractors/Loaders/Backhoes	3	8
	Welders	1	8
Paving	Pavers	2	8
	Paving Equipment	2	8
	Rollers	2	8
Architectural Coatings	Air Compressors	1	8

Source: Table 3-3, *Clinton Keith Road (APN: 390-250-003) "Grove Park" Air Quality Analysis, City of Wildomar*, Urban Crossroads, March 2, 2015.

Dust is typically a major concern during rough grading activities. Because such emissions are not amenable to collection and discharge through a controlled source, they are called "fugitive emissions." Fugitive dust emissions rates vary as a function of many parameters (soil silt, soil moisture, wind speed, area disturbed, number of vehicles, depth of disturbance or excavation, etc.). The CalEEMod model was utilized to calculate fugitive dust emissions resulting from this phase of activity. The project site would require approximately 78,300 cubic yards of soil import in order to balance. Soil import would commence in January 2017, concurrent with grading activity, and would last for of approximately four months (75 working days). The proposed project will be required to comply with standard SCAQMD Rules for the control of fugitive dust.

Construction emissions for construction worker vehicles traveling to and from the project site, as well as vendor trips (construction materials delivered to the project site) were estimated based on CalEEMod defaults. Table 4.3.J summarizes the construction-related emissions based on the previously stated activity and equipment assumptions. Under the assumed construction scenario, emissions will exceed the SCAQMD thresholds established for VOCs and NO_X. The exceedance of SCAQMD thresholds is a significant impact requiring mitigation.

Table 4.3.J: Summary of Regional Construction-related Emissions (without Mitigation)

Year	Emissions (pounds per day without Mitigation)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
2017	8.52	105.79	71.22	0.15	15.21	8.05
2018	101.23	31.84	37.40	0.08	5.25	2.57
Maximum daily emissions	**101.23**	**105.79**	**71.22**	**0.15**	**15.21**	**8.05**
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	**YES**	**YES**	**NO**	**NO**	**NO**	**NO**

Source: Table 3-4, *Clinton Keith Road (APN: 390-250-003) "Grove Park" Air Quality Analysis, City of Wildomar,* Urban Crossroads, March 2, 2015.
Note: The volume of emissions identified does not take credit to reductions that would be achieved through application of Best Available Control Measures and standard SCAQMD Rules.

Best Available Control Measures (BACMs) refer to an approach to pollution control that is based on adopting the most effective methods of controlling emissions of pollutants from sources such as roadway dust, soot and ash from woodstoves, and open burning of timber, grasslands, or rubbish. Additionally, during construction activities, the proposed project would be subject to applicable rules established by the SCAQMD including, but not limited to:

- **Rule 402 (Nuisance):** This rule prohibits the discharge from any source whatsoever such quantities of air contaminant or other materials which cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, repose, health, or safety of any such person or the public, or which cause, or have a natural tendency to cause, injury, or damage to business or property.
- **Rule 403 (Fugitive Dust):** This rule requires fugitive dust sources to implement Best Available Control Measures for all sources and all forms of visible particulate matter are prohibited from crossing any property line. SCAQMD Rule 403 is intended to reduce PM_{10} emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust. PM_{10} suppression techniques are summarized below.
    a. Portions of the construction site to remain inactive longer than a period of three months will be seeded and watered until grass cover is grown or otherwise stabilized in a manner acceptable to the City.
    b. All on-site roads will be paved as soon as feasible or watered periodically or chemically stabilized.
    c. All material transported off-site will be either sufficiently watered or securely covered to prevent excessive amounts of dust.
    d. The area disturbed by clearing, grading, earthmoving, or excavation operations will be minimized at all times.

e. Where vehicles leave the construction site and enter adjacent public streets, the streets will be swept daily or washed down at the end of the work day to remove soil tracked onto the paved surface.

- **Rule 431.2 (Low Sulfur Fuel):** The purpose of this rule is to limit the sulfur content in diesel and other liquid fuels for the purpose of both reducing the formation of sulfur oxides and particulates during combustion and to enable the use of add-on control devices for diesel fueled internal combustion engines. The rule applies to all refiners, importers, and other fuel suppliers such as distributors, marketers and retailers, as well as to users of diesel, low sulfur diesel, and other liquid fuels for stationary source applications in the district. The rule also affects diesel fuel supplied for mobile source applications.
- **Rule 1113 (Architectural Coatings):** This rule requires manufacturers, distributors, and end-users of architectural and industrial maintenance coatings to reduce ROG/VOC emissions from the use of these coatings, primarily by placing limits on the ROG/VOC content of various coating categories.
- **Rule 1186/1186.1 (Street Sweepers):** The purpose of Rule 1186 is to reduce the amount of particulate matter entrained in the ambient air as a result of vehicular travel on paved and unpaved public roads, and at livestock operations. Rule 1186.1 requires certain public and private sweeper fleet operators to acquire and operate alternative-fuel or otherwise less-polluting sweepers when purchasing or leasing these vehicles for sweeping operations undertaken by or for governments or governmental agencies in the jurisdiction of the SCAQMD.

Mitigation Measures. The following measures have been identified to ensure implementation of BACMs and applicable SCAQMD Rules to reduce the level of pollutants emitted during on-site construction activities:

4.3.6.1A "Zero-Volatile Organic Compounds" paints (no more than 150 grams/liter of VOC) and/or High Pressure/Low Volume (HPLV) applications consistent with SCAQMD Rule 1113 shall be used during project construction.

4.3.6.1B All rubber tired dozers and scrapers used during grading operations shall be California Air Resources Board (CARB) Tier 3 certified or better.

4.3.6.1C Appropriate provisions detailed in SCAQMD Rule 403 shall be implemented for the duration of project construction. Fugitive dust suppression measures include but shall not be limited to the following:

- All clearing, grading, earthmoving, or excavation activities shall cease when winds exceed 25 miles per hour;
- The contractor shall ensure that all disturbed unpaved roads and disturbed areas within the project site are watered at least three (3) times daily during dry weather. Watering, with complete coverage of

disturbed areas, shall occur at least three times a day, preferably in the mid-morning, afternoon, and after work is done for the day; and

- The contractor shall ensure that traffic speeds on unpaved roads and project site areas are reduced to 15 miles per hour or less.

4.3.6.1D On-site construction equipment shall be shut off at or prior to five minutes of idling.

Level of Significance After Mitigation. Table 4.3.K identifies construction-related emissions upon incorporation of BACMs, adherence to standard SCAQMD regulations, and implementation of **Mitigation Measures 4.3.6.1A** through **4.3.6.1D.**

Table 4.3.K: Summary of Regional Construction-related Emissions (with Mitigation)

Year	Emissions (pounds per day without Mitigation)					
	VOC	**NO_X**	**CO**	**SO_X**	**PM_{10}**	**$PM_{2.5}$**
2017	5.68	78.31	61.45	0.15	8.61	4.77
2018	60.80	31.84	37.40	0.08	5.25	2.57
Maximum Daily Emissions	**60.80**	**78.31**	**61.45**	**0.15**	**8.61**	**4.77**
SCAQMD Regional Threshold	75	100	550	150	150	55
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**	**NO**	**NO**

Source: Table 3-5, *Clinton Keith Road (APN: 390-250-003) "Grove Park" Air Quality Analysis, City of Wildomar*, Urban Crossroads, March 2, 2015.
Note: Includes incorporation of BACMs, standard regulatory requirements, and Mitigation Measures 4.3.6.1A-B.

With the incorporation of these measures, construction-related emissions would not exceed any established thresholds; therefore, this impact would be reduced to a less than significant level.

Impact 4.3.6.2 Construction-related Localized Emissions

On-site construction activities would result in the localized emission of pollutants in excess of applicable standards.

Threshold	Would the proposed project exceed the SCAQMD localized significance threshold of: • 279.67 pounds per day of NO_X. • 1,388.83 pounds per day of CO. • 9.0 pounds per day of PM_{10}. • 5.33 pounds per day of $PM_{2.5}$.

The SCAQMD has established that impacts to air quality are significant if there is a potential to contribute or cause localized exceedances of the Federal and/or State AAQS. The significance of localized emissions impacts depends on whether ambient

levels in the vicinity of a given project are above or below State standards. In the case of CO and NO_2, if ambient levels are below the standards, a project is considered to have a significant impact if project emissions result in an exceedance of one or more of these standards. If ambient levels already exceed a State or Federal standard, then project emissions are considered significant if they increase ambient concentrations by a measurable amount. This would apply to PM_{10} and $PM_{2.5}$, both of which are non-attainment pollutants in the Basin.

LSTs represent the maximum emissions from a project that will not cause or contribute to an exceedance of the most stringent applicable Federal or State AAQS at the nearest residence or sensitive receptor. The SCAQMD states that Lead Agencies can use the LSTs as another indicator of significance in their air quality impact analyses. LSTs were developed in response to environmental justice and health concerns raised by the public regarding exposure of individuals to criteria pollutants in local communities. To address the issue of localized significance, the SCAQMD adopted LSTs that show whether a project would cause or contribute to localized air quality impacts and thereby cause or contribute to potential localized adverse health effects.

For the proposed project, the appropriate SRA for the LST analysis is the Lake Elsinore area (SRA 25). LSTs apply to CO, NO_2, PM_{10}, and $PM_{2.5}$. The SCAQMD produced look-up tables for projects less than or equal to five acres in size. In order to determine the appropriate methodology for determining localized impacts that could occur as a result of project-related construction, the following process is undertaken:

- The CalEEMod model is utilized to determine the maximum daily on-site emissions that will occur during construction activity.
- The SCAQMD's Fact Sheet for Applying CalEEMod to Localized Significance Thresholds is used to determine the maximum site acreage that is actively disturbed based on the construction equipment fleet and equipment hours as estimated in CalEEMod.
- If the total acreage disturbed is less than or equal to five acres per day, then the SCAQMD's screening look-up tables are utilized to determine if a project has the potential to result in a significant impact. The look-up tables establish a maximum daily emissions threshold in pounds per day that can be compared to CalEEMod outputs.
- If the total acreage disturbed is greater than five acres per day, then the SCAQMD recommends dispersion modeling to be conducted to determine the actual pollutant concentrations for applicable LSTs in the air. In other words, the maximum daily on-site emissions as calculated in CalEEMod are modeled via air dispersion modeling to calculate the actual concentration in the air (e.g., parts per million or micrograms per cubic meter) in order to determine if any applicable thresholds are exceeded.

While the site-specific construction fleet may vary due to specific project needs at the time of construction, Table 4.3.L details the maximum anticipated daily disturbed acreage. The SCAQMD produced look-up tables for projects less than or equal to five acres in size. Using this information, the project could actively disturb approximately 3.0 acres per day and thus would not exceed the five-acre per day limit established by the SCAQMD's LST look-up tables; therefore, SCAQMD LST look-up tables will be used to determine localized impacts consistent with SCAQMD protocol.

Table 4.3.L: Maximum Daily Disturbed Acreage

Construction Phase	Equipment Type	Equipment Quantity	Acres Graded per 8-hour Day	Operating Hours per day	Acres Graded per Day
Grading	Graders	1	0.5	8	0.5
	Rubber Tired Dozers	1	0.5	8	0.5
	Scrapers	2	1.0	8	2.0
Total Acres Graded per Day					3.0
Applicable LST Mass Rate Look-up Table					3.0

Source: Table 3-7*, Clinton Keith Road (APN: 390-250-003) "Grove Park" Air Quality Analysis, City of Wildomar*, Urban Crossroads, March 2, 2015.

Sensitive receptors include residences, schools, medical offices, convalescent facilities, and similar uses that are sensitive to air pollutants. The nearest sensitive receptors are the multifamily residences located directly south of the project site. Projects with boundaries closer than 25 meters (82.0 feet) should use the LST for receptors at 25 meters. As the nearest sensitive receptors are directly south of the project site, the LST for 25 meters was used for this analysis.

As detailed in Table 4.3.M, localized emissions of PM_{10} and $PM_{2.5}$ at the nearest receptor would exceed the SCAQMD's thresholds. The exceedance of SCAQMD thresholds is a significant impact requiring mitigation.

Table 4.3.M: Summary of Localized Construction Emissions (without Mitigation)

On-Site Grading Emissions	Emissions (pounds per day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions	**76.87**	**49.73**	**12.44**	**6.96**
SCAQMD Localized Threshold	279.67	1,383.33	9.00	5.33
Threshold Exceeded?	**NO**	**NO**	**YES**	**YES**

Source: Table 3-8*, Clinton Keith Road (APN: 390-250-003) "Grove Park" Air Quality Analysis, City of Wildomar,* Urban Crossroads, March 2, 2015.
Note: The volume of emissions identified does not take credit to reductions that would be achieved through application of Best Available Control Measures, standard SCAQMD Rules, or Mitigation Measures.

Mitigation Measures. Previously identified **Mitigation Measures 4.3.6.1A** through **4.3.6.1D** address the incorporation of BACMs and applicable SCAQMD Rules to reduce the level of pollutants emitted during on-site construction activities. Specifically, adherence to provisions of Rule 403 will reduce PM_{10} emissions from on-site activities that have the potential to generate fugitive dust.

Level of Significance After Mitigation. As Table 4.3.N shows, with incorporation of mitigation, localized construction emissions at the nearest receptor to the project site would not exceed thresholds established by the SCAQMD.

Table 4.3.N: Summary of Localized Construction Emissions (with Mitigation)

On-Site Grading Emissions	Emissions (pounds per day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Maximum Daily Emissions	**49.40**	**39.96**	**5.84**	**3.68**
SCAQMD Localized Threshold	279.67	1,383.33	9.00	5.33
Threshold Exceeded?	**NO**	**NO**	**NO**	**NO**

Source: Table 3-9*, Clinton Keith Road (APN: 390-250-003) "Grove Park" Air Quality Analysis, City of Wildomar,* Urban Crossroads, March 2, 2015.

4.3.7 Cumulative Impacts

The project area is designated as an extreme non-attainment area for ozone and a non-attainment area for PM_{10} and $PM_{2.5}$. The SCAQMD has published a report on how to address cumulative impacts from air pollution.[1] This reports states, "… the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR. … Projects that exceed the project-specific significance thresholds are considered by the SCAQMD to be cumulatively considerable. This is the reason project-specific and cumulative significance thresholds are the same. Conversely, projects that do not exceed the project-specific thresholds are generally not considered to be cumulatively significant."

After application of BACMs and implementation of required mitigation measures, project construction-source air pollutant emissions will not exceed established thresholds. Project operational source emissions will not exceed applicable SCAQMD regional thresholds. As established thresholds are not exceeded, the per SCAQMD significance guidance, project air pollutant emissions levels are also considered cumulatively less than significant over the life of the project.

[1] White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution, http://www.aqmd.gov/rules/ciwg/final_white_paper.pdf.

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4.4 BIOLOGICAL RESOURCES

This section addresses the potential impacts development of the project may have on biological resources. The analysis contained in this section is based on the following documents:

- *City of Wildomar General Plan, Multipurpose Open Space Element*, City of Wildomar, adopted July 2008.
- *Biological Resources Assessment and Western Riverside County MSHCP Consistency Analysis, Clinton Keith Road APN 380-250-003,* PCR Services Corporation, November 2013. (Appendix C-1).
- *Determination of Biologically Equivalent or Superior Preservation, Grove Park APN 380-250-003,* PCR Services Corporation, January 2015. (Appendix C-2).

4.4.1 Existing Setting

The site consists of gently rolling hills punctuated by steeper drainage areas. On-site elevations range from approximately 1,330 feet above mean sea level (amsl) along the southwestern boundary to approximately 1,380 feet amsl along the northern boundary. Surrounding land uses include undeveloped and rural residential uses to the north, undeveloped land to the east and west, and multifamily uses to the south. The project includes the 19.4 acres to be developed and approximately 2.0 acres along portions of the west and east property lines. These areas were included in the impact assessments to account for off-site disturbances from grading activities associated with the development of manufactured slopes and the Yamas Drive improvements.

The project site and off-site areas are not within any U.S. Fish and Wildlife Service (USFWS) designated critical habitat, but are within the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) area and the Stephens' Kangaroo Rat (SKR) Habitat Conservation Plan (HCP) fee area.

4.4.1.1 Vegetation Communities

The project site consists primarily of disturbed fields with sparse ruderal (weedy) vegetation, with a smaller component of native vegetation dominated by California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), chamise (*Adenostoma fasciculatum*), and coast live oak (*Quercus agrifolia*). The Biological Resources Assessment documented the following on-site vegetation communities: buckwheat scrub, chamise chaparral, ruderal, coast live oak woodland, Riversidean sage scrub, southern willow scrub, ornamental, disturbed, and developed. Approximately 85 percent of the area surveyed is disturbed, or contains mostly ruderal or mixed ruderal/native vegetation communities. Native vegetation communities comprise the remainder of the survey area. The extent of these communities is depicted in Figure 4.4.1.

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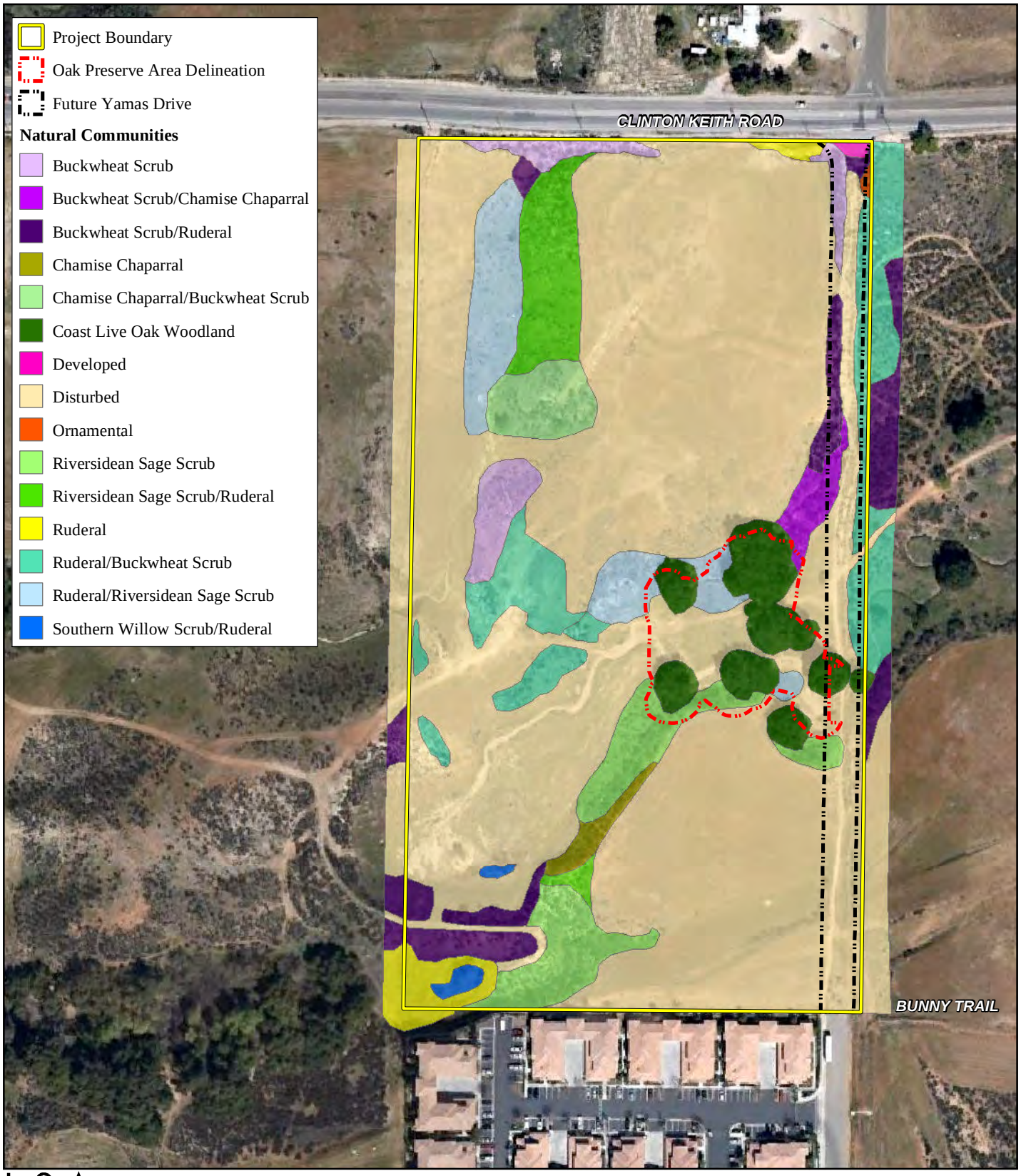

LSA

FIGURE 4.4.1

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SOURCE: Google Earth, 2013; PCR Services, 2013.

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Grove Park Mixed-Use Development
Environmental Impact Report

Vegetation Communities

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4.4.1.2 Wildlife

Small patches of on-site native vegetation provide habitat for common species of invertebrates, reptiles, birds, and small mammals. These include a variety of birds (including species of quail, heron, hawk, plover, dove, hummingbird, flycatcher, crow, swallow, bushtit, wren, gnatcatcher, mockingbird, emberizids, and finch), lizards, coyotes, rabbits, squirrels. A full list of plant and wildlife species observed at the site can be found in the Biological Resources Assessment, which is included as Appendix C-1 to this EIR.

4.4.1.3 Special-Status Species

Special status species are plant and animal species or subspecies for which there is concern for population sustainability or that are otherwise considered worthy of consideration for protection by the California Department of Fish and Wildlife (CDFW), USFWS, local agencies, or special interest groups, such as the California Native Plant Society (CNPS). Two special-status wildlife species were observed during on-site biological surveys: the coastal California gnatcatcher (*Polioptila californica californica)* and the San Diego black-tailed jackrabbit (*Lepus californicus bennettii*), both of which are Species of Special Concern and Covered under the MSHCP. In addition, paniculate tarplant (*Deinandra paniculata*), which is classified as a "plant of limited distribution – a watch list" by CNPS, was observed on site.

4.4.1.4 Jurisdictional Waters/Wetlands

The project site contains four ephemeral drainage features. Two (Drainages B and B1) originate from the eastern boundary of the site, one from the north (Drainage A), and the last is an erosional feature (Drainage C) located near the southern boundary. Drainages B, B1, and C are isolated from downstream jurisdictional features. Drainage A, originating north of the site and flowing south, ultimately connects to Murrieta Creek one mile southwest of the site. No blueline (year round) streams are mapped by the United States Geologic Survey (USGS) within the project site. On-site drainages are presented in Figure 4.4.2.

Drainages A, B, B1 and C are considered CDFW and Regional Water Quality Control Board (RWQCB) jurisdictional "waters of the State." Drainage A is also considered U.S. Army Corps of Engineers (USACE) jurisdictional "waters of the U.S." In addition, Drainages A, B, and B1 are considered MSHCP Riverine Areas.

4.4.1.5 NOP/Scoping Comments

No one in attendance at the Public Scoping Meetings expressed any concerns regarding biological resources. The City received comment letters (January 14 and June 19, 2015) from the CDFW (see Appendix A) during each of the NOP review periods, which addressed current habitat and species information and suggested mitigation measures. The CDFW also required that the project demonstrate its

consistency with the MSHCP and that the EIR fully analyze cumulate impacts and project alternatives.

4.4.2 Existing Policies and Regulations

4.4.2.1 Federal Regulations

Federal Endangered Species Act (FESA). The FESA was enacted to protect any species of plant or animal that is endangered or threatened with extinction. Section 9 of the FESA prohibits "take" of federally threatened or endangered wildlife. Take, as defined under the FESA, means to harass, harm, pursue, hunt, wound, kill, trap, capture, collect, or attempt to engage in any such conduct (16 USC 1532[19]). Section 9 also prohibits the removal and reduction of endangered plants from lands under Federal jurisdiction, and the removal, cutting, digging, damage, or destruction of endangered plants on any other area in "knowing violation of State law or regulation."

Section 9 of the FESA (16 USC 1538) prohibits take of a federally listed endangered species of fish or wildlife except pursuant to a permit and HCP approved under Section 10(a) of the FESA (16 USC 1539). The FESA prohibitions and requirements are different, however, for endangered species of plants. Section 9 prohibits the take of endangered plants only from areas under Federal jurisdiction, or if such take would violate state law.

The MSHCP functions as an HCP pursuant to Section 10(a)(1)(B) of the FESA. The USFWS and CDFW have authorized the take of a number of sensitive plant and wildlife species within the MSHCP Plan Area in exchange for the assembly and management of a coordinated MSHCP Conservation Area.

Clean Water Act. The USACE regulates discharges of dredged or fill material into waters of the United States. These waters include wetlands and non-wetland bodies of water that meet specific criteria, including a direct or indirect connection to interstate commerce. The USACE regulatory jurisdiction pursuant to Section 404 of the Federal Clean Water Act (CWA) is founded on a connection, or nexus, between the water body in question and interstate commerce. This connection may be direct (through a tributary system linking a stream channel with traditional navigable waters used in interstate or foreign commerce) or may be indirect (through a nexus identified in the USACE regulations). The USACE typically regulates as non-wetland waters of the U.S. any body of water displaying an ordinary high water mark (OHWM). In order to be considered a jurisdictional wetland under Section 404, an area must possess three wetland characteristics: hydrophytic vegetation, hydric soils, and wetland hydrology. Each characteristic has a specific set of mandatory wetland criteria that must be satisfied in order for that particular wetland characteristic to be met.

In 2006, the United States Supreme Court in the consolidated cases *Rapanos v. United States* and *Caravell v. United States*, Nos. 04-1034 and 04-1384 (*Rapanos*: June 19, 2006) addressed CWA jurisdiction over wetlands adjacent or abutting navigable, non-navigable and ephemeral tributaries and jurisdiction over permanent and relatively permanent non-navigable tributaries. According to the United Sates Supreme Court, the CWA does not assert jurisdiction over upland erosional features, gullies, and roadside ditches that have infrequent, low volume, and short duration of water flow. The USACE uses a significant nexus analysis. A water body is considered to have a "significant nexus" with a traditional navigable water (TNW)[1] if its flow characteristics and functions in combination with the ecologic and hydrologic functions performed by all wetlands adjacent to such a tributary, affect the chemical, physical, and biological integrity of a downstream traditional navigable water. Additional information is provided in the Environmental Protection Agency (EPA) memorandum titled "Clean Water Act Jurisdiction Following the U.S. Supreme Court's Decision in *Rapanos v. United States & Caravell v. United States*," dated June 5, 2007 (USACE 2007), and also the *U.S. Army Corps of Engineers Jurisdictional Determination Form Instructional Guidebook* (USACE and EPA 2007).

The Regional Water Quality Control Board (RWQCB) is responsible for the administration of Section 401 of the CWA, through water quality certification of any activity that may result in a discharge to jurisdictional waters of the U.S. The RWQCB may also regulate discharges to "waters of the State," including wetlands, under the California Porter-Cologne Water Quality Control Act.

Migratory Bird Treaty Act (MBTA). The MBTA implements conventions between the United States and four countries (Canada, Mexico, Japan, and Russia) for the protection of migratory birds. The MBTA makes it illegal for anyone to take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase, or barter, any migratory bird, or the parts, nests, or eggs of such a bird except under the terms of a valid permit issued pursuant to Federal regulations. The USFWS has statutory authority and responsibility for enforcing the MBTA. The MBTA applies to the individual nests of these species, but does not regulate impacts to the species' habitats.

4.4.2.2 State Regulations

California Endangered Species Act (CESA). The CESA is similar to the FESA in that its intent is to protect species of fish, wildlife, and plants that are in danger of, or threatened with, extinction because their habitats are threatened with destruction, adverse modification, or severe curtailment, or because of overexploitation, disease, predation, or other factors.

[1] A "traditional navigable water" includes all of the "navigable waters of the United States," defined in 33 C.F.R. § 329 and by numerous decisions of the Federal courts, plus all other waters that are navigable-in-fact.

"Take" as defined under the CESA means hunt, pursue, capture, or kill, or attempt to hunt, pursue, capture, or kill. Under certain conditions, the CESA has provisions for take through a 2081 Permit or a Section 2081 Memorandum of Understanding. The impacts of the authorized take must be minimized and fully mitigated. No permit may be issued if the issuance of the permit would jeopardize the continued existence of the species.

California Environmental Quality Act. Section 15380(b) of the *CEQA Guidelines* provides that a species not listed on the Federal or State lists of protected species may be considered rare or endangered if the species can be shown to meet specified criteria. These criteria have been modeled after the definitions in FESA and CESA and § 2780–2781 of Article 1 of the California Fish and Game Code dealing with the California Wildlife Protection Act of 1990. This section was included in the guidelines primarily to deal with situations in which a public agency is reviewing a project that may have a significant effect on a species that has not yet been listed by either the USFWS or CDFW.

California Fish and Game Code. Various sections of the California Fish and Game Code provide protection to nesting birds, birds of prey and species protected under the MBTA. Section 3503 of the California Fish and Game Code prohibits the destruction of the nest or eggs of any bird as otherwise provided for in the Fish and Game Code. Section 3503.5 specifically extends this protection to the nests or eggs of any bird of prey (species of the Orders *Falconiformes* [falcons, hawks, eagles, ospreys] *or Strigiformes* [owls]). The unlawful take, sale or purchase (whole or in part) of any aigrette or egret, osprey, bird of paradise, goura, or numidi is prohibited under Section 3505. Section 3513 prohibits the unlawful to take or possession of any migratory nongame bird as designated in the MBTA or any part of such migratory nongame bird except as provided by rules and regulations adopted by the Secretary of the Interior under provisions of the MBTA.

Streambed Alteration Agreements. Sections 1600 et seq. of the California Fish and Game Code define the responsibilities of the CDFW and require public and private applicants to obtain an agreement for projects that would "… divert, obstruct, or change the natural flow or bed, channel, or bank of any river, stream, or lake designated by the CDFW in which there is at any time an existing fish or wildlife resource or from which those resources derive benefit, or would use material from the streambed designated by the department." CDFW wardens and/or unit biologists typically have the responsibility for formulating and issuing Streambed Alteration Agreements. The CDFW, through provisions of the Code (Sections 1601–1603), is empowered to issue agreements for any alteration of a river, stream, or lake where fish or wildlife resources may be adversely affected. Streams (and rivers) are defined by the presence of a channel bed and banks, and at least an intermittent

flow of water. The CDFW regulates wetland areas only to the extent that those wetlands are part of a river, stream, or lake as defined by the CDFW.

Native Plant Protection Act (NPPA). Sections 1900–1913 of the California Fish and Game Code (Native Plant Protection Act) direct the CDFW to carry out the Legislature's intent to "… preserve, protect and enhance endangered or rare native plants of this state." The NPPA gives the California Fish and Game Commission the power to designate native plants as "endangered" or "rare" and protect endangered and rare plants from take.

4.4.2.3 Regional Policies

Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP): The County of Riverside, eight additional land jurisdictions, and approximately fourteen cities adopted the Western Riverside County MSHCP in 2003. Since its adoption, other jurisdictions, such as the City of Wildomar, have become permittees under the MSHCP. The MSHCP is a habitat conservation plan formed and permitted under the FESA. The MSHCP builds upon existing preserves and attempts to provide connectivity and wildlife corridors, and proposes to conserve approximately 500,000 acres and 146 different species. Approximately 347,000 acres are anticipated to be conserved on existing Public/Quasi-Public lands with additional contributions of approximately 153,000 acres acquired from private land owners. The MSHCP establishes seven core reserve areas and associated linkages between the proposed and existing core areas. The MSHCP provides a Section 10(a) take permit under the FESA for property owners, developers, and participating public agencies.

Permittees (in this case, the City) under the MSHCP are required to adopt an ordinance imposing the Local Development Mitigation Fee and adopt an ordinance or resolution that adopts the MSHCP and establishes procedures and requirements for the implementation of its terms and conditions that includes 1) a commitment to utilize the Habitat Evaluation and Acquisition Negotiation Strategy (HANS) or appropriate alternative method to ensure compliance with the criteria, 2) imposition of all other terms of the MSHCP, including but not limited to requirements concerning riparian/riverine areas and vernal pools and appropriate required surveys, and 3) agreement to enforce all other terms and conditions of the MSHCP, Implementing Agreement and the Permits.

The MSHCP has survey areas for narrow endemic plant species and criteria area species encompassing specified rare plants, burrowing owl, amphibians (e.g., arroyo toad, California red-legged frog, and mountain yellow-legged frog), and small mammals (e.g., Aguanga kangaroo rat, San Bernardino kangaroo rat, and Los Angeles pocket mouse). With the exception of a single-family home development, a habitat assessment must be performed when a proposed project occurs on a parcel within an MSHCP survey area. If suitable habitat is present and full avoidance

cannot be met, a survey must be performed to determine the presence or absence and population of the resource. If no suitable habitat is present, then documentation of the results is provided to the county or city.[1]

The site is not located within an area that has been identified in the MSHCP as an area where conservation is planned. Based on its location, the project requires compliance with the following MSHCP policies: Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools (Section 6.1.2 of the MSHCP), the Guidelines Pertaining to the Urban/Wildlands Interface (Section 6.1.4 of the MSHCP), and the Burrowing Owl Survey Area (Section 6.3.2 of the MSHCP).

Stephens' Kangaroo Rat Habitat Conservation Plan (SKRHCP). In October 1988 the Stephens' kangaroo rat was listed as an endangered species by the USFWS.[2] Under the FESA, the SKR and its habitat were protected from any type of disturbance resulting in "take" of the species. In order to protect the SKR while allowing development to continue, the Riverside County Habitat Conservation Agency prepared the SKRHCP. The SKRHCP establishes suitable habitat areas where incidental take is permitted through a fee process and core reserve areas in occupied habitat where development projects are required to obtain individual permits. The project is located within the SKRHCP fee area and will be required to pay a per-acre fee to participate in the HCP. An SKR incidental take permit is not required.

4.4.2.4 City General Plan Policies

The policies outlined in the City's General Plan related to biological resources include:

Open Space

OS 5.5 New development shall preserve and enhance existing native riparian habitat and prevent obstruction of natural watercourses. Incentives shall be utilized to the maximum extent possible.

OS 5.6 Identify and, to the maximum extent possible, conserve remaining upland habitat areas adjacent to wetland and riparian areas that are critical to the feeding, hibernation, or nesting of wildlife species associated with these wetland and riparian areas.

OS 6.1 During the development review process, ensure compliance with the Clean Water Act's Section 404 in terms of wetlands mitigation policies and policies concerning fill material in jurisdictional wetlands.

[1] Campbell, Trisha A. *Western Riverside County MSHCP Basics*, http://naturalcommunity.org/79-2/know/articles/applied/wrmshcp-basics/#Q16 (accessed April 7, 2015).

[2] *Stephens' Kangaroo Rat: Introduction*, Riverside County Habitat Conservation Agency. http://www.skrplan.org/introduction.html (accessed April 9, 2015).

OS 6.2 Preserve buffer zones around wetlands where feasible and biologically appropriate.

OS 9.3 Maintain and conserve superior examples of native trees, natural vegetation, stands of established trees, and other features for ecosystem, aesthetic, and water conservation purposes.

OS 9.4 Conserve the oak tree resources in the County.

OS 19.8 Whenever existing information indicates that a site proposed for development may contain biological, paleontological, or other scientific resources, a report shall be filed stating the extent and potential significance of the resources that may exist within the proposed development and appropriate measures through which the impacts of development may be mitigated.

The anticipated impacts to biological resources on the project site are generally consistent with General Plan policies and objectives in the Open Space Element. Refer to Table 4.4.A.

Table 4.4.A: General Plan Consistency Analysis

General Plan Goals and Targets	General Plan Consistency Analysis
Open Space	
OS 5.5. New development shall preserve and enhance existing native riparian habitat and prevent obstruction of natural watercourses. Incentives shall be utilized to the maximum extent possible.	**Consistent.** Impacts to jurisdictional areas on site are required to comply with Sections 404 and 401 of the CWA, including applying for a permit and mitigation subject to approval by USACE and RWQCB, respectively. Due to low quality of jurisdictional features, it was concluded that 1:1 replacement of disturbed drainage features is sufficient. Refer to Mitigation Measure 4.4.6.2A.
OS 5.6. Identify and, to the maximum extent possible, conserve remaining upland habitat areas adjacent to wetland and riparian areas that are critical to the feeding, hibernation, or nesting of wildlife species associated with these wetland and riparian areas.	**Consistent.** Upland plant communities are located along drainages in the project site. As discussed in Section 4.4.6.2, these drainages have limited function as riparian areas, and impacts shall be adequately mitigated by Mitigation Measures 4.4.6.2A.
OS 6.1. During the development review process, ensure compliance with the Clean Water Act's Section 404 in terms of wetlands mitigation policies and policies concerning fill material in jurisdictional wetlands.	**Consistent.** The project applicant is required to obtain clearance from the USACE in compliance with the Clean Water Act's Section 404 prior to grading on the project site.
OS 6.2. Preserve buffer zones around wetlands where feasible and biologically appropriate.	**Consistent.** It was determined there are no wetlands on the project site.
OS 9.3. Maintain and conserve superior examples of native trees, natural vegetation, stands of established trees, and other features for ecosystem, aesthetic, and water conservation purposes.	**Consistent.** 1.3 acres of oak trees will be preserved on site.

Table 4.4.A: General Plan Consistency Analysis

General Plan Goals and Targets	General Plan Consistency Analysis
OS 9.4. Conserve the oak tree resources in the County.	**Consistent.** 1.3 acres of oak trees will be preserved on site.
OS 19.8. Whenever existing information indicates that a site proposed for development may contain biological, paleontological, or other scientific resources, a report shall be filed stating the extent and potential significance of the resources that may exist within the proposed development and appropriate measures through which the impacts of development may be mitigated.	**Consistent.** A Biological Report was prepared for the proposed project by PCR dated November 2013 to address impacts to biological resources.

4.4.3 Methodology

The project site and surrounding areas were assessed to determine if any biological resources impacts would occur with implementation of the proposed project. The Biological Resources Assessment was based on information compiled from databases, reference materials, field reconnaissance, general biological survey, vegetation mapping, jurisdictional waters and wetlands delineation, and focused surveys for special-status plants and burrowing owls.

4.4.3.1 Literature Search

A literature review was conducted to determine environmental conditions occurring on the project site and the surrounding area. The primary objective of the review was to evaluate the potential for suitable habitat for special status plant and wildlife species as they pertain to the proposed project. A compilation of special status plant and wildlife species recorded in the vicinity of the study area was derived from the CDFW's 2013 Natural Diversity Data Base.

Additional recorded occurrences of plant species found on or near the planning area were derived from the CNPS 2013 Electronic Inventory of Rare and Endangered Vascular Plants of California database. The CNDDB and CNPS search was based on the eight USGS 7.5-minute topographic quadrangles: *Romoland, Winchester, Bachelor Mountain, Pechanga, Temecula, Fallbrook, Wildomar,* and *Lake Elsinore, California*. In addition, Federal Register listings, protocols, and species data provided by the USFWS and soil maps provided by the Department of Agriculture Natural Resources Conservation Service (NRCS) were reviewed. Based on the literature search, Table 4.4.B lists the special status species that have potential to occur in the project area.

Table 4.4.B: Special-Status Species with Potential to Occur On Site

Species Name (common/scientific)	Federal Listing Status	State Listing Status	MSHCP Covered Species?	Comments
Reptiles				
Coast horned lizard *(Phrynosoma blainvillii)*	None	Special Concern	Yes	Potential to occur was considered moderate.
Orange-throated whiptail *(Aspidoscelis hyperythra)*	None	Special Concern	Yes	Potential to occur was considered moderate.
Red-diamond rattlesnake (*Crotalus ruber)*	None	Special Concern	Yes	Potential to occur was considered moderate.
Birds				
Loggerhead shrike (*Lanius ludovicianus*)	None	Special Concern	Yes	Low potential for nesting, moderate potential for foraging.
Coastal California gnatcatcher (*Polioptila californica californica*)	Threatened	Special Concern	Yes	**Observed on-site**
Golden eagle (*Aquila chrysaetos*)	None	Fully Protected	Yes	Low potential to occur for foraging only.
White-tailed kite (*Elanus leucurus*)	None	Fully Protected	Yes	Potential to occur for foraging only.
Burrowing owl (*Athene cunicularia*)	None	Special Concern	Yes	Absent; not found in focused surveys.
Northern harrier (*Circus cyaneus*)	None	Special Concern	Yes	Potential to occur for foraging only.
Mammals				
Northwestern San Diego pocket mouse *(Chaetodipus fallax fallax):*	None	Special Concern	Yes	Potential to occur was considered very low due to the habitat being limited and highly disturbed.
Stephens' kangaroo rat (*Dipodomys stephensi*)	Endangered	Threatened	Yes	Potential to occur was considered very low due to the limited habitat on site that is scattered and highly disturbed.
Los Angeles pocket mouse (*Perognathus longimembris brevinasus*)	Endangered	Threatened	Yes	Potential to occur was considered low due to the limited habitat on site that is scattered and highly disturbed.
Jacumba pocket mouse *(Perognathus longimembris internationalis)*	None	Special Concern	No	Potential occur was considered low due to limited, scattered, and highly disturbed habitat.

Table 4.4.B: Special-Status Species with Potential to Occur On Site

Species Name (common/scientific)	Federal Listing Status	State Listing Status	MSHCP Covered Species?	Comments
Western mastiff bat (*Eumops perotis californicus*)	None	Special Concern	No	Potential to occur was considered low due to the limited habitat supported by the project site. No suitable roosting habitat was determined present on or off site.
San Diego desert woodrat (*Neotoma lepida intermedia*)	None	Special Concern	Yes	Potential to occur was considered very low based on the limited habitat supported by the project site and the absence of any recorded observations in CNDDB within 10 miles of the site.
Southern grasshopper mouse (*Onychomys torridus ramona*)	None	Special Concern	No	Potential to occur was considered very low based on the limited habitat supported by the project site and the absence of any recorded observations in CNDDB within 8 miles of the site since 1932.
Pallid bat (*Antrozous pallidus*)	None	Special Concern	No	Potential to occur was considered low based on the limited habitat.
San Diego black-tailed jackrabbit *(Lepus californicus bennettii)*	None	Special Concern	Yes	**Observed on site**
Plants				
Paniculate tarplant (*Deinandra paniculata*)	None	None	No	List 4.2 in California Native Plant Society (Fairly endangered in California) **Observed on site**

Source: Biological Resource Assessment, November 2013 (Appendix C-1).

4.4.3.2 Field Investigations

A general biological survey of the project site was conducted on November 27, 2012. A delineation of jurisdictional waters and wetlands was also conducted on the same date. Focused surveys for special-status plants and burrowing owls were completed in April, May, June, and August 2013.

4.4.4 Thresholds of Significance

Based on Appendix G of the *CEQA Guidelines*, biological resource impacts would occur if the proposed project would:

- Have a substantial adverse effect, either directly or indirectly or through habitat modification, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or the USFWS;
- 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 CDFW or the USFWS;
- 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;
- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native or resident migratory wildlife corridors, or impede the use of native wildlife nursery sites;
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance; and/or
- Conflict with the provisions of an adopted habitat conservation plan, natural community conservation plan, or other approved local, regional, or state habitat conservation plan.

4.4.5 Less than Significant Impacts

The following potential impacts were determined to be less than significant. In each of the following issues, either no impact would occur or adherence to established regulations, standards, and policies would reduce potential impacts to a less than significant level. In either instance, no mitigation would be required.

4.4.5.1 Adopted Policies and/or Ordinances

Threshold	Would the proposed project conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

The City does not have a tree preservation ordinance or any other local ordinance that pertains to the protection of biological resources. Therefore, the project will have no impact related to adopted policies and/or ordinances and no mitigation is required. Regional policies (MSHCP and SKR HCP) are discussed in Section 4.4.6.5.

4.4.5.2 Adopted Habitat Conservation Plans

Threshold	Would the proposed project conflict with the provisions of an adopted Habitat Conservation Plan (HCP), Natural Community Conservation Plan (NCCP), or other approved local, regional, or state habitat conservation plan?

The project site is located within the Elsinore Area Plan of the MSHCP. The MSHCP is multi-jurisdictional HCP implemented in order to maintain biological and ecological diversity within a rapidly urbanizing region. Under the MSHCP, participating jurisdictions (in this case, the City) are authorized to allow "take" of specified plant and wildlife species within the MSHCP Plan Area. In addition, the wildlife agencies, namely the CDFW and USFWS, allow take of habitat or individual species outside of the MSHCP Conservation Area in exchange for the assembly and management of a coordinated MSHCP Conservation Area.

Implementation of the proposed project under the MSHCP requires compliance with the Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools (Section 6.1.2 of the MSHCP), the Guidelines Pertaining to the Urban/Wildlands Interface (Section 6.1.4 of the MSHCP), and the Burrowing Owl Survey Area (Section 6.3.2 of the MSHCP). However, the project site is not within or adjacent to a Criteria Cell, a designated Cell Group, or a subunit within the Elsinore Area Plan that requires conservation of land for inclusion in the MSHCP Conservation Area.

As described in Section 4.4.6.3, the project site contains on-site ephemeral drainage features that meet the criteria of Riverine Areas under the MSHCP. Drainages A, B, and B1 are considered Riverine Areas under the MSHCP. However, Drainage A is unvegetated and does not support habitat for MSHCP-associated riparian/riverine species. Drainages B and B1 have limited function as a result of absence of a downstream connection and therefore cannot support the majority of MSHCP riparian/riverine species. The Biological Resources Assessment determined Drainages B and B1 had low potential for peregrine falcon foraging habitat. However, because the project would affect 0.65 acre of Riparian/Riverine Areas, a Determination of Biologically Equivalent or Superior Preservation (DBESP) analysis was prepared to provide details on the impacts and compensatory mitigation to comply with the MSHCP. Further discussion of the DBESP and required mitigation measures is provided in Section 4.4.6.3 above.

While the site does not currently support burrowing owls, based on focused surveys conducted for the project, there is potential for them to exist on the project site in the future. The burrowing owl is a species covered under the MSHCP and **Mitigation Measure 4.4.6.1A** is required to comply with the MSHCP.

MSHCP Criteria Cell 5558 is located directly northeast of the project site across Clinton Keith Road. Indirect impacts may include the effects associated with artificial lighting, increased noise, unnatural predators (e.g., domestic cats and other non-native animals), competitors (e.g., exotic plants and non-native animals),

unauthorized recreational use that may damage vegetation and/or habitat, increased generation of dust and trash/debris, and effects on storm water and water quality. These effects and the alteration of existing on-site vegetation may result in changes in the behavioral patterns of wildlife or reduce the amount or diversity of wildlife adjacent to the site. Criteria Cell 5558 is already bordered by residential development to the east and west; therefore, the project would not introduce substantial new edge effects greater than that which the area is already exposed to. Conservation in the Criteria Cell 5558 is concentrated in the northern portion in the Sedco Hills area, the portion of the cell farthest portion from the project site.

The separation of the project site from Criteria Cell 5558 by Clinton Keith Road would reduce impacts related to lighting, noise, and trespass and unauthorized usage. Effects associated with project-related lighting and noise impacts are addressed in Chapters 4.1, *Aesthetics* and 4.12, *Noise* of this EIR, respectively. On-site access to recreational and open space areas is expected to reduce effects related to unauthorized use of the Criteria Cell 5558. With project mitigation measures and design features, edge effects caused by the project would be less than significant.

The Biological Resources Assessment evaluated the project's indirect impact to the MSHCP Conservation Area resulting from changes in drainage, toxics, and invasive plants. For drainage and toxicity concerns, the Best Management Practices (BMPs) identified in the project-specific Storm Water Pollution Prevention Plan (SWPPP) and Water Quality Management Plan (WQMP) are sufficient to reduce indirect water quality impacts to less than significant levels. These BMPs are included as mitigation in Section 4.9, *Hydrology and Water Quality* of this EIR. The BMPs included in the project-specific SWPPP and WQMP must be reviewed and approved by the City prior to the issuance of any project-related grading permit. With the City's review and approval of these plans and the subsequent monitoring of the project, it is reasonable to conclude the appropriate implementation of these BMPs will occur. The project will avoid the use of invasive plants as specified in Table 6-2 of the MSHCP, *Plants That Should Be Avoided Adjacent to the MSHCP Conservation Area*. Project design features are sufficient to reduce indirect impacts to the MSHCP Conservation area to less than significant levels.

Finally, the project site is located within the MSHCP Mitigation Fee Area and SKR HCP Fee Area. Fees are used to offset region-wide impacts to endemic species. As an MSHCP permittee, the City is required to ensure development occurs pursuant to all applicable provisions of the MSHCP. Specific MSHCP impacts are discussed in in the following analyses of biological resources. Where appropriate, measures have been identified to address specific biological resource impacts. The payment of required MSHCP and SKR HCP fees and the implementation of mitigation to address specific biological resource impacts will sufficiently ensure the project complies with adopted habitat conservation plans. No significant impact related to this issue would occur.

4.4.5.3 Candidate, Non-listed Sensitive, or Special-Status Plant Species

Threshold	Would the proposed project 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 Wildlife or U.S. Fish and Wildlife Service?

Special-Status Plant Species. Sensitive plants or special status plants are those that are listed by the USFWS, CDFW, and CNPS. The CNPS considers sensitive plant species to be those that are:

- Extirpated in California and either rare or extinct elsewhere;
- Rare or endangered in California and elsewhere;
- Presumed extirpated in California but are more common elsewhere; or
- Rare or endangered in California but are more common elsewhere.

The proposed project would result in the direct removal of various common plant species; this would not result in a significant impact. However, the project would result in the removal of one special-status plant species, the paniculate tarplant. The paniculate tarplant occupies approximately 2.28 acres of the site including two moderate density patches of the species (1.74 acres) and two low density patches (0.54 acre). The two patches of moderate density areas are located along the northern site boundary, one small low density patch is located in the central portion of the site and one low density patch is located in the southeastern corner of the site.

The paniculate tarplant is classified by the CNPS as a "plant of limited distribution – a watch list." However, according to documentation by Calflora and CNPS, the paniculate tarplant is widely distributed throughout Riverside County. Additionally, this species is not covered or being considered for coverage under the MSHCP. Based on the distribution of this species within Riverside County, the lack of consideration of this species for coverage under the MSHCP, and the CNPS listing, this species is not considered sensitive. Therefore, impacts to paniculate tarplant would be considered a less than significant impact and no mitigation measures would be required.

4.4.6 Significant Impacts

4.4.6.1 Candidate, Non-listed Sensitive, or Special-Status Animal Species

Impact 4.4.6.1: *The proposed project may have a significant impact on special-status wildlife species.*

Threshold	Would the proposed project have a substantial adverse effect, either

	directly or through habitat modifications, on any species identified as a candidate, sensitive,[1] or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Special-Status Wildlife Species. "Special Status Species" is a universal term used in the scientific community for species that are considered sufficiently rare that they require special consideration and/or protection and should be, or have been, listed as rare, threatened or endangered by the Federal and/or state governments.

Sensitive wildlife species are species listed as Endangered or Threatened under FESA or CESA, candidates for listing by the USFWS or CDFW, and Species of Special Concern to the CDFW. A CDFW Species of Special Concern (SSC) is a species, subspecies, or distinct population of an animal native to California that currently satisfies one or more of the following (not necessarily mutually exclusive) criteria: 1) is extirpated from the State or, in the case of birds, in its primary seasonal or breeding role; 2) is listed as federally-, but not State-, threatened or endangered; meets the State definition of threatened or endangered but has not formally been listed; 3) is experiencing, or formerly experienced, serious (noncyclical) population declines or range retractions (not reversed) that, if continued or resumed, could qualify it for State threatened or endangered status; or 4) has naturally small populations exhibiting high susceptibility to risk from any factor(s), that if realized, could lead to declines that would qualify it for State threatened or endangered status.

Based on a literature search, eighteen (18) special-status animal species were determined to have potential to occur on site (see Table 4.4.B). After conducting on-site observations, fifteen (15) of the 18 special-status species were determined to have a potential to occur on the project site or off-site areas. Of these, eleven (11) are Covered Species pursuant to the MSHCP (Table 4.4.B; coast horned lizard, orange-throated whiptail, red diamond rattlesnake, northwestern San Diego pocket mouse, Stephens' kangaroo rat, Los Angeles pocket mouse, San Diego desert woodrat, loggerhead shrike, northern harrier, white-tailed kite, and golden eagle).

Two special-status species, the coastal California gnatcatcher and San Diego black-tailed jackrabbit were observed on site. The coastal California gnatcatcher is federally designated as "threatened" and is a California "species of special concern." The San Diego black-tailed jackrabbit has no Federal designation but is a California "species of special concern." Both of these species are MSHCP Covered Species. One (1) special-status species (burrowing owl) was determined absent following on-site focused surveys. The burrowing owl is also an MSHCP Covered Species.

Implementation of appropriate MSHCP measures, including the payment of appropriate fees, is required of all development within the MSHCP area. With the

[1] http://www.dfg.ca.gov/wildlife/nongame/ssc/, site accessed August 17, 2015.

exception of the burrowing owl (see burrowing owl summary below), no further survey or mitigation is required under the MSHCP for these Covered Species. Through the payment of the MSHCP development fee and implementation of MSHCP measures such as the Standard Best Management Practices outlined in Appendix C of the MSHCP, no significant impacts to MSHCP covered species would occur.

Each of the remaining four special-status species not covered under the MSHCP, are California "species of special concern." Due to nature of the limited disturbed scrub habitat on and off site, two species, the Jacumba pocket mouse and southern grasshopper mouse, have a very low or low potential to occur on site. The site provides only limited potential foraging habitat for the remaining two species, the western mastiff bat and pallid bat. No significant impacts to these four species are anticipated and no mitigation is required.

Burrowing Owl. While payment of MSHCP fees and adherence to MSHCP guidelines is typically sufficient to offset impacts to Covered Species, under Section 6.3.2 of the MSHCP additional surveys may be needed for certain species to achieve coverage. The burrowing owl has been identified as species requiring additional surveys. Despite previous negative surveys for burrowing owl, due to the presence of suitable habitat and the mobile nature of the species, there is potential for the species to occupy the site prior to development. Burrowing owls often use the burrows of California ground squirrels. Numerous burrows were observed on site along the slopes of the drainage in the northwest corner, in the southwest corner, along the eastern boundary, and on slopes near the coast live oak trees. The site remains fairly open, which burrowing owls prefer, and potential perch features were observed including an earthen berm along the western portion of the site and concrete rubble in the center of the site west of the oak trees. The potential on-site presence of burrowing owls is a potentially significant impact requiring mitigation.

Mitigation Measures. The following measures have been identified to reduce the significance of potential impacts to burrowing owls:

4.4.6.1A A pre-construction burrowing owl survey shall be conducted by a qualified biologist prior to the start of ground-disturbing activities. The burrowing owl survey shall be conducted pursuant to the guidelines established by the California Department of Fish and Wildlife and shall require four (4) site visits (two in the morning and two in the evening) to determine the on-site presence/absence of the species. The final survey shall occur no more than three days prior to the start of ground-disturbing activities. In the event this species is not identified on site, no further mitigation is required. If during the pre-construction burrowing owl survey, this species is found to occupy the site, **Mitigation Measure 4.4.6.1B** shall be required.

4.4.6.1B If burrowing owls are identified during the survey periods, the City shall contact the California Department of Fish and Wildlife to develop a burrowing owl relocation and conservation strategy. Prior to ground-disturbing activities the project applicant shall take the following actions:

- A minimum 75-meter (250-foot) buffer shall be provided around any active nest until fledging has occurred. Following fledging, owls may be passively relocated (use of one-way doors and collapse of burrows) by a qualified biologist.
- If impacts to occupied (non-nesting) burrows are unavoidable, on-site passive relocation techniques, as approved by the CDFW, may be employed to encourage owls to move to alternative burrows outside of the impact area.
- If relocation of the owls is approved for the site by the CDFW, the City shall require the developer to hire a qualified biologist to prepare a plan for relocating the owls to a suitable site. The relocation plan must include all of the following:
  - The location of the nest and owls proposed for relocation.
  - The location of the proposed relocation site.
  - The number of owls involved and the time of year when the relocation is proposed to take place.
  - The name and credentials of the biologist who will be retained to supervise the relocation.
  - The proposed method of capture and transport for the owls to the new site.
  - A description of site preparation at the relocation site (e.g., enhancement of existing burrows, creation of artificial burrows, one-time or long-term vegetation control).
  - A description of efforts and funding support proposed to monitor the relocation.

Level of Significance after Mitigation. Implementation of **Mitigation Measures 4.4.6.1A** and **4.4.6.1B** would reduce impacts to burrowing owls to less than significant levels.

4.4.6.2 Riparian Habitat or Other Sensitive Natural Communities

Impact 4.4.6.2. *The project will have a significant impact on sensitive native natural communities.*

Threshold	Would the proposed project have a substantial adverse effect on any

	riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or U.S. Fish and Wildlife Service?

Riverine Areas. As discussed in the Section 4.4.1, approximately 15 percent of the project site's vegetative cover includes native plant communities. Of the existing native plant communities, the southern willow scrub is considered a sensitive, high priority community for inventory in the CNDDB. The 0.06 acre of on-site southern willow scrub is of low habitat quality due to limited native components, which consist of red willow trees, mule fat plants, and an understory of non-native plants. The community is isolated from other similar habitats in the project vicinity, and does not support or have the potential to support any protected plant or animal species. Therefore, loss of southern willow scrub on site is not considered a significant impact.

The project site supports four ephemeral drainage features identified as Drainages A, B, B1, and C. Drainages A, B, and B1 are associated with headwaters that originate in the foothills located approximately 1.25 miles to the northeast, while Drainage C is an erosional feature that initiates within the project site. Drainages B and B1 originate from the eastern boundary, while Drainage A originates near the northern boundary and Drainage C is located near the southern boundary. No USGS blueline streams are mapped within the project site.

The project site includes three MSHCP Riverine Areas associated with Drainages A, B, and B1. A description of the drainages is as follows.

Drainage A supports a USACE/RWQCB jurisdictional channel width of approximately one foot and a CDFW jurisdictional streambed width ranging from one to six feet. Due to the lack of vegetation to support riparian/riverine associated species, however, it does not support the biological functions of riverine areas.

Drainages B and B1 are completely unvegetated. Drainage B downstream of the oak trees exhibits severe degradation due to decades of weed abatement. Drainages B and B1 support RWQCB jurisdictional channel widths ranging from 2 to 6 feet and approximately 4 to 80 feet in CDFW jurisdictional widths.

Based on the presence of coast oak trees that grow close to the drainages, Drainages B and B1 are considered to meet the MSHCP definition of a Riverine Area. These drainages support limited function and value as Riverine Areas due to the absence of a downstream connection. The hydrology of these drainages has been altered as a result of disking activities and construction of a berm around an earthen basin in the southwest corner of the site. As such, the drainages do not support the vegetation or hydrology suitable for supporting the majority of the MSHCP list of associated riparian/riverine species.

The riverine areas total 0.91 acre on site and 0.02 acre off site. The project would

result in permanent direct impacts to approximately 0.54 acre of these riverine areas. The project has been designed to avoid approximately 0.38 acre of on-site MSHCP Riverine Areas including 0.24 acre in Drainage B and 0.14 acre in Drainage B1. The riverine areas avoided within Drainages B and B1 are within the proposed 1.3-acre oak preserve.

The loss of MSHCP Riverine Areas constitutes a significant impact and must be mitigated. A DBESP[1] was performed in accordance with the MSHCP in order to mitigate all lost functions and values of these Riverine Areas. The DBESP concluded that the loss of 0.54 acre of riverine areas could be mitigated through off-site replacement, as described in **Mitigation Measure 4.4.6.2A** identified below.

Oak Trees. Live oak woodlands are generally dominated by coast live oak trees with an understory of primarily non-native grasses, such as brome grasses, occasionally with native and non-native herbaceous species. In southern California, live oak woodlands are often associated with drainage systems and south-facing canyon slopes.

On-site, coast live oak trees in this community grow close together along the east-central portion of the site with their canopies occasionally touching. The shrub layer underneath is poorly developed likely due to historic livestock grazing. Some non-native species found in the understory included olive, tocalote, shortpod mustard, ripgut brome, and other brome grasses. Coast live oak woodland occupies 0.81 acre within the on-site portion of the project and 0.01 acre off site.

The project retains existing on-site oak trees in a 1.3-acre oak preserve. During development, a limited number of oaks located outside the oak preserve will be removed to facilitate the construction of buildings or project features. While the City does not have a tree-preservation ordinance or other requirement for the specific preservation of oak trees, due to the trees' contribution to the on-site MSHCP "riverine" areas, mitigation has been identified to reduce potential impacts associated with the removal of any on-site oak trees.

Mitigation Measure. The following measure has been identified to reduce the significance of potential impacts MSHCP Riverine Areas.

4.4.6.2A Prior to the issuance of any grading permit for permanent impacts in jurisdictional features, the project applicant shall obtain a Federal Clean Water Act Section 404 permit and/or an Approved Jurisdictional

[1] A DBESP is prepared for a project that impacts riparian/riverine habitats. The DBESP is a report that must make a finding demonstrating that although the proposed project would not avoid impacts, with proposed design and compensation measures, the project would be biologically equivalent or superior to that which would occur under an avoidance alternative without these measures, based on one or more of the following factors: Effects on Conserved Habitats; Effects on the species listed above under the heading; and "Purpose" and effects on riparian Linkages and function of the MSHCP Conservation Area.

Determination from the USACE, a Federal Clean Water Act Section 401 permit from the RWQCB, and a Streambed Alteration Agreement permit under Section 1602 of the California Fish and Game Code from the CDFW. The following shall be incorporated into the permitting, subject to approval by the regulatory agencies:

1. Off-site replacement and/or restoration of USACE/RWQCB jurisdictional "waters of the U.S."/"waters of the State" within the Santa Margarita Watershed at a ratio no less than 1:1 or within an adjacent watershed within Riverside County at a ratio no less than 2:1 for permanent impacts, and for any temporary impacts to restore the impact area to pre-project conditions (i.e., pre-project contours and revegetate where applicable). Off-site mitigation may occur on land acquired for the purpose of in-perpetuity preservation, or through the purchase of mitigation credits at an agency-approved off-site mitigation bank.
2. Off-site replacement and/or restoration of CDFW jurisdictional streambed and associated riparian habitat within the Santa Margarita Watershed at a ratio no less than 1:1 or within an adjacent watershed at a ratio no less than 2:1 for permanent impacts, and for any temporary impacts to restore the impact area to pre-project conditions (i.e., pre-project contours and revegetate where applicable). Off-site mitigation may occur on land acquired for the purpose of in-perpetuity preservation, or through the purchase of mitigation credits at an agency-approved off-site mitigation bank.

The following measure has been identified to reduce the significance of potential impacts to on-site oak trees.

4.4.6.2B Prior to any development activity or the issuance of any permit or approval removing or encroaching upon oak trees on the project site (this generally includes the canopy drip-line of trees within the area of ground disturbance and trees subject to changes in hydrologic regime), an Oak Tree Mitigation Plan prepared by a certified arborist, registered professional forester, botanist, or landscape architect shall be submitted for review and approval by the City that includes:

1. A survey showing the location of oak trees 5 inches or more in diameter at breast height (DBH), as defined by Public Resources Code Section 21083.4(a).
2. The removal of all oak trees 5 inches or more DBH height shall be mitigated. Removal shall be mitigated by planting (or replanting) and maintaining oak trees. A minimum of three native oak trees of 5 gallons or larger size shall be planted for each oak tree removed that is greater than or equal to 5 inches DBH. The trees shall be planted in areas deemed appropriate by the Oak Tree Mitigation Plan, considering future lot development and interference with foundations, fencing,

roadways, driveways, and utilities. Replanted oak trees shall be maintained for a period of seven years after they are planted. If any of the replanted oak trees die or become diseased, they shall be replaced and maintained for seven years after the new oak trees are planted.

3. A replanting schedule and diagram for trees removed or encroached upon by the project shall be submitted to and approved by the City. Replanted trees shall be planted in areas deemed appropriate by the Oak Tree Mitigation Plan, considering future lot development and interference with foundations, fencing, roadways, driveways, and utilities. Trees planted shall be protected from livestock and other animals.
4. Oak tree protection measures for trees to be retained within the project site shall be included in construction specifications. Each oak tree to be preserved shall be surrounded by a tree zone identified by the drip-line of the tree. An orange plastic fence or other suitable type of fence shall be used to identify the tree zone during construction activities. No vegetation removal, soil disturbance, or other development activities shall occur within the tree zone in order to protect root systems and minimize compaction of the soil, unless authorized by the Oak Tree Mitigation Plan.
5. Conservation easements or funds for off-site oak woodlands conservation shall be proposed to and approved by the City.

Level of Significance after Mitigation. Implementation of **Mitigation Measure 4.4.6.2A** and **4.4.6.2B** would reduce impacts to riparian habitat and oak trees to a less than significant level, respectively. No other impact to sensitive natural communities would occur.

4.4.6.3 Jurisdictional Waters/Wetlands

Impact 4.4.6.3: *The project would have a significant impact on jurisdictional drainages.*

Threshold	Would the proposed project 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?

The project site does not include any federally protected wetlands. However, as described in Section 4.4.1 and depicted in Figure 4.4.2, the site contains four ephemeral drainage features, identified as Drainages A, B, B1, and C. Drainage A is both a USACE and RWQCB Jurisdictional Feature. Drainages B, B1, and C are considered isolated ephemeral drainages and do not support indicators of a surface

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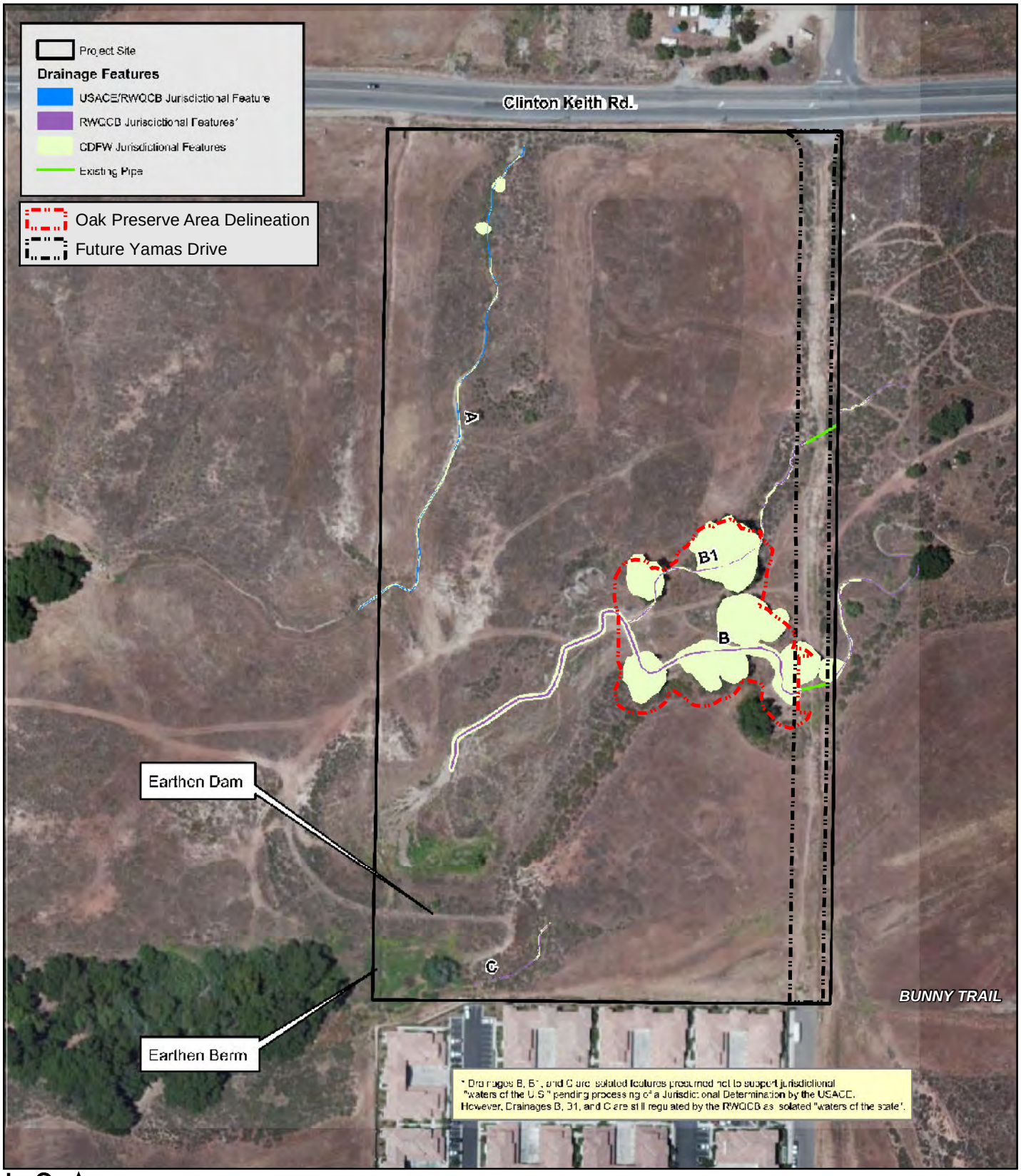

LSA

FIGURE 4.4.2

N

0 100 200

FEET

SOURCE: World Imagery Aerial, 2010; PCR Services, 2013.

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Drainage Features

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connection to downstream "waters of the U.S." Therefore, these drainages may be considered isolated non-jurisdictional streambeds by the USACE that would not be regulated under Section 404 of the CWA. These drainages could, however, be considered RWQCB "waters of the State" regulated pursuant to Section 401 of the CWA. Permanent or temporary impacts are proposed to the majority of these jurisdictional drainages on the project site and off-site, as shown in Figure 4.4.3. Avoidance of a small portion of Drainages B and B1 is proposed to preserve oak trees that are within CDFW jurisdiction.

As detailed in Table 4.4.C, impacts to USACE/RWQCB Jurisdictional Drainages would total approximately 0.07 acre and a length of 2,241 feet. As the drainages on the project are considered jurisdictional features, this is potentially significant impact and mitigation is required.

Table 4.4.C: Impacts to USACE/RWQCB Jurisdictional Drainages

Drainage	Length	On Site (acres)		Off Site (acres)	
		Permanent	Temporary	Permanent	Temporary
A	795	0.02	—	<0.01	—
B	853	0.04	<0.01	<0.01	<0.01
B1	433	0.01	<0.01	<0.01	<0.01
C	160	<0.01	—	—	—
Total	**2,241**	**0.07**	**<0.01**	**<0.01**	**<0.01**

Source: Biological Resource Assessment, Table 7, November 2013 (Appendix C-1).

Impacts to these jurisdictional areas would be required to comply with Sections 404 and 401 of the CWA, including applying for a permit and mitigation subject to approval by USACE and RWQCB, respectively. Due to low quality of jurisdictional features, the DBESP concluded that 1:1 replacement of disturbed drainage features is sufficient. **Mitigation Measure 4.4.6.2A** describes this requirement.

Mitigation Measures. Implementation of **Mitigation Measure 4.4.6.2A** is required to mitigate impacts to jurisdictional waters.

Level of Significance after Mitigation. Implementation of **Mitigation Measure 4.4.6.2A** would reduce impacts to jurisdictional waters to less than significant.

4.4.6.4 Wildlife Movement and Nesting/Migratory Birds

Impact 4.4.6.4: *The proposed project may affect nesting bird species.*

Threshold	Would the proposed project 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?

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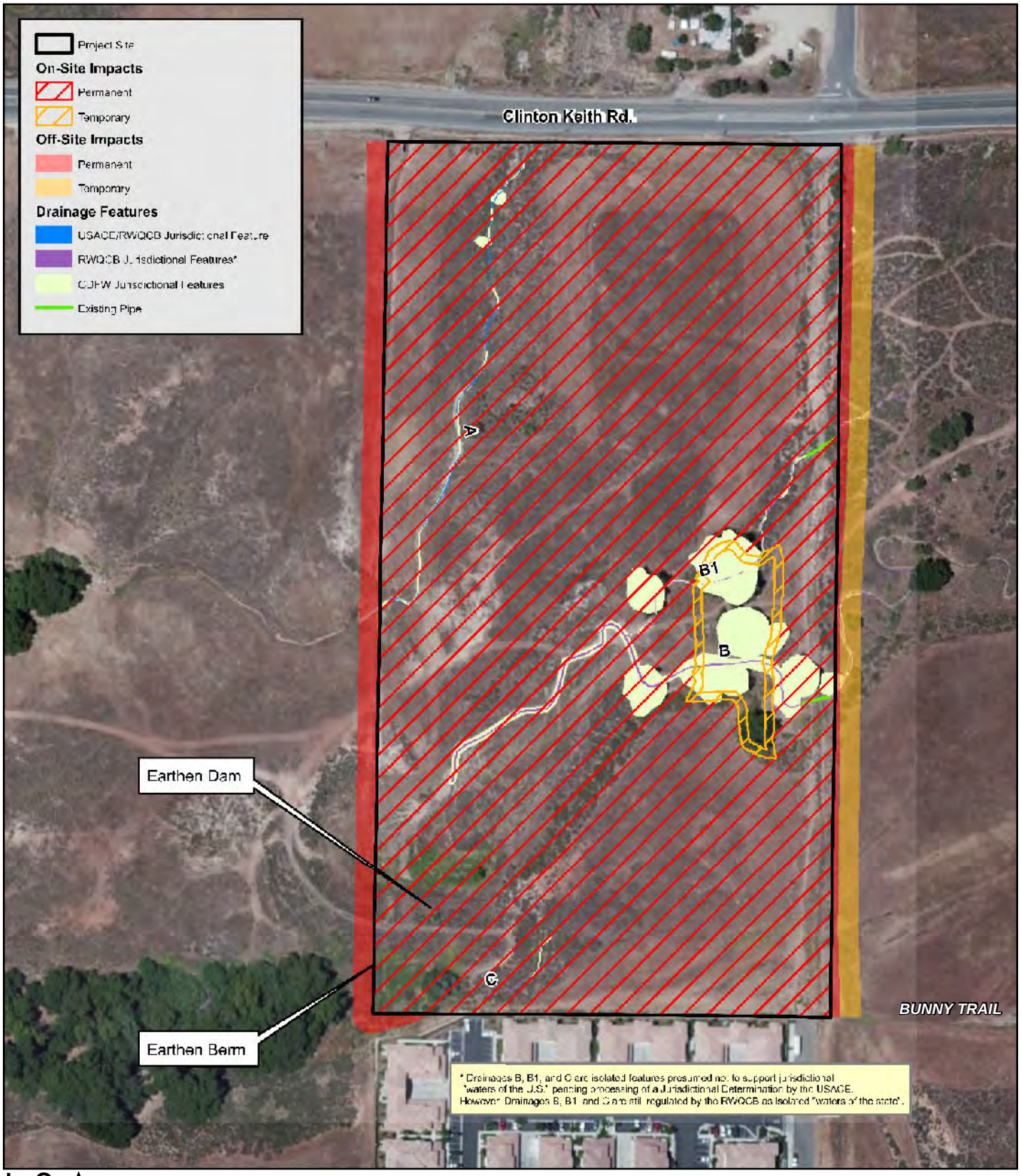

LSA

FIGURE 4.4.3

N

0 100 200

FEET

SOURCE: Bing Aerial, 2010; PCR Services, 2013.

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Drainage Impacts

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Wildlife Movement. Habitat fragmentation occurs when a single, contiguous habitat area is divided into two or more areas, or where an action isolates two or more new areas from each other. Isolation of habitat occurs when wildlife cannot move freely from one portion of the habitat to another or to/from one habitat type to another. Habitat fragmentation may occur when a portion of one or more habitats is converted into another habitat, as when scrub habitats are converted into annual grassland habitat because of frequent burning. Wildlife movement includes seasonal migration along corridors, as well as daily movements for foraging. Examples of migration corridors may include areas of unobstructed movement for deer, riparian corridors providing cover for migrating birds, routes between breeding waters and upland habitat for amphibians, and between roosting and feeding areas for birds.

While the project may provide some local scale movement habitat, it has little to no function to facilitate movement for wildlife species on a regional scale and is not identified as a regionally important dispersal or seasonal migration corridor. The project area includes rural, single-family and multifamily residential developments and some undeveloped parcels. Species whose movements may be affected on the local scale, including reptiles, birds, and small mammals, are generally adapted to urban areas. The project site is not identified as being in any core or linkage areas identified by the MSHCP or South Coast Missing Linkages,[1] nor is it identified as supporting habitat that connects two or more habitat patches that would otherwise be fragmented or isolated from one another if the proposed development occurred. The project would not significantly affect a native or migratory wildlife corridor or cause habitat fragmentation; therefore, no significant impact on wildlife movement would occur and no mitigation is required.

Nesting/Migratory. Under the MBTA, it is illegal to take, possess, import, export, transport, sell, purchase, barter, or offer for sale, purchase, or barter, any migratory bird, or the parts, nests, or eggs of such a bird except under the terms of a valid permit issued pursuant to Federal regulations. The MBTA similarly protects the nests of migratory birds. Various sections of the California Fish and Game provide protection to nesting birds, birds of prey, and species protected under the MBTA.

The project site and surrounding area contain suitable nesting habitat for several tree-, shrub-, and ground-nesting avian species, including the coastal California gnatcatcher. Four additional MSHCP-covered migratory birds or raptor species (loggerhead shrike, northern harrier, white-tailed kite, and golden eagle) have a potential to utilize the project site to forage. Of these, the loggerhead shrike has a low potential for nesting at the site. The literature search did not identify any migratory birds or raptors species not covered by the MSHCP as having a potential to occur on site. While impacts to these species are addressed through the MSHCP, impacts to individual nests or nesting activity may occur during development of the site. This is a significant impact requiring mitigation.

[1] http://www.scwildlands.org/reports/SCMLRegionalReport.pdf, site accessed August 25, 2015.

Mitigation Measures: The following mitigation has been identified to address impacts to nesting bird species.

4.4.6.4A A pre-construction survey for nesting birds and migratory birds shall be conducted by a qualified biologist, no more than three (3) days prior to the initiation of construction activities. A qualified biologist shall survey the construction zone and a 250-foot radius surrounding the construction zone to determine whether these activities have the potential to disturb or otherwise harm nesting birds.

If an active nest is located within 100 feet (250 feet for raptors) of construction activities, the project applicant shall establish an exclusion zone (no ingress of personnel or equipment at a minimum radius of 100 feet or 250 feet for raptors, around the nest). Alternative exclusion zones may be established through consultation with the CDFW and the USFWS. The exclusion zones shall remain in force until all young have fledged.

Level of Significance after Mitigation. Implementation of **Mitigation Measure 4.4.6.4A** would reduce impacts to nesting birds a less than significant level.

4.4.7 Cumulative Impacts

Cumulative impacts refer to incremental effects of an individual project when viewed in connection with the effects of past projects, current projects, and probable future projects. The cumulative area for biological resources for the proposed project is the Elsinore Valley region of the MSHCP Plan Area.

Focused biological resource studies have been conducted to assess potential impacts associated with development of the proposed uses. The project would not have potentially significant impacts related to local ordinances or regulations protecting biological resources. In addition, although the project could have significant impacts to plant communities, sensitive wildlife species, habitat fragmentation, wildlife movement, jurisdictional waters, and habitat conservation plans, the compliance with the above mitigation measures and payment of development impact fees would reduce impacts to less than significant levels.

All projects within the cumulative impact area would be required to comply with applicable provisions of the MSHCP and SKR HCP. These HCPs were developed to consider a regional, programmatic approach to conservation planning. By complying with the provisions of the HCPs (e.g., the payment of fees, adherence to appropriate guidelines, and completion of additional required surveys), individual development projects participate in the conservation of critical biological resources in western Riverside County. With mitigation, the project-specific biological resource impacts have been effectively reduced to a less than significant level. Since all development within the MSHCP and SKR HCP area would be required to implement similar measures, development in compliance with the HCPs furthers the stated regional

conservation goals. Accordingly, cumulatively significant biological resource impacts would not occur.

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4.5 CULTURAL AND PALEONTOLOGICAL RESOURCES

This section identifies and evaluates the potential of the proposed project to have adverse effects on archaeological, historical, and paleontological resources. The resources of concern include, but are not limited to, prehistoric and historic artifacts, burials, sites of religious or cultural significance to Native American groups, and historic structures. This section provides a detailed discussion of impacts potentially attributable to the proposed project, and criteria used to determine impact significance to cultural resources.

The analysis contained in this section is based on the following technical study prepared for the proposed project:

- *Cultural Resources Assessment*, *Clinton Keith Property*, BCR Consulting, March 9, 2015 (Appendix D).
- *Phase I Environmental Site Assessment, APNs 380-250-003 and 380-250-023, Wildomar, CA*. Hillmann Consulting, LLC. August 31, 2012 (Appendix G).

In addition to this technical study, the analysis contained in this section is also based on the following reference documents:

- *City of Wildomar General Plan, Multipurpose Open Space Element,* adopted July 1, 2008.

4.5.1 Existing Setting

4.5.1.1 Archaeological Context

Archaeological resources are those associated with prehistoric cultural sites, prehistoric isolates, and the remnants of historic cultural sites that lack substantive building remnants (termed “historic archaeological sites”), such as roads and trails. Prehistoric cultural resources consist of those physical properties considered important to a culture, subculture, or community for scientific or humanistic reasons. These include geographic districts, structures, sites, objects, and/or other physical evidence of past human activity that predate the advent of written records in a particular region. Historic cultural resources are similarly important resources that postdate the advent of written records.

The project is located within the traditional boundaries of the Luiseño. Prior to Spanish colonization of California, the territory of the Luiseño extended along the coast from Agua Hedionda Creek to the south, Aliso Creek to the northwest, and the Elsinore Valley and Palomar Mountain to the east. These territorial boundaries were somewhat fluid and changed through time. They encompassed an extremely diverse environment that included coastal beaches, lagoons and marshes, inland river valleys and foothills, and mountain groves of oaks and evergreens

Like other Native American groups in southern California, the Luiseño caught and collected seasonally available food resources, and led a semi-sedentary lifestyle. Luiseño villages generally were located in valley bottoms, along streams, or along coastal strands near mountain ranges sheltered in canyons, near a water source, and in a location that was easily defended. Individuals from these villages took advantage of the varied resources available. They also established seasonal camps along the coast and near bays and estuaries to gather shellfish and hunt. The Luiseño lived in small communities, which were the focus of family life. Luiseño villages were politically independent, administered by a hereditary chief, and occupied by patrilineally linked extended families. The Luiseño believed in private property, which covered items and land owned by the village, as well as items (houses, gardens, ritual equipment, trade beads, eagle nests, and songs) owned by individuals. Trespass against any property was punished. Luiseño subsistence was based primarily on seeds like acorns, grass seed, Manzanita, sunflower, sage, chia, and pine nuts. Seeds were dried and ground to be cooked into a mush. Game animals such as deer, rabbit, jackrabbit, wood rat, mice, antelope, and many types of birds supplemented their vegetal intake. The Luiseño utilized fire for crop management and communal rabbit drives.

The archeological records research identified 68 cultural resources studies that have been conducted within one mile of the project site. None of these previous studies includes the project site. Cultural resources were recorded in 18 of these previous studies. The 18 recorded cultural resources include 12 prehistoric archaeological sites, one historic archaeological site, and five historic-period buildings. No cultural resources have been recorded within the project site.

4.5.1.2 Historic Context

The Phase I ESA (Appendix G) conducted for the project examined historical directories and aerial photography to research the history of the project site. Based on a review of aerial photographs, the site has been largely undeveloped since at least 1938. The Phase I ESA identified the presence of possible beehives on the site starting prior to 1938 and ending before 1953. Data prior to 1938 was unavailable. No historic structures of buildings are currently located on the project site.

4.5.1.3 Paleontological Context

The project area is located in the Peninsular Range Geomorphic, a 900-mile long northwest-southeast trending structural block that extends from the tip of Baja California to the Transverse Ranges and includes the Los Angeles Basin. This region is characterized by a series of mountain ranges separated by northwest-trending valleys sub-parallel to faults branching from the San Andreas Fault. The trend of topography is similar to that of the Coast Ranges Geomorphic Province located to the north, but the geology is more like that of the Sierra Nevada, with granitic rock intruding on the older metamorphic rocks. It contains extensive pre-

Cretaceous (greater than 65 million years ago) igneous and metamorphic rocks covered by limited exposures of post-Cretaceous sedimentary deposits.

The project site occupies the eastern margin of the Perris Block. Crystalline rocks present in the region include late Jurassic and Cretaceous granitics of the southern California batholith. These resistant rocks weather to form gray or tan colored, boulder-covered conical buttes and hills. Locally, a thin veneer of Holocene soils typically obscures late Pleistocene sediments that often erode away to reveal the base of local boulder outcrops.[1,2] Decomposing granite in the form of reddish brown sandy silts intermixed with granitic and quartz cobbles dominates sediments observed within the project site. Early Pleistocene-age Pauba Sandstone is present within the western ridge of the site. The Pauba Sandstone consists of locally massive, highly weathered yellow-red silty sandstone. Earliest Pleistocene-age Unnamed Sandstone is present within the central portion of the site and consists of light yellow brown, coarse, highly weathered silty sandstone.

No paleontological resources have been identified within the project limits. However, the Pauba Formation has produced fossils near the project site. Southeast of the project site, several vertebrate fossil localities have been identified on the Pauba Formation. Specimens such as the fossil horse (*Equidae*), fossil rabbit (*Leporidae*), and fossil pocket gopher (*Thomomys*) have been uncovered. The nearest fossil localities are located east of I-15 near Winchester Road (State Route 79). Since the Pauba Formation has produced fossils, it is considered potentially sensitive for significant paleontological resources, according to the project Cultural Resources Report (Appendix D).

The topsoils at the project site are primarily formed from young alluvium. This topsoil overlies hillsides of the site to depths of 6 to 18 inches. It consist of dry, loose (recently plowed), slightly blocky silty sand. In drainage areas, young alluvium accumulates to depths of 3 to 10 feet. Found at the mouths of canyons or along the sides of hills that flank river and stream valleys and deposited by small streams that flow out of mountains and hills, these deposits range in age from the recent to 10,000 years before the present. Generally, not enough time has passed for the remains to fossilize. In addition, the remains are contemporaneous with modern species and are usually not considered to be significant.

4.5.1.4 NOP/Scoping Comments

The Native American Heritage Commission (NAHC) sent a letter dated November 30, 2012, recommending consultation with local Native American tribes.

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1 The Holocene epoch dates from approximately 11,700 years ago until present day. The Pleistocene epoch started approximately 2.59 million years ago and ended at the beginning of the Holocene.

2 *International Chronostratigraphic Chart*, 2013, International Union of Geological Sciences, http://www.stratigraphy.org/ICSchart/ChronostratChart2013-01.pdf (accessed April 6, 2015).

No residents expressed concern about cultural resources during the scoping meetings. The City is conducting Native American consultation as required by Senate Bill 18 (SB 18). The Pechanga Band of Luiseño Indians (Pechanga Band) responded during each NOP review period. The Soboba Band of Luiseño Indians (Soboba Band) provided comment (June 17, 2015) during the second NOP review period. Both the Pechanga and Soboba Bands (collectively Tribes) requested to be involved in the entire CEQA review for the project, including notification of all public hearings and scheduled approvals.

4.5.2 Existing Policies and Regulations

4.5.2.1 Federal Regulations

National Historic Preservation Act (NHPA) of 1966 (as amended), Section 106. The NHPA declares a national policy of historic preservation to protect, rehabilitate, restore, and reuse districts, sites, buildings, structures, and objects significant in American architecture, history, archaeology, and culture. The NHPA established the National Register of Historic Places (National Register), State Historic Preservation Offices (SHPOs) and programs, and the Advisory Council on Historic Preservation. This Act applies to all properties on or eligible for inclusion in the National Register. The Section 106 review process requires consultation to mitigate damage to "historic properties" (defined per 36 CFR 800.16[1] as places that qualify for the National Register), including Native American traditional cultural places (TCPs). Evaluation of cultural resources consists of determining whether it is significant (i.e., whether it meets one or more of the criteria for listing in the National Register). These eligibility criteria are defined in 36 CFR 60.4 as follows:

> The quality of significance in America history, architecture, archaeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association:
>
> A. That is associated with events that have made a significant contribution to the broad patterns of our history;
>
> B. That is associated with the lives of persons significant in our past;
>
> C. That embodies the distinctive characteristics of a type, period or method of construction, or that represents the work of a master, or possesses high artistic values, or that represents a significant and distinguishable entity whose components may lack individual distinction; and/or
>
> D. That has yielded, or may be likely to yield, information important to prehistory or history.

4.5.2.2 State Regulations

California Environmental Quality Act (CEQA). A "historic resource" includes, but is not limited to, any object, building, site, area, place, record, or manuscript that is historically or archaeologically significant, or is significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California.[1] CEQA mandates that lead agencies consider a resource "historically significant" if it meets the criteria for listing in the California Register of Historical Resources (California Register). Such resources meet this requirement if they (1) are associated with events that have made a significant contribution to the broad patterns of California history, (2) are associated with the lives of important persons in the past, (3) embody distinctive characteristics of a type, period, region, or method of construction, and/or (4) represent the work of an important creative individual or possesses high artistic value.[2] These criteria mimic the criteria utilized to determine eligibility for the National Register.

In addition, Public Resources Code Section 21083.2 and *CEQA Guidelines* Section 15064.5(f) recognize that historical or unique archaeological resources other than potential Native American burials may be accidentally discovered during project construction. This guideline recommends that immediate evaluation defined by qualified archaeologists be included in mitigation measures. This guideline also recommends that if the find is determined to be a historical or unique archaeological resource, that contingency funding and time allotments sufficient to allow for implementation and avoidance measures be available.

Senate Bill 18 (SB 18). Signed into law in September 2004, and effective March 1, 2005, SB 18 permits California Native American tribes recognized by the NAHC to hold conservation easements on terms mutually satisfactory to the tribe and the landowner. The term "California Native American tribe" is defined as "a federally recognized California Native American tribe or a non-federally recognized California Native American tribe that is on the contact list maintained by the NAHC."

The bill requires a City or County to consult with California Native American tribes for the purpose of preserving specified places, features, and objects located prior to the adoption or amendment of a General Plan or Specific Plan. This bill requires the planning agency to refer to the California Native American tribes specified by the NAHC and to provide them with opportunities for involvement.

California Health and Safety Code. The California Health and Safety Code Section 7050.5 states that if human remains are discovered on site, no further disturbance shall occur until the County Coroner has made a determination of origin and disposition. If the Coroner determines that the remains are not subject to his or her

[1] Public Resources Code, Section 5020.1(j).
[2] Public Resources Code, Section 5024.1(c).

authority and if the Coroner recognizes the human remains to be those of a Native American, or has reason to believe that they are those of a Native American, he or she shall contact, by telephone within 24 hours, the NAHC. This regulation is applicable to any project where ground disturbance would occur.

4.5.2.3 City General Plan Policies

The General Plan defines goals and policies related to cultural resources within the City:

Open Space

OS 19.2 Review all proposed development for the possibility of archaeological sensitivity.

Cultural Resources

OS 19.4 Require a Native American Statement as part of the environmental review process on development projects with identified cultural resources.

Historical Resources

OS 19.5 Transmit significant development proposals to the History Division of the Riverside County Regional Park and Open-Space District for evaluation in relation to the destruction/preservation of potential historical sites. Prior to approval of any development proposal, feasible mitigation shall be incorporated into the design of the project and its conditions of approval.

Paleontological Resources

OS 19.8 Whenever existing information indicates that a site proposed for development may contain biological, paleontological, or other scientific resources, a report shall be filed stating the extent and potential significance of the resources that may exist within the proposed development and appropriate measures through which the impacts of development may be mitigated.

OS 19.9 This policy requires that when existing information indicates that a site proposed for development may contain paleontological resources, a paleontologist shall monitor site grading activities, with the authority to halt grading to collect uncovered paleontological resources, curate any resources collected with an appropriate repository, and file a report with the Planning Department documenting any paleontological resources that are found during the course of site grading.

OS 19.10 Transmit significant development applications subject to CEQA to the San Bernardino County Museum for review, comment, and/or preparation of recommended conditions of approval with regard to paleontological resources.

Environmental Justice

EJ 1.7 Consult with Native American Tribes early in the process on issues that could affect culturally significant areas.

Table 4.5.A analyzes the project's consistency with applicable goals and policies of the City General Plan and shows the project is generally consistent with City General Plan policies.

Table 4.5.A: General Plan Consistency Analysis

General Plan Goals and Targets	General Plan Consistency Analysis
Open Space	
OS 19.2 Review all proposed development for the possibility of archaeological sensitivity.	**Consistent.** BCR Consulting conducted a Cultural Resources Assessment for the project site.
OS 19.4 Require a Native American Statement as part of the environmental review process on development projects with identified cultural resources.	**Consistent.** The City is conducting Native American consultation pursuant to the requirements of SB 18.
OS 19.5 Transmit significant development proposals to the History Division of the Riverside County Regional Park and Open-Space District for evaluation in relation to the destruction/preservation of potential historical sites. Prior to approval of any development proposal, feasible mitigation shall be incorporated into the design of the project and its conditions of approval.	**Consistent.** The project site has no potential for historic resources as there are no aboveground structures.
OS 19.8 Whenever existing information indicates that a site proposed for development may contain biological, paleontological, or other scientific resources, a report shall be filed stating the extent and potential significance of the resources that may exist within the proposed development and appropriate measures through which the impacts of development may be mitigated.	**Consistent.** This EIR evaluates the significance of resources that may be affected by the project.
OS 19.9 This policy requires that when existing information indicates that a site proposed for development may contain paleontological resources, a paleontologist shall monitor site grading activities, with the authority to halt grading to collect uncovered paleontological resources, curate any resources collected with an appropriate repository, and file a report with the Planning Department documenting any paleontological resources that are found during the course of site grading.	**Consistent.** The underlying geological formation is considered highly sensitive for paleontological resources. **Mitigation Measures 4.5.6.2A** through **4.5.6.2E** require paleontological monitoring.
OS 19.10 Transmit significant development applications subject to CEQA to the San Bernardino County Museum for review, comment, and/or preparation of recommended conditions of approval with regard to paleontological resources.	**Consistent.** The Natural History Museum of Los Angeles County was contacted for paleontological review of the project site.
Environmental Justice	
EJ 1.7 Consult with Native American Tribes early in the process on issues that could affect culturally significant areas.	The City is conducting Native American consultation pursuant to the requirements of SB 18.

Source: *City of Wildomar General Plan*, July 2008.

4.5.3 Methodology

A records search was conducted at the Eastern Information Center, the local clearinghouse for cultural resource records. This archival research reviewed the status of all recorded historic and prehistoric cultural resources, and survey and excavation reports completed within one mile of the project site. Additional resources reviewed included the National Register, the California Register, and documents and inventories published by the California Office of Historical Preservation. These include the lists of California Historical Landmarks, California Points of Historical Interest, Listing of National Register Properties, and the Inventory of Historic Structures.

An archaeological field survey of the site was conducted on November 6 and 15, 2012. The survey was conducted by walking parallel transects spaced approximately 15 meters (approximately 50 feet) apart across 100 percent of the project site. Soil exposures were carefully inspected for evidence of cultural resources.

4.5.4 Thresholds of Significance

Appendix G of the State CEQA Guidelines recognizes the following significance thresholds related to cultural resources. Based on these significance thresholds, a project would have a significant impact on cultural resources if it would result in:

- Cause a substantial adverse change in the significance of a historical resource as defined in *CEQA Guidelines* Section 15064.5;
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to *CEQA Guidelines* Section 15064.5;
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; and/or
- Result in any disturbance of human remains, including those interred outside of formal cemeteries.

CEQA Section 15064.5, Determining the Significance of Impacts to Archaeological and Historical Resources, states that:

> "Generally, a resource shall be considered by the lead agency to be 'historically significant' if the resource meets the criteria for listing on the California Register of Historical Resources (Pub. Res. Code §5024.1, Title 14 CCR, Section 4852) including the following:
>
> A. Is associated with events that have made a significant contribution to the broad patterns of California's history and cultural heritage;
>
> B. Is associated with the lives of persons important in our past;

C. Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or

D. Has yielded, or may be likely to yield, information important in prehistory or history."

4.5.5 Less than Significant Impacts

The following impacts were determined to be less than significant. In each of the following issues, either no impact would occur (therefore, no mitigation would be required) or adherence to established regulations, standards, and policies would reduce potential impacts to a less than significant level.

4.5.5.1 Historic Resources

Threshold	Would the proposed project cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5 of the *State CEQA Guidelines*?

A records search was conducted at the Eastern Information Center, the local clearinghouse for cultural resource records. This archival research reviewed the status of all recorded historic and prehistoric cultural resources, and survey and excavation reports completed within one mile of the subject property site. Additional resources reviewed included the National Register, the California Register, and documents and inventories published by the California Office of Historic Preservation. These include the lists of California Historical Landmarks, California Points of Historical Interest, Listing of National Register Properties, and the Inventory of Historic Structures. No historic site has previously been documented on site.

An archeological field survey of the project site was conducted by a qualified archeologist on November 5 and 12, 2012. During this survey, the project site exhibited approximately 90 percent surface visibility. Artificial disturbances consisted of mechanical disking, trenches excavated for geotechnical studies, and some modern trash dumping.

No historic structure or aboveground feature was identified on site during the field survey or archival records search. Therefore, there is no potential for historic resources on the project site eligible for listing in the California Register. No impact to any historic resource would result from development of the proposed on-site uses; therefore, no mitigation is required.

4.5.5.2 Human Remains

Threshold	Would the proposed project disturb any human remains, including those interred outside of formal cemeteries?

The project site is currently undeveloped. While no evidence exists to suggest the project site has been utilized in the past for human burials, on-site construction could uncover previously unknown buried human remains. In the event of an accidental discovery or recognition of any suspected human remains, California State Health and Safety Code § 7050.5 dictates that no further excavation or disturbance of the site (or any nearby area reasonably suspected to overlie adjacent human remains) may occur until the Riverside County coroner determines that no investigation of the cause of death is required. If the coroner determines the remains to be Native American, the NAHC must be contacted within 24 hours. Upon notification of the coroner, the NAHC must identify the persons it believes to be the most likely descended from the deceased Native American.

With the permission of the property owner, the most likely descendants may inspect the site of the discovery and may recommend to the owner or the person responsible for the excavation work, means of treating or disposing of, with appropriate dignity, the human remains and any associated grave goods as provided in Public Resources Code § 5097.98 (PRC § 5097.98).

Adherence to the aforementioned provisions of existing State law is required of all development projects; therefore, potential impacts related to the discovery of buried human remains would be less than significant. No mitigation is required.

4.5.6 Significant Impacts

4.5.6.1 Archaeological Resources

Impact 4.5.6.1: *The proposed project has the potential to affect known or previously undetected subsurface archaeological resources.*

Threshold	Would the proposed project cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

While no archaeological resources have been identified or previously recorded within the project site, 12 archaeological sites have been identified within one mile of the proposed development. The project site is within the Pechanga Band's aboriginal territory and within bounds of the Soboba Band's "Traditional Use Areas." The project area is considered sensitive for Native American cultural resources, which include pictographs, petroglyphs, cupules, and artifacts. The project location is in proximity to known sites and is a shared use area that was used in ongoing trade between tribes. Therefore, a potential exists that development activities may result in

the anticipated discovery of buried resources on site. This is a potentially significant impact and requires mitigation.

Mitigation Measures. The following measures are proposed to reduce potential impacts on known, unknown, or potential archaeological resources to less than significant levels:

4.5.6.1A If, during grading or construction activities, archaeological resources are discovered on the project site, work shall be halted immediately within 50 feet of the discovery and the resources shall be evaluated by a qualified archaeologist and the Pechanga and Soboba Bands (Tribes). Any unanticipated archaeological resources that are discovered shall be evaluated and a final report prepared by the qualified archaeologist. The report shall include a list of the resources discovered, documentation of each site/locality, and interpretation of the resources identified, and the method of preservation and/or recovery for identified resources. In the event the significant resources are recovered and if the qualified archaeologist and the Tribe(s) determine the resources to be historic or unique, avoidance and/or mitigation would be required pursuant to and consistent with CEQA Guidelines Sections 15064.5 and 15126.4 and Public Resources Code Section 21083.2 and the Cultural Resources Treatment and Monitoring Agreement required by **Mitigation Measure 4.5.6.1B.**

This mitigation measure shall be incorporated in all construction contract documentation.

4.5.6.1B At least 30 days prior to seeking a grading permit, the project applicant(s) shall contact the Pechanga and Soboba Bands (Tribes) to notify the Tribes of grading, excavation, and the monitoring program and to coordinate with the City of Wildomar and the Tribes to develop a Cultural Resources Treatment and Monitoring Agreement. The agreement shall include, but shall not be limited to, outlining provisions and requirements for addressing the treatment of cultural resources; project grading and development scheduling; terms of compensation for the monitors; treatment and location of final disposition of any cultural resources, sacred sites, and human remains discovered on the site; and establishing on-site monitoring provisions and/or requirements for professional Tribal monitors during all ground-disturbing activities. A copy of this signed agreement shall be provided to the Planning Director and Building Official prior to the issuance of the first grading permit.

4.5.6.1C In the event agreement on the significance and/or mitigation of archaeological resources cannot be reached, these issues will be presented to the City of Wildomar Planning Director. The Planning Director shall make the determination based on the provisions of CEQA with respect to archaeological resources and shall take into account the

religious beliefs, customs, and practices of both the Pechanga and the Soboba Bands (Tribes). Notwithstanding any other rights available under the law, the Planning Director's decision shall be appealable to the City Council of Wildomar. In the event the significant resources are recovered and if the qualified archaeologist determines the resources to be historic or unique as defined by relevant State and local laws, avoidance and mitigation would be required pursuant to and consistent with Public Resources Code Section 21083.2 and CEQA Guidelines Sections 15064.5 and 15126.4.

4.5.6.1D All cultural materials, with the exception of sacred items, burial goods, and human remains, which will be addressed in the Cultural Resources Treatment and Monitoring Agreement required by **Mitigation Measure 4.5.6.1B,** that are collected during the grading monitoring program and from any previous archeological studies or excavations on the project site shall be curated according to the current professional repository standards. The collections and associated records shall be transferred, including title, to a curation facility, which meets the standards set forth in 36 CRF Part 79 for federal repositories.

4.5.6.1E All sacred sites, should they be encountered within the project site, shall be avoided and preserved as the preferred mitigation, if feasible as determined by a qualified archaeologist in consultation with the Tribe(s). To the extent that a sacred site cannot be feasibly preserved in place or left in an undisturbed state, mitigation measures shall be required pursuant to and consistent with Public Resources Code Section 21083.2 and CEQA Guidelines Sections 15064.5 and 15126.4.

4.5.6.1F To address the possibility that cultural resources may be encountered during grading or construction, a qualified professional archeologist shall monitor all construction activities that could potentially impact archaeological deposits (e.g., grading, excavation, and/or trenching). However, monitoring may be discontinued as soon the qualified professional is satisfied that construction will not disturb cultural resources.

Level of Significance After Mitigation. Adherence to **Mitigation Measures 4.5.6.1A** through **4.5.6.1F** will reduce potential impacts to archaeological resources to less than significant levels.

4.5.6.2 Paleontological Resources

Impact 4.5.6.2: *The proposed project has the potential to affect previously undetected subsurface paleontological resources.*

Threshold	Would the proposed project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

While no known fossil beds exist on the site, the Pauba Formation, which underlies the western portion of the site, has produced fossils near the project site. Southeast of the project site several vertebrate fossil localities have been identified on the Pauba Formation. These have uncovered specimens such as the fossil horse (*Equidae*), fossil rabbit (*Leporidae*), and fossil pocket gopher (*Thomomys*). Therefore, the project site is considered paleontologically sensitive. Impacts are potentially significant and mitigation is required.[1]

Project Design Features. The project does not contain any characteristics related to paleontological resources.

Mitigation Measures. The following mitigation measures have been identified to address potential impacts to paleontological resources that may be located within the project limits:

4.5.6.2A Prior to the issuance of a grading permit, the project applicant(s) shall identify the qualified paleontologist to the City of Wildomar who has been retained to evaluate the significance of any inadvertently discovery paleontological resources. If paleontological resources are encountered during grading or project construction, all work in the area of the find shall cease. The project applicant shall notify the City of Wildomar and retain a qualified paleontologist to investigate the find. The qualified paleontologist shall make recommendations as to the paleontological resource's disposition to the City of Wildomar Planning Director. The recommendations shall follow procedures established by the Society of Vertebrate Paleontology (SVP) for assessment and mitigation of impacts to paleontological resources, which the Planning Director shall follow. The developer shall pay for all required treatment and storage of the discovered resources.

4.5.6.2B A qualified paleontologist or paleontological monitor shall monitor all mass grading and excavation activities. Monitoring will be conducted in areas of grading or excavation in undisturbed formational sediments of the Pauba Formation. Paleontological monitors shall be equipped to salvage fossils as they are unearthed to avoid construction delays and to remove samples of sediment that are likely to contain the remains of small fossil invertebrates and vertebrates. The monitor must be empowered to temporarily halt or divert equipment to allow removal of abundant or large

[1] The identification of impacts will follow guidelines established in *The Standard Procedures for the Assessment and Mitigation of Adverse Impacts to Paleontological Resources,* Society for Vertebrate Paleontology, 2010.

specimens in a timely manner. Monitoring may be reduced if the potentially fossiliferous units are not present in the subsurface, or if present, are determined on exposure and examination by qualified paleontological personnel to have low potential to contain fossil resources.

4.5.6.2C Any recovered paleontological specimens shall be identified to the lowest taxonomic level possible and prepared for permanent preservation, including screen-washing of sediments to recover small invertebrates and vertebrates shall occur if necessary.

4.5.6.2D Identification and curation of specimens into a professional, accredited public museum repository with a commitment to archival conservation and permanent retrievable storage shall occur at an institutional repository approved by the City of Wildomar. The paleontological program shall include a written repository agreement prior to the initiation of mitigation activities.

4.5.6.2E A final monitoring and mitigation report of findings and significance shall be prepared, including lists of all fossils recovered and necessary maps and graphics to accurately record their original location. The report, when submitted to and accepted by the City of Wildomar, shall signify satisfactory completion of the project program to mitigate impacts to any potential nonrenewable paleontological resources (i.e., fossils) that might have been lost or otherwise adversely affected without such a program in place.

Level of Significance After Mitigation. Adherence to **Mitigation Measures 4.5.6.2A** through **4.5.6.2E** will reduce potential impacts to paleontological resources to less than significant levels.

4.5.7 Cumulative Impacts

The cumulative area for cultural resources is the City of Wildomar. Implementation of the proposed project and related off-site improvements would require measures to identify, recover, and/or record any cultural and/or paleontological resource that may occur within the project limits. Although unlikely to occur, potential impacts associated with human remains would be reduced to a less than significant level through adherence to existing State law. With implementation of the recommended mitigation measures, potential impacts to archaeological or paleontological resources from future development will be reduced to less than significant levels. Since this region contains archaeological, historical, and paleontological resources that have been found in the past, future development in the surrounding region may affect these resources as well. However, implementation of the mitigation measures outlined in this document, and other CEQA documents for development projects in the area, will reduce potential impacts to cultural resources to less than significant levels. With implementation of the project-level mitigation for future development

identified in Section 4.5.6, the proposed project will not have significant impacts related to cultural resources and will also not make any significant contributions to cumulatively considerable impacts relative to cultural resources. Therefore, no additional mitigation is required.

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4.6 GEOLOGY AND SOILS

This section describes the location of the proposed project relative to the known geologic features and soil conditions and qualitatively evaluates potential impacts. Additionally, this chapter evaluates whether development on the proposed project site would significantly be affected by fault rupture, seismic shaking, erosion or unstable slopes, liquefaction, settlement, expansive soils, or other soil or geologic conditions.

The following documents were used in preparing the analysis of the geologic impacts:

- *Preliminary Geotechnical and Fault Rupture Hazard Investigation, Grove Park , APN 380-250-003 SW Corner Clinton Keith Road & Yamas Drive, Wildomar, California,* Geogon West, Inc., February 24, 2015. (Appendix E)
- *Project Specific Water Quality Management Plan, Grove Park,* JLC Engineering & Consulting, Inc., March 16, 2015. (Appendix H-2)
- *Wildomar General Plan, Safety Element*, adopted July 1, 2008.

4.6.1 Existing Setting

The project is located within the Peninsular Range Geomorphic Province, one of the major geologic provinces of southern California (California Geologic Survey 2002), a 900-mile long northwest-southeast trending structural block that extends from the tip of Baja California to the Transverse Ranges and includes the Los Angeles Basin. This region is characterized by a series of mountain ranges separated by northwest-trending valleys sub-parallel to faults branching from the San Andreas Fault. The trend of topography is similar to that of the Coast Ranges Geomorphic Province located to the north, but the geology is more like that of the Sierra Nevada, with granitic rock intruding on the older metamorphic rocks. It contains extensive pre-Cretaceous (greater than 65 million years ago) igneous and metamorphic rocks covered by limited exposures of post-Cretaceous sedimentary deposits.

Locally, the site is located southeast of the Elsinore Trough, which is a graben, or depressed area between two parallel faults. The Elsinore Trough lies between the Wildomar and Willard Faults to the east and west. The site lies on an alluvial plain that descends gently to the southwest from Clinton Keith Road.

The existing setting for geology and soils includes faulting and seismicity, soils, and geologic and seismic hazards, which are discussed below.

4.6.1.1 Faulting and Seismicity

The project site, like the rest of Southern California, is located within a seismically active region as a result of being located near the active margin between the North American and Pacific tectonic plates. The principal source of seismic activity is

movement along the northwest-trending regional fault systems such as the San Andreas and Sierra Madre Fault Zones.

As defined by the California Geological Survey (CGS), an active fault is a fault, which has had surface displacement within Holocene time (about the last 11,000 years). This definition is used when delineating Earthquake Fault Zones as mandated by the Alquist-Priolo Geologic Hazards Zones Act of 1972 (as revised 2007). The intent of this act is to require fault investigations on sites located within Earthquake Fault Zones to ensure that certain inhabited structures are not constructed across the traces of active faults.

As detailed in Figure 4.6.1, the project is not within an Alquist-Priolo Earthquake Fault Zone for surface rupture hazards. The closest active faults include the Temecula branch of the Elsinore Fault and the Glen Ivy branch of the Elsinore Fault, located 2 and 7.5 miles from the site, respectively. The nearest Alquist-Priolo zoned fault is the Wildomar Fault, which is part of the Elsinore Fault Zone, located approximately 1.5 miles southwest of the project site.

According to Riverside County's Land Information System, a possible fault traverses the site, trending northwest from the middle of the eastern boundary to the northwest corner. The Fault Rupture Hazard Investigation found evidence of faulting in the underlying Unnamed Sandstone, which is approximately 1.6 million years old. However, faulting was not observed in the younger Pauba Sandstone, approximately 1 million years old, indicating that the fault is inactive.

4.6.1.2 Soils

The site's soils are sandy and formed from granitic alluvium. Based on the *Soil Survey Geographic (SSURGO)* database, on-site soils include:[1]

- **Hanford series (HfD):** These soils consist of fine sandy loam to a depth of 60 inches. They are deep and well-drained, with low runoff and moderately rapid permeability. These qualities enable their use for a wide variety of farm crops. They are also used in dairies and urban settings.
- **Monserate series (MmD2, MnE3):** The Monserate series consists of sandy loam overlying denser sandy clay loam, followed by a silica-cemented layer at approximately 28 inches in depth. They are moderately well to well drained, with slow permeability. Monserate soils can be used for growing grain, hay, some citrus, and as pasture.

[1] *Official Soil Series Descriptions*. Soil Survey Staff, Natural Resources Conservation Service, United States Department of Agriculture. http://soils.usda.gov/technical/classification/osd/index.html. Accessed October 29, 2014.

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CGS Faults, 2005

Alquist-Priolo Zone

Fault Zone

Fault, Inferred

Fault, Concealed

Fault, Certain

Fault, Approximate

SOURCE: Google Earth, 2013; Riverside County, 2014; California Geological Survey, 2002 & 2005

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FIGURE 4.6.1

Grove Park Mixed-Use Development
Environmental Impact Report

Alquist-Priolo Zones and Earthquake Faults

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- **Ramona series (RmE3, RnD2):** The Ramona series consists of sandy loam and loam overlying sandy clay loam to a depth of 68 inches with a layer of sandy loam and massive alluvial parent material beneath. Ramona soils are well-drained with moderately slow permeability. They can be used for production of grain, hay, irrigated citrus, deciduous fruits, and as pasture.
- **Placentia series (PID):** The Placentia series consists on sandy loam surface horizons overlying dense clay loams with prismatic structure. At a depth of approximately 58 inches, the parent material gravelly sandy loam is reached. These soils are sodium affected, well to moderately well drained, and have very slow permeability. They can be used for the production of citrus, truck crops, small grain, and forage.
- **Buren series (RmE3, RnD2):** The Buren series consists of fine sandy loam overlying clay loam. A silica-cemented loam layer is reached at 37 inches in depth. Buren soils are well drained with slow to medium runoff and slow permeability. They can be used for the production of citrus, small grains, and pasture.

On-site soils are depicted in Figure 4.6.2.

4.6.1.3 Geologic and Seismic Hazards

Geologic and seismic hazards discussed in this subsection include the following:

- Surface rupture;
- Ground shaking;
- Liquefaction;
- Subsidence and seismic settlement;
- Landslides/slope stability; and
- Compressible, expansive and collapsible soils.

Surface Rupture. Surface rupture occurs where displacement or fissuring occurs along a fault zone. While primary ground damage due to earthquake fault rupture typically results in a relatively small percentage of the total damage in an earthquake, the location of structures or facilities too close to a rupturing fault can cause profound damage. It is difficult to reduce the hazards of surface rupture through structural design. The primary method to avoid this hazard is to either set structures and facilities away from active faults, or avoid their construction in close proximity to an active fault.

Faults throughout southern California have formed over millions of years. Some of these faults are considered inactive under present geologic conditions and other

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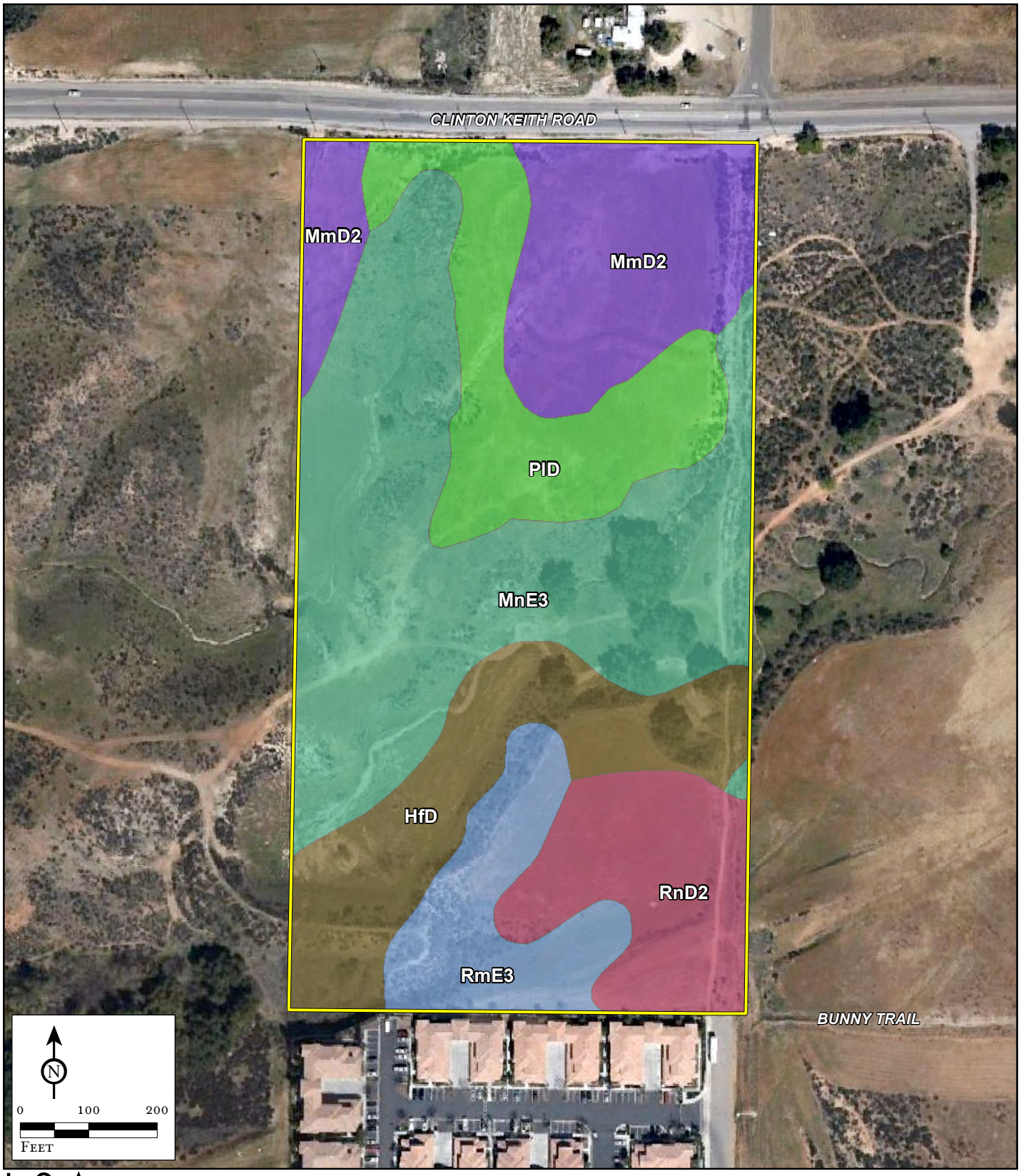

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Project Boundary

Soils

- HfD - Hanford sandy loam, 2-15 % slopes
- MmD2 - Monserate sandy loam, 8-15 % slopes, eroded
- MnE3 - Monserate sandy loam, shallow, 15- 25 % slopes, severely eroded
- PlD - Placentia fine sandy loam, 5-15 % slopes
- RmE3 - Ramona and Buren sandy loams, 15-25 % slopes, severely eroded
- RnD2 - Ramona and Buren loams, 5-15 % slopes, eroded

FIGURE 4.6.2

Grove Park Mixed-Use Development
Environmental Impact Report

On-site Soils Map

SOURCE: Google Earth, 2013; SSURGO/Soil Data Mart, 2003.

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faults are known to be active.[1] Such faults have either generated earthquakes in historic times (200 years), or show geologic and geomorphic indications of movement within the last 11,000 years. Faults that have moved in the relatively recent geological past are generally presumed to be the most likely candidates to generate damaging earthquakes in the lifetimes of residents, buildings, or communities. The closest known surface trace of an active fault is the Temecula branch of the Elsinore Fault, located approximately two miles west of the site.

As previously noted, a possible unclassified fault exists on site, trending northwest from the middle of the eastern boundary to the northwest corner. While evidence of faulting was found in the Unnamed Sandstone formation underlying portions of the site, the fault was determined to be inactive to lack of evidence of movement within the last 1.6 million years.

Ground Shaking. The vast majority of earthquake damage is caused by ground shaking. Source effects include earthquake size, location, and distance. The bigger and closer the earthquake is, the more severe the damage will be. The exact way that rocks and other earth materials move along the fault can also influence shaking, as can the subsurface orientation of the fault.

Path effects are caused by seismic waves that change direction as they travel through the earth's contrasting layers, just as light bounces (reflects) and bends (refracts) as it moves from air to water. Sometimes this can focus seismic energy at one location and cause damage in unexpected areas.

Site effects are brought about by seismic waves that slow in the loose sediments and weathered rock at the surface of the earth. As they slow, their energy converts from speed to amplitude, which increases shaking. This is identical to the behavior of ocean waves. As the waves slow near shore, their crests grow higher. Sometimes, too, seismic waves get trapped at the surface and resonate. Whether resonance will occur depends on the period (the length) of the incoming waves. Waves, soils and buildings all have resonant periods. When these match, tremendous damage can occur.

The primary threat associated with on-site and the nearby faults previously identified is the intensity of ground shaking that could be generated at the project site.

Liquefaction. Liquefaction occurs primarily in saturated, loose, fine-to-medium-grained soils in areas where the groundwater table is within 50 feet of the surface. Shaking suddenly causes soils to lose strength and behave as a liquid. Excess water pressure is vented upward through fissures and soil cracks, and a water-soil

[1] The Alquist-Priolo Earthquake Fault Zoning Act defines *active faults* as those that show proven displacement of the ground surface within about the last 11,000 years. *Potentially active faults* are those that show evidence of movement within the last 1.6 million years.

slurry bubbles onto the ground surface. The resulting features are called "sand boils," "sand blows," or "sand volcanoes." Liquefaction-related effects include loss of bearing strength, ground oscillations, lateral spreading, and flow failures or slumping. According to Riverside County Land Information data from 2003, the project area has moderate liquefaction potential due to underlying soils. However, the shallow underlying bedrock at the site is well-consolidated and therefore not susceptible to liquefaction. For this reason, the geotechnical study concluded that liquefaction potential at the site is very low.

Subsidence and Seismic Settlement. Ground subsidence is typically a gradual settling or sinking of the ground surface with little or no horizontal movement, although fissures (cracks and separations) can result from lowering of the ground surface.

The common causes of subsidence include:

- Dewatering of peat or organic soils;
- Dissolution in limestone aquifers;
- First-time wetting of moisture-deficient, low-density soils (hydrocompaction);
- Natural compaction;
- Liquefaction;
- Crustal deformation;
- Ground shaking;
- Subterranean mining; and
- Withdrawal of fluids (groundwater, petroleum, or geothermal).

Most of the damage caused by subsidence is the result of oil, gas, or groundwater extraction from below the ground surface, or the organic decomposition of peat deposits. Ground subsidence may occur as a response to natural forces such as earthquake movements, which can cause abrupt elevation changes of several feet or densification of low density granular soils during an earthquake event that may cause several inches of settlement.

According to the City General Plan EIR, the project area is susceptible to subsidence. Seismically-induced settlement can occur when thick beds of dry and loose sands are subjected to a major earthquake. However, due to the shallow depth to bedrock, appreciable settlement at the site is not anticipated.

Landslides/Slope Stability. Significant factors that contribute to slope failure include slope height and steepness, shear strength and orientation of weak layers in the underlying geologic units, and pore water pressures. There are no known

landslides or evidence of large-scale slope instability within the project area. Some localized surficial slopes failures were found along drainages, but the potential for these will be negated once the site is graded and developed.

Expansive Soils. Expansive soils generally have a significant amount of clay particles that can give up water (shrink) or take on water (swell). The change in volume exerts stress on buildings and other loads placed on these soils. The extent of shrink/swell is influenced by the amount and kind of clay in the soil. The occurrence of these soils is often associated with geologic units having marginal stability. Based on the samples taken for the geotechnical investigation, the majority of on-site soils are expected to have a low to very low expansive potential.

Collapse Potential. Hydroconsolidation, or soil collapse, typically occurs in recently deposited Holocene (less than 10,000 years before present time) soils that were deposited in an arid or semi-arid environment. Soils prone to collapse are commonly associated with man-made fill, wind-laid sands and silts, and alluvial fan and mudflow sediments deposited during flash floods. Particles of these soils, which typically contain minute pores and voids, may be partially supported by clay or silt, or chemically cemented with carbonates. When saturated, collapsible soils undergo a rearrangement of their grains and the water removes the cohesive (or cementing) material, and a rapid, substantial settlement may occur. An increase in surface water infiltration (such as from irrigation) or a rise in the groundwater table, combined with the weight of a building or structure, may initiate settlement, causing foundations and walls to crack. The project site contains Holocene age sediments; however, they are mostly concentrated in drainage areas.

4.6.1.4 NOP/Scoping Comments

Local residents did not express any concerns regarding geology and soils during the scoping meetings. In addition, no comment letters were received from agencies during the NOP periods.

4.6.2 Policies and Regulations

4.6.2.1 State Regulations

Alquist-Priolo Earthquake Fault Zoning Act. The major State legislation regarding earthquake fault zones is the *Alquist-Priolo Earthquake Fault Zoning Act* (A-P Act). In 1972, the State of California began delineating “Earthquake Fault Zones” (called Special Studies Zones prior to 1994) around and along faults that are “sufficiently active” and “well defined” to reduce fault-rupture risks to structures for human occupancy (California Public Resources Code Sections 2621–2630). The boundary of an “Earthquake Fault Zone” is generally 500 feet from major active faults and from 200 to 300 feet from well-defined minor faults. The mapping of active faults has been

completed by the State Geologist and these maps are distributed to all affected cities, counties, and State agencies for their use in developing planning policies and controlling renovation or new construction.

Before a project can be permitted within an identified Earthquake Fault Zone, cities and counties must require a geologic investigation to demonstrate that proposed buildings will not be constructed across active faults. A site-specific evaluation and written report must be prepared by a licensed geologist. If an active fault is identified, a structure intended for human occupancy cannot be placed over the trace of the fault and must be set back from the fault.

The A-P Act only addresses the hazard of surface fault rupture and is not directed toward other earthquake hazards.

The Seismic Hazards Mapping Act. Passed in 1990, the Seismic Hazards Mapping Act (SHMA) addresses non-surface fault rupture earthquake hazards, including strong ground shaking, liquefaction, and seismically induced landslides. The California Geological Survey (CGS) is the principal State agency charged with implementing the 1990 SHMA. Pursuant to the SHMA, the CGS is directed to provide local governments with seismic hazard zone maps that identify areas susceptible to amplified shaking, liquefaction, earthquake-induced landslides, and other ground failures. The goal is to minimize loss of life and property by identifying and mitigating seismic hazards. The seismic hazard zones delineated by the CGS are referred to as “zones of required investigation.” Site-specific geotechnical hazard investigations are required by SHMA when construction projects fall within these areas.

Natural Hazards Disclosure Act. Effective June 1, 1998, the Natural Hazards Disclosure Act requires that sellers of real property and their agents provide prospective buyers with a “Natural Hazard Disclosure Statement” when the property being sold lies within one or more State-mapped hazard areas. If a property is located in a Seismic Hazard Zone as shown on a map issued by the State Geologist, the seller or the seller’s agent must disclose this fact to potential buyers.

4.6.2.2 Local Policies

City General Plan Policies. The City General Plan includes policies and goals related to geologic and seismic hazards. The following goals and policies are applicable to the proposed project. Table 4.6.A analyzes the consistency of the proposed project with the goals and targets listed in the Public and Environmental Safety Element and the Environmental Resources Element.

Seismic

ELAP 22.1 Protect life and property from seismic related incidents through adherence to the Seismic Hazards section of the General Plan Safety Element.

Seismic Hazards

S 2.1 Minimize fault rupture hazards through enforcement of Alquist-Priolo Earthquake Fault Zoning Act provisions and the following policies: (AI 80, 91)

a. Require geologic studies or analyses for critical structures, and lifeline, high-occupancy, schools, and high-risk structures, within 0.5 miles of all Quaternary to historic faults shown on the Earthquake Fault Studies Zones map.

b. Require geologic trenching studies within all designated Earthquake Fault Studies Zones, unless adequate evidence, as determined and accepted by the County Engineering Geologist, is presented. The County may require geologic trenching of non-zoned faults for especially critical or vulnerable structures or lifelines.

c. Require that lifelines be designed to resist, without failure, their crossing of a fault, should fault rupture occur.

d. Support efforts by the California Department of Conservation, Division of Mining and Geology to develop geologic and engineering solutions in areas of disseminated ground deformation due to faulting, in those areas where a through-going fault cannot be reliably located.

e. Encourage and support efforts by the geologic research community to define better the locations and risks of County faults. Such efforts could include data sharing and database development with regional entities, other local governments, private organizations, utility agencies or companies, and local universities.

S 2.2 Require geological and geotechnical investigations in areas with potential for earthquake-induced liquefaction, landsliding or settlement as part of the environmental and development review process, for any structure proposed for human occupancy, and any structure whose damage would cause harm.

S 2.3 Require that a State-licensed professional investigate the potential for liquefaction in areas designated as underlain by “Susceptible Sediments” and “Shallow Ground Water” for all general construction projects (Figure S-3).

S 2.5 Require that engineered slopes be designed to resist seismically induced failure. For lower-risk projects, slope design could be based

on pseudo-static stability analyses using soil engineering parameters that are established on a site-specific basis. For higher-risk projects, the stability analyses should factor in the intensity of expected ground shaking, using a Newmark-type deformation analysis.

S 2.6 Require that cut and fill transition lots be over-excavated to mitigate the potential of seismically-induced differential settlement.

S 2.7 Require a 100% maximum variation of fill depths beneath structures to mitigate the potential of seismically-induced differential settlement.

Slope and Soil Instability Hazards

S 3.3 Before issuance of building permits, require certification regarding the stability of the site against adverse effects of rain, earthquakes, and subsidence.

S 3.4 Require adequate mitigation of potential impacts from erosion, slope instability, or other hazardous slope conditions, or from loss of aesthetic resources for development occurring on slope and hillside areas.

S 3.5 During permit review, identify and encourage mitigation of onsite and offsite slope instability, debris flow, and erosion hazards on lots undergoing substantial improvements.

S 3.6 Require grading plans, environmental assessments, engineering and geologic technical reports, irrigation and landscaping plans, including ecological restoration and revegetation plans, as appropriate, in order to assure the adequate demonstration of a projects ability to mitigate the potential impacts of slope and erosion hazards and loss of native vegetation.

Subsidence Hazards

S 3.8 Require geotechnical studies within documented subsidence zones, as well as zones that may be susceptible to subsidence, as identified in Figure S-7 and the Technical Background Report, prior to the issuance of development permits. Within the documented subsidence zones of the Coachella, San Jacinto, and Elsinore valleys, the studies must address the potential for reactivation of these zones, consider the potential impact on the project, and provide adequate and acceptable mitigation measures.

Table 4.6.A: General Plan Consistency Analysis

General Plan Goals and Targets	General Plan Consistency Analysis
Safety	
S 2.1. Minimize fault rupture hazards through enforcement of Alquist-Priolo Earthquake Fault Zoning Act provisions and the following policies:	**Consistent.** The potential fault on site was analyzed in the Fault Rupture Hazard Investigation, where it was determined to be inactive.

Table 4.6.A: General Plan Consistency Analysis

General Plan Goals and Targets	General Plan Consistency Analysis
a. Require geologic studies or analyses for critical structures, and lifeline, high-occupancy, schools, and high-risk structures, within 0.5 miles of all Quaternary to historic faults shown on the Earthquake Fault Studies Zones map. b. Require geologic trenching studies within all designated Earthquake Fault Studies Zones, unless adequate evidence, as determined and accepted by the County Engineering Geologist, is presented. The County may require geologic trenching of non-zoned faults for especially critical or vulnerable structures or lifelines. c. Require that lifelines be designed to resist, without failure, their crossing of a fault, should fault rupture occur. d. Support efforts by the California Department of Conservation, Division of Mining and Geology to develop geologic and engineering solutions in areas of disseminated ground deformation due to faulting, in those areas where a through-going fault cannot be reliably located. e. Encourage and support efforts by the geologic research community to define better the locations and risks of County faults. Such efforts could include data sharing and database development with regional entities, other local governments, private organizations, utility agencies or companies, and local universities.	
S 2.2. Require geological and geotechnical investigations in areas with potential for earthquake-induced liquefaction, landsliding or settlement as part of the environmental and development review process, for any structure proposed for human occupancy, and any structure whose damage would cause harm.	**Consistent.** A geotechnical and fault rupture hazard investigation was performed for the project by Geocon West, Inc. (Appendix E)
S 2.3. Require that a State-licensed professional investigate the potential for liquefaction in areas designated as underlain by "Susceptible Sediments" and "Shallow Ground Water" for all general construction projects (Figure S-3).	**Consistent.** A geotechnical and fault rupture hazard investigation was performed for the project by Geocon West, Inc. (Appendix E) State-licensed professional geologists assessed liquefaction potential as part of the report.
S 2.5. Require that engineered slopes be designed to resist seismically induced failure. For lower-risk projects, slope design could be based on pseudo-static stability analyses using soil engineering parameters that are established on a site-specific basis. For higher-risk projects, the stability analyses should factor in the intensity of expected ground shaking, using a Newmark-type deformation analysis.	**Consistent.** This will be a requirement of the City's engineering and building departments at the time grading and building permits are requested by the applicant.

Table 4.6.A: General Plan Consistency Analysis

General Plan Goals and Targets	General Plan Consistency Analysis
S 2.6. Require that cut and fill transition lots be over-excavated to mitigate the potential of seismically-induced differential settlement.	**Consistent.** This will be a requirement of the City's engineering department at the time grading permits are requested by the applicant.
S 2.7. Require a 100% maximum variation of fill depths beneath structures to mitigate the potential of seismically-induced differential settlement.	**Consistent.** This will be a requirement of the City's engineering department at the time grading permits are requested by the applicant.
S 3.3 Before issuance of building permits, require certification regarding the stability of the site against adverse effects of rain, earthquakes, and subsidence.	**Consistent.** Project-specific analyses (geotechnical investigation, hydrology study, WQMP) have been completed to assess the adverse effects of rain, earthquakes, and subsidence.
S 3.5. During permit review, identify and encourage mitigation of onsite and offsite slope instability, debris flow, and erosion hazards on lots undergoing substantial improvements.	**Consistent.** These issues were analyzed as part of the project-specific geotechnical investigation. Mitigation was identified as required.
S 3.6. Require grading plans, environmental assessments, engineering and geologic technical reports, irrigation and landscaping plans, including ecological restoration and revegetation plans, as appropriate, in order to assure the adequate demonstration of a projects ability to mitigate the potential impacts of slope and erosion hazards and loss of native vegetation.	**Consistent.** The required plans and assessments will be submitted by the applicant to the City engineering department at the time grading permits are requested by the applicant.

Source: *City of Wildomar General Plan*, July 2008.

4.6.3 Methodology

The analysis of potential geologic and soil-related impacts is based upon the preliminary site-specific geotechnical study for the project. The City's Safety Element of the General Plan and information from State and Federal agencies was referenced to establish the existing on-site geologic conditions. The geotechnical study included a site reconnaissance, review of published reports, maps, and aerial photographs, geotechnical field exploration, laboratory testing, engineering analysis, and fault trench excavations. In determining the level of significance, the analysis assumes that construction and operation of the proposed project would comply with relevant Federal and State laws and regulations, as well as City General Plan policies.

4.6.4 Thresholds of Significance

The following thresholds of significance regarding potential impacts to geology and soils are based on *CEQA Guidelines* (2011). A project would have a significant impact related to geology and soils if it would:

- Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zone Maps issued by the State Geologist for the area or based on other substantial evidence of a known fault.
  - Strong seismic ground shaking.
  - Seismic-related ground failure, including liquefaction.
  - Landslides.
- Result in substantial soil erosion or the loss of topsoil;
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on-site or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse;
- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994 or most current edition), creating substantial risks to life or property; and/or
- Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

4.6.5 Less than Significant Impacts

The following impacts were determined to be less than significant. In each of the following issues, either no impact would occur (therefore, no mitigation would be required) or adherence to established regulations, standards and policies would reduce potential impacts to a less than significant level.

4.6.5.1 Fault Rupture

Threshold	Would the proposed project expose persons or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zone Maps issued by the State Geologist for the area or based on other substantial evidence of a known fault.

Surface rupture occurs where displacement or fissuring occurs along a fault zone. While primary ground damage due to earthquake fault rupture typically results in a relatively small percentage of the total damage in an earthquake, the location of structures or facilities too close to a rupturing fault can cause profound damage. The primary method to avoid this hazard is to either set structures and facilities away from active faults, or avoid their construction in close proximity to an active fault.

Faults throughout southern California have formed over millions of years. Some of these faults are generally considered inactive under present geologic conditions and other faults are known to be active. Such faults have either generated earthquakes in historic times (within the last 200 years) or show geologic and geomorphic indications of movement during the last 11,000 years. Faults that have moved in the relatively recent geological past are generally presumed to be the most likely candidates to generate damaging earthquakes in the lifetimes of residents, buildings, or communities.

The project site is not located within an Earthquake Fault Zone as defined by the State of California in the A-P Act or as defined by the City of Wildomar General Plan. In its Land Information System, Riverside County has depicted a fault crossing the site. Based on the on-site subsurface geotechnical investigation conducted for the project, faults present in the older Unnamed Sandstone unit (very early Pleistocene age) were capped by unbroken Pauba Sandstone (early Pleistocene age, approximately one million years old). Based on this investigation, it appears this fault is inactive and poses no threat of surface rupture.

The nearest Alquist-Priolo zoned fault is the Wildomar Fault, which is part of the Elsinore Fault Zone, located approximately 1.5 miles southwest of the project site. Due to the distance from these faults, no on-site fault rupture is anticipated. The next closest known active faults include the Temecula branch of the Elsinore Fault and the Glen Ivy branch of the Elsinore Fault, located 2 and 7.5 miles from the site, respectively.

In the absence of any on-site active faults, no significant fault-rupture impact would occur on the project site and no mitigation is required.

4.6.5.2 Ground Shaking

Threshold	Would the proposed project expose persons or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong ground shaking?

The site could be subjected to moderate to severe ground shaking from any of the active faults in the vicinity. Southern California is a seismically active area and, therefore, will continue to be subject to ground shaking resulting from seismic activity on regional faults. Ground shaking from earthquakes associated with nearby and more distant faults is expected to occur during the lifetime of the project. The geotechnical investigation determined the maximum earthquake would be a magnitude 6.8 event on the Elsinore Fault. Such an event would generate peak horizontal accelerations at the site of 0.82g.

The design and construction of the proposed on-site structures would be accordance with the current California Building Code (CBC) requirements, which would address potential impacts resulting from ground shaking. Adherence to the CBC

requirements is standard for all development in the City. No significant on-site ground shaking would occur; therefore, no mitigation is required.

4.6.5.3 Seismic-Related Ground Failure

Threshold	Would the proposed project expose persons or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic ground failure?

Development of the proposed project will result in the construction of 55,000 square feet of commercial/retail space and eight three-story multifamily apartment buildings. The project site is located within Seismic Zone 4 as defined by the Uniform Building Code (UBC). The site has relatively low-lying hills with intervening drainages. No landslides or area of mass movement has been documented on the project site.

The geotechnical investigation determined the potential for on-site slope instability is low. No significant landslide hazard impact is anticipated and no mitigation is required.

The project does not propose any activity known to cause subsidence (e.g., oil, gas, or groundwater extraction). Settlement generally occurs within areas of loose, granular soils with relatively low density. Based on the shallow depth to bedrock at the site, appreciable seismically-induced settlement is not anticipated. Remedial excavation of 2 to 10 feet will be conducted as necessary to remove all unsuitable soil, including alluvium, colluvium, and undocumented fill. Therefore, no significant subsidence impact would occur and no mitigation is required.

The potential for liquefaction generally occurs during strong ground shaking within relatively cohesionless loose sediments where the groundwater is typically less than 50 feet below the surface. According to the 2003 Riverside County Land Information System, the project is located in an area of moderate liquefaction potential based on underlying soil deposits. Groundwater was found at a depth of 15 feet below existing grade in one of the borings conducted during the geotechnical investigation. However, the soils at the site are underlain by competent, shallow bedrock (12 to 18 inches below the surface), consisting of dense cemented sandstone and siltstone, which reduces potential for liquefaction. In addition, remedial grading operations are expected to further reduce potential for liquefaction to a very low level. Existing artificial fill, alluvium, and colluvium would be excavated and property compacted. Oversize material (rocks greater than six inches in diameter) would be incorporated into deep compacted fill areas. Due to the shallow nature of bedrock and remedial grading plans of the project, liquefaction impacts are considered less than significant and no mitigation is required.

4.6.5.4 Landslides and Rockfalls

Threshold	Would the proposed project expose persons or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?

The site currently slopes in a northeast to southwest direction, with the elevations ranging from approximately 1,380 feet to 1,330 feet amsl. The site's topography is characterized by low-lying hills with intervening drainages. The site-specific geotechnical investigation concluded the site has a low potential for landslides. No evidence of landslides or large-scale slope instability was observed during the geotechnical investigation. In addition, landslides are uncommon in the City. Therefore, no significant impacts relating to or from landslides are anticipated at the project site. No mitigation is required.

4.6.5.5 Soil Erosion or Loss of Topsoil

Threshold	Would the proposed project result in substantial soil erosion or the loss of topsoil?

Based on the conceptual grading plan, development of the site will require the excavation (cut) and placement (fill) of approximately 67,200 cubic yards (cy) and 145,500 cy of material, respectively. Preparation of the project site will require the net import of approximately 78,300 cy of material. The project proposes the construction of various infrastructure improvements both on site and off site. These improvements include interior roadways, sidewalks, landscaping, and underground utilities. These activities have the potential to cause erosion both on site and off site.

Prior to the issuance of grading permits, the project proponent will be required to prepare and submit detailed grading plans. These plans will be prepared in conformance with applicable standards of the City of Wildomar. Construction of off-site utility and roadway improvements will also result in the movement of soil, and would be subject to the same permitting and plan checking processes.

Development of the site and related off-site improvements would involve the disturbance of more than one acre; therefore, the Project is required to obtain a National Pollutant Discharge Elimination System (NPDES) permit. A Storm Water Pollution Prevention Plan (SWPPP) prepared for the NPDES permit will identify the Best Management Practices (BMPs) required to address the erosion and discharge impacts associated with the proposed on-site grading. Compliance with storm water regulations include minimizing storm water contact with potential pollutants by providing covers and secondary containment for construction materials, designating areas away from storm drain systems for storing equipment and materials and implementing good housekeeping practices at the construction site.

BMPs included in the SWPPP may include, but shall not be limited the following:

- Protect all storm drain inlets and streams located near the construction site to prevent sediment-laden water from entering the storm drain system.
- Prevent erosion by implementing one or more of the following soil stabilization practices: mulching, surface roughening, permanent or temporary seeding.
- Limit vehicular access to and from the site. Stabilize construction entrances/exits to minimize the track out of dirt and mud onto adjacent streets. Conduct frequent street sweeping.
- Protect stockpiles and construction materials from winds and rain by storing them under a roof, secured impermeable tarp or plastic sheeting.
- Avoid storing or stockpiling materials near storm drain inlets, gullies or streams.
- Phase grading operations to limit disturbed areas and duration of exposure.
- Perform major maintenance and repairs of vehicles and equipment off site.
- Wash out concrete mixers only in designated washout areas at the construction site.
- Set up and operate small concrete mixers on tarps or heavy plastic drop cloths.
- Keep construction sites clean by removing trash, debris, wastes, etc. on a regular basis.
- Clean up spills immediately using dry clean-up methods (e.g., absorbent materials such as cat litter, sand or rags for liquid spills; sweeping for dry spills such as cement, mortar or fertilizer) and by removing the contaminated soil from spills on dirt areas.
- Maintain all vehicles and equipment in good working condition. Inspect frequently for leaks, and repair promptly.
- Cover open dumpsters with secured tarps or plastic sheeting. Clean out dumpsters only in approved locations on the construction site.
- Arrange for an adequate debris disposal schedule to ensure that dumpsters do not overflow.

A preliminary Water Quality Management Plan (WQMP) was prepared for the project site and is included in Appendix H-2. The preliminary WQMP contains the following post-construction measures, which will help reduce potential impacts to soil erosion to less than significant levels and identifies measures to treat and/or limit the entry of contaminants into the storm drain system:

- *Preserve Existing Drainage Patterns.* The project site will intercept the off-site flows tributary from the north and east, and perpetuate the existing flow patterns to the downstream tributary locations of the project boundaries.
- *Protect Existing Vegetation.* The project will preserve the existing 1.3-acre natural open space area.

- *Minimize Impervious Area.* The project will use the minimum amount of impervious area necessary. The project includes a 1.8-acre landscaped park and several landscaped pervious areas. Disperse runoff into adjacent pervious areas. The project will discharge roof runoff and impervious areas into adjacent landscaping, where feasible.
- *Bioretention/Biotreatment BMPs.* The project will include bioretention planters, sand filters, and an infiltration self-retaining area.

The WQMP is incorporated by reference and/or attached to the project's SWPPP as the Post-Construction Management Plan.

Soils at the project site generally have a moderate erosion potential. As the project would be required to adhere to the conditions detailed in the NPDES Permit, the project-specific SWPPP and a WQMP, soil-erosion impacts are considered to be less than significant. No mitigation is required.

Compliance with Existing Regulations. The developer of the project will be required to prepare a final, site-specific geotechnical report based on the location of building foundations. Prior to issuance of any building permits, the City reviews building plans to confirm that the siting, design, and construction of all structures and facilities fully satisfy the regulations and standards established in the CBC (California Code of Regulations, Title 24), City Building Code, and/or the professional engineering standards appropriate. This practice is required for all development that occurs of the City. Incorporating the recommendations detailed in the geotechnical investigation(s) and compliance with the City's development review regulations will ensure potential geologic and geotechnical issues impacts are appropriately addressed. No mitigation is required.

4.6.5.6 Unstable Soils

Threshold	Would the proposed project be located on expansive soil, creating substantial risks to life or property?

As previously identified, expansive soils generally have a substantial amount of clay particles, which can give up water (shrink) or absorb water (swell). The change in volume exerts stress on buildings and other loads placed on these soils. The extent or range of the shrink/swell is influenced by the amount and kind of clay present in the soil. Expansive soils can be widely dispersed and they can occur in hillside areas as well as low-lying alluvial basins.

One on-site soil (Boring 1 @ 0'-5') is identified as having a low shrink-swell potential, with an Expansion Index (EI) of 21. A minimum EI of 21 is required to be considered expansive by the 2013 CBC. The geotechnical investigation concluded that most soils on site will have a very low to low expansion potential. In general, soils on site are dominated by sandy textures that lack the amount of clay needed to create

substantial hazards related to expansion. Remedial excavation and grading under the project would address the potential for expansive soils on site. Therefore, impacts are less than significant and no mitigation is required.

4.6.5.7 Septic Tanks

Threshold	Would the proposed project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

The project does not include the installation or use of septic systems. On-site wastewater flows will be collected in and conveyed to new or existing wastewater pipelines. In the absence of any on-site septic use, no impact will occur. No mitigation is required.

4.6.6 Significant Impacts

No significant impacts that relate to geology and soils have been identified.

4.6.7 Cumulative Impacts

The cumulative area for geologic issues is the City of Wildomar and Riverside County, within the larger context of southern California due to regional seismicity. The project area has potential geotechnical and soils constraints, as the entire southern California area contains a number of major regional and local faults, including the Elsinore, San Jacinto, and San Andreas Fault Zones.

The presence of regional faults creates the potential for damage to structures or injury to persons during seismic events. However, City, County, and State regulations provide guidelines for development in areas with geologic constraints and ensure that the design of buildings is in accordance with applicable CBC standards and other applicable standards, which reduces potential property damage and human safety risks to less than significant levels. Anticipated development in the City and surrounding area in general will not have a cumulatively considerable impact on earth resources, nor will regional geotechnical constraints have a cumulatively considerable impact on the proposed project or cumulative projects, as long as proper design and engineering are implemented based on available seismic and other geotechnical data. The proposed project represents only an incremental portion of this potential impact, so the project will not have cumulatively significant impacts in this regard.

Because it is reasonable to conclude that all development within seismically active areas will be required to adhere to applicable State regulations, CBC standards, and

the design and siting standards required by local agencies, a less than significant cumulative impact would occur with implementation of the proposed project.

4.7 GREENHOUSE GAS EMISSIONS AND CLIMATE CHANGE

This section provides a discussion of global climate change, existing regulations pertaining to global climate change, and an analysis of greenhouse gas (GHG) emissions associated with the project.

This section analyzes the project's potential climate impacts based on the following technical study:

- *Clinton Keith Road (APN: 380-250-003) "Grove Park" Greenhouse Gas Analysis, City of Wildomar*, Urban Crossroads, Inc., March 2, 2015. (Appendix F)

4.7.1 Existing Setting

4.7.1.1 Global Climate Change

Global climate change (GCC) refers to change in average meteorological conditions on the earth with respect to temperature, precipitation, and storms, lasting for decades or longer. The term "global climate change" is often used interchangeably with the term "global warming," but "global climate change" is preferred by some scientists and policy makers to "global warming" because it helps convey the notion that in addition to rising temperatures, other changes in global climate may occur. Climate change may result from:

- Natural factors, such as changes in the sun's intensity or slow changes in the Earth's orbit around the sun;
- Natural processes within the climate system (e.g., changes in ocean circulation); and/or
- Human activities that change the atmosphere's composition (e.g., through burning fossil fuels) and the land surface (e.g., deforestation, reforestation, urbanization, and desertification).

As determined from meteorological measurements worldwide between 1990 and 2005, the primary observed effect of global climate change has been a rise in the average global tropospheric[1] temperature of 0.36 degree Fahrenheit (°F) per decade. Climate change modeling shows that further warming could occur, which could induce additional changes in the global climate system during the current century. Changes to the global climate system, ecosystems, and the environment of California could include higher sea levels, drier or wetter weather, changes in ocean salinity, changes in wind patterns or more energetic aspects of extreme weather (e.g., droughts, heavy precipitation, heat waves, extreme cold and increased intensity of tropical cyclones). Specific effects in California may include a decline in

[1] The troposphere is the zone of the atmosphere characterized by water vapor, weather, winds, and decreasing temperature with increasing altitude.

the Sierra Nevada snowpack, erosion of California's coastline, and seawater intrusion in the Sacramento-San Joaquin River Delta.

Human activities, such as fossil fuel combustion and land use changes release carbon dioxide (CO_2) and other compounds cumulatively termed greenhouse gases (GHGs). GHGs are effective in trapping radiation that would otherwise escape the atmosphere. This trapped radiation warms the atmosphere, the oceans, and earth's surface (EPA, 2007). Many scientists believe "... most of the warming observed over the last 50 years is attributable to human activities."[1] The increased amount of CO_2 and other GHGs in the atmosphere are the alleged primary causes of human-induced warming.

GHGs are present in the atmosphere naturally, released by natural sources, or formed from secondary reactions taking place in the atmosphere. They include CO_2, methane (CH_4), nitrous oxide (N_2O), and ozone (O_3). In the last 200 years, substantial quantities of GHGs have been released into the atmosphere, primarily from fossil fuel combustion. These human-induced emissions are increasing GHG concentrations in the atmosphere, enhancing the natural greenhouse effect. The GHGs resulting from human activity are believed to be causing global climate change. While human-made GHGs include CO_2, CH_4, and N_2O, some (like chlorofluorocarbons [CFCs]) are completely new to the atmosphere.

GHGs vary considerably in terms of Global Warming Potential (GWP), the comparative ability of each GHG to trap heat in the atmosphere. The GWP is based on several factors, including the relative effectiveness of a gas to absorb infrared radiation and length of time that the gas remains in the atmosphere ("atmospheric lifetime"). The GWP of each gas is measured relative to CO_2, the most abundant GHG. The definition of GWP for a particular GHG is the ratio of heat trapped by one unit mass of the GHG to the ratio of heat trapped by one unit mass of CO_2 over a specified time period. GHG emissions are typically measured in terms of pounds or tons of "CO_2 equivalents" (CO_2e).

Natural sources of CO_2 include the respiration (breathing) of humans and animals and evaporation from the oceans. Together, these natural sources release approximately 150 billion metric tons[2] of CO_2 each year, far outweighing the 7 billion metric tons of GHGs emissions from fossil fuel burning, waste incineration, deforestation, cement manufacture and other human activity. Nevertheless, natural GHG removal processes such as photosynthesis cannot keep pace with the additional output of CO_2 from human activities. Consequently this gas is building up in the atmosphere.[3]

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1 *Climate Change 2013: The Physical Science Basis*, Intergovernmental Panel on Climate Change (IPCC), http://www.ipcc.ch/report/ar5/wg1/.

2 A tonne is a ton in the metric unit system, also called a metric ton, equal to 1,000 kilograms or about 2,204 pounds.

3 Enviropedia, http://www.enviropedia.org.uk/Global_Warming/Emissions.php.

Methane is produced when organic matter decomposes in environments lacking sufficient oxygen. Natural sources include wetlands, termites, and oceans. Human-made sources include the mining and burning of fossil fuels; digestive processes in ruminant animals such as cattle; rice cultivation; and the decomposition of waste in landfills. Human activity accounts for the majority of the approximately 500 million metric tons of CH_4 emitted annually. The major removal process for atmospheric CH_4, the chemical breakdown in the atmosphere, cannot keep pace with source emissions; therefore, CH_4 concentrations in the atmosphere are rising.

Worldwide emissions of GHGs in 2008 were 30.1 billion metric tons of CO_2e[1] and have increased considerably since that time. It is important to note that the global emissions inventory data are not all from the same year and may vary depending on the source of the emissions inventory data.[2] Emissions from the top five emitting countries and the European Union accounted for approximately 55 percent of total global GHG emissions. The United States was the number two producer of GHG emissions. The primary GHG emitted by human activities in the United States was CO_2, representing approximately 84 percent of total GHG emissions.[3]

In 2009, the United States emitted approximately 6.6 billion metric tons of CO_2e or approximately 25 tons per year (tpy) per person. Of the six major sectors nationwide (electric power industry, transportation, industry, agriculture, commercial, and residential), the electric power industry and transportation sectors combined account for approximately 62 percent of the GHG emissions; the majority of the electrical power industry and all of the transportation emissions are generated from direct fossil fuel combustion. Between 1990 and 2006, total United States GHG emissions rose approximately 14.7 percent.[4]

World carbon dioxide emissions[5] are expected to increase by 1.9 percent annually between 2001 and 2025. Much of the increase in these emissions is expected to occur in the developing world where emerging economies, such as China and India, fuel economic development with fossil energy. Developing countries' emissions are expected to grow above the world average at 2.7 percent annually between 2001 and 2025; and surpass emissions of industrialized countries near 2018.

The California Air Resources Board (CARB) is responsible for developing and maintaining the California greenhouse gas emission inventory. This inventory

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1 *The Millennium Development Goals Report 2011,* United Nations, http://unstats.un.org/unsd/default.htm, accessed July 26, 2011.

2 *Inventory of U.S. Greenhouse Gas Emissions and Sinks 1990–2006*, U.S. Environmental Protection Agency, http://www.epa.gov/climatechange/emissions/usinventoryreport.html, 2008.

3 Ibid.

4 *Inventory of U.S. Greenhouse Gas Emissions and Sinks: 1990 – 2009*. U.S. Environmental Protection Agency (EPA). 2011. http://www.epa.gov/climatechange/emissions/usinventoryreport.html. Accessed July 2011.

5 *Greenhouse Gases, Climate Change, and Energy,* National Energy Information Center, Energy Information Administration, http://www.eia.gov/oiaf/1605/ggccebro/chapter1.html (accessed April 27, 2015).

estimates the amount of GHGs emitted into and removed from the atmosphere by human activities within the State of California and supports the Assembly Bill (AB) 32 Climate Change Program. The CARB's current GHG emission inventory covers the years 1990 through 2008 and is based on fuel use, equipment activity, industrial processes, and other relevant data (e.g., housing, landfill activity, and agricultural lands).

California's net emissions of GHG decreased 1.3 percent from 459 million metric tons (MMT) of CO_2e in 2000 to 453 MMT in 2009, with a maximum of 483.9 MMT in 2004. Driven by a noticeable drop in on-road transportation emissions, statewide GHG emissions dropped from 485 MMT CO_2e in 2008 to 457 MMT in 2009 (2009 also reflects the beginning of the economic recession and fuel price spikes). As the economy recovers, GHG emissions are likely to rise again without other mitigation actions. During the same period from 2000 to 2009, California's GHG emissions per person decreased by 9.7 percent, but the emissions reductions were offset by the state's population increase of 9.0 percent.

The CARB estimates that transportation was the source of approximately 38 percent of California's GHG emissions in 2009, followed by electricity generation at 23 percent. Other sources of GHG emissions were industrial sources at 20 percent, residential plus commercial activities at 9 percent, and agriculture at 7 percent.

The CARB has projected statewide GHG emissions for the year 2020, which represent the emissions that would be expected to occur with reductions anticipated from Pavley I and the Renewables Portfolio Standard (RPS) (38 MMT CO_2e total), will be 507 MMT of CO_2e.[1] GHG emissions from the transportation and electricity sectors as a whole are expected to increase at approximately 36 percent and 22 percent of total CO_2e emissions, respectively. The industrial sector consists of large stationary sources of GHG emissions and the percentage of the total 2020 emissions is projected to be 18 percent of total CO_2e emissions. The remaining sources of GHG emissions in 2020 are high global warming potential gases at 7 percent, residential and commercial activities at 9 percent, agriculture at 6 percent, and recycling and waste at 2 percent.

4.7.1.2 Effects of Global Climate Change

Changes in global climate are assessed using historical records of temperature changes that have occurred in the past. Climate change scientists use these data to extrapolate a level of statistical significance specifically focusing on temperature records from the last 150 years (the Industrial Age) that differ from past climate changes in rate and magnitude.

[1] Greenhouse Gas Inventory – 2020 Emissions Forecast. California Air Resources Board (CARB), http://www.arb.ca.gov/cc/inventory/data/forecast.htm. Accessed January 2013.

The Intergovernmental Panel on Climate Change (IPCC) constructed several emission trajectories of greenhouse gases needed to stabilize global temperatures and climate change impacts. In its Fifth Assessment Report, the IPCC predicted that the global mean temperature change from 1990 to 2100, could range from 1.1 degree Celsius (°C) to 6.4 °C (8 to 10.4 °Fahrenheit). Global average temperatures and sea levels are expected to rise under all scenarios (IPCC 2007a). The IPCC concluded that global climate change was largely the result of human activity, mainly the burning of fossil fuels. However, the scientific literature is not consistent regarding many of the aspects of climate change, the actual temperature changes during the 20th century, and contributions from human versus non-human activities.

Effects from global climate change may arise from temperature increases, climate-sensitive diseases, extreme weather events, and degradation of air quality. There may be direct temperature effects through increases in average temperature leading to more extreme heat waves and less extreme cold spells. Those living in warmer climates are likely to experience more stress and heat-related problems. Heat-related problems include heat rash and heat stroke, drought, etc. In addition, climate-sensitive diseases may increase, such as those spread by mosquitoes and other disease-carrying insects. Such diseases include malaria, dengue fever, yellow fever, and encephalitis. Extreme events such as flooding and hurricanes can displace people and agriculture. Global warming may also contribute to air quality problems from increased frequency of smog and particulate air pollution.

According to the 2006 California Climate Action Team (CAT) Report,[1] the following climate change effects, which are based on trends established by the IPCC, can be expected in California over the course of the next century:

- A diminishing Sierra snowpack declining by 70 percent to 90 percent, threatening the State's water supply.
- A rise in sea levels resulting in the displacement of coastal businesses and residences. During the past century, sea levels along California's coast have risen about seven inches. If emissions continue unabated and temperatures rise into the higher anticipated warming range, sea level is expected to rise an additional 22 to 35 inches by the end of the century. Elevations of this magnitude would inundate coastal areas with salt water, accelerate coastal erosion, threaten vital levees and inland water systems, and disrupt wetlands and natural habitats. (Note: This condition would not affect the project area as it is a significant distance away from coastal areas.)
- An increase in temperature and extreme weather events. Climate change is expected to lead to increases in the frequency, intensity, and duration of extreme heat events and heat waves in California. More heat waves can exacerbate chronic disease or heat-related illness.

[1] *Climate Action Team Report to Governor Schwarzenegger and the Legislature*, California Environmental Protection Agency, March 2006.

- Increased risk of large wildfires if rain increases as temperatures rise. Wildfires in the grasslands and chaparral ecosystems of southern California are estimated to increase by approximately 30 percent toward the end of the 21st century because more winter rain will stimulate the growth of more plant fuel available to burn in the fall. In contrast, a hotter, drier climate could promote up to 90 percent more northern California fires by the end of the century by drying out and increasing the flammability of forest vegetation.
- Increasing temperatures from 8 to 10.4 °F under the higher emission scenarios, leading to a 25 percent to 35 percent increase in the number of days ozone pollution levels are exceeded in most urban areas (see below).
- Increased vulnerability of forests due to forest fires, pest infestation, and increased temperatures.
- Reductions in the quality and quantity of certain agricultural products. The crops and products likely to be adversely affected include wine grapes, fruit, nuts, and milk.
- Exacerbation of air quality problems. If temperatures rise to the medium warming range, there could be 75 to 85 percent more days with weather conducive to ozone formation in Los Angeles and the San Joaquin Valley, relative to today's conditions. This is more than twice the increase expected if rising temperatures remain in the lower warming range. This increase in air quality problems could result in an increase in asthma and other health-related problems.
- A decrease in the health and productivity of California's forests. Climate change can cause an increase in wildfires, an enhanced insect population, and establishment of non-native species.
- Increased electricity demand, particularly in the hot summer months.
- Increased ground-level ozone formation due to higher reaction rates of ozone precursors.

4.7.1.3 Greenhouse Gases

The most common greenhouse gases include water vapor, carbon dioxide, methane, nitrous oxides, chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, ozone, and aerosols. Greenhouse gases defined by AB 32 include carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride.

Natural processes and human activities emit greenhouse gases. The presence of greenhouse gases in the atmosphere affects the earth's temperature. Many scientists believe that emissions from human activities, such as electricity production and vehicle use, have led to elevated concentrations of these gases in the atmosphere beyond the level of naturally occurring concentrations. Table 4.7.A lists greenhouse gases, the effects of each greenhouse gas, and sources for each of the greenhouse gases.

Table 4.7.A: Greenhouse Gas Properties, Effects, and Sources

Constituent	Description and Physical Properties	Health Effects	Sources
Water Vapor	Water vapor (H_2O) is the most abundant, important, and variable greenhouse gas in the atmosphere. Water vapor is not considered a pollutant; in the atmosphere it maintains a climate necessary for life. Changes in its concentration are primarily considered to be a result of climate feedbacks related to the warming of the atmosphere rather than a direct result of industrialization.	There are no health effects from water vapor. When some pollutants come in contact with water vapor, they can dissolve and then the water vapor can be a transport mechanism to enter the human body.	The main source of water vapor is evaporation from the oceans (approximately 85%). Other sources include evaporation from other water bodies, sublimation (change from solid to gas) from sea ice and snow, and transpiration from plant leaves.
Carbon Dioxide	Carbon dioxide (CO_2) is an odorless, colorless natural greenhouse gas.	Outdoor levels of carbon dioxide are not high enough to result in negative health effects.	Carbon dioxide is emitted from natural and anthropocentric (human) sources. Natural sources include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic out gassing. Anthropogenic sources are from burning coal, oil, natural gas, and wood.
Methane	Methane (CH_4) is an extremely effective absorber of radiation, though its atmospheric concentration is less than carbon dioxide and its lifetime in the atmosphere is brief (10–12 years) compared to other greenhouse gases.	There are no health effects from methane.	Methane has both natural and anthropogenic sources. It is released as part of the biological processes in low oxygen environments, such as in swamplands or in rice production (at the roots of the plants). Over the last 50 years, human activities such as growing rice, raising cattle, using natural gas, and mining coal have added to the atmospheric concentration of methane. Other anthropocentric sources include fossil-fuel combustion and biomass burning.
Nitrous Oxide	Nitrous oxide (N_2O), also known as laughing gas, is a colorless greenhouse gas.	Nitrous oxide can cause dizziness, euphoria, and sometimes slight hallucinations. In small doses it is harmless. In some cases, heavy and extended use can cause Olney's Lesions (brain damage).	Concentrations of nitrous oxide also began to rise at the beginning of the Industrial Revolution. In 1998, the global concentration was 314 ppb. Nitrous oxide is produced by microbial processes in soil and water, including those reactions that occur in fertilizer containing nitrogen. In addition to agricultural sources, some industrial processes (fossil fuel-fired power plants, nylon production, nitric acid production, and vehicle emissions) also contribute to its atmospheric load. It is used as an aerosol spray propellant, e.g., in whipped cream bottles. It is also used in potato chip bags to keep chips fresh. It is used in rocket engines and in race cars.
Chloro-fluorocarbons	Chlorofluorocarbons (CFCs) are gases formed synthetically by replacing all hydrogen atoms in methane or ethane (C_2H_6) with chlorine and/or fluorine atoms. CFCs are nontoxic, nonflammable, insoluble, and chemically unreactive in the troposphere (the level of air at the earth's surface).	In confirmed indoor locations, working with CFC-113 or other CFCs is thought to have resulted in death by cardiac arrhythmia (heart frequency too high or too low) or asphyxiation.	CFCs have no natural source, but were first synthesized in 1928. They were used for refrigerants, aerosol propellants, and cleaning solvents. Due to the discovery that they are able to destroy stratospheric ozone, a global effort to halt their production was undertaken and was extremely successful, so much so that levels of the major CFCs are now remaining level or declining. However, their long atmospheric lifetimes mean that some of the CFCs will remain in the atmosphere for over 100 years.
Hydro-fluorocarbons	Hydrofluorocarbons (HFCs) are synthetic man-made chemicals that are used as a substitute for CFCs. Out of all the greenhouse gases, they are one of three groups with the highest global warming potential. Prior to 1990, the only significant emissions were HFC-23. HFC-134a use is increasing due to its use as a refrigerant.	None.	HFCs are man-made for applications such as automobile air conditioners and refrigerants.
Per-fluorocarbons	Perfluorocarbons (PFCs) have stable molecular structures and do not break down through the chemical processes in the lower atmosphere. Because of this, PFCs have very long lifetimes, between 10,000 and 50,000 years. Two common PFCs are tetrafluoromethane (CF_4) and hexafluoroethane (C_2F_6).	None.	The two main sources of PFCs are primary aluminum production and semiconductor manufacture.
Sulfur Hexafluoride	Sulfur hexafluoride (SF_6) is an inorganic, odorless, colorless, nontoxic, nonflammable gas. It also has the highest GWP of any gas evaluated, 23,900. Concentrations in the 1990s were about 4 ppt.	In high concentrations in confined areas, the gas presents the hazard of suffocation because it displaces the oxygen needed for breathing.	Sulfur hexafluoride is used for insulation in electric power transmission and distribution equipment, in the magnesium industry, in semiconductor manufacturing, and as a tracer gas for leak detection.
Aerosols	Aerosols are particles emitted into the air through burning biomass (plant material) and fossil fuels. Aerosols can warm the atmosphere by absorbing and emitting heat and can cool the atmosphere by reflecting light. Cloud formation can also be affected by aerosols.	Similar health effects associated with particulate matter.	Sulfate aerosols are emitted when fuel containing sulfur is burned. Another source of aerosols (in the form of black carbon or soot) is the result of incomplete combustion or the incomplete burning of fossil fuels. Although particulate matter regulation has been lowering aerosol concentrations in the United States, global concentrations are likely increasing as a result of other sources around the world.

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In order to attempt to quantify the impact of greenhouse gases, the gases are assigned global warming potentials. Individual greenhouse gas compounds have varying global warming potential and atmospheric lifetimes. Carbon dioxide, the reference gas for global warming potential, has a global warming potential of one. The global warming potential of a greenhouse gas is a measure of how much a given mass of a greenhouse gas is estimated to contribute to global warming. To describe how much global warming a given type and amount of greenhouse gas may cause, the carbon dioxide equivalent is used. The calculation of the CO_2e is a consistent methodology for comparing greenhouse gas emissions since it normalizes various greenhouse gas emissions to a consistent reference gas, carbon dioxide. For example, methane's warming potential of 21 indicates that methane has 21 times greater warming affect than carbon dioxide on a molecule per molecule basis. A carbon dioxide equivalent is the mass emissions of an individual greenhouse gas multiplied by its global warming potential.

4.7.1.4 Greenhouse Gas Emission Sources and Inventories

An emissions inventory that identifies and quantifies the primary human-generated sources and sinks of GHGs is a well-recognized and useful tool for addressing climate change. This section summarizes the latest information on global, national, State, and local GHG emission inventories. However, because GHGs persist for a long time in the atmosphere (previously referenced Table 4.7.A), accumulate over time, and are generally well mixed, their impact on the atmosphere and climate cannot be tied to a specific point of emission.

Global Emissions. Worldwide emissions of GHGs in 2004 totaled 27 billion MT of CO_2e per year (CO_2e/yr).[1] Global estimates are based on country inventories developed as part of the programs of the United Nations Framework Convention on Climate Change (UNFCCC).

United States Emissions. In 2008, the United States emitted approximately 7 billion MT of CO_2e, or approximately 25 tons tpy per person. Of the six major sectors nationwide, electric power industry, transportation, industry, agriculture, commercial, and residential, the electric power industry and transportation sectors combined account for approximately 62 percent of the GHG emissions; the majority of the electric power industry and all of the transportation emissions are generated from

[1] Combined total of Annex I and Non-Annex I Country CO_2e emissions. UNFCCC, 2007. *Greenhouse Gas Inventory Data.* Information available at http://unfccc.int/ghg_data/ghg_data_unfccc/time_series_annex_i/items/3814.php and http://maindb.unfccc.int/library/view_pdf.pl?url=http://unfccc.int/resource/docs/2005/sbi/eng/18a02.pdf.

direct fossil fuel combustion. Between 1990 and 2006, total United States GHG emissions rose approximately 14.7 percent.[1]

State of California Emissions. According to CARB emission inventory estimates, California emitted approximately 474 million metric tons of CO_2e ($MMTCO_2e$) emissions in 2008.[2] This large number is due primarily to the sheer size of California compared to other states. By contrast, California has the fourth-lowest per-capita CO_2 emission rate from fossil fuel combustion in the country due to the success of its energy efficiency and renewable energy programs and commitments that have lowered the State's GHG emissions rate of growth by more than half of what it would have been otherwise.[3]

The California Environmental Protection Agency (CalEPA) CAT[4] stated in its March 2006 report that the composition of gross climate change pollutant emissions in California in 2002 (expressed in terms of CO_2e) was as follows:

- CO_2 accounted for 83.3 percent
- CH_4 accounted for 6.4 percent
- N_2O accounted for 6.8 percent
- HFCs, PFC, and SF_6 accounted for 3.5 percent.[5]

The CARB estimates that transportation was the source of approximately 38 percent of California's GHG emissions in 2011, followed by electricity generation (both in-State and out-of-State) at 19 percent and industrial sources at 21 percent. The remaining sources of GHG emissions were residential and commercial activities at 10 percent, agriculture at 7 percent, high-GWP gases at 3 percent, and recycling and waste at 2 percent.[6]

The CARB is responsible for developing the California Greenhouse Gas Emission Inventory. This inventory estimates the volume of GHGs emitted to and removed from the atmosphere by human activities within the State of California and supports the AB 32 Climate Change Program. The CARB's current GHG emission inventory

1 *The 2010 U.S. Greenhouse Gas Inventory Report*. Environmental Protection Agency, 2010. http://www.epa.gov/climatechange/emissions/usinventoryreport.html (accessed September 2010).

2 Greenhouse Gas Inventory Data – 1990 to 2004. California Air Resources Board, http://www.arb.ca.gov/cc/inventory/data/data.htm (accessed September 2010).

3 Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004 – Final Staff Report, California Energy Commission (CEC), 2007. Publication # CEC-600-2006-013-sf, Sacramento, CA, December 22, 2006; and January 23, 2007, update to that report.

4 The CAT is a consortium of representatives from State agencies who have been charged with coordinating and implementing GHG emission reduction programs that fall outside of the CARB's jurisdiction.

5 *Climate Action Team Report to Governor Schwarzenegger and the Legislature.* CalEPA. 2006. March.

6 CARB website, 2013. http://www.arb.ca.gov/cc/inventory/data/data.htm (October 2013).

covers the years 1990–2004 and is based on fuel use, equipment activity, industrial processes, and other relevant data (e.g., housing, landfill activity, agricultural lands). The emission inventory estimates are based on the actual amount of all fuels combusted in the State, which accounts for over 85 percent of the GHG emissions within California.

CARB staff has projected statewide unregulated GHG emissions for 2020, which represent the emissions that would be expected to occur in the absence of any GHG reduction actions, at 596 $MMTCO_2e$. GHG emissions from the transportation and electricity sectors as a whole are expected to increase but remain at approximately 36 percent and 22 percent of total CO_2e emissions, respectively. The industrial sector consists of large stationary sources of GHG emissions, and the percentage of the total 2020 emissions is projected to be 18 percent of total CO_2e emissions. The remaining sources of GHG emissions in 2020 are high-GWP gases at 7 percent, residential and commercial activities at 9 percent, agriculture at 6 percent, and recycling and waste at 2 percent.[1]

4.7.1.5 NOP/Scoping Comments

During the NOP periods and the scoping meetings, no residents expressed concerns regarding greenhouse gases and global climate change. The South Coast Air Quality Management District (SCAQMD) submitted a letter during each NOP period requesting the air quality study examine potential greenhouse gas emission impacts of the project, and recommended their methodologies to follow (see Appendix A).

4.7.2 Regulatory Setting

4.7.2.1 International Regulation of Climate Change

Intergovernmental Panel on Climate Change (IPCC). In 1988, the United Nations created the IPCC to provide independent scientific information regarding climate change to policymakers. The IPCC does not conduct research itself, but rather compiles information from a variety of sources into reports regarding climate change and its impacts. The IPCC has thereafter periodically released reports on climate change, and in 2014 released its Fifth Assessment Report, which concluded that "[w]arming of the climate system is unequivocal," and that "[a]nthropogenic greenhouse gas emissions … are extremely likely to have been the dominant cause of the observed warming since the mid-20th century."

United Nations Framework Convention on Climate Change. On March 21, 1994, the United States joined a number of countries around the world in signing the United Nations Framework Convention on Climate Change (Convention). Under the Convention, governments gather and share information on greenhouse gas

[1] CARB website, 2013. http://www.arb.ca.gov/cc/inventory/data/data.htm (October 2013).

emissions, national policies, and best practices; launch national strategies for addressing greenhouse gas emissions and adapting to expected impacts, including the provision of financial and technological support to developing countries; and cooperate in preparing for adaptation to the impacts of climate change.

Kyoto Protocol. The Kyoto Protocol is an international agreement linked to the United Nations Framework Convention on Climate Change. The major feature of the Kyoto Protocol is that it sets binding targets for 37 industrialized countries and the European community for reducing greenhouse gas emissions an average of five per cent against 1990 levels over the five-year period 2008-2012. The Convention (discussed above) encouraged industrialized countries to stabilize emissions; however, the Protocol commits them to do so. Developed countries have contributed more emissions over the last 150 years; therefore, the Protocol places a heavier burden on developed nations under the principle of "common but differentiated responsibilities." The United States has not entered into force of the Kyoto Protocol.

4.7.2.2 Federal Regulations/Standards

The following are actions regarding the Federal Government, GHGs, and fuel efficiency.

Greenhouse Gas Endangerment. *Massachusetts v. EPA* (Supreme Court Case 05-1120) was argued before the United States Supreme Court on November 29, 2006, in which it was petitioned that the EPA regulate four greenhouse gases, including carbon dioxide, under Section 202(a)(1) of the Clean Air Act. A decision was made on April 2, 2007, in which the Supreme Court found that greenhouse gases are air pollutants covered by the Clean Air Act. The Court held that the Administrator must determine whether emissions of greenhouse gases from new motor vehicles cause or contribute to air pollution, which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. On December 7, 2009, the EPA Administrator signed two distinct findings regarding greenhouse gases under section 202(a) of the Clean Air Act:

- *Endangerment Finding:* The Administrator finds that the current and projected concentrations of the six key well-mixed greenhouse gases—carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride—in the atmosphere threaten the public health and welfare of current and future generations.
- *Cause or Contribute Finding:* The Administrator finds that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution, which threatens public health and welfare.

These findings do not impose requirements on industry or other entities. However, this was a prerequisite for implementing greenhouse gas emissions standards for vehicles, as discussed in the section "Clean Vehicles" below.

The EPA denied ten petitions for Reconsideration of the Endangerment and Cause or Contribute Findings in 2010. Some of the petitioners included the Ohio Coal Association, Peabody Energy Company, and the State of Texas.

In September 2011, the EPA Office of Inspector General evaluated the EPA's compliance with established policy and procedures in the development of the endangerment finding, including processes for ensuring information quality. The evaluation concluded that the technical support document should have had more rigorous EPA peer review.

In June 2012, a Federal appeals court rejected a lawsuit by thirteen states against the EPA. The suit alleged that the EPA violated the law by relying almost exclusively on data from the United Nations IPCC rather than doing its own research or testing data according to Federal standards. The states include Virginia, Texas, Alabama, Florida, Hawaii, Indiana, Kentucky, Louisiana, Mississippi, Nebraska, North Dakota, Oklahoma, South Carolina, South Dakota, and Utah. Virginia intends to petition the Supreme Court to review the case.

Clean Vehicles. Congress first passed the Corporate Average Fuel Economy (CAFE) law in 1975 to increase the fuel economy of cars and light duty trucks. The law has become more stringent over time. On May 19, 2009, President Obama put in motion a new national policy to increase fuel economy for all new cars and trucks sold in the United States. On April 1, 2010, the EPA and the Department of Transportation's Highway Traffic and Safety Administration (NHTSA) announced a joint final rule establishing a national program that would reduce greenhouse gas emissions and improve fuel economy for new cars and trucks sold in the United States.

The first phase of the national program would apply to passenger cars, light-duty trucks, and medium-duty passenger vehicles, covering model years 2012 through 2016. They require these vehicles to meet an estimated combined average emissions level of 250 grams of carbon dioxide per mile, equivalent to 35.5 miles per gallon if the automobile industry were to meet this carbon dioxide level solely through fuel economy improvements. Together, these standards would cut carbon dioxide emissions by an estimated 960 million metric tons and 1.8 billion barrels of oil over the lifetime of the vehicles sold under the program (model years 2012–2016). The EPA and NHTSA are working on a second-phase joint rulemaking to establish national standards for light-duty vehicles for model years 2017 and beyond.

On October 25, 2010, the EPA and the U.S. Department of Transportation proposed the first national standards to reduce greenhouse gas emissions and improve fuel

efficiency of heavy-duty trucks and buses. For combination tractors, the agencies are proposing engine and vehicle standards that begin in the 2014 model year and achieve up to a 20 percent reduction in carbon dioxide emissions and fuel consumption by the 2018 model year. For heavy-duty pickup trucks and vans, the agencies are proposing separate gasoline and diesel truck standards, which phase in starting in the 2014 model year and achieve up to a 10 percent reduction for gasoline vehicles and up to a 15 percent reduction for diesel vehicles by 2018 model year (12% and 17%, respectively, if accounting for air conditioning leakage). Lastly, for vocational vehicles (includes other vehicles like buses, refuse trucks, concrete mixers; everything except for combination tractors and heavy-duty pickups and vans), the agencies are proposing engine and vehicle standards starting in the 2014 model year, which would achieve up to a 10 percent reduction in fuel consumption and carbon dioxide emissions by the 2018 model year.

New Source Review Prevention of Significant Deterioration (GHG Tailoring Rule). The EPA issued a final rule on May 13, 2010, that establishes thresholds for greenhouse gases that define when permits under the New Source Review Prevention of Significant Deterioration and Title V Operating Permit programs are required for new and existing industrial facilities. Operating permits are legally enforceable documents that permitting authorities issue to air pollution sources after the source has begun to operate. Title V Operating Permits are required from Title V of the Clean Air Act. This final rule "tailors" the requirements of these Clean Air Act permitting programs to limit which facilities will be required to obtain Prevention of Significant Deterioration and Title V permits. In the preamble to the revisions to the Federal Code of Regulations, the EPA states:

This rulemaking is necessary because without it the Prevention of Significant Deterioration and Title V requirements would apply, as of January 2, 2011, at the 100 or 250 tons per year levels provided under the Clean Air Act, greatly increasing the number of required permits, imposing undue costs on small sources, overwhelming the resources of permitting authorities, and severely impairing the functioning of the programs. EPA is relieving these resource burdens by phasing in the applicability of these programs to greenhouse gas sources, starting with the largest greenhouse gas emitters. This rule establishes two initial steps of the phase-in. The rule also commits the agency to take certain actions on future steps addressing smaller sources, but excludes certain smaller sources from Prevention of Significant Deterioration and Title V permitting for greenhouse gas emissions until at least April 30, 2016.

EPA estimates that facilities responsible for nearly 70 percent of the national greenhouse gas emissions from stationary sources will be subject to permitting requirements under this rule. This includes the nation's largest greenhouse gas emitters—power plants, refineries, and cement production facilities.

On December 23, 2010, the EPA issued a series of rules that put the necessary regulatory framework in place to ensure that 1) industrial facilities can get Clean Air Act permits covering their GHG emissions when needed and 2) facilities emitting GHGs at levels below those established in the Tailoring Rule do not need to obtain Clean Air Act permits.

Standards of Performance for Greenhouse Gas Emissions for New Stationary Sources. As required by a settlement agreement, the EPA proposed new performance standards for emissions of carbon dioxide for new affected fossil fuel-fired electric utility generating units on March 27, 2012. New sources greater than 25 megawatts would be required to meet an output based standard of 1,000 pounds of carbon dioxide per megawatt-hour, based on the performance of widely used natural gas combined cycle technology.

Cap and Trade. Cap and trade refers to a policy tool where emissions are limited to a certain amount and can be traded, or provides flexibility on how the emitter can comply. Successful examples in the United States include the Acid Rain Program and the NO_X Budget Trading Program in the northeast. There is no Federal cap and trade program currently and no pending legislation exists to establish a cap and trade program.

Energy Policy and Conservation Act. The Energy Policy and Conservation Act of 1975 sought to ensure that all vehicles sold in the U.S. would meet certain fuel economy goals. Through this Act, Congress established the first fuel economy standards for on-road motor vehicles in the U.S. Pursuant to the Act, NHTSA, which is part of the U.S. Department of Transportation (USDOT), is responsible for establishing additional vehicle standards and for revising existing standards. Since 1990, the fuel economy standard for new passenger cars has been 27.5 miles per gallon (mpg). Since 1996, the fuel economy standard for new light trucks (gross vehicle weight of 8,500 pounds or less) has been 20.7 mpg. The CAFE program, administered by the EPA, was created to determine vehicle manufacturers' compliance with the fuel economy standards. The EPA calculates a CAFE value for each manufacturer based on city and highway fuel economy test results and vehicle sales. Based on the information generated under the CAFE program, the USDOT is authorized to assess penalties for noncompliance.

Energy Policy Act of 1992. The Energy Policy Act (EPAct) of 1992 was passed to reduce the country's dependence on foreign petroleum and improve air quality. EPAct includes several parts intended to build an inventory of alternative fuel vehicles (AFVs) in large, centrally fueled fleets in metropolitan areas. EPAct requires certain Federal, State, and local governments and private fleets to purchase a percentage of light-duty AFVs capable of running on alternative fuels each year. In addition, financial incentives are also included in EPAct. Federal tax deductions will

be allowed for businesses and individuals to cover the incremental cost of AFVs. States are also required by the Act to consider a variety of incentive programs to help promote AFVs.

Energy Policy Act of 2005. The Energy Policy Act of 2005 includes provisions for renewed and expanded tax credits for electricity generated by qualified energy sources, such as landfill gas; provides bond financing, tax incentives, grants, and loan guarantees for clean renewable energy and rural community electrification; and establishes a Federal purchase requirement for renewable energy.

Federal Regulation of Climate Change. The United States has historically had a voluntary approach to reducing GHG emissions. However, on April 2, 2007, the United States Supreme Court ruled that the EPA has the authority to regulate CO_2 emissions under the Federal Clean Air Act (CAA). While there currently are no adopted Federal regulations for the control or reduction of GHG emissions, the EPA commenced several actions in 2009 that are required to implement a regulatory approach to global climate change.

On December 7, 2009, the EPA Administrator signed a final action under the CAA, finding that six greenhouse gases—CO_2, CH_4, N_2O, HFCs, PFCs, and SF_6—constitute a threat to public health and welfare, and that the combined emissions from motor vehicles cause and contribute to global climate change. This EPA action does not impose any requirements on industry or other entities. However, the findings are a prerequisite to finalizing the GHG emission standards for light-duty vehicles mentioned below.

On April 1, 2010, the EPA and NHTSA announced a final joint rule to establish a national program consisting of new standards for model year 2012 through 2016 light-duty vehicles that will reduce GHG emissions and improve fuel economy. EPA is finalizing the first-ever national GHG emissions standards under the CAA, and NHTSA is finalizing CAFE standards under the EPAct. The EPA GHG standards require these vehicles to meet an estimated combined average emissions level of 250 grams of CO_2 per mile in model year 2016, equivalent to 35.5 mpg.

Mandatory Reporting of GHG. The Consolidated Appropriations Act of 2008, passed in December 2007, requires the establishment of mandatory GHG reporting requirements. On September 22, 2009, the EPA issued the Final Mandatory Reporting of Greenhouse Gases rule. The rule requires reporting of GHG emissions from large sources and suppliers in the United States, and is intended to collect accurate and timely emissions data to inform future policy decisions. Under the rule, suppliers of fossil fuels or industrial GHGs, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons or more per year of GHG emissions, are required to submit annual reports to the EPA.

4.7.2.3 State Regulations/Standards

California Code of Regulations Title 24, Part 6, also titled The Energy Efficiency Standards for Residential and Nonresidential Buildings.. Enacted in 1978, this part of the California Code established energy efficiency standards for residential and nonresidential buildings in response to a legislative mandate to reduce California's energy consumption. These standards are updated periodically to allow consideration and possible incorporation of new energy efficiency technologies and methods. The most recent standards (the 2013 California Energy Code) were adopted and went into effect July 2013. Such standards include the provision of cool roofs, demand control ventilation, skylights for day-lighting in buildings, thermal breaks for metal building roofs, and lighting power limits. These standards are expected to reduce the growth in electricity use of residential and non-residential buildings. Continual updates to Title 24 along with the State's implementation of AB 1493 and SB 1368 will have a major impact on the State's attainment of the AB 32 goals.

California Code of Regulations Title 24, Part 11. This part of the California Code is known as the California Green Building Standards Code (CALGreen Code) and was enacted to improve public health, safety, and general welfare by enhancing the design and construction of buildings through the use of building concepts with positive environmental impacts and through encouragement of sustainable construction practices. The CALGreen Code is not intended to substitute for or be identified as meeting the certification requirements of any green building program that is not established and adopted by the California Building Standards Commission (CBSC). The 2013 update to Part 11 of Title 24 of the California Code of Regulations became effective January 1, 2014, with a supplement becoming effective July 1, 2015. Key provisions of the CALGreen Code that apply to the project site include:

Division 5.1—Planning and Design

Section 5.106 Site Development

5.106.4 Bicycle Parking and Changing Rooms:

Short-term bicycle parking. If the new project or an addition or alteration is anticipated to generate visitor traffic, provide permanently anchored bicycle racks within 200 feet of the visitors' entrance, readily visible to passers-by, for 5 percent of new visitor motorized vehicle parking spaces being added, with a minimum of one two-bike capacity rack (5.106.4.1).

Long-term bicycle parking. For buildings with over 10 tenant-occupants or alterations that add 10 or more tenant vehicular parking spaces, provide secure bicycle parking for 5 percent of tenant vehicular parking spaces being added, with a minimum of one space. Acceptable parking facilities shall be convenient from the street and shall meet the following: 1. Covered, lockable enclosures with permanently anchored

racks for bicycles; 2. Lockable bicycle rooms with permanently anchored racks; or 3. Lockable, permanently anchored bicycle lockers (5.106.4.2).

5.106.5 Clean Air Vehicle Parking: For new projects or additions or alterations that add 10 or more vehicular parking spaces, provide designated parking for any combination of low-emitting, fuel-efficient and carpool/van pool vehicles [201 spaces and over require at least 8 percent] (5.106.5.2).

5.106.8 Light Pollution Reduction (specific backlight, uplight, and glare ratings)

5.106.10 Grading and Paving: Construction plans shall indicate how site grading or a drainage system will manage all surface water flows to keep water from entering buildings.

Division 5.2—Energy Efficiency

Section 5.201.1 Energy Efficiency (Mandatory energy efficiency standards through California Code of Regulations, Title 24, Part 6)

Division 5.3—Water Efficiency and Conservation

Section 5.303 Indoor Water Use

5.303.1 Meters: Separate water meters for buildings in excess of 50,000 sq ft or buildings projected to consume more than 1,000 gallons per day.

5.303.2 Twenty Percent Savings: Use of plumbing fixtures and fittings that will reduce the overall use of potable water within the building by 20 percent, based on the maximum allowable water use per fixture and fitting as required by the California Building Code (California Code of Regulations, Title 24, Part 2)

5.304.3 Irrigation design: Automatic irrigation system controllers installed at the time of final inspection shall be weather- or soil moisture-based controllers that adjust irrigation in response to changes in plant needs; weather-based controllers.

5.303.4 Wastewater Reduction: Each building shall reduce by 20 percent wastewater by one of the following methods: 1. The installation of water-conserving fixtures or 2. Use of non-potable water systems (5.303.4).

5.303.6 Plumbing Fixtures and Fittings

Section 5.304 Outdoor Water Use

5.304.1 Water Budget: A water budget shall be developed for landscape irrigation use that conforms to the local water efficient landscape ordinance or to the California Department of Water Resources Model Water Efficient Landscape Ordinance where no local ordinance is applicable.

5.304.2 Outdoor Water Use (separate submeters or metering devices)

5.304.3 Irrigation Design (irrigation controllers and sensors)

Division 5.4—Material Conservation and Resource Efficiency

Section 5.407 Water Resistance and Moisture Management

Section 5.408 Construction Waste Reduction, Disposal and Recycling

5.408.1 and 5.408.3 Construction Waste Diversion: Recycle and/or salvage for reuse a minimum 50 percent of the nonhazardous construction and demolition waste. 100 percent of trees, stumps, rocks and associated vegetation and soils resulting from land clearing shall be reused or recycled.

5.408.2 Construction Waste Management Plan

Section 5.410 Building Maintenance and Operation

5.410.1 and 5.713.10 Recycling by Occupants: Provide readily accessible areas that serve the entire building and are identified for the depositing, storage and collection of non-hazardous materials for recycling.

Division 5.5—Environmental Quality

Section 5.504 Pollutant Control

5.504.3 Covering of Duct Openings and Protection of Mechanical Equipment During Construction

5.504.4 Finish Material Pollutant Control: Low-pollutant emitting interior finish materials such as adhesives, paints, carpet, and flooring

5.404.5.3 Filters: Minimum Efficiency Reporting Value (MERV) of 8 or higher in mechanically ventilated buildings.

California Code of Regulations Titles 14 and 27. These parts of the California Code require energy-efficient practices as part of solid and hazardous waste handling and disposal.

Pavley Regulations and Fuel Efficiency Standards. California AB 1493, enacted on July 22, 2002, required the CARB to develop and adopt regulations that reduce greenhouse gases emitted by passenger vehicles and light duty trucks. The regulation was stalled by automaker lawsuits and by the EPA's denial of an implementation waiver. On January 21, 2009, the CARB requested that the EPA reconsider its previous waiver denial. On January 26, 2009, President Obama directed that the EPA assess whether the denial of the waiver was appropriate. On June 30, 2009, the EPA granted the waiver request. On September 8, 2009, the U.S. Chamber of Commerce and the National Automobile Dealers Association sued the EPA to challenge its granting of the waiver to California for its standards. California assisted the EPA in defending the waiver decision. The U.S. District Court for the District of Columbia denied the Chamber's petition on April 29, 2011.

The standards phase in during the 2009 through 2016 model years. When fully phased in, the near term (2009–2012) standards will result in about a 22 percent

reduction compared with the 2002 fleet, and the mid-term (2013–2016) standards will result in about a 30 percent reduction. Several technologies stand out as providing significant reductions in emissions at favorable costs. These include discrete variable valve lift or camless valve actuation to optimize valve operation rather than relying on fixed valve timing and lift as has historically been done; turbocharging to boost power and allow for engine downsizing; improved multi-speed transmissions; and improved air conditioning systems that operate optimally, leak less, and/or use an alternative refrigerant.

Low Carbon Fuel Standard, Executive Order S-01-07. The Governor signed Executive Order S-01-07 on January 18, 2007. The order mandates that a statewide goal shall be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. In particular, the executive order established a Low Carbon Fuel Standard and directed the Secretary for Environmental Protection to coordinate the actions of the California Energy Commission (CEC), the CARB, the University of California, and other agencies to develop and propose protocols for measuring the "life-cycle carbon intensity" of transportation fuels. The CARB adopted the Low Carbon Fuel Standard (LCFS) on April 23, 2009. The Low Carbon Fuel Standard requires producers of petroleum based fuels to reduce the carbon intensity of their products, beginning with a quarter of a percent in 2011, ending in a 10 percent total reduction in 2020. Petroleum importers, refiners and wholesalers can either develop their own low carbon fuel products, or buy LCFS Credits from other companies that develop and sell low carbon alternative fuels, such as biofuels, electricity, natural gas or hydrogen. The Low Carbon Fuel Standard was challenged in the United States District Court in Fresno in 2011. The court's ruling issued on December 29, 2011, included a preliminary injunction against the CARB's implementation of the rule. The Ninth Circuit Court of Appeals stayed the injunction on April 23, 2012 pending final ruling on appeal, allowing the CARB to continue to implement and enforce the regulation and vacated the injunction on September 18, 2013, and remanded the case to the district court for further consideration.

Senate Bill (SB) 1368. In 2006, the State Legislature adopted SB 1368, which was subsequently signed into law by the Governor. SB 1368 directs the California Public Utilities Commission (CPUC) to adopt a performance standard for greenhouse gas emissions for the future power purchases of California utilities. SB 1368 seeks to limit carbon emissions associated with electrical energy consumed in California by forbidding procurement arrangements for energy longer than 5 years from resources that exceed the emissions of a relatively clean, combined cycle natural gas power plant. Because of the carbon content of its fuel source, a coal-fired plant cannot meet this standard because such plants emit roughly twice as much carbon as combined cycle natural gas plants. Accordingly, the law effectively prevents California's utilities from investing in, otherwise financially supporting, or purchasing power from new coal plants located in or out of the State. Thus, SB 1368 will lead to dramatically lower greenhouse gas emissions associated with California's energy

demand, as SB 1368 will effectively prohibit California utilities from purchasing power from out-of-state producers that cannot satisfy the performance standard for greenhouse gas emissions required by SB 1368. The CPUC adopted the regulations required by SB 1368 on August 29, 2007.

SB 97 and the *CEQA Guidelines* Update. Passed in August 2007, SB 97 added Section 21083.05 to the Public Resources Code. The code states "(a) On or before July 1, 2009, the Office of Planning and Research shall prepare, develop, and transmit to the Resources Agency guidelines for the mitigation of greenhouse gas emissions or the effects of greenhouse gas emissions as required by this division, including, but not limited to, effects associated with transportation or energy consumption. (b) On or before January 1, 2010, the Resources Agency shall certify and adopt guidelines prepared and developed by the California Governor's Office of Planning and Research (OPR) pursuant to subdivision (a)." Section 21097 was also added to the Public Resources Code. It provided CEQA protection until January 1, 2010, for transportation projects funded by the Highway Safety, Traffic Reduction, Air Quality, and Port Security Bond Act of 2006 or projects funded by the Disaster Preparedness and Flood Prevention Bond Act of 2006, in stating that the failure to analyze adequately the effects of greenhouse gases would not violate CEQA.

On April 13, 2009, the OPR submitted to the Secretary for Natural Resources its recommended amendments to the *CEQA Guidelines* for addressing greenhouse gas emissions. On July 3, 2009, the Natural Resources Agency commenced the Administrative Procedure Act rulemaking process for certifying and adopting these amendments pursuant to Public Resources Code Section 21083.05. Following a 55-day public comment period and two public hearings, the Natural Resources Agency proposed revisions to the text of the *CEQA Guidelines* amendments. The Natural Resources Agency transmitted the adopted amendments and the entire rulemaking file to the Office of Administrative Law on December 31, 2009. On February 16, 2010, the Office of Administrative Law approved the Amendments, and filed them with the Secretary of State for inclusion in the California Code of Regulations. The Amendments became effective on March 18, 2010.

The CEQA Amendments provide guidance to public agencies regarding the analysis and mitigation of the effects of greenhouse gas emissions in CEQA documents. The CEQA Amendments fit within the existing CEQA framework by amending existing *CEQA Guidelines* to reference climate change.

A new section, *CEQA Guidelines* Section 15064.4, was added to assist agencies in determining the significance of GHG emissions. The new section allows agencies the discretion to determine whether a quantitative or qualitative analysis is best for a particular project. However, the *CEQA Guidelines* offer little guidance on the crucial next step in this assessment process—how to determine whether the project's estimated greenhouse gas emissions are significant or cumulatively considerable.

Also amended were *CEQA Guidelines* Sections 15126.4 and 15130, which address mitigation measures and cumulative impacts respectively. Greenhouse gas mitigation measures are referenced in general terms, but no specific measures are championed. The revision to the cumulative impact discussion requirement (Section 15130) simply directs agencies to analyze greenhouse gas emissions in an EIR when a project's incremental contribution of emissions may be cumulatively considerable; however, it does not answer the question of how to determine whether emissions are cumulatively considerable.

Section 15183.5 permits programmatic greenhouse gas analysis and later project-specific tiering. A tiered project is a project that was addressed in a certified program document, such as an EIR or Mitigated Negative Declaration. The *CEQA Guidelines* state the following:

> *Lead agencies may analyze and mitigate the significant effects of greenhouse gas emissions at a programmatic level, such as in a general plan, a long range development plan, or a separate plan to reduce greenhouse gas emissions. Later project-specific environmental documents may tier from and/or incorporate by reference that existing programmatic review. Project-specific environmental documents may rely on an EIR containing a programmatic analysis of greenhouse gas emissions (Section 15183.5(a)).*

Compliance with plans for the reduction of GHG emissions can support a determination that a project's cumulative effect is not cumulatively considerable, according to proposed Section 15183.5(b).

In addition, the amendments revised Appendix F of the *CEQA Guidelines*, which focuses on energy conservation. The sample environmental checklist in the *CEQA Guidelines'* Appendix G was amended to include greenhouse gas impact questions, which are used in this analysis (see Section 4.7.4).

Executive Order S-3-05. Executive Order S-3-05 was signed by Governor Schwarzenegger in 2005 proclaiming California is vulnerable to the impacts of climate change. It states that increased temperatures could reduce the Sierra Nevada's snowpack, worsen California's air quality problems, and potentially cause a rise in sea levels. The Executive Order establishes total GHG emission targets including emissions reductions to the 2000 level by 2010, and the 1990 level by 2020, and to 80 percent below the 1990 level by 2050. The 2050 reduction goal represents what scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal was established to be an aggressive, but achievable, mid-term target.

Assembly Bill 32 (AB 32). California's major initiative for reducing GHG emissions is outlined in AB 32, the "Global Warming Solutions Act," passed by the California State legislature on August 31, 2006. This effort aims at reducing GHG emissions to

1990 levels by 2020. The CARB has established the level of GHG emissions in 1990 at 427 MMT CO_2e. The emissions target of 427 MMT requires the reduction of 169 MMT from the State's projected business-as-usual (BAU) 2020 emissions of 596 MMT. AB 32 requires the CARB to prepare a Scoping Plan that outlines the main State strategies for meeting the 2020 deadline and to reduce GHGs that contribute to global climate change.

The Scoping Plan was approved by the CARB on December 11, 2008, and includes measures to address GHG emission reduction strategies related to energy efficiency, water use, and recycling and solid waste, among other measures.[1] Emission reductions that are projected to result from the recommended measures in the Scoping Plan are expected to total 174 MMT CO_2e, which would allow California to attain the emissions goal of 427 MMT CO_2e by 2020. The Scoping Plan includes a range of GHG reduction actions that may include direct regulations, alternative compliance mechanisms, monetary and non-monetary incentives, voluntary actions, and market-based mechanisms such as a cap-and-trade system. The Scoping Plan, even after Board approval, remains a recommendation. The measures in the Scoping Plan will not be binding until after they are adopted through the normal rulemaking process. The CARB rule-making process includes preparation and release of each of the draft measures, public input through workshops and a public comment period, followed by a CARB hearing and rule adoption.

AB 32 requires the CARB and the CAT to:

- Adopt a list of discrete early action measures by July 1, 2007, that can be implemented before January 1, 2010;
- Establish a statewide GHG emissions cap for 2020 based on 1990 emissions and adopt mandatory reporting rules for significant sources of GHG by January 1, 2008;
- Indicate how emission reductions will be achieved from significant GHG sources via regulations, market mechanisms and other actions by January 1, 2009; and
- Adopt regulations by January 1, 2011, to achieve the maximum technologically feasible and cost-effective reductions in GHG, including provisions for using both market mechanisms and alternative compliance mechanisms.

In June 2007, the CARB approved a list of 37 early action measures, including three discrete early action measures (Low Carbon Fuel Standard, Restrictions on High Global Warming Potential Refrigerants, and Landfill Methane Capture). Discrete early action measures are measures that were required to be adopted as regulations and made effective no later than January 1, 2010, the date established by Health and Safety Code (HSC) Section 38560.5. The CARB adopted additional early action

[1] *Climate Change Proposed Scoping Plan: a Framework for Change,* CARB, October 2008.

measures in October 2007[1] that tripled the number of discrete early action measures. These measures relate to truck efficiency, port electrification, reduction of perfluorocarbons from the semiconductor industry, reduction of propellants in consumer products, proper tire inflation, and sulfur hexafluoride (SF_6) reductions from the non-electricity sector. The combination of early action measures is estimated to reduce statewide GHG emissions by nearly 16 MMT.[2]

AB 32 codifies Executive Order S-3-05's[3] year 2020 goal by requiring that statewide GHG emissions be reduced to 1990 levels by the year 2020. This reduction will be accomplished through an enforceable statewide cap on GHG emissions that will be implemented no later than January 1, 2012. To effectively implement the cap, AB 32 directs the CARB to develop appropriate regulations and establish a mandatory reporting system to track and monitor global warming emissions levels.

The AB 32 Scoping Plan identifies a cap-and-trade program as one of the strategies California will employ to reduce the GHG emissions that cause climate change. The program is a central element of AB 32 and covers major sources of GHG emissions in the State such as refineries, power plants, industrial facilities, and transportation fuels. The regulation includes an enforceable GHG cap that will decline over time. The CARB will distribute allowances, which are tradable permits, equal to the emission allowed under the cap. The program started on January 1, 2012, with the first offset credit auctions in November 2012 and an enforceable compliance obligation beginning with 2013 GHG emissions. For the first two years of the program, large industrial emitters will receive 90 percent of their allowances for free in a soft start meant to give companies time to reduce emissions through new technologies or other means. The cap, or number of allowances, will decline over time in an effort to drastically reduce greenhouse gas emissions by 2050.

The California Chamber of Commerce filed suit[4] challenging the validity of the State's cap-and-trade program. The suit challenges CARB's authority as stated under the State's 2006 climate-change law, AB 32, to sell the permits, called "allowances," for the purpose of generating revenue for the State. It is also challenging the sale of allowances as an illegal tax, arguing that taxes need a two-thirds vote by the Legislature. The suit was rejected on November 12, 2013, by the California Superior Court.

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1 *Expanded List of Early Action Measures to Reduce Greenhouse Gas Emissions in California Recommended for Board Consideration*. CARB. 2007. October.

2 "ARB approves tripling of early action measures required under AB 32." News Release 07-46. CARB. 2007. http://www.arb.ca.gov/newsrel/nr102507.htm. October 25.

3 Executive Order S-3-05 establishes greenhouse gas emission reduction targets for California.

4 "California's Cap-And-Trade System Goes Into Effect Amidst Lawsuit," *The Huffington Post*, November 14, 2012, http://www.huffingtonpost.com/2012/11/14/californias-cap-and-trade_n_2131251.html).

CARB Scoping Plan. The California State Legislature adopted AB 32 in 2006 which focuses on reducing greenhouse gases (carbon dioxide, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride) to 1990 levels by the year 2020. Pursuant to the requirements in AB 32, the CARB adopted the Climate Change Scoping Plan (Scoping Plan) in 2008, which outlines actions recommended to obtain that goal. The Scoping Plan calls for an "ambitious but achievable" reduction in California's greenhouse gas emissions, cutting approximately 30 percent from BAU emission levels projected for 2020, or about 10 percent from today's levels. On a per-capita basis, that means reducing annual emissions of 14 tons of carbon dioxide for person in California down to about 10 tons per person by 2020.

The Scoping Plan[1] contains the following 18 strategies to reduce the State's emissions:

1. *California Cap-and-Trade Program Linked to Western Climate Initiative.* Implement a broad-based California Cap-and-Trade program to provide a firm limit on emissions. Link the California cap-and-trade program with other Western Climate Initiative Partner programs to create a regional market system to achieve greater environmental and economic benefits for California. Ensure California's program meets all applicable AB 32 requirements for market-based mechanisms.
2. *California Light-Duty Vehicle Greenhouse Gas Standards.* Implement adopted standards and planned second phase of the program. Align zero-emission vehicle, alternative and renewable fuel and vehicle technology programs with long-term climate change goals.
3. *Energy Efficiency.* Maximize energy efficiency building and appliance standards; pursue additional efficiency including new technologies, policy, and implementation mechanisms. Pursue comparable investment in energy efficiency from all retail providers of electricity in California.
4. *Renewable Portfolio Standard.* Achieve 33 percent renewable energy mix statewide. Renewable energy sources include (but are not limited to) wind, solar, geothermal, small hydroelectric, biomass, anaerobic digestion, and landfill gas.
5. *Low Carbon Fuel Standard.* Develop and adopt the Low Carbon Fuel Standard.
6. *Regional Transportation-Related Greenhouse Gas Targets.* Develop regional greenhouse gas emissions reduction targets for passenger vehicles. This measure refers to SB 375.
7. *Vehicle Efficiency Measures.* Implement light-duty vehicle efficiency measures.
8. *Goods Movement.* Implement adopted regulations for the use of shore power for ships at berth. Improve efficiency in goods movement activities.

[1] Scoping Plan Reduction Measures from California Air Resources Board 2008 and Table 69 from MBA 2013.

9. *Million Solar Roofs Program.* Install 3,000 MW of solar-electric capacity under California's existing solar programs.
10. *Medium/Heavy-Duty Vehicles.* Adopt medium and heavy-duty vehicle efficiency measures.
11. *Industrial Emissions.* Require assessment of large industrial sources to determine whether individual sources within a facility can cost-effectively reduce greenhouse gas emissions and provide other pollution reduction co-benefits. Reduce greenhouse gas emissions from fugitive emissions from oil and gas extraction and gas transmission. Adopt and implement regulations to control fugitive methane emissions and reduce flaring at refineries.
12. *High Speed Rail.* Support implementation of a high-speed rail system.
13. *Green Building Strategy.* Expand the use of green building practices to reduce the carbon footprint of California's new and existing inventory of buildings.
14. *High Global Warming Potential Gases.* Adopt measures to reduce high global warming potential gases.
15. *Recycling and Waste.* Reduce methane emissions at landfills. Increase waste diversion, composting, and commercial recycling. Move toward zero-waste.
16. *Sustainable Forests.* Preserve forest sequestration and encourage the use of forest biomass for sustainable energy generation.
17. *Water.* Continue efficiency programs and use cleaner energy sources to move and treat water.
18. *Agriculture.* In the near-term, encourage investment in manure digesters and at the five-year Scoping Plan update determine if the program should be made mandatory by 2020.

Senate Bill 1368 (SB 1368). In September 2006, Governor Arnold Schwarzenegger signed Senate Bill 1368, which calls for the adoption of a GHG performance standard for in-State and imported electricity generators to mitigate climate change. On January 25, 2007, the CPUC adopted an interim GHG emissions performance standard. This standard is a facility-based emissions standard requiring all new long-term commitments for baseload generation to serve California consumers with power plants that have emissions no greater than a combined cycle gas turbine plant. The established level is 1,100 pounds of CO_2 per megawatt-hour.

Senate Bill 375. SB 375 was signed into law on October 1, 2008. SB 375 provides emissions-reduction goals around which regions can plan, integrating disjointed planning activities, and provides incentives for local governments and developers to implement "smart growth" planning and development strategies, including reducing the average vehicle miles traveled (VMT) to reduce commuting distances and reduce criteria and greenhouse gas air pollutant emissions. SB 375 has three major components:

- Using the regional transportation planning process to achieve reductions in GHG emissions consistent with AB 32's goals;
- Offering CEQA incentives to encourage projects that are consistent with a regional plan that achieves GHG emission reductions; and
- Coordinating the regional housing needs allocation process with the regional transportation process while maintaining local authority over land use decisions.

SB 375 requires each Metropolitan Planning Organization (MPO) to include a Sustainable Communities Strategy (SCS) in the regional transportation plan that demonstrates how the region will meet the greenhouse gas emission targets and creates CEQA streamlining incentives for projects that are consistent with the regional SCS. The focus of SB 375 is on location of new residential projects and coordinated transportation planning.

Renewable Electricity Standards. There have been several renewable electricity senate bills in California. On September 12, 2002, Governor Gray Davis signed SB 1078 requiring California to generate 20 percent of its electricity from renewable energy by 2017. SB 107 changed the due date to 2010 instead of 2017. On November 17, 2008, Governor Arnold Schwarzenegger signed Executive Order S-14-08, which established a Renewable Portfolio Standard target for California requiring that all retail sellers of electricity serve 33 percent of their load with renewable energy by 2020. Governor Schwarzenegger also directed the CARB (Executive Order S-21-09) to adopt a regulation by July 31, 2010, requiring the state's load serving entities to meet a 33 percent renewable energy target by 2020. The CARB approved the Renewable Electricity Standard on September 23, 2010, by Resolution 10-23. Senate Bill X1-2 (2011) codifies the Renewable Electricity Standard into law.

4.7.2.4 Regional Regulations: Southern California Association of Governments (SCAG)

Sustainable Communities Strategy (SCS) within Regional Transportation Plan (RTP). The SCS demonstrates the region's ability to attain and exceed the GHG emission reduction targets set by the CARB. The SCS outlines the plan for integrating the transportation network and related strategies with an overall land use pattern that responds to projected growth, housing needs, changing demographics, and transportation demands. The regional vision of the SCS maximizes current voluntary local efforts that support the goals of SB 375, as evidenced by several Compass Blueprint Demonstration Projects and various county transportation improvements. The SCS focuses the majority of new housing and job growth in high-quality transit areas and other opportunity areas in existing main streets, downtowns, and commercial corridors, resulting in an improved jobs-housing balance and more opportunity for transit-oriented development. This overall land use development pattern supports and complements the proposed transportation network, which

emphasizes system preservation, active transportation, and transportation demand management measures. The RTP/SCS exceeds its greenhouse gas emission-reduction targets set by the CARB by achieving a 9 percent reduction by 2020 and 16 percent reduction by 2035 compared to the 2005 level on a per capita basis.

South Coast Air Quality Management District. In April 2008, the SCAQMD, in order to provide guidance to local lead agencies on determining the significance of GHG emissions identified in CEQA documents, convened a "GHG CEQA Significance Threshold Working Group."[1] The goal of the working group is to develop and reach consensus on an acceptable CEQA significance threshold for GHG emissions that would be utilized on an interim basis until the CARB (or some other State agency) develops statewide guidance on assessing the significance of GHG emissions under CEQA.

Initially, SCAQMD staff presented the working group with a significance threshold that could be applied to various types of projects—residential, non-residential, industrial, etc. However, the threshold is still under development. In December 2008, staff presented the SCAQMD Governing Board with a significance threshold for stationary source projects in which it is the lead agency. This threshold uses a tiered approach to determine a project's significance, with 10,000 metric tons (MT) of CO_2e as a screening numerical threshold.

In September 2010, the Working Group released additional revisions, which recommended a project-level efficiency target of 4.8 MT CO_2e per service population (SP) as a 2020 target and 3.0 MT CO_2e, per SP as a 2035 target. The recommended plan-level target for 2020 was 6.6 MT CO_2e and the plan level target for 2035 was 4.1 MT CO_2e. The SCAQMD has not announced when staff is expecting to present a finalized version of these thresholds to the Governing Board. The SCAQMD has also adopted Rules 2700, 2701, and 2702 that address GHG reductions; however, these rules are currently applicable to boilers and process heaters, forestry, and manure management projects.

Western Riverside Council of Governments Climate Action Plan (WRCOG CAP). The WRCOG (2014) Subregional CAP establishes a community-wide emissions reduction target of 15 percent below 2010, following guidance from CARB and the Governor's Office of Planning and Research. CARB and the California Attorney General have determined this approach to be consistent with the statewide AB 32 goal of reducing emissions to 1990 levels. The Subregional CAP does not establish a reduction target for 2035 or future years; however, the CAP identifies a reduction goal of 49 percent below baseline emissions levels to set the WRCOG subregion on a trajectory to meet targets identified in SB 375 and Executive Order S-3-05, recognizing that information, methodologies, and data availability may change between now and 2035.

[1] For more information see: http://www.aqmd.gov/ceqa/handbook/GHG/GHG.html.

To meet emissions reduction targets, the CAP considers existing programs and policies in the subregion that achieve GHG emissions reductions in addition to new GHG reduction measures. Several measures apply to participating jurisdictions uniformly, because they respond to adoption of a State law (e.g., the Low Carbon Fuel Standard) or result from programs administered at the discretion of a utility serving multiple jurisdictions (e.g., utility rebates). For other, more discretionary measures, participating jurisdictions, including Wildomar, have voluntarily committed to a participation level that could be implemented in their community.

4.7.2.5 City General Plan Policies

The City's General Plan contains the following policies directly related to greenhouse gases, climate change, energy conservation, and sustainability:

Circulation

C 5.2 Encourage the use of drought-tolerant native plants and the use of recycled water for roadway landscaping.

Open Space

OS 2.3 Encourage native, drought-resistant landscape planting.

Energy Efficiency and Conservation

AQ 5.4 Encourage the incorporation of energy-efficient design elements, including appropriate site orientation and the use of shade and windbreak trees to reduce fuel consumption for heating and cooling.

Housing

Goal H-6 Conserve energy in the development of new housing and the rehabilitation of existing housing.

Land Use and the Environment

EJ 2.19 Encourage public and private development to achieve LEED certification or an equivalent green building standard.

4.7.3 Methodology

CEQA does not require "perfection" but instead "adequacy, completeness, and a good faith effort at full disclosure" (Section 15003 (i)); therefore, the analysis of project GHG emissions and climate change is based on methodologies and information available at the time this EIR was prepared. Estimation of GHG emissions in the future does not account for changes in technology that may reduce such emissions; therefore, the estimates are based on past performance and represent a scenario that may be worse than that which may occur. Many uncertainties exist regarding the precise relationship between specific levels of GHG emissions and the ultimate impact on global climate. Significant uncertainties also exist regarding the reduction potential of mitigation strategies. Thus, while

information is presented below to assist the public and the City's decision-makers in understanding the project's potential contribution to global climate change impacts, the information available to the City is not sufficiently detailed to allow a direct comparison between particular project characteristics and particular climate change impacts, nor between any particular proposed mitigation measure and any reduction in climate change impacts.

The recommended approach for GHG analysis included in the OPR's June 2008 release is to (1) identify and quantify GHG emissions, (2) assess the significance of the impact on climate change, and (3) if significant, identify alternatives and/or mitigation measures to reduce the impact below a level of significance.[1] Neither the CEQA statute nor Guidelines prescribes quantitative thresholds of significance or a particular methodology for performing an impact analysis and significance criteria are left to the judgment and discretion of the lead agency.

The June 2008 OPR guidance provides some additional direction regarding planning documents as follows: "CEQA can be a more effective tool for GHG emissions analysis and mitigation if it is supported and supplemented by sound development policies and practices that will reduce GHG emissions on a broad planning scale and that can provide the basis for a programmatic approach to project-specific CEQA analysis and mitigation. For local government lead agencies, adoption of General Plan policies and certification of General Plan EIRs that analyze broad jurisdiction-wide impacts of GHG emissions can be part of an effective strategy for addressing cumulative impacts and for streamlining later project-specific CEQA reviews."

Pursuant to SB 97, the OPR is in the process of developing guidelines for analysis of the effects of GHG emissions. As part of this process, the OPR has asked CARB technical staff to recommend Statewide interim thresholds of significance for GHGs. The CARB released a preliminary draft staff proposal in October 2008 that included initial suggestions for significance criteria related to industrial, commercial, and residential projects.

In March 2010, *CEQA Guidelines* amendments were adopted and include the following direction regarding determination of significant impacts from GHG emissions (Section 15064.4):

> (a) The determination of the significance of greenhouse gas emissions calls for a careful judgment by the lead agency consistent with the provisions in Section 15064. A lead agency should make a good-faith effort, based on available information, to describe, calculate or estimate the amount of greenhouse gas emissions resulting from a project. A lead agency shall have discretion to determine, in the context of a particular project, whether to:

[1] *CEQA and Climate Change: Addressing Climate Change through California Environmental Quality Act Review*. Governor's Office of Planning and Research, State of California, 2008. June 19.

(1) Use a model or methodology to quantify greenhouse gas emissions resulting from a project, and which model or methodology to use. The lead agency has discretion to select the model it considers most appropriate provided it supports its decision with substantial evidence. The lead agency should explain the limitations of the particular model or methodology selected for use; or

(2) Rely on a qualitative analysis or performance based standards.

(b) A lead agency may consider the following when assessing the significance of impacts from greenhouse gas emissions on the environment:

(1) The extent to which the project may increase or reduce greenhouse gas emissions as compared to the existing environmental setting.

(2) Whether the project emissions exceed a threshold of significance that the lead agency determines applies to the project.

(3) The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of greenhouse gas emissions. Such regulations or requirements must be adopted by the relevant public agency through a public review process and must include specific requirements that reduce or mitigate the project's incremental contribution of greenhouse gas emissions. If there is substantial evidence that the possible effects of a particular project are still cumulatively considerable notwithstanding compliance with the adopted regulations or requirements, an EIR must be prepared for the project.

CEQA Guidelines Section 15064(b) provides that the "determination of whether a project may have a significant effect on the environment calls for careful judgment on the part of the public agency involved, based to the extent possible on scientific and factual data," and further, states that an "ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting."

On October 2, 2013, SCAQMD released the California Emission Estimator Model (CalEEMod) Version 2013.2.2. This version of CalEEMod was used to model both on-site and off-site GHG emissions. The purpose of the new model is to calculate air quality and GHG emissions more accurately from direct and indirect sources and quantify applicable air quality and GHG reductions achieved from mitigation measures.

For construction, the analysis estimated emissions for the following activities: site preparation, grading, building construction, paving, and coating. The analysis also projected operational emissions using area source, energy source, mobile source, waste, water, and construction (averaged over 30 years) emissions. A detailed description of the assumptions used to estimate GHG emissions is included in Appendix F.

4.7.4 Thresholds of Significance

As the SCAQMD has recognized, the analysis of GHGs is a much different analysis than the analysis of criteria pollutants. For criteria pollutants, significance thresholds are based on daily emissions because attainment or nonattainment is based on daily exceedances of applicable AAQS. Furthermore, several AAQS are based on relatively short-term exposure effects on human health (e.g., 1-hour and 8-hour). Since the half-life of CO_2 is approximately 100 years, the effects of GHGs are longer-term and affect global climate over a relatively longer time frame. Therefore, the SCAQMD's current position is to evaluate GHG effects over a longer time frame than a single day.

In concert with other past, present, and probable future projects, individual projects cumulatively contribute to potential for GCC. Appendix G of the CEQA Guidelines suggests that projects address the following questions:

- Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?
- Would the project conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs?

Neither the CEQA statutes, the OPR guidelines, nor the CEQA Guidelines prescribe thresholds of significance or a particular methodology for performing an impact analysis. As with most environmental topics, significance criteria are left to the judgment and discretion of the lead agency.

The analysis uses compliance with AB 32, considered a "... previously approved mitigation program," to determine whether the project's incremental contribution of GHGs represents a cumulatively considerable contribution to GCC. The project's GHG emission levels are analyzed to determine whether project implementation would impede compliance with the GHG emissions reduction mandated by AB 32. As noted in the Scoping Plan, a reduction of 28.5 percent below the BAU scenario is required to meet the goals of AB 32.

4.7.5 Less than Significant Impacts

The following potential impacts were determined to be less than significant. In each instance, either no impact would occur or adherence to established regulations, standards, and policies would reduce potential impacts to a less than significant level.

4.7.5.1 Greenhouse Gas Plan, Policy, Regulation Consistency

Threshold	Would the proposed project conflict with any applicable plan, policy or regulation of an agency adopted for the purpose of reducing the emissions of greenhouse gases?

The CAT and the CARB have developed several reports to achieve the Governor's GHG targets that rely on voluntary actions of California businesses, local government and community groups, and State incentive and regulatory programs. These include the CAT's 2006 "*Report to Governor Schwarzenegger and the Legislature*," the CARB's 2007 "*Expanded List of Early Action Measures to Reduce Greenhouse Gas Emissions in California,*" and the CARB's 2014 "*Proposed First Update to the Climate Change Scoping Plan: Building on the Framework."*

The reports identify strategies to reduce California's emissions to the levels proposed in EO S-3-05 and AB 32 that are applicable to the project. As stated previously, the project would be consistent with the goals of AB 32 by exceeding the 28.5 percent reduction below BAU standard. In addition, the project would comply with specific policies contained in the CARB Scoping Plan. The strategies included in the Scoping Plan that apply to the project are contained in Table 4.7.B, which summarizes the extent to which the project would comply with the strategies to help California reach the emission reduction targets.

Table 4.7.B: CARB Scoping Plan Compliance Analysis

Scoping Plan Measure	Project Consistency
Pavley Motor Vehicle Standards (AB 1493)	**Compliant.** The project's employees and customers 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	**Compliant.** The project's employees and customers 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	**Compliant.** The project's employees and customers would be prohibited from performing air conditioning repairs and required to use professional servicing.
Low Carbon Fuel Standard	**Compliant.** Motor vehicles driven by project's employees and customers and employees would use compliant fuels in the future.
Water Use Efficiency	**Compliant.** The project includes measures to minimize water use and maximize efficiency.
Green Buildings	**Compliant.** 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	**Compliant.** Motor vehicles driven by the project's employees and customers would comply with the leak test requirements during smog checks.
Renewable Portfolios Standard (33% by 2020)	**Compliant.** The electricity used by businesses in the project will benefit from reduced GHG emissions resulting from increased use of renewable energy sources.
Energy Efficiency Measures (Electricity)	**Compliant.** The project will comply with energy efficiency standards for electrical appliances and other devices at the time of building construction.
Energy Efficiency (Natural Gas)	**Compliant.** The project will comply with energy efficiency standards for natural gas appliances and other devices at the time of building construction.

Table 4.7.B: CARB Scoping Plan Compliance Analysis

Scoping Plan Measure	Project Consistency
Greening New Residential and Commercial Construction	**Compliant.** 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	**Compliant.** The project's buildings would meet retrofit standards when they become effective.

With implementation of these strategies/measures, the project's contribution to cumulative GHG emissions would be reduced and would be considered to be less than significant.

The project is also required to comply with SB 375, which requires local MPOs to prepare an SCS that demonstrates how the region will meets its GHG reduction targets through integrated land use, housing, and transportation planning. The SCAG is the planning agency for the project area. SCAG's SCS was 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 VMT and GHG emissions from personal vehicles.

The project generally supports the provisions of the SCS because it would locate residential development next to commercial uses, reducing vehicle usage. In addition, the project is located 0.85 mile from a major transportation corridor (I-15). Two bus stops are located within 0.25 mile of the project and the project would provide bicycle parking as required by the City's Municipal Code.

City General Plan Policies. Even though the City does not have any policies related directly to GHG emissions, it does have a number of policies related to energy and sustainability. Table 4.7.C evaluates the consistency of the project with these City General Plan policies.

Table 4.7.C: General Plan Consistency Analysis

General Plan Goals and Targets	General Plan Consistency Analysis
Circulation	
C 5.2. Encourage the use of drought-tolerant native plants and the use of recycled water for roadway landscaping.	**Consistent.** The project would be required to comply with drought-tolerant landscaping requirements as described in Municipal Code Section Chapter 17.276 (Water Efficient Landscapes).
Open Space	
OS 2.3. Encourage native, drought-resistant landscape planting.	**Consistent.** The project would be required to comply with drought-tolerant landscaping requirements as described in Municipal Code Section Chapter 17.276 (Water Efficient Landscapes).

Table 4.7.C: General Plan Consistency Analysis

General Plan Goals and Targets	General Plan Consistency Analysis
Air Quality	
AQ 5.4. Encourage the incorporation of energy-efficient design elements, including appropriate site orientation and the use of shade and windbreak trees to reduce fuel consumption for heating and cooling.	**Consistent.** 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.
Housing	
Goal H-6. Conserve energy in the development of new housing and the rehabilitation of existing housing	**Consistent.** The project would be required to comply with the California Building Code Title 24 Energy Standards.
Land Use and the Environment	
EJ 2.19. Encourage public and private development to achieve LEED certification or an equivalent green building standard.	**Consistent.** While encouraged, at this time private development is not mandated to achieve LEED certification.

Source: *City of Wildomar General Plan*, July 2008.

Based on the above analysis, the project is consistent with State, regional, and local policies regarding climate change. Therefore, it would not conflict with any plans or policies created for the purpose of reducing greenhouse gas emissions. Impacts are less than significant and no mitigation is required.

4.7.6 Significant Impacts

4.7.6.1 Greenhouse Gas Emissions

Impact 4.7.6.1: *The proposed project will have significant impacts related to greenhouse gas emissions.*

Threshold	Would the proposed project generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

This section evaluates potential significant impacts related to GCC that could result from implementation of the project. Because it is not possible to tie specific GHG emissions to actual changes in climate, this evaluation focuses on the project's emission of GHGs. As identified previously, SCAQMD and CARB have not established CEQA significance thresholds for GHG emissions. Project GHG emissions are therefore evaluated against the BAU scenario to determine whether GHG reductions are consistent with the goals of AB 32.

GHG Emissions Background. Emissions estimates for the project are discussed below. While information is presented below to assist the public and decision-makers in understanding the project's potential contribution to GCC impacts, the information available to the City is not sufficiently detailed to allow a direct

comparison between particular project characteristics and particular climate change impacts, or between any particular proposed mitigation measure and any reduction in climate change impacts.

Construction and operation of the project would generate GHG emissions, with the majority of energy consumption (and associated generation of GHG emissions) occurring during the project's operation. Typically, more than 80 percent of the total energy consumption takes place during project operation and less than 20 percent of energy is consumed during construction.[1]

GHG emissions associated with the project would occur over the short term from construction activities and would consist primarily of emissions from equipment exhaust. There would also be long-term regional emissions associated with project-related new vehicular trips and stationary-source emissions, such as natural gas used for heating and electricity usage for lighting.

Overall, the following sources associated with the project would directly or indirectly contribute to the generation of GHG emissions:

- **Construction Activities:** Construction activities produce combustion emissions from various sources, such as site grading, utility engines, on-site heavy-duty construction vehicles and equipment, hauling materials to and from the site, asphalt paving, and motor vehicles transporting the construction crew. The combustion of fossil fuels creates GHGs such as CO_2, CH_4, and N_2O. Furthermore, CH_4 is emitted during the fueling of heavy equipment (51.03 MT of CO_2e/yr, amortized over 30 years).
- **Area Sources:** Area sources of GHG emissions include architectural coatings, consumer products, hearth, and landscaping. The project would result in increased GHG emissions from the area sources (41.98 MT of CO_2e/yr).
- **Gas and Electricity (Energy) Use:** Natural gas use results in the emission of two GHGs: CH_4 (the major component of natural gas) and CO_2 (from the combustion of natural gas). Electricity use can result in GHG production if the electricity is generated by combusting fossil fuel.

  Buildings represent 39 percent of the United States' primary energy usage and 70 percent of its electricity consumption. The project would increase the demand for electricity and natural gas due to the construction of 162 multifamily residential units, and 55,000 square feet of commercial/retail and office uses. The project would indirectly result in increased GHG emissions from off-site electricity generation at power plants and on-site natural gas consumption (605 MT of CO_2e/yr).
- **Solid Waste Disposal:** Solid waste generated by the project could contribute to GHG emissions in a variety of ways. Landfilling and other methods of disposal

[1] *Buildings and Climate Change: Status, Challenges and Opportunities*, United Nations Environment Programme (UNEP), 2007. Paris, France.

use energy for transporting and managing the waste, and they produce additional GHGs to varying degrees. Landfilling, the most common waste management practice, results in the release of CH_4 from the anaerobic decomposition of organic materials. CH_4 is 25 times more potent a GHG than CO_2.

The project would generate solid waste during the construction and operation phase of the project. Average waste generation rates from a variety of sources are available from the California Integrated Waste Management Board (CIWMB). The project would indirectly result in increased GHG emissions from solid waste treatment at landfills (215.48 MT of CO_2e/yr).

- **Water Usage:** Water-related energy use consumes 19 percent of California's electricity every year. Energy use and related GHG emissions are based on electricity used for water supply and conveyance, water treatment, water distribution, and wastewater treatment. The project would indirectly result in increased GHG emissions from the off-site electricity generation at power plants and on-site natural gas consumption (115.48 MT of CO_2e/yr).
- **Mobile Sources:** Mobile sources (vehicle trips and associated miles traveled) are the largest source of GHG emissions in California and represent approximately 38 percent of annual CO_2 emissions generated in the State. Transportation associated with the project would result in GHG emissions from the combustion of fossil fuels in daily automobile and truck trips by residents, employees, and customers. Vehicle miles traveled (VMT) are used to indicate CO_2 emissions (4,900.10 MT of CO_2e/yr).

GHG emissions generated by the project would predominantly consist of CO_2. In comparison to criteria air pollutants such as O_3 and PM_{10}, CO_2 emissions persist in the atmosphere for a substantially longer period of time. While emissions of other GHGs, such as CH_4, are important with respect to GCC, emission levels of other GHGs are less dependent on the land use and circulation patterns associated with the proposed land use development project than are levels of CO_2.

The GHG emission estimates presented in Table 4.7.D show the total emissions associated with the full buildout in a BAU scenario. Under the CARB's definition of BAU, new growth is assumed to have the same carbon intensities as was typical from 2002 through 2004. No reductions, emissions, or mitigation are incorporated into the BAU analysis. Yearly emissions, in $MTCO_2e$, are calculated for each source and shown in Table 4.7.D.

Table 4.7.D: "Business as Usual" Greenhouse Gas Emissions

Emission Source	Emissions (metric tons per year)			
	CO_2	CH_4	N_2O	Total CO_2e
Annual Construction-related emissions amortized over 30 years	50.99	0.007	—	51.13
Area Source Emissions	41.65	0.00519	0.00071	41.98
Energy	602.60	0.02	0.00694	605.26

Table 4.7.D: "Business as Usual" Greenhouse Gas Emissions

Emission Source	Emissions (metric tons per year)			
	CO_2	CH_4	N_2O	Total CO_2e
Mobile Source Emissions	3,863.68	0.34	—	3,870.77
Waste	96.15	5.68	—	215.48
Water Usage	99.95	0.54	0.01	115.48
Total CO_2e (All Sources)	**4,900.10**			

Source: Table 3-1, *Clinton Keith Road (APN: 390-250-003) "Grove Park" Greenhouse Gas Analysis, City of Wildomar,* Urban Crossroads, March 2, 2015.

The BAU project would generate up to 4,900.10 MT of CO_2e/yr of new emissions, as shown in Table 4.7.D. For comparison, the existing emissions from the entire SCAG region are estimated to be approximately 230.2 MMT of CO_2e/yr, and the existing emissions for the entire State are estimated at approximately 480.9 MMTCO_2e/yr[1].

Emissions from vehicle exhaust would comprise approximately 79 percent of the project's total CO_2e emissions. Emissions from vehicle exhaust are controlled by the State and Federal governments and are outside the control of the City.

At present, there is a Federal ban on chlorofluorocarbons (CFCs); therefore, it is assumed the project would not generate emissions of CFCs. The project may emit a small amount of HFCs from leakage and service of refrigeration and air-conditioning equipment and from disposal at the end of the life of the equipment. However, the details regarding refrigerants to be used at the project site are unknown at this time. PFCs and SF_6 are typically used in industrial applications, none of which would be used on the project site. Therefore, it is not anticipated that the project would contribute significant emissions of these additional GHGs.

To analyze consistency with reductions mandated by AB 32, the next step of the analysis is to compare the project's BAU emissions with its Year 2020 emissions. The 2020 emissions projection includes design features and mitigation measures to reduce emissions. Table 4.7.E shows the 2020 project emissions with mitigation and State requirements.

[1] Regional Greenhouse Gas Emissions Inventory and Reference Case Projections, 1990–2035, Southern California Association of Governments (SCAG), May 2012. Available at: http://sustain.scag.ca.gov/Sustainability%20Portal%20Document%20Library/05-30-12_SCAG_Revised_IF%20Report_Final.pdf (accessed January 27, 2015).

Table 4.7.E: 2020 Greenhouse Gas Emissions with Regulatory Requirements, Design Features, and Mitigation Measures

Emission Source	Emissions (metric tons per year)				Reduction in CO_2e Compared to BAU (%)
	CO_2	CH_4	N_2O	Total CO_2e	
Annual Construction-related emissions amortized over 30 years	50.99	0.007	—	51.13	0.00
Area Source Emissions	41.65	0.00345	0.00071	41.98	0.00
Energy	437.72	0.02	0.0063	440.14	27.28
Mobile Source Emissions	2,097.55	0.06	—	2,098.90	45.78
Waste	96.15	5.68	—	215.48	0.00
Water Usage	75.32	0.54	0.01	90.85	21.33
Total CO_2e (All Sources)	**2,938.48**				**40.03**

Source: Tables 3-2 and 3-3, *Clinton Keith Road (APN: 390-250-003) "Grove Park" Greenhouse Gas Analysis, City of Wildomar,* Urban Crossroads, March 2, 2015.

By applying regulatory changes from the baseline as well as **Mitigation Measures 4.3.6.1A** through **4.3.6.1D**, the 2020 model achieved a 40.03 percent reduction in GHG emissions from the BAU model. Regulatory requirements, such as those limiting vehicle emissions, would over time decrease project GHG emissions. Thus, with mitigation and regulatory developments, the project's GHG reduction would exceed the AB 32 reduction target of 28.5 percent. With mitigation incorporated, the operation of the project would not create significant impact related to GCC.

Summary of Impacts. With implementation of **Mitigation Measures 4.3.6.1A** through **4.3.6.1D** discussed in Section 4.3, *Air Quality*, of this EIR, project-related GHG emissions will not exceed SCAQMD thresholds. Therefore, impacts related to greenhouse gas emissions and climate change will be less than significant.

4.7.7 Cumulative Impacts

The project's greenhouse gas emissions would not exceed any established thresholds, nor would it conflict with any plan established for the purpose of reducing greenhouse gas emissions. The analysis above demonstrates that the project would achieve a 40.03 percent GHG emissions reduction from the BAU scenario with implementation of design features and mitigation measures, thereby exceeding reductions mandated by AB 32. As a result, the project's contribution to GCC is not considered cumulatively significant.

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4.8 HAZARDS AND HAZARDOUS MATERIALS

This section addresses potential impacts to human health and the environment that may result from exposure to hazardous materials or hazardous conditions during the construction or occupation of the project. Potential effects include those associated with the routine transport, use, or disposal of hazardous materials; reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment; safety hazards associated with the site's past or future use; impairment/interference with adopted emergency response plans or emergency evacuation plans, and exposure of people or structures to risks involving wildland fires.

This section is based in part on the following report, which is included as Appendix G of this EIR:

- *Phase I Environmental Site Assessment, APNs 380-250-003 and 380-250-023, Wildomar, CA.* Hillmann Consulting, LLC, August 31, 2012.

In addition, information from the Safety Element of the City's General Plan was used in some of the sections.

4.8.1 Existing Setting

4.8.1.1 Project Site History

The project area is approximately 19.4 acres and is located in the southern portion of the City of Wildomar, within southwestern Riverside County. The property is currently undeveloped, and consists primarily of disturbed areas with annual grasses and some native vegetation. According to the Phase I Environmental Site Assessment (ESA), the site has been almost entirely undeveloped since before 1938, which is the earliest that aerial photographs are available. The exceptions include the presence of possible beehives on the property starting prior to 1938 and ending before 1953, and the presence of a small area of development in 2005.

While evidence of minor nuisance dumping (e.g., discarded tires, a hot tub, and other debris) were noted during the 2012 Phase I ESA no evidence of recognized hazardous environmental conditions were detected. The current condition of the site is substantially unchanged from that assessed in 2012. The report suggests that trash and other debris should be removed and taken to a landfill or approved dumpsite.

4.8.1.2 Surrounding Area

The project site is bordered by a multifamily development directly to the south, undeveloped land to the east and west, and scattered rural residences to the north. Within the broader project area, commercial/retail development is located farther to

the west, adjacent to I-15. Medical care and office uses are located farther southwest and south of the project site along Inland Valley Drive and Prielipp Road. Residential development occurs on either side of Clinton Keith Road to I-215 east and west of the project (refer to Figure 3.2 in Section 3.0).

Surrounding uses generally do not involve the use, storage, or transport of hazardous materials. However, the Inland Valley Regional Medical Center, located southwest of the project has been identified as having two Leaking Underground Storage Tanks (LUSTs). The listings are over 1,000 feet away from and down-gradient of the project site. According to the Phase I ESA, the status of the LUST is "Completed – Case Closed." Considering the distance, status, and the topographical relation to the project, the LUST sites do not pose a hazardous materials problem for the project site.

4.8.1.3 NOP/Scoping Comments

No comments related to hazards or hazardous materials were raised during the NOP comment periods or the Public Scoping Meetings.

4.8.2 Existing Policies and Regulations

4.8.2.1 Federal Regulations

Comprehensive Environmental Response, Compensation, and Liability Act. Discovery of environmental health damage from disposal sites prompted the U.S. Congress to pass the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA or Superfund). The purpose of the CERCLA is to identify and clean up chemically contaminated sites that pose a significant environmental health threat. The Hazard Ranking System is used to determine whether a site should be placed on the National Priorities List for cleanup activities.

Superfund Amendments and Reauthorization Act. The Superfund Amendments and Reauthorization Act (SARA) pertains primarily to emergency management of accidental releases. It requires formation of State and local emergency planning committees, which are responsible for collecting, material handling, and transportation data for use as a basis for planning. Chemical inventory data are made available to the community at large under the "right-to-know" provision of the law. In addition, SARA also requires annual reporting of continuous emissions and accidental releases of specified compounds. These annual submissions are compiled into a nationwide Toxics Release Inventory (TRI).

Resource Conservation and Recovery Act. The Resource Conservation and Recovery Act (RCRA) Subtitle C addresses hazardous waste generation, handling, transportation, storage, treatment, and disposal. It includes requirements for a system that uses hazardous waste manifests to track the movement of waste from

its site of generation to its ultimate disposition. The 1984 amendments to the RCRA created a national priority for waste minimization. Subtitle D establishes national minimum requirements for solid waste disposal sites and practices. It requires states to develop plans for the management of wastes within their jurisdictions. Subtitle I requires monitoring and containment systems for underground storage tanks that hold hazardous materials. Owners of tanks must demonstrate financial assurance for the cleanup of a potential leaking tank.

Hazardous Materials Transportation Act. The Hazardous Materials Transportation Act is the statutory basis for the extensive body of regulations aimed at ensuring the safe transport of hazardous materials on water, rail, highways, in the sky, or in pipelines. It includes provisions for materials classification, packaging, marking, labeling, placarding, and shipping documentation.

4.8.2.2 State Regulations

California Code of Regulations. Most State and Federal regulations and requirements that apply to generators of hazardous waste are spelled out in the California Code of Regulations (CCR), Title 22, Division 4.5. Title 22 contains the detailed compliance requirements for hazardous waste generators, transporters, treatment, storage, and disposal facilities. Because California is a fully authorized State according to RCRA, most RCRA regulations (those contained in 40 Code of Federal Regulations [CFR] 260, et seq.) have been duplicated and integrated into Title 22. However, because the Department of Toxic Substance Control (DTSC) regulates hazardous waste more stringently than the U.S. EPA, the integration of California and Federal hazardous waste regulations that make up Title 22 do not contain as many exemptions or exclusions as does 40 CFR 260. As with the California Health and Safety Code, Title 22 also regulates a wider range of waste types and waste management activities than do the RCRA regulations in 40 CFR 260. To aid the regulated community, California compiled the hazardous materials, waste and toxics-related regulations contained in CCR, Titles 3, 8, 13, 17, 19, 22, 23, 24, and 27 into one consolidated CCR, Title 26 “Toxics.” However, the California hazardous waste regulations are still commonly referred to as Title 22. For the purposes of clarity, because of the extensive reach of Title 22 and Title 26, many common household products sold in grocery stores and home improvement warehouses qualify as hazardous materials. These items include household cleaners, detergents, paint, motor oil, lubricants, glues, pesticides, etc. The term “hazardous materials” is also defined to include many on site materials as well, such as lubricants, fuel, etc. Thus, when this section of the EIR discusses the transport and storage of “hazardous materials,” it is referring to the potential transport of bulk products to the project locations and to the temporary storage of such materials at the project sites prior to re-package and transport to subsequent destinations.

Cortese List: Section 65962.5(a). Government Code Section 65962.5 requires the California Environmental Protection Agency (CalEPA) to develop at least annually an updated Hazardous Waste and Substances Sites list (Cortese List). The Cortese List is a planning document used by the State, local agencies, and developers to comply with CEQA requirements in providing information about the locations of hazardous materials release sites. Release sites or hazardous materials release sites may include the following:

- All hazardous waste facilities subject to corrective action pursuant to Section 25187.5 of the Health and Safety Code.
- All land designated as hazardous waste property or border zone property pursuant to Article 11 (commencing with Section 25220) of Chapter 6.5 of Division 20 of the Health and Safety Code.
- All information received by the Department of Toxic Substances Control pursuant to Section 25242 of the Health and Safety Code on hazardous waste disposals on public land.
- All sites listed pursuant to Section 25356 of the Health and Safety Code.
- All sites included in the Abandoned Site Assessment Program.

The California DTSC is responsible for a portion of the information contained in the Cortese List. Other State and local government agencies are required to provide additional hazardous material release information for the Cortese List.

California Emergency Services Act. Government Code 8550–8692 provides for the assignment of functions to be performed by various agencies during an emergency so that the most effective use may be made of all manpower, resources, and facilities for dealing with any emergency that may occur. The coordination of all emergency services is recognized by the State to mitigate the effects of natural, man-made, or war-caused emergencies that result in conditions of disaster or extreme peril to life, property, and the resources of the State, and generally, to protect the health and safety and preserve the lives and property of the people of the State.

State Fire Plan. The State Board of Forestry and the California Department of Forestry and Fire Protection have drafted a comprehensive update of the State Fire Plan for wildland fire protection in California. The planning process defines a level of service measurement, considers assets at risk, incorporates the cooperative interdependent relationships of wildland fire protection providers, provides for public stakeholder involvement, and creates a fiscal framework for policy analysis.

4.8.2.3 Local Regulations: City of Wildomar

The City of Wildomar General Plan identifies the following policies related to hazards and hazardous materials. General Plan policies specific to geological and seismic hazards are detailed Section 4.6.2.2.

Fire Hazards

S 5.1 Develop and enforce construction and design standards that ensure that proposed development incorporates fire prevention features through the following:

a. All proposed construction shall meet minimum standards for fire safety as defined in the County Building or Fire Codes, or by County zoning, or as dictated by the Building Official or the Transportation Land Management Agency based on building type, design, occupancy, and use.

b. In addition to the standards and guidelines of the Uniform Building Code and Uniform Fire Code fire safety provisions, continue additional standards for high-risk, high occupancy, dependent, and essential facilities where appropriate under the Riverside County Fire Protection Ordinance. These shall include assurance that structural and nonstructural architectural elements of the building will not:

- impede emergency egress for fire safety staffing/personnel, equipment, and apparatus; nor
- hinder evacuation from fire, including potential blockage of stairways or fire doors.

c. Proposed development in Hazardous Fire areas shall provide secondary public access, unless determined otherwise by the County Fire Chief.

d. Proposed development in Hazardous Fire areas shall use single loaded roads to enhance fuel modification areas, unless otherwise determined by the County Fire Chief.

Disaster Preparedness

S 7.3 Require commercial businesses, utilities, and industrial facilities that handle hazardous materials to:

- install automatic fire and hazardous materials detection, reporting and shut-off devices; and
- install an alternative communication system in the event power is out or telephone service is saturated following an earthquake.

Land Use

LU 14.2 Review all proposed projects and require consistency with any applicable airport land use compatibility plan as set forth in Appendix L and as

summarized in the Area Plan's Airport Influence Area section for the airport in question.

4.8.3 Methodology

A Phase I ESA was prepared to document existing site conditions involving the presence or absence of hazardous materials that may have been deposited on site as a result of previous land uses. The analysis included a review of applicable airport land use plans, fire hazard mapping, and other resource databases. The analysis anticipates that development of the proposed uses would conform to the standard local, State, and Federal laws and regulations pertaining to the transport, use, storage, and disposal of hazardous materials.

4.8.4 Thresholds of Significance

Based on Appendix G of the *CEQA Guidelines*, the proposed project would result in a significant adverse impact with regard to hazards and hazardous materials if it were to:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- 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;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- Be located on a site that is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment;
- For a project located within an airport land use plan or where such a plan has not been adopted within two miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area;
- For a project located within the vicinity of a private airstrip, result in a safety hazard for people working in the project area;
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation; and/or
- Result in the exposure of 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.

4.8.5 Less than Significant Impacts

In each of the following issues, either no impact would occur (therefore, no mitigation would be required) or adherence to established regulations, standards, and policies would reduce potential impacts to a less than significant level.

4.8.5.1 Routine Transport, Use, or Disposal of Hazardous Materials and Reasonable Foreseeable Upset and Accident Conditions

Threshold	Would the proposed project create a significant hazard to the public through the routine transport, use, or disposal of hazardous materials? Would the proposed project create a significant hazard to the public or the environment through reasonably foreseeable upset and accident?

The transport of hazardous materials on State highways is governed by the United States Department of Transportation (USDOT), as described in Title 49 of the Code of Federal Regulations[1] and by Title 13 of the California Code of Regulations. The State Office of Hazardous Materials Safety enforces regulations for the safe transportation of hazardous materials.

The project does not include any uses that would generate, store, transport or dispose of hazardous material. Equipment and vehicles utilized during construction would be similar to those found on typical construction sites such as graders, dozers, water trucks, and pickup trucks. Hazardous materials associated with equipment and vehicles would consist of fluids used to operate/drive equipment and vehicles. During the operation of the proposed project, hazardous materials such as petroleum products, pesticides, fertilizer, and household hazardous products such as paint products, solvents, and cleaning products may be stored, used, or sold on-site. Due to the nature of the proposed on-site uses, it is anticipated that hazardous material usage would be minor and incidental.

The project would be required to comply with City standards regarding hazards and hazardous materials. Chapter 8.56 of the City's Municipal Code identifies the process in which hazardous material usage is permitted in the City. In addition, the General Plan contains several policies that relate to hazards or hazardous materials.

Table 4.8.A evaluates the consistency of the proposed project with applicable General Plan policies and concludes that it is consistent with the City's General Plan.

[1] Code of Federal Regulations, Title 49—Transportation, Pipeline and Hazardous Materials Safety Administration, Department of Transportation, http://ecfr.gpoaccess.gov/cgi/t/text/text idx?c=ecfr&tpl=/ecfrbrowse/Title49/49tab_02.tpl, site accessed March 1, 2014.

Table 4.8.A: General Plan Consistency Analysis

General Plan Goals and Targets	General Plan Consistency Analysis
Disaster Preparedness	
S 7.3. Require commercial businesses, utilities, and industrial facilities that handle hazardous materials to: ✓ install automatic fire and hazardous materials detection, reporting and shut-off devices; and ✓ install an alternative communication system in the event power is out or telephone service is saturated following an earthquake.	**Not Applicable:** The proposed commercial and residential land uses do not include the handling of hazardous materials other than commercial type cleaning and related materials.

As detailed in Table 4.8.A, the project would be consistent with General Plan policies involving hazards and hazardous materials. All activity involving hazardous substances during the construction and operation of the proposed project would be conducted in accordance with applicable local, State, and Federal safety standards. Therefore, impacts associated with the use, transport, storage, and disposal of hazardous materials during the construction and operation of the project would be less than significant. No mitigation is required.

4.8.5.2 Located on a List of Hazardous Materials Sites

Threshold	Would the project 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 create a significant hazard to the public or the environment?

No reported hazardous materials or evidence of any past hazardous materials spills were identified in the Phase I ESA prepared for the proposed project. The project site is not included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Since no hazardous materials were identified during the Phase I ESA, the project site has never been developed, and the visual inspection of immediate adjacent land uses did not reveal evidence of storage tanks or the storage of hazardous materials, the presence of hazardous materials on-site is considered unlikely; therefore, impacts associated with this issue are considered less than significant. No mitigation is required.

4.8.5.3 Within Two Miles of a Private Airport or Within an Airport Land Use Plan or Within Two Miles of a Public Airport

Threshold	For a project located within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the proposed project area?

	Would the project be 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, resulting in a safety hazard for people residing or working in the project area?

The project is not located within two miles of a public airport or within an airport land use plan, as determined in Table 4.8.B below. The nearest airport or airstrip is Skylark Airstrip, a private airstrip located approximately 4.5 miles northwest of the project. Table 4.8.B shows the project is consistent with the City's goals and policies related to airport land use compatibility plans. The project is located outside of any safety zones associated with the Skylark Airstrip. Because the site is outside the area of influence of any public or private airport, no impact related to this issue would occur. No mitigation is required.

Table 4.8.B: General Plan Consistency Analysis

General Plan Goals and Targets	General Plan Consistency Analysis
Land Use	
LU 14.2. Review all proposed projects and require consistency with any applicable airport land use compatibility plan as set forth in Appendix L and as summarized in the Area Plan's Airport Influence Area section for the airport in question.	**Consistent:** The project is not within an airport land use compatibility plan.

4.8.5.4 Existing or Proposed School

Threshold	Would the proposed project emit hazardous emissions or handle acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?

The project does not include any use that would result in the large-scale manufacture, storage, use, transport or disposal of hazardous materials. The nearest existing school is Ronald Reagan Elementary School, which is located approximately 0.8 mile northwest of the site.

Due to the nature of the project, any hazardous material present on site during the construction or occupation of the proposed uses would be limited to vehicle fuels and fluids; paints, varnishes, and similar coatings; common household cleaning materials; fertilizers, insecticides, and other substances routinely used in landscaping activities; and hazardous materials that may be used or sold in office and/or and retail outlets. The project does not involve any use that manufactures, transports, stores, processes, sells, or disposes of large amounts of hazardous materials.

The emission of air pollutants is discussed in Section 4.3, *Air Quality*. The handling of hazardous materials incidental to the routine operation of commercial uses would

be governed by applicable City, State, and/or Federal regulations. Compliance with these regulations will ensure any impact associated with environmental and health hazards related to an accidental release of hazardous materials or emissions of hazardous substance near existing or proposed schools is less than significant and no mitigation is required.

4.8.5.5 Conflict with Emergency Response Plans

Threshold	Would the project impair the implementation of or physically interfere with an adopted emergency response plan or emergency evacuation?

Implementation of the project would increase the amount of commercial, office and residential uses beyond that which currently exists. This development would generate an increase in the amount and volume of traffic on local and regional roadway networks. The developer of the project would be required to design, construct, and maintain structures, roadways, and facilities to maintain appropriate emergency/evacuation access.

Construction activities that may temporarily restrict vehicular traffic would be required to implement appropriate measures to facilitate the passage of persons and vehicles through/around any required road closures. The City General Plan Circulation Element and Municipal Code (Section 16.08.020, General Street Design) require the design of roadways to allow adequate evacuation times. The City of Wildomar Local Hazard Mitigation Plan specifies actions for the coordination of operations, management, and resources during emergencies. Compliance with existing regulations for emergency access and evacuation will ensure that impacts related to this issue are less than significant and no mitigation is required.

4.8.5.6 Wildland Fire Risks

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

According to the General Plan EIR, the project is within a Very High Local Responsibility Area (LRA) for fire hazards. In an LRA, fire protection can be provided by a city fire department, fire protection district, county, or by Cal Fire under contract to the local government. Within this area, multiple factors including fuels, terrain, housing density, weather, and fire history could combine to result in catastrophic losses. Very High Fire Hazard Safety (VHFHS) zones are required to comply with California Buildings Standards Commission's California Building Code (CBC) Chapter 7A, which specifies that new buildings in VHFHS zones use ignition-resistant construction methods and materials.

The project would be required to comply with CBC requirements for ignition-resistant construction. The project would also comply with the City General Plan Safety

Element, as discussed in Table 4.8.C. The project area receives adequate service from the local fire station, as discussed in greater detail in Section 4.14, Public Services. In consideration of the site's adequate fire protection services and the project's compliance with wildland fire safety policies, it is not expected that the project would expose people or structures to significant loss or injury. Therefore, impacts are less than significant and no mitigation is required.

Table 4.8.C: General Plan Consistency Analysis

General Plan Goals and Targets	General Plan Consistency Analysis
Safety	
S 5.1. Develop and enforce construction and design standards that ensure that proposed development incorporates fire prevention features through the following: a. All proposed construction shall meet minimum standards for fire safety as defined in the County Building or Fire Codes, or by County zoning, or as dictated by the Building Official or the Transportation Land Management Agency based on building type, design, occupancy, and use. b. In addition to the standards and guidelines of the Uniform Building Code and Uniform Fire Code fire safety provisions, continue additional standards for high-risk, high occupancy, dependent, and essential facilities where appropriate under the Riverside County Fire Protection Ordinance. These shall include assurance that structural and nonstructural architectural elements of the building will not: - impede emergency egress for fire safety staffing/ personnel, equipment, and apparatus; nor - hinder evacuation from fire, including potential blockage of stairways or fire doors. c. Proposed development in Hazardous Fire areas shall provide secondary public access, unless determined otherwise by the County Fire Chief. d. Proposed development in Hazardous Fire areas shall use single loaded roads to enhance fuel modification areas, unless otherwise determined by the County Fire Chief.	**Consistent:** The project will be required to comply with the City's fire protection requirements.

4.8.6 Significant Impacts

The project would not have any significant impacts related hazards or hazardous materials.

4.8.7 Cumulative Impacts

The project would not result in significant cumulative impacts associated with the routine transport, use, and disposal of hazardous materials; the emission or handling

of hazardous substances. Accidental spills and leaks are unplanned occurrences. It is impossible to predict the occurrences of such events and the likelihood of such events occurring in close proximity to each other at the same time is very small; therefore, such events cannot be considered cumulatively. The implementation of policies and adherence to standards mandated by the City, including the enforcement of existing local, State, and Federal practices applicable to businesses that transport, sell, or use hazardous materials, would ensure that no cumulative impact would result from the construction and operation of the proposed project.

Similar to the project, development of other planned projects within the City of Wildomar would be required to adhere to the existing laws and regulations regarding the use, storage, transport, or disposal of hazardous materials and waste. Moreover, the project would not result in any safety hazards related to nearby airports, airstrips, adopted emergency response plans, or wildland fire hazards. The project would not combine with other projects to result in a cumulatively considerable impact with respect to these potential hazards. In addition the project would be consistent with General Plan policies as shown in Tables 4.8.A through 4.8.C. Therefore, the project will not make a significant contribution to any cumulatively considerable impacts related to hazardous materials, hazardous waste, or the creation of any health hazards.

4.9 HYDROLOGY AND WATER QUALITY

This section describes the hydrologic conditions on and adjacent to the project site and evaluates potential impacts to surface and groundwater resources associated with the project.

The analysis contained in this section is based on the following technical studies prepared for the proposed project, which are in Appendices H-1 and H-2 of this EIR:

- *Preliminary Hydrology and Hydraulics Study for Grove Park, City of Wildomar, California,* JLC Engineering & Consulting, Inc., March 16, 2015; and
- *Project Specific Water Quality Management Plan, Grove Park,* JLC Engineering & Consulting, Inc., March 16, 2015.

In addition to these project-specific technical studies, the analysis contained in this section utilized information contained in the following reference documents:

- *Water Quality Control Plan for the San Diego Basin (9).* Regional Water Quality Board, San Diego Region. September 8, 1994 (Amended 2011).
- *Riverside County Water Quality Management Plan for Urban Runoff.* Santa Ana River Region and Santa Margarita Region. July 24, 2006.
- *Riverside County Flood Control and Water Conservation District Hydrology Manual*, 1978.
- *Elsinore Valley Municipal Water District Urban Water Management Plan (UWMP),* MWH, July 2011.
- *Riverside County Design Handbook for Low Impact Development Best Management Practices.* Riverside County Flood Control and Water Conservation District. Updated September 2011.
- *Water Quality Management Plan for the Santa Margarita Region of Riverside County.* Riverside County Flood Control and Conservation District. 2014.

4.9.1 Existing Setting

4.9.1.1 Drainage

The project site exhibits rolling terrain with a general slope toward the southwest. Currently, drainage flows are transported via four ephemeral streams toward two downstream locations: a drainage feature at the westerly project boundary and a man-made detention basin in the southwest corner of the site (previously referenced Figure 4.4.2). Drainages in the project area are ultimately tributary to Murrieta Creek within the Santa Margarita Watershed. This watershed covers approximately 750 miles in northern San Diego and southwestern Riverside County. It is drained by the Santa Margarita River, Murrieta Creek, and Temecula River with flows ultimately reaching the Pacific Ocean.

The project is underlain by hydrologic soil groups B, C, and D, which have moderate, slow, and very slow infiltration rates, respectively.[1] A drainage feature runs in a southwest direction in the western portion of the project site. No storm drain features currently exist on site.

Existing runoff from the site was calculated in the project hydrology and hydraulics study and is detailed in Table 4.9.A. The site currently has a 24-hour, two-year runoff volume of 16,256 cubic feet (161,603 gallons)[2] and flow rate of 1.04 cubic feet per second (ft^3/s or cfs). The hydrology study identifies existing drainage subareas.

Table 4.9.A: Existing On-site Runoff Characteristics

Runoff Characteristics	Drainage Subareas					
	A	B	C	D	E	F
Area (acres)	4.25	1.57	4.10	4.14	1.41	0.19
Volume						
24-Hour Runoff Volume, 2-year (ft^3)	4,447	1,751	4,421	4,069	1,381	187
24-Hour Runoff Volume, 10-year (ft^3)	25,526	10,202	25,957	21,810	6,617	649
Flow Rate						
Peak Flow Rate, 2-year (ft^3/s)	0.31	0.15	0.36	0.16	0.05	0.01
Peak Flow Rate, 10-year (ft^3/s)	1.71	0.65	1.68	1.56	0.50	0.06

Source: "Flow Rate Summary", "Volume Rate Summary", page 5, Preliminary Hydrology and Hydraulics Study, JLC Engineering and Consulting, Inc. March 16, 2015.
ft^3/s: Cubic feet per second
ft^3: Cubic feet

4.9.1.2 Water Quality

The project area is within the San Diego Region of the State Regional Water Quality Control Board (RWQCB), which includes watersheds of most of San Diego County, as well as southwestern Riverside and Orange Counties. The San Diego Region forms the southwest corner of California and is bounded by the Pacific Ocean on the west, the U.S.-Mexico border on the south, a hydrologic divide near Laguna Beach to the north and the Laguna Mountains to the east. The region is divided into a coastal plain area, a central mountain-valley area, and an eastern mountain valley area. The San Diego Regional Board's Basin Plan (Basin Plan) is designed to preserve and enhance water quality and protect the beneficial uses of all regional waters. Specifically, the Basin Plan (a) designates beneficial uses for surface and ground waters; (b) sets narrative and numerical objectives that must be attained or maintained to protect the designated beneficial uses and conform to the state's anti-degradation policy; (c) describes implementation programs to protect all waters in the region; and (d) describes surveillance and monitoring activities to evaluate the effectiveness of the Basin Plan. In addition, the Basin Plan incorporates (by

[1] United States Department of Agriculture, Natural Resources Conservation Service, Part 630 Hydrology: National Engineering Handbook, Chapter 7: Hydrologic Soil Groups, May 2007.
[2] 1 cubic foot equals approximately 7.48 gallons of water.

reference) all applicable State and RWQCB plans and policies and other pertinent water quality policies and regulations. Those of other agencies are referenced in appropriate sections throughout the Basin Plan.

The Basin Plan is a resource for the San Diego RWQCB and others who use water and/or discharge wastewater in the region. Other agencies and organizations involved in environmental permitting and resource management activities also use the Basin Plan. Finally, the Basin Plan provides valuable information to the public about local water quality issues.

Groundwater contamination, agricultural and urban runoff, and physical modifications of water bodies are considered to the greatest threats to water quality and beneficial uses in the San Diego Region. Nonpoint sources (NPS) are the major contributors of pollution to the streams, lakes, lagoons, harbors, bays, and coastal and marine waters in the San Diego Region. NPS comes from many diffuse sources, including activities associated with urbanization and agriculture. In the San Diego Region, recreational boating is also a significant source of NPS pollution. The most significant pollutant concerns from NPS are bacterial contamination, heavy metal and pesticide contamination, nutrient loading and resulting eutrophication, and sedimentation. In general, water quality in the San Diego Region becomes progressively poorer as water moves along hydraulic flow-paths. The highest quality water is typically associated with tributaries flowing from surrounding mountains and groundwater recharged by these streams. As indicated in the Basin Plan, there are four receiving waters downstream of the project site as identified in the most recent Federal Clean Water Act (CWA) Section 303(d) list of impaired water bodies – Murrieta Creek for pesticides (Chlorpyrifos), metals (copper, iron, manganese), nutrients (nitrogen, phosphorus) and toxicity; the Upper Portion of the Santa Margarita River for nutrients (phosphorus) and toxicity; the Lower portion of the Santa Margarita River for bacteria and viruses (Enterococcus, fecal coliform), and nutrients (phosphorus, nitrogen); and the Santa Margarita Lagoon for nutrients (eutrophic).[1]

This proposed development is subject to the Riverside County Flood Control and Water Conservation District (RCFCWCD) Water Quality Management Plan (WQMP) requirements under the "New Development" category. According to the RCFCWCD, New Development includes residential development of ten dwelling units or more. In this case, the project proposes the development of 55,000 square feet of commercial/retail and office uses and 162 multifamily residential units.

Receiving waters may have multiple designated beneficial uses. These designations provide a description of how the water is used and what beneficial purposes it serves. Table 4.9.B provides a description of each of these beneficial water uses, while Table 4.9.C shows the specific locations of the various beneficial use designations.

[1] WQMP, JLC Engineering and Consulting 2014, Receiving Waters for Urban Runoff from Site – Santa Margarita Watershed.

Table 4.9.B: Descriptions of Beneficial Uses

Designated Beneficial Use	Description of Beneficial Use
Municipal and Domestic Supply (MUN)	Waters used for community, military, or individual water supply systems including, but not limited to, drinking water supply.
Agricultural Supply (AGR)	Waters used for farming, horticulture or ranching. These uses may include, but are not limited to, irrigation, stock watering, and support of vegetation for range grazing.
Industrial Service Supply (IND)	Includes uses of water for industrial activities that do not depend primarily on water quality including, but not limited to, mining, cooling water supply, hydraulic conveyance, gravel washing, fire protection, or oil well re-pressurization.
Industrial Process Supply (PROC)	Includes uses of water for industrial activities that depend primarily on water quality.
Contact Water Recreation (REC-1)	Includes uses of water for recreational activities involving body contact with water, where ingestion of water is reasonably possible. These uses include, but are not limited to, swimming, wading, water-skiing, skin and SCUBA diving, surfing, white water activities, fishing, or use of natural hot springs.
Non-contact Water Recreation (REC-2)	Waters used for recreational activities involving proximity to water, but not normally involving body contact with water where ingestion of water would be reasonably possible. These uses may include, but are not limited to, picnicking, sunbathing, hiking, beachcombing, camping, boating, tide pool and marine life study, hunting, sightseeing and aesthetic enjoyment in conjunction with the above activities.
Cold Freshwater Habitat (COLD)	Includes uses of water that support cold water ecosystems including, but not limited to, preservation or enhancement of aquatic habitats, vegetation, fish or wildlife, including invertebrates.
Spawning, Reproduction, and Development (SPWN)	Waters that support high quality aquatic habitats necessary for reproduction and early development of fish and wildlife.
Groundwater Recharge (GWR)	Waters used for natural or artificial recharge of groundwater proposed for future extraction, maintenance of water quality, or halting of saltwater intrusion into freshwater aquifers.
Warm Freshwater Habitat (WARM)	Waters that support warm water ecosystems including, but not limited to, preservation and enhancement of aquatic habitats, vegetation, fish, and wildlife, including invertebrates.
Wildlife Habitat (WILD)	Water that support wildlife habitats including, but not limited to, the preservation and enhancement of vegetation and prey species used by wildlife, such as waterfowl.
Rare and Endangered Species Habitat (RARE)	Waters support habitats necessary for the survival and successful maintenance of plant or animal species designated under State or Federal law as rare, threatened, or endangered.

Source: Chapter 2: Beneficial Uses, Current San Diego Basin Plan. http://www.swrcb.ca.gov/rwqcb9/water_issues/programs/basin_plan/index.shtml (accessed November 7, 2014).

Table 4.9.C: Locations of Beneficial Uses

Designated Beneficial Use	Murrieta Creek	Santa Margarita River – Upper portion (HAS 2.22, 2.21)	Santa Margarita River – Lower portion (HAS 2.13, 2.12, 2.11)
Municipal and Domestic Supply (MUN)	Existing	Existing	Existing
Groundwater Recharge (GWR)	Existing	—	—
Agricultural Supply (AGR)	Existing	Existing	Existing
Industrial Service Supply (IND)	Existing	Existing	Existing
Industrial Process Supply (PROC)	Existing	—	Existing
Contact Water Recreation (REC-1)	Potential	Existing	Existing
Non-contact Water Recreation (REC-2)	Existing	Existing	Existing
Cold Freshwater Habitat (COLD)	—	Existing	Existing
Spawning, Reproduction, and Development (SPWN)	—	—	—
Warm Freshwater Habitat (WARM)	Existing	Existing	Existing
Wildlife Habitat (WILD)	Existing	Existing	Existing
Rare and Endangered Species Habitat (RARE)	Potential	Existing	Existing

Notes: HAS: Hydrologic Unit Basin Number.
Source: Chapter 2: Beneficial Uses. Table 2-2, Beneficial Uses of Inland Surface Waters. Current San Diego Basin Plan. http://www.swrcb.ca.gov/rwqcb9/water_issues/programs/basin_plan/index.shtml (accessed November 7, 2014).

4.9.1.3 Water Sources

Water service to the City of Wildomar and the project site is provided by the Elsinore Valley Municipal Water District (EVMWD), a special district that provides public water service, water supply development and planning, wastewater treatment and disposal, and recycling.[1] EVMWD retails water to the Cities of Lake Elsinore, Canyon Lake, and Wildomar, as well as the unincorporated communities of Lakeland Village, Cleveland Ridge, Rancho Capistrano-El Cariso Village, Horsethief Canyon, and Sedco and Temescal Canyon EVMWD also provides wholesale water to The Farm Mutual Water Company.

[1] *Agency Profile,* Elsinore Valley Municipal Water District, http://www.evmwd.com/civica/filebank/blobdload.asp?BlobID=8198 (accessed April 27, 2015).

EVMWD's obtains approximately 70 percent of its potable water supplies from imported water, 20 percent from local groundwater, and 10 percent from the Canyon Lake reservoir. EVMWD is a Metropolitan Water District Member Agency and Western Municipal Water District (WMWD) Sub-Agency. EVMWD's imported water sources are the Colorado River and Northern California; imported water is provided by the State Water Project. Local groundwater is pumped from the Elsinore and Temescal Valley area aquifers. Nearly all of the potable groundwater production of EWMWD comes from the Elsinore Basin; less than one percent comes from wells in the Temescal Valley Basin.

A majority of EVMWD's potable water is imported water purchased from Metropolitan Water District (MWD) and WMWD. MWD receives water via the State Water Project (SWP) and the Colorado River Aqueduct that is ultimately derived from the Sacramento-San Joaquin River Delta and the Colorado River, respectively. MWD currently serves about 19 million people in Southern California, including residents of Los Angeles, Orange, San Diego, Riverside, San Bernardino, and Ventura Counties. In 2015, projected annual demand was approximately 2.1 million acre-feet (AF) while water allocations from Northern California and the Colorado River are expected to be about 1.2 million AF of water.[1] MWD also currently has approximately 1.2 million AF of water in storage. WMWD is a member agency of MWD and its water sources include the Colorado River, State Water Project, and groundwater.

Water resources in the City and throughout Elsinore Valley are supplemented by withdraws from groundwater basins. Much of this water comes from the Elsinore Basin, in which the EVMWD has seven operating potable groundwater wells. The Elsinore Basin underlies approximately 25 square miles of the valley, including beneath Lake Elsinore. Water rights within the Elsinore Basin are not adjudicated. This underground reservoir is tapped throughout the year according to the demand for water. Natural inflows for the Elsinore basin include infiltration from precipitation, runoff from the surrounding watershed, infiltration from the San Jacinto River, and returns flows from irrigation and domestic use. Groundwater supplies are also augmented with recharged surface water purchased through the SWP. Currently, the EVMWD does not identify any major groundwater recharge areas within the project site or immediate surrounding area.

Further analysis of the project's water supply impacts is provided in Section 4.17, *Utilities*.

4.9.1.4 NOP/Scoping Comments

Three public comments were at the scoping meeting regarding impacts the project may have on localized flooding and local drainage. The RCFCWCD provided comment during the first NOP period stating that the project would not be affected by

[1] Sprague, Mike. *Metropolitan Water District may face choice of dipping into water reserves or reducing deliveries, chairman says, Mercury News*, January 15, 2015.

the District Master Drainage Plan facilities, and that the project is required to pay fees in accordance with the Murrieta Creek/Murrieta Valley Area Drainage Plan.

4.9.2 Existing Policies and Regulations

In the past, the effort to control the discharge of storm water has focused on managing the quantity of storm water (e.g., flood control) and only to a limited extent on managing the quality of storm water. In recent years, awareness of the need to improve water quality has increased. With this awareness, an extensive body of Federal, State, and local laws and regulatory programs has been established to pursue the goal of reducing pollutants contained in storm water discharges to waterways. The emphasis of these programs is to promote the concept and the practice of preventing pollution at the source, before it can cause environmental harm.

4.9.2.1 Federal Regulations

Clean Water Act. The CWA was amended in 1972 to prevent discharge of pollutants to waters of the United States from any point source unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. The 1987 amendments to the CWA added Section 402(p), which establishes the NPDES, a permitting system for the regulation of discharges of any pollutant into waters of the United States. RWQCBs administer this permitting program in California. In November 1990, the EPA published final regulations that establish application requirements for storm water permits. The regulations require NPDES permits for discharges of storm water from industrial/construction and Municipal Separate Storm Sewer Systems (MS4s). To comply with the permits, storm water pollution controls must be implemented for construction and industrial activity that discharges either directly to surface waters or indirectly through separate municipal storm drains. Pollution control is achieved by establishing engineering measures that have been designed, tested and successfully implemented throughout the past decades, such as detention basins and sediment traps, during both the construction period and the operational phases of a project.

Pursuant to the requirements of the State Water Resources Control Board (SWRCB), the NPDES General Permit No. CAS000002 applies to all construction activities that result in the disturbance of at least one acre of total land area, or activity which is part of a larger common plan of development of one acre or greater. General Permit No. CAS000002 is issued by the SWRCB as part of the Federal delegation responsibilities under this section of the CWA. The RWQCB regulates hydromodification[1] as well as surface and groundwater quality through adoption of water quality plans and standards, and issuance of water quality permits and

[1] Hydromodification is the alteration of the hydrologic characteristics of coastal and non-coastal waters, which, in turn, could cause degradation of water resources.

waivers. The NPDES permit deals with both the construction phase and operational phase of development projects. For the construction phase of a project, the NPDES permit identifies the preparation of a Storm Water Pollution Prevention Plan (SWPPP).

The implementation of NPDES permits ensures that the State's mandatory standards for the maintenance of clean water and the Federal minimum standards are met. Coverage under an NPDES permit regulates sedimentation and soil erosion through implementation of an SWPPP and periodic inspections by RWQCB staff. An SWPPP is a written document that describes the construction operator's activities to comply with the requirements in the NPDES permit. The SWPPP establishes a process whereby the operator evaluates potential pollutant sources at the site and implements Best Management Practices (BMPs) designed to prevent or control the discharge of pollutants in storm water runoff.

Storm water control measures during construction and grading will be outlined in the construction NPDES permit and SWPPP prepared for each proposed phase of the project. Examples of such BMP control measures include but are not limited to the following:

- Temporary detention basins for runoff and silt containment;
- Regular street-sweeping and truck washing prior to exiting construction areas;
- Covering of soil hauling trucks to minimize dust generation (and silt buildup on project roads;
- Dirt rockers at project exits to reduce soil transported out of construction areas;
- Monitoring of runoff and protection devices during storm events;
- Use of silt fencing, gravel bags, and/or straw bales to channel runoff to temporary basins; and
- Identification of emergency procedures in case of hazardous materials spills.

The project proponent will be required to obtain a construction NPDES permit prior to any site grading. In addition, the NPDES permit will require the identification of post-construction BMPs to be incorporated into the project WQMP and any subsequent site-specific WQMP. The WQMP identifies measures to control the post-construction entry of contaminants into storm flows.

In addition, pursuant to Section 404 of the CWA, the U.S. Army Corps of Engineers (USACE) regulates discharges of dredged or fill material into waters of the United States. These waters include wetlands and non-wetland bodies of water that meet specific criteria, including a direct or indirect connection to interstate commerce. The USACE regulatory jurisdiction pursuant to Section 404 of the CWA is founded on a connection, or nexus, between the water body in question and interstate commerce. This connection may be direct (through a tributary system linking a stream channel with traditional navigable waters used in interstate or foreign commerce) or may be

indirect (through a nexus identified in the USACE regulations). The USACE typically regulates as non-wetland waters of the U.S. any body of water displaying an ordinary high water mark (OHWM). In order to be considered a jurisdictional wetland under Section 404, an area must possess three wetland characteristics: hydrophytic vegetation, hydric soils, and wetland hydrology. Each characteristic has a specific set of mandatory wetland criteria that must be satisfied in order for that particular wetland characteristic to be met. A project-specific discussion regarding Section 404 issues is provided in Section 4.4, *Biological Resources*, of this EIR.

National Flood Insurance Program. The National Flood Insurance Program (NFIP) is a relatively recent Federal program. The Federal Government has been actively involved in flood control since 1927 following major floods on the Mississippi River. Beginning with the Flood Control Act of 1936, Congress assigned the USACE the responsibility for flood control engineering works and later for floodplain information services. Flood control was provided through the construction of dams and reservoirs. Despite these programs and rapidly rising Federal expenditures for flood control, flood losses continued to rise. In 1968, Congress passed the National Flood Insurance Act, which created the NFIP. The Flood Disaster Protection Act of 1973, which amended the 1968 Act, required the purchase of flood insurance by property owners who were located in special flood hazard areas and were being assisted by Federal programs, or by federally supervised, regulated, or insured agencies or institutions.

National Flood Insurance Program Reform Act of 1994. In 1994, the National Flood Insurance Program Reform Act went through its first major revision since its inception. Included in this revision were provisions that if a lender were to escrow an account and if the structure were in the floodplain, then the lender *must* escrow for flood insurance. The revised legislation also included increased flood insurance limits and the elimination of the 1962 buy-out program. However, the legislation did initiate the Hazard Mitigation Fund as part of the flood insurance policy. Also included in this legislation was the increase from a 5-day to a 30-day waiting period for a new policy to become effective. It also prohibits the waiver of flood insurance purchase requirements as a condition of receiving Federal disaster assistance. If the flood insurance policy were not maintained, in the event of another disaster, no disaster assistance would be made available for that structure.

Executive Order 11988, Floodplain Management. Executive Order 11988 requires the USACE to provide leadership and to take action to:

- Reduce the hazards and risk associated with floods;
- Minimize the impact of floods on human health, safety, and welfare; and
- Restore and preserve the natural and beneficial values of the current floodplain.

To comply with Executive Order 11988, the policy of the USACE is to develop projects that, to the extent possible, avoid or minimize adverse effects associated with use of the floodplain and that avoid development (or the inducement of development) in an existing floodplain unless there is no practicable alternative.

4.9.2.2 State Regulations

Porter-Cologne Water Quality Control Act. The Porter-Cologne Act is the principal law governing water quality regulation in California. It establishes a comprehensive program to protect water quality and the beneficial uses of water. The Porter-Cologne Act applies to surface waters, wetlands, and groundwater and to both point and nonpoint sources of pollution. Pursuant to the Porter-Cologne Act (California Water Code section 13000 et seq.), the policy of the State is as follows:

- That the quality of all the waters of the State shall be protected,
- That all activities and factors affecting the quality of water shall be regulated to attain the highest water quality within reason, and
- That the State must be prepared to exercise its full power and jurisdiction to protect the quality of water in the State from degradation.

The Porter-Cologne Act established nine Regional Water Boards (based on hydrogeologic barriers) and the State Water Board, which are charged with implementing its provisions and which have primary responsibility for protecting water quality in California. The State Water Board provides program guidance and oversight, allocates funds, and reviews Regional Water Board decisions. In addition, the State Water Board allocates rights to the use of surface water. The Regional Water Boards have primary responsibility for individual permitting, inspection, and enforcement actions within each of nine hydrologic regions. The SWRCB board is designated as the state water pollution control agency for all purposes stated in the Federal Water Pollution Control Act and any other Federal act, heretofore or hereafter enacted, and is (a) authorized to give any certificate or statement required by any Federal agency pursuant to any such Federal act that there is reasonable assurance that an activity of any person subject to the jurisdiction of the state board will not reduce water quality below applicable standards, and (b) authorized to exercise any powers delegated to the state by the Federal Water Pollution Control Act.

The Regional Water Boards regulate discharges under the Porter-Cologne Act primarily through issuance of NPDES permits for point source discharges and waste discharge requirements (WDRs) for NPS discharges. Anyone discharging or proposing to discharge materials that could affect water quality (other than to a

community sanitary sewer system regulated by an NPDES permit) must file a report of waste discharge.[1]

Pursuant to requirements of the SWRCB, the NPDES Construction General Permit (CGP) No. CAS000002 applies to all construction activities in Riverside County that result in the disturbance of at least one acre of total land area, or activity which is part of a larger common plan of development of one acre or greater. The CGP requires the development and implementation of an SWPPP that identifies the BMPs used to protect storm water runoff, the placement of those BMPs, and a monitoring program.

In compliance with the RWQCB-issued MS4 permit issued to the City (as a co-Permitee within the Santa Margarita Region), a project-specific WQMP is required to:

1) Identify all pollutant sources, including sources of sediment that may affect the quality of storm water discharges associated with daily use/activity (storm water discharges) from the property site;
2) Identify non-storm water discharges;
3) Identify, construct, implement and maintain BMPs to reduce or eliminate pollutants in storm water discharges and authorized non-storm water discharges from the property site; and
4) Develop a maintenance schedule for BMPs designed to reduce or eliminate pollutants.

California Fish and Game Code. The California Fish and Game Code has provisions to prevent unauthorized diversions of any surface water and discharge of any substance that may be deleterious to fish, plant, animal, or bird life. The California Department of Fish and Wildlife (CDFW), through provisions of the California Fish and Game Code (§1601 through §1603), is empowered to regulate any alteration of a river, stream, or lake where fish or wildlife resources may be adversely affected. The presence of a channel bed and banks, and at least an intermittent flow of water define streams (and rivers), is one of the most important factors in establishing CDFW jurisdiction. The CDFW regulates wetland areas only to the extent that those wetlands are part of a river, stream, or lake as defined by the CDFW. Discussion of jurisdictional waters and riparian/wetland resources is provided in Section 4.4, *Biological Resources*, of this EIR.

California Code of Regulations. The California Code of Regulations (CCR) contains administrative procedures for the State and the nine RWQCBs in Title 23,

[1] http://swrcb2.swrcb.ca.gov/water_issues/programs/nps/encyclopedia/0a_laws_policy.shtml, site accessed August 27, 2015.

and for water quality for domestic uses, wastewater reclamation, and hazardous waste management in Title 22.

Health and Safety Code. The Health and Safety Code provides for protection of ground and surface waters from hazardous waste and other toxic substances.

Groundwater Management Act (AB 3030) [Sections 10750–10756 of the California Water Code]. The availability of groundwater and issues involving the adequacy of recharge capability are regional in nature. The Groundwater Management Act[1] (AB 3030) provides a systematic procedure for an existing local agency to develop a groundwater management plan. AB 3030 allows a local agency whose service includes a groundwater basin that is not already subject to groundwater management pursuant to law or court order to adopt and implement a groundwater management plan and includes plans to mitigate overdraft conditions, control brackish water, and to monitor and replenish groundwater.

Sustainable Groundwater Management Act of 2014 (Senate Bills 1168 and 1319, Assembly Bill 1739). In March 2014, the Governor's Office released a draft framework soliciting input on actions that can be taken to ensure local groundwater managers have the tools and authority to sustainably manage groundwater. In response, SB 1168 and AB 1739 were introduced. These bills moved through the legislation process in nearly identical form while the authors and administration convened multiple stakeholder meetings and further developed the provisions of the bills. On August 22, 2014, both bills were amended to divide the provisions between the two bills. In tandem, SB 1168 and AB 1739 provide a comprehensive groundwater sustainability management program.[2] In September 2014, Senate Bills 1168 and 1319, and Assembly Bill 1739 were enacted, amending and adding to the State's Government and Water Codes relative to the management of groundwater resources. The three bills comprise the Sustainable Groundwater Management Act of 2014 (SGMA). The SGMA provides for the formation of local groundwater sustainability agencies (GSAs), which are responsible for monitoring and sustainably managing groundwater basins.

Cobey-Alquist Flood Plain Management Act (Sections 8000–9651 of the California Water Code). This Act states that a large portion of land resources of the State of California is subject to recurrent flooding. The public interest necessitates sound development of land use, as land is a limited, valuable, and irreplaceable resource, and the floodplains of the State are a land resource to be developed in a manner that, in conjunction with economically justified structural measures for flood

[1] Sections 10750–10756 of the California Water Code.
[2] *Sustainable Groundwater Management Act of 2014*, Association of California Water Agencies, http://www.acwa.com/content/groundwater/groundwater-sustainability (accessed April 29, 2015).

control, would result in prevention of loss of life and of economic loss caused by excessive flooding. The primary responsibility for planning, adoption, and enforcement of land use regulations to accomplish floodplain management rests with local levels of government. It is policy of the State of California to encourage local government to plan land use regulations to accomplish floodplain management and to provide state assistance and guidance. As part of its discretionary review process, the City must determine how the project will comply with this Act and not create flooding impacts on new occupied land uses.

California Toxics Rule. On May 18, 2000, the State Environmental Protection Agency (CalEPA) promulgated numeric water quality criteria for priority toxic pollutants and other provisions for water quality standards to be applied to waters in the State of California. The CalEPA promulgated this rule based on the Administrator's determination that the numeric criteria are necessary in California to protect human health and the environment. The rule fills a gap in California water quality standards that was created in 1994 when a State court overturned the State's water quality control plans containing water quality criteria for priority toxic pollutants. Thus, the State of California has been without numeric water quality criteria for many priority toxic pollutants as required by the CWA, necessitating this action by CalEPA. These Federal criteria are legally applicable in the State of California for inland surface waters, enclosed bays, and estuaries for all purposes and programs under the CWA.

SB 610 and SB 221. Senate Bills 610 and 221 amended State law in 2002 to include water supply assessment as part of land use planning decisions made by cities and counties.[1] Both statutes require that information regarding water availability be made available to decision-makers prior to approval of a large development project. The two bills complement each other in facilitating this process. Under SB 610, water assessments for certain projects (as defined in Water Code 10912 [a]) must be made available to local governments as part of environmental documentation prepared pursuant to CEQA. SB 221 requires that a written verification of sufficient water supply be made by a city or county in order to approve certain residential subdivisions.

The project does not exceed the thresholds established by SB 610 and the subsequent Water Code sections, which is the equivalent of 500 residential units, so the project does not need to prepare a Water Supply Assessment (WSA).

[1] Guidebook for Implementation of Senate Bill 610 and Senate Bill 221 of 2001, California Department of Water Resources. Accessed on October 17, 2014: http://www.water.ca.gov/pubs/use/sb_610_sb_221_guidebook/guidebook.pdf.

4.9.2.3 Local Regulations

Municipal Separate Storm Sewer System (MS4) Permit System. The City is a co-permittee under the NPDES MS4 Permit No. CAS 0108766(Order RA-2010-0016), adopted in 2010. The NPDES MS4 permit is intended to regulate the discharge of urban runoff from the MS4 within the Santa Margarita Region. Under the NPDES MS4 permit, the City is responsible for the management of storm drain systems within its jurisdiction. Cities are required to implement management programs, monitoring programs, implementation plans, and all applicable BMPs outlined in the Riverside County WQMP, which covers the Santa Ana and Santa Margarita Watersheds.

The 2010 MS4 Permit mandates a Low Impact Development (LID) approach to storm water treatment and management of runoff discharges. The project site should be designed to minimize imperviousness, detain runoff, and infiltrate, reuse or evapotranspirate runoff where feasible. LID BMPs should be used to infiltrate, evapotranspirate, harvest and use, or treat runoff from impervious surfaces, in accordance with the *Design Handbook for Low Impact Development Practices*. The project must ensure that runoff does not create a hydrologic condition of concern. The RWQCB continuously updates impairments as studies are completed.

4.9.2.4 City General Plan Policies

The following General Plan objectives, policies, and programs are applicable to the proposed project and Table 4.9.D provides a consistency analysis of the proposed project to the General Plan policies, targets and actions:

Flood and Inundation Hazards

S 4.10 Require all proposed projects anywhere in the County to address and mitigate any adverse impacts that it may have on the carrying capacity of local and regional storm drain systems.

S 4.20 Balance flood control mitigation with open space and environmental protection.

Open Space

OS 2.2 Where feasible, decrease storm water runoff by reducing pavement in development areas, and by design practices such as permeable parking bays and porous parking lots with bermed storage areas for rainwater detention.

OS 3.3 Minimize pollutant discharge into storm drainage systems and natural drainage and aquifers.

OS 4.4 Incorporate natural drainage systems into developments where appropriate and feasible.

OS 5.3 Based upon site, specific study, all development shall be set back from the floodway boundary a distance adequate to address the following issues:

a. public safety;
b. erosion;
c. riparian or wetland buffer;
d. wildlife movement corridor or linkage; and
e. slopes.

OS 6.3 Consider wetlands for use as natural water treatment areas that will result in improvement of water quality.

Table 4.9.D: General Plan Consistency Analysis

General Plan Goals and Targets	General Plan Consistency Analysis
Flood and Inundation Hazards	
S 4.10. Require all proposed projects anywhere in the County to address and mitigate any adverse impacts that they may have on the carrying capacity of local and regional storm drain systems.	**Consistent.** The project hydrology study assessed drainage impacts of the project and found that it would not substantially affect storm drainage systems.
S 4.20. Balance flood control mitigation with open space and environmental protection.	**Consistent.** The project contains BMPs, such as detention basins that would capture and treat flows generated by the project.
Open Space	
OS 2.2. Where feasible, decrease storm water runoff by reducing pavement in development areas, and by design practices such as permeable parking bays and porous parking lots with bermed storage areas for rainwater detention.	**Consistent.** The project includes rainwater detention BMPs. The project includes a 1.9-acre passive park and 1.3-acre natural open space area.
OS 3.3. Minimize pollutant discharge into storm drainage systems and natural drainage and aquifers.	**Consistent.** The project would implement BMPs to reduce pollutant discharge.
OS 4.4. Incorporate natural drainage systems into developments where appropriate and feasible.	**Consistent.** The project would preserve the existing natural drainage located in the on-site oak grove.
OS 6.3. Consider wetlands for use as natural water treatment areas that will result in improvement of water quality.	**Consistent**. The project will include a bioretention planter as a natural treatment area. No wetlands are located on site.

4.9.3 Methodology

A Preliminary Hydrology and Hydraulics Study and WQMP were prepared for the project based on the RCFCWCD *Hydrology Manual* dated April 1978 and the *Low Impact Development Best Management Practice Design Handbook* (September 2011). The purpose of the Hydrology and Hydraulics Study was to determine the

preliminary storm drain infrastructure and BMPs required for the project. The analyses divided the site into drainage areas and used runoff characteristics (soil type, impervious fraction) and acreage in order to calculations flows in cfs from 2-year and 10-year storm events. By comparing pre- and post-project conditions, the study determined the required storage volume of BMPs to mitigate increased runoff from the project. The post-project flows have been allocated to flow in a manner that resembles the existing conditions.

Overall, the evaluation of hydrology and water quality impacts associated with the proposed project includes the following:

- Determine the construction phase water quality impacts based on NPDES standards;
- Determine the construction impacts on drainage patterns and drainage capacity;
- Determine the operational water quality impacts based on NPDES standards;
- Determine the operational impacts on drainage patterns and drainage capacity; and
- Determine the impacts on local groundwater table levels.

The design guidelines for this project are in accordance with RCFCWCD requirements. The RCFCWCD authored its LID BMP handbook as a supplement to the Riverside County WQMP. The handbook provides guidance for planning, design, and maintenance of LID BMPs. The SWRCB defines LID as follows:

> "… a sustainable practice that benefits water supply and contributes to water quality protection. Unlike traditional storm water management, which collects and conveys storm water runoff through storm drains, pipes, or other conveyances to a centralized storm water facility, LID takes a different approach by using site design and storm water management to maintain the site's pre-development runoff rates and volumes. The goal of LID is to mimic a site's predevelopment hydrology by using design techniques that infiltrate, filter, evaporate, and detain runoff close to the source of rainfall."

When implemented correctly, LID provides two primary benefits:

1. The post-construction site hydrology will more closely mimic the pre-development hydrology, thus reducing the downstream erosion that may occur due to increased runoff from impervious surfaces; and
2. Pollutants in runoff from the site will be significantly reduced.

The project's WQMP followed the Riverside County WQMP guidelines and LID principles. It characterized the physical properties of site and receiving waters, divided the site into Drainage Management Areas (DMAs), and then chose BMPs based on the required amount of runoff to be captured, or the Design Capture

Volume (DCV). The DCV is the volume of runoff produced by the "Design Storm," which the 85th percentile 24-hour storm event.

Drainage pattern and capacity impacts from the hydrology study are evaluated against the CEQA significance criteria for runoff, flooding, and water quality to determine the potential for significant impacts.

4.9.3.1 Pollutants of Concern and Assessment Methodology

The pollutants of concern for the water quality analysis have been identified based on the previously described regulations and the pollutants identified by regulatory agencies that potentially could be generated by urban runoff from the proposed project. The potential pollutants associated with the project are reflected in Table 4.9.E, which describes these pollutants and their general impact on water quality and aquatic habitat.

Table 4.9.E: Pollutants and General Water Quality Impacts

Pollutant	Water Quality Impact
Bacterial and Viruses	May result in water body impairments, can exceed public health standards for water contact recreation, creating a harmful environment. Can alter the aquatic habitat and create a harmful environment for aquatic life.
Metals	Bio-available forms of trace metals are toxic to aquatic life, potential of groundwater contamination, bio-accumulation in aquatic life, affect beneficial uses of a water body.
Nutrients	Elevated nutrient levels in surface waters cause algal blooms, excessive vegetative growth, and dissolved oxygen levels, which is detrimental to aquatic life.
Pesticides	Elevated levels can indirectly or directly constitute a hazard to life or health. During cleaning activities, these compounds can be washed off into storm drains creating runoff containing toxic levels of the pesticides active component. Dirt, grease, and grime may adsorb concentrations that are harmful or hazardous to aquatic life.
Toxic Organic Compounds	May contain levels that are harmful or hazardous to aquatic life.
Sediments	Excessive sediment can be detrimental to aquatic life by interfering with photosynthesis, respiration, growth, and reproduction.
Trash and Debris	Detrimental effect on recreational value of a water body and aquatic habitat; interferes with aquatic life respiration and can be harmful or hazardous to aquatic animals that mistakenly ingest floating debris.
Oxygen-Demanding Substances	Use up dissolved oxygen in water. Can create low oxygen conditions cause stress or death of aquatic animals.
Oil and Grease	Can accumulate in aquatic life from contaminated water, sediments, and food and are toxic at low concentrations. Can persist in sediments for long periods of time and result in adverse impacts on the diversity and abundance of existing bio-communities and can affect the aesthetic value of a water body.

The WQMP prepared for the project determined that the pollutants of concern from the project are sediments, nutrients, organic compounds (petroleum hydrocarbons), trash and debris, oxygen-demanding substances, bacteria and viruses, oil and grease, pesticides, and metals. The pollutants from the project that match pollutants from 303(d) listed receiving waters are nutrients, bacteria and viruses, pesticides, and metals. The project-specific WQMP outlines the various BMPs that will be implemented for this project (see EIR Appendix H-2). These have been developed by the project engineer to address project-specific water quality impacts. The selected BMPs shall achieve the following, consistent with the WQMP requirements:

- Minimize Urban Runoff;
- Minimize Impervious Footprint;
- Conserve Natural Areas; and
- Minimize Directly Connected Impervious Areas.

4.9.4 Thresholds of Significance

The following thresholds of significance regarding potential impacts to hydrology and water quality are based on *CEQA Guidelines*. A project would have a significant impact on surface hydrology, water quality, and/or groundwater if it would:

- Result in violations of any water quality standards or waste discharge requirements of the City or the Regional Water Quality Control Board;
- 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;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion, siltation on site or off site;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff which would result in on-site or off-site flooding;
- Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff;
- Otherwise substantially degrade water quality;
- Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map;

- Place within a 100-year flood hazard area structures which would impede or redirect flood flows;
- Expose people or structures to a significant risk of loss injury or death involving flooding, including flooding as a result of the failure of a levee or dam; and/or
- Expose people or structures to inundation by seiche, tsunami, or mudflow.

4.9.5 Less than Significant Impacts

The following potential impacts were determined to be less than significant. In each of the following issues, either no impact would occur (therefore, no mitigation would be required) or adherence to established regulations, standards, and policies would reduce potential impacts to a less than significant level.

4.9.5.1 Dam Inundation Impacts

Threshold	Would the project expose people or structure to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?

The project is not located in a dam inundation or dam hazard zone. The nearest dam to the project site is the Railroad Canyon Dam, located approximately 5.9 miles northwest of the project site. The project site is not located within the inundation area for this facility. Development and occupation of the site would not expose people or structures to risk of loss, injury, or death resulting from failure of a nearby dam or other water retention facility. No impact related to this issue would occur; therefore, no mitigation is necessary.

4.9.5.2 Seismic-Related Impacts

Threshold	Would the project expose people or structure to a significant risk of loss, injury, or death involving inundation by seiche, tsunami, or mudflow?

A tsunami is a series of waves generated in a body of water by a pulsating or abrupt disturbance that vertically displaces water. The project area is not at risk of inundation by a tsunami due to its distance from the Pacific Ocean and the presence of Santa Ana Mountains between it and the ocean; therefore, no tsunami impact would occur.

Seiches are oscillations in enclosed bodies of water that are caused by a number of factors, most often wind or seismic activity. Lakes in seismically active areas such as Lake Perris are at risk from seiches. No bodies of water or enclosed water storage features are located in the project area; therefore, there is no potential for flooding related to seiche events.

A mudslide (also known as a mudflow) occurs when there is fast-moving water and a great volume of sediment and debris that surges down a slope, stream, canyon, arroyo, or gulch. Mudslides are similar to flash floods and can occur suddenly without time for adequate warning. Mudflows can affect improvements with the force of the flow itself and the burying or erosion of improvements by mud and debris. The site has rolling hills topography and slopes from the north to the southwest. No steep slopes or rock outcrops exist on or near the site that could potentially become unstable or saturated. In addition, the developed site would be more level as a result of grading and fill operations during construction. In the absence of significant hillside features in the project area from which mudflows can originate, no significant impact from mudflows would occur. No mitigation is warranted.

4.9.5.3 Groundwater

Threshold	Would the proposed project 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?

The proposed project includes 162 residential units. The Elsinore Valley Municipal Water District in its 2010 Urban Water Management Plan (UWMP) describes average potable water demand for different land uses. The average daily per capita water use, based on data collected from 1999 to 2008, of the EVMD service area is 248 gallons per day. Occupation of the residential component of the project could increase the population within the EVMWD service area by approximately 356 persons. Therefore, the water demand of the project residential portion would be approximately 88,288 gallons per day.

As stated previously, the majority of EVMWD's water supply comes from imported water. EVMWD analyzed groundwater water supply reliability in its UWMP. The UWMP projects the water consumption demands of existing and future development based on rates of growth assumed by regional planning organizations (i.e., SCAG) and estimates water demand versus available supply under different water supply scenarios (e.g., multiple dry years). The EVMWD pumps local groundwater primarily from the Elsinore Basin. EVMWD's conjunctive use program recharges imported water in the Elsinore Basin during wet years, enhancing groundwater supply reliability. Conjunctive use and artificial recharge programs instituted by EVMWD over the past several years and continued implementation of such programs in the future is expected to result in satisfactory management of the Elsinore Basin. For further information on available water supply refer to Section 4.17.1, *Water Supply*.

EVMWD's assessment of groundwater usage in its UWMP took into account planned growth in its service area. In addition, the EVMWD is able to import water to prevent significant overdraft of local groundwater supplies. The UWMP anticipates demand based on SCAG population growth estimates. While the project would result in the development of a currently undeveloped parcel, relative to the total population

and projected demand within the EVMWD service area, no substantial increase in the demand for groundwater would occur. As such, the project would not substantially deplete groundwater supplies. Impacts are less than significant.

The project would reduce infiltration of storm water on site through the addition of impervious cover. Currently, the site is undeveloped with no impervious surfaces. Implementation of the project would result in the construction of 506,376 square feet of impervious surfaces.

The project incorporates several design features that increase infiltration of storm water. The 1.9-acre passive park and landscaped areas will be used to help treat and infiltrate flows. Currently, the BMPs in the WQMP consist of filtration BMPs that treat flows and later discharge storm water into storm water facilities. The site's soils have naturally low infiltration capacity, making it hard to effectively infiltrate on-site flows. However, infiltration testing will be performed during final engineering to determine if the project site can utilize infiltration-based BMPs. Should infiltration rates be feasible, the proposed filtration based BMPs will be modified to infiltration.

The project would implement infiltration BMP to the extent feasible. Storm water that leaves the project will be conveyed in the existing storm water channels within the Elsinore Basin. The project would therefore not significantly affect groundwater recharge or the availability of groundwater. Impacts are less than significant and no mitigation is required.

4.9.5.4 Flood Hazard Areas

Threshold	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; Place within a 100-year flood hazard area structures which would impede or redirect flood flows;

The project site is undeveloped. Currently, drainage flows are transported via four ephemeral streams toward two downstream locations. Under the existing condition, no impervious surfaces are located within the project limits and storm water runoff is able to infiltrate into existing on-site soils. Development of the project site will result in the installation of impervious surfaces which will increase the rate and volume of storm water runoff. As established in Section 4.9.6.3, the on-site storm water management system has been designed to accommodate the anticipated volume of storm water runoff resulting from site development.

A one-hundred-year flood is a flood event that has a one percent probability of occurring in any given year. The project site is not located within an identified 100-

year flood hazard zone.[1] As the project is not located within a 100-year flood zone, no 100-year flooding impact will result from development of the site as proposed. No mitigation is required.

4.9.6 Significant Impacts

4.9.6.1 Construction-Related Water Quality Impacts

Impact 4.9.6.1: *The project may cause surface water pollution during construction.*

Threshold	Would the proposed project violate any water quality standards or waste discharge requirements during construction phases of the project in form of increased soil erosion, sedimentation, or storm water discharges?

The grading phase of the project will require the disturbance of surface soils and removal of vegetative cover, which could potentially result in erosion and sedimentation, which could affect water quality. Stockpiles and excavated areas may be susceptible to high rates of erosion from wind and rain and, if not managed properly, could result in increased sedimentation in local watercourses.

By volume, sediment is the principal component in most storm runoff. The delivery, handling, and storage of construction materials and wastes, as well as the use of on-site construction equipment could increase the risk of storm water contamination through the spill, leakage and routine usage of substances such as fuels, oils, paints, and solvents. These substances can be transported to nearby surface waterways and/or to groundwater in storm water runoff, wash water, and dust control water, potentially reducing the quality of the receiving waters. The anticipated and potential pollutants in storm water or urban runoff for various land uses are reflected in previously referenced Table 4.9.E.

Short-term storm water pollutant discharges from the project development site will be mitigated through compliance with the required NPDES permits, resulting in a less than significant impact. The NPDES permit program was established under Section 402 of the CWA, which prohibits the unauthorized discharge of pollutants, including municipal, commercial, and industrial wastewater discharges, from point sources to U.S. waters. Permittees must verify compliance with permit requirements by monitoring their effluent, maintaining records, and filing periodic reports. An NPDES permit specifies an acceptable level of a pollutant or pollutant parameter in a discharge (for example, a certain level of bacteria) and the permittee selects an appropriate process or technology to achieve that level. Some permits, however, do contain certain generic BMPs. Table 4.9.F lists possible construction site BMPs for runoff control, sediment control, erosion control, and housekeeping that may be used during the construction phases of the proposed project. These construction site

[1] Federal Emergency Management Agency Flood Insurance Rate Map, Community Panel No. 06065C2705G.

BMPs are only examples of what should be considered and should not preclude new or innovative approaches currently available or being developed.

Table 4.9.F: General Construction Site Best Management Practices

Runoff Control	Sediment Control	Erosion Control	Good Housekeeping
Minimize clearing Preserve natural vegetation Stabilize drainage ways Install check dams Install diversion dikes	Install perimeter controls (e.g., silt fences) Install sediment trapping devices (e.g., straw wattles, hay bales, gravel bags) Inlet protection (e.g., check dams) Install fiber rolls	Stabilize exposed soils (e.g., hydroseed, soil binders) Protect steep slopes(e.g., geotextiles, compost blankets) Cover stockpiles with blankets Complete construction in phases	Create waste collection area Put lids on containers Clean up spills immediately

Source: *Construction Site Storm Water Runoff Control*, National Pollutant Discharge Elimination System, http://www.epa.gov/npdes/stormwater/menuofbmps/construction, accessed January 2015.

The implementation of NPDES permits, including the General Construction permit, ensures that the Federal and State standards for clean water are met. Enforcement of required NPDES permit requirements will prevent sedimentation and soil erosion through implementation of an SWPPP and periodic inspections by RWQCB staff. An SWPPP is a written document that describes the construction operator's activities to comply with the requirements in the NPDES General Construction permit. Required elements of an SWPPP include (1) site description addressing the elements and characteristics specific to the project site; (2) descriptions of BMPs for erosion and sediment controls; (3) BMPs for construction waste handling and disposal; (4) implementation of approved local plans; and (5) proposed post-construction controls, including a description of local post-construction erosion and sediment control requirements. The SWPPP establishes a plan whereby the operator evaluates potential pollutant sources at the site and selects and implements BMPs designed specifically to prevent or control the discharge of the identified pollutants into storm water runoff.

Mitigation Measure. Although adherence to NPDES requirements is required of all development within the City, the incorporation of these requirements as **Mitigation Measure 4.9.6.1A** is designed to ensure that any future development on the project site obtains coverage under the NPDES General Construction permit, and to track compliance with these requirements as part of the Mitigation Monitoring and Reporting Plan or Program (MMRP):

4.9.6.1A Prior to the issuance of grading permits, the project applicant shall submit evidence to the City that coverage under the State Water Resources Control Board (SWRCB) General Permit for Discharges of Storm Water Associated with Construction Activity (Construction General Permit Order

2009-0009-DWQ) has been obtained. As required by the General Permit, project applicant shall submit a Storm Water Pollution Prevention Plan (SWPPP) to the City of Wildomar, Riverside County Flood Control and Water Conservation District, and San Diego Regional Water Quality Control Board for review and approval. The SWPPP shall identify pre- and post-construction Best Management Practices (BMPs) intended to prevent the release of sediment and pollutants into downstream waterways and comply with all other requirements of the General Permit. BMPs to be implemented may include (but shall not be limited to) the following:

- Sediment discharges from the site may be controlled by the following: sandbags, silt fences, straw wattles and temporary debris basins (if deemed necessary), and other discharge control devices. The construction and condition of the BMPs are to be periodically inspected by the RWQCB during construction, and repairs would be made as required.
- Materials that have the potential to contribute non-visible pollutants to storm water must not be placed in drainage ways and must be placed in temporary storage containment areas.
- All loose soil, silt, clay, sand, debris, and other earthen material shall be controlled to eliminate discharge from the site. Temporary soil stabilization measures to be considered include covering disturbed areas with mulch, temporary seeding, soil stabilizing binders, fiber rolls or blankets, temporary vegetation, and permanent seeding. Stockpiles shall be surrounded by silt fences and covered with plastic tarps.
- The SWPPP shall include inspection forms for routine monitoring of the site during the construction phase.
- Additional required BMPs and erosion control measures shall be documented in the SWPPP.
- The SWPPP would be kept on site for the duration of project construction and shall be available to the local Regional Water Quality Control Board for inspection at any time.

Level of Significance after Mitigation. While on-site grading and development activities will increase the potential for the erosion of soils, adherence to the BMPs mandated by **Mitigation Measure 4.9.6.1A** will reduce impacts associated with short-term (construction) storm water discharges during project construction to a less than significant level.

4.9.6.2 Operational-Related Water Quality Impacts

Impact 4.9.6.2: *The project may result in surface water pollution during occupancy.*

Threshold	Would the proposed project violate any water quality standards or waste discharge requirements during the operational phases of the project in the form of increased soil erosion, sedimentation, or urban runoff?

During the operational phase of any urban use, the major source of pollution in storm water runoff will be contaminants that have accumulated on the land surface over which runoff passes. Storm runoff from the roadways, parking lots, and commercial and residential buildings can carry a variety of pollutants such as sediment, petroleum products, commonly utilized construction materials, landscaping chemicals, and (to a lesser extent) trace metals such as zinc, copper, lead, cadmium, and iron, which may lead to the degradation of storm water in downstream channels. Runoff from landscaped areas may contain elevated levels of phosphorus, nitrogen, and suspended solids. Oil and other hydrocarbons from vehicles are also expected in storm water runoff.

Pollutant concentrations in urban runoff are variable depending on storm intensity, land use, elapsed time since previous storms, and the volume of runoff generated in a given area that reaches receiving waters. Pollutant concentrations are typically highest during the first major rainfall event after the dry season, known as the "first-flush." The preliminary WQMP prepared for the project identifies pollutants and hydrologic conditions of concern that may be associated with the implementation of the project.

The pollutants associated with the operations of the proposed land uses include bacterial indicators, metals, nutrients, pesticides, toxic organic compounds, sediments, trash and debris, and oil and grease. The project-specific WQMP identified downstream receiving waters and their impairments, as described previously. The selection of treatment controls for the project is based primarily on the potential pollutants associated with the project that are also present in impaired receiving waters, which are deemed project priority pollutants of concern. Priority pollutants of concern for the project are bacterial indicators, metals, nutrients, and pesticides.

Post-development, the project site will be divided into eight DMAs. The project will incorporate a bioretention planter, two sand filter basins, natural self-retaining area(s), and five subsurface retention systems to manage and treat storm water flows. As necessary, subsurface storm drains, inlet devices, and other features will be installed to convey flows between and through DMAs (Table 4.9.G). The locations of the storm water management features associated with the project have been previously identified in Figure 3.7. Table 4.9.H identifies the volume required and provided for each storm water management feature.

Table 4.9.G: Storm Water Management Features

Drainage Management Area	Location	Use	Storm Water Management Features
A	Eastern ⅔ northern portion	Commercial/Retail & Park	Bioretention Planter A Subsurface systems A-1, -2 and -3
B	Western ⅓ northern portion	Commercial	Bioretention Planter A then Subsurface system B
C	Western ⅓ southern portion	Apartments	Sand filter basin C and D Subsurface basin C
D	Southeast corner of site	Apartments	Same as for DMA C
E	Western edge of site	Future Yamas Drive	Self-retaining area (oak grove preserve)
F	Western edge of site	Future Yamas Drive	Same as for DMA C
G	Western edge of site	Oak grove preserve	Self-retaining area
H	Slope between northern and southern portions	Slope	Self-retaining area

Sources: Project Specific Water Quality Management Plan (Preliminary), JLC Engineering and Consulting, February 27, 2015.

Table 4.9.H: Project Runoff Characteristics

DMA	Pre Project		Post-Project		Post-Project Change		Total increase in volume of runoff (ft^3)
	2-Year, 24-Hour (ft^3)	10-Year, 24-Hour (ft^3)	2-Year, 24-Hour (ft^3)	10-Year, 24-Hour (ft^3)	2-Year, 24-Hour (ft^3)	10-Year, 24-Hour (ft^3)	
A	4,447	25,526	24,158	39,552	+19,711	+14,026	+33,737*
B	1,751	10,202	12,619	19,576	+10,868	+9,374	+20,242
C	4,421	25,957	27,809	43,573	+23,387	+17,616	+41,003
D	4,069	21,810	29,050	43,834	+24,982	+22,024	+47,006
E	1,381	6,617	11,330	17,228	+9,949	+10,611	+20,560
F	187	649	1,529	2,300	+1,342	+1,651	+2,993

Source: "Volume Summary Table," page 5, Preliminary Hydrology and Hydraulics Study, JLC Engineering and Consulting, Inc. March 16, 2015.
ft^3: cubic foot
* In order to be conservative during the preliminary analysis, the increase for pre-post condition for both storm durations were added, rather than utilizing the larger volume.

The treatment of storm water flows is summarized as follows:

- Flows from DMA A will be collected within three low points. The flows will be conveyed to the subsurface systems A-1, A-2, and A-3, which will discharge into the Bioretention Planter "A" for treatment.
- Flows from DMA B will collected at one low point and conveyed to subsystem B. A splitter structure will be provided downstream of the subsurface system in order to convey the water quality flows to Bioretention Planter "A." Flows in

excess of the water quality flow rate will be conveyed downstream. Flows from DMA B must discharge to the southwesterly corner of the site in order to prevent diversion of area.

- Flows from DMA C will enter sand filter basin C via two inlets.
- Flows from DMA D will enter sand basin D via three inlets. In order to provide enough volume to mitigate for increased runoff, a subsystem C has been provided. The series of two sand filter basins and subsurface systems will provided the required storage volume for mitigation of increased volume.
- DMA E will discharge into the natural, undisturbed area adjacent to Yamas Road. This area is designated as an Oak Tree Preserve and will remain in its current undeveloped condition. This area is considered a self-retaining area and will utilize the natural infiltration capability of the soil to treat DMA E flows. This area provides sufficient volume to mitigate for increased runoff within DMA E.

The WQMP prepared for the project (Appendix H-2) identifies the BMPs that will minimize the project's effects on site hydrology, urban runoff flow rates, and pollutant loads. The project WQMP was prepared pursuant to the methodologies required for WQMPs prepared in the Santa Margarita Region of Riverside County. This comprehensive water quality approach will be implemented throughout development and operation of the project and will establish a program for achieving water quality goals through the enforcement of site design, source control, and treatment control BMPs. These project-specific site design, source control, and treatment control BMPs are listed below.

Site Design BMPs. Site design BMPs are implemented to create a hydrologically-functional project design that attempts to mimic the natural hydrologic regime. The project shall implement the following Site Design BMPs:

1. *Preserve Existing Drainage Patterns:* The project site will intercept the off-site flows tributary from the north and east, and perpetuate the existing flow patterns to the downstream tributary locations of the project boundaries.
2. *Protect Existing Vegetation and Sensitive Areas:* The existing 1.3-acre natural open space area including the oak grove shall be preserved.
3. *Preserve Natural Infiltration Capacity:* The project site consists of a majority of soil type D, which is typical of having low infiltration rates. Infiltration testing will be done during final engineering to determine if the designed BMPs shall be modified from filtration to infiltration.
4. *Minimize Impervious Area:* The project site utilizes the minimum amount of impervious area necessary, and includes a 1.9-acre passive park. Additionally, the project includes several landscaped areas.
5. *Disperse Runoff to Adjacent Pervious Areas:* The project will discharge roof runoff and impervious areas to adjacent landscaping when feasible.

Source Control BMPs. Source control BMPs are implemented to eliminate the presence of pollutants through prevention. Such measures can be both structural and operational. The project WQMP included the following source control BMPs:

- Structural Source Control BMPs:
  - Mark all inlets with the words "Only Rain Down the Storm Drain" or similar.
  - Include catch basin filter inserts in all inlets/catch basins on site as a pre-treatment measure.
  - State that parking garage floor drains will be plumbed to the sanitary sewer.
  - Show storm water treatment and hydrograph modification management BMPs.
  - If the Co-permittee requires pools to be plumbed to the sanitary sewer, place a note on the plans and state in the narrative that this connection will be made according to local requirements.
  - State how site refuse will be handled and provide supporting detail to what is shown on plans.
  - State that signs will be posted on or near dumpsters with the words "Do not dump hazardous materials here" or similar.
- Operational Source Control BMPs:
  - Maintain and periodically repaint or replace storm drain inlet markings.
  - Provide storm water pollution prevention information to new site owners, lessees, or operators.
  - Include the following in lease agreements: "Tenant shall not allow anyone to discharge anything to storm drains or to store or deposit materials so as to create a potential discharge to storm drains."
  - Inspect and maintain drains to prevent blockages and overflow.
  - Design landscaping to minimize irrigation and runoff, to promote surface infiltration where appropriate, and to minimize the use of fertilizers and pesticides that can contribute to storm water pollution.
  - Consider using pest-resistant plants, especially adjacent to hardscape.
  - To ensure successful establishment, select plants appropriate to site soils, slopes, climate, sun, wind, rain, land use, air movement, ecological consistency, and plant interactions.
  - See applicable operational BMPs in "Guidelines for Maintaining Your Swimming Pool, Jacuzzi and Garden Fountain" at http://rcflood.org/stormwater/.
  - State how the following will be implemented: Provide adequate number of refuse receptacles. Inspect receptacles regularly; repair or replace leaky

receptacles. Keep receptacles covered. Prohibit/prevent dumping of liquid or hazardous wastes. Post "no hazardous materials" signs. Inspect and pick up litter daily and clean up spills immediately. Keep spill control materials available on site. See Fact Sheet SC-34, "Waste Handling and Disposal" in the California Stormwater Quality Association (CASQA) Storm Water.

- Sweep plazas, sidewalks, and parking lots regularly to prevent accumulation of litter and debris. Collect debris from pressure washing to prevent entry into the storm drain system. Collect wash water containing any cleaning agent or degreaser and discharge to the sanitary sewer not to a storm drain.

Treatment Control BMPs. Treatment control BMPs supplement the pollution prevention and source control measures by treating the water to remove pollutants before it is released from the project site. Per the WQMP guidance document, treatment control BMPs must have pollutant removal efficient of medium (40–80% removal) or high (equal to or greater than 80% removal). The project WQMP selected four treatment control BMPs:

1. Bioretention Planter "A" capturing runoff from DMAs A and B;
2. Sand Filter Basin "C" capturing runoff from DMA C;
3. Sand Filter Basin "D" capturing runoff from DMAs D and F; and
4. Infiltration Basin "E" capturing runoff from DMA E.

All of these BMPs would achieve a medium or high removal efficiency of the metals, nutrients, bacteria and viruses, and pesticides. In addition, their capacity would be equal or greater than the DCV (Figure 4.9.1).

Mitigation Measure. The following mitigation has been identified to address potential impacts to water quality during the operational phase of the project:

4.9.6.2A Prior to the issuance of grading permits, the Project Applicant shall submit a final Water Quality Management Plan (WQMP) to the City of Wildomar, for review and approval, as required by SDRWQCB Order No. R9-2004-001 (MS4 Permit) and the current Riverside County Water Quality Management Plan for Urban Runoff. The project shall implement site design BMPs, source control BMPs, and treatment control BMPs as identified in the Water Quality Management Plan. This measure shall be implemented to the satisfaction of the City Public Works Department and Planning Division as appropriate.

Level of Significance After Mitigation. The proposed project incorporates on-site drainage control structures and programs sufficient to meet the applicable Federal,

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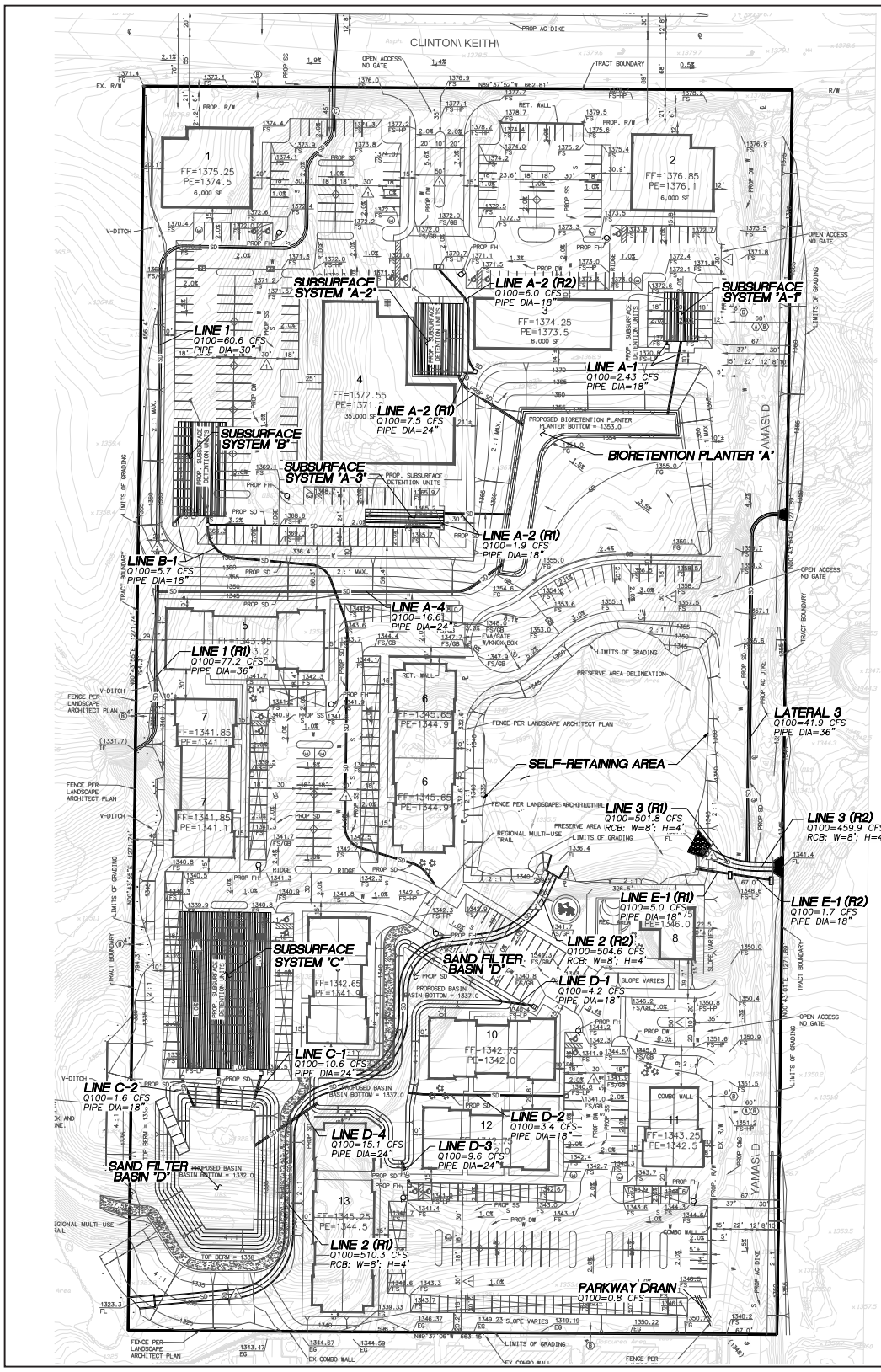

BIORETENTION PLANTER "A"–WATER QUALITY	
TRIBUTARY WATER QUALITY DMA'S	DMA A & DMA B
TOTAL DCV	7,747 ft³
BIORETENTION PLANTER "A" VOLUME PROVIDED	11,308 ft³

BIORETENTION PLANTER "A" & SUBSURFACE SYSTEMS A–1, A–2, & A–3 – MITIGATION	
TRIBUTARY MITIGATION DMA'S	DMA A
TOTAL MITIGATION VOLUME	33,737 ft³
BIORETENTION PLANTER "A", SUBSURFACE SYSTEM A–1, A–2, AND A–3 VOLUME PROVIDED	42,714 ft³

SUBSURFACE SYSTEM B–MITIGATION	
TRIBUTARY MITIGATION DMA'S	DMA B
TOTAL MITIGATION VOLUME	20,242 ft³
SUBSURFACE SYSTEM B VOLUME PROVIDED	22,962 ft³

SAND FILTER BASIN "C"–WATER QUALITY	
TRIBUTARY WATER QUALITY DMA'S	DMA C
TOTAL DCV	5,953 ft³
SAND FILTER BASIN "C" VOLUME PROVIDED	64,422 ft³

SAND FILTER BASIN "D"–WATER QUALITY	
TRIBUTARY WATER QUALITY DMA'S	DMA D & DMA F
TOTAL DCV	6,521 ft³
SAND FILTER BASIN "D" VOLUME PROVIDED	8,227 ft³

SAND FILTER BASIN "C", SAND FILTER BASIN "D", AND SUBSURFACE SYSTEM C–MITIGATION	
TRIBUTARY MITIGATION DMA'S	DMA C, DMA D, & DMA F
TOTAL MITIGATION VOLUME	91,002 ft³
SAND FILTER BASIN "C", SAND FILTER BASIN "D", AND SUBSURFACE SYSTEM C TOTAL VOLUME	97,781 ft³

SELF–RETAINING AREA "E"–WATER QUALITY	
TRIBUTARY WATER QUALITY DMA'S	DMA E
TOTAL DCV	2,662 ft³
SELF–RETAINING AREA "E" VOLUME PROVIDED	27,834 ft³

SELF–REATAINING AREA "E"–MITIGATION	
TRIBUTARY MITIGATION DMA'S	DMA E
TOTAL MITIGATION VOLUME	20,560 ft³
SELF–RETAINING AREA "E" VOLUME PROVIDED	27,834 ft³

LSA

FIGURE 4.9.1

N

GRAPHIC SCALE
50' 0 25' 50' 100'
1" = 50'

Grove Park Mixed-Use Development
Environmental Impact Report

WQMP Site Plan

SOURCE: JLC Engineering: Water Quality Management Plan, 2015.

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State, and local water quality requirements. Through the use of site design BMPs, source control BMPs, and treatment control BMPs, the resulting pollutant loads coming from the project will be reduced, thereby reducing pollutants discharged from urban storm water runoff to surface water bodies. Compliance with the requirements of the NPDES permit, which include implementation of the BMPs outlined in the WQMP, would reduce project operational impacts to a less than significant level.

4.9.6.3 Drainage Pattern and Capacity-Related Impacts

Threshold	Would the proposed project substantially alter the existing local drainage patterns of the site and substantially increase the rate or amount of surface runoff in a manner which would result in substantial erosion, siltation, or flooding on site or off site? Would the proposed project create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?

The project site is currently undeveloped. On-site terrain consists of rolling terrain with four ephemeral stream drainages (previously referenced Figure 4.4.2). There are no impervious surfaces and runoff is currently able to infiltrate into existing on-site soils. The site's runoff is also diverted to a man-made earthen detention area in the southwest corner of the site.

Off-site flows will be collected and conveyed through the project site. Untreated on-site flows will not co-mingle with off-site flows. Development of the project would result in the construction of impervious surfaces, increasing the amount of runoff at the site. This increase in site runoff resulting from development of the project is presented in previously referenced Table 4.9.H.

The increase in runoff from the pre-project condition would be captured via treatment control BMPs, as described in Table 4.9.I.

The project will incorporate a bioretention planter, two sand filter basins, and a natural self-retaining area that will be utilized for water quality treatment. Additional subsurface systems will be provided as necessary in order to store additional volume not captured by the filtration BMPs. As demonstrated in Table 4.9.I, sufficient capacity is provided to accommodate anticipated increases in storm water runoff resulting from project development.

The subsurface systems will be used for increased runoff mitigation only. The volume of storm water storage provided by these systems is detailed in Table 4.9.J.

Table 4.9.I: Project Runoff Volume Characteristics

DMA	Mitigation Volume Required (ft^3)	Total Mitigation Volume Required (ft^3)	Feature Provided	Volume Provided (ft^3)	Total Volume Provided (ft^3)
A	33,737	33,737	Bioretention Planter "A-1"	11,308	40,077
			Subsurface System "A-1"	5,842	
			Subsurface System "A-2"	17,460	
			Subsurface System "A-3"	5,467	
B	20,242	20,242	Subsurface System "B"	22,962	22,962
C	41,003	91,002	Sand Filter Basin "C"	64,422	97,781
D	47,006		Subsurface Basin "C"	25,132	
F	2,993		Sand Filter Basin "D"	8,227	
E	20,560	20,560	Self-Retaining Area "E"	27,834	27,834

Source: "Mitigation Volumes," page 7, Preliminary Hydrology and Hydraulics Study, JLC Engineering and Consulting, Inc. March 16, 2015.
ft^3: cubic foot

Table 4.9.J: Subsurface Storage Volumes

Subsurface System	Total Available Storage per Linear Foot (f^3)	Linear Feet of Subsurface Storage	Total Available Storage Volume within Subsurface System (f^3)
A-2	34.1	250	8,525
A-2		511	17,425
A-3		160	5,456
B		672	22,915
C	9.2	2,720	25,132

Source: "Subsurface storage volumes," page 7, Preliminary Hydrology and Hydraulics Study, JLC Engineering and Consulting, Inc. March 16, 2015.
f^3: cubic foot

In order to be conservative during the preliminary analysis, the increase flows from the pre- to post-project condition for both storm durations were added, rather than utilizing only the larger volume (previously referenced Table 4.9.H). The Project Hydrology study demonstrated that increases in storm water runoff would be captured and treated by the previously described features. In addition, the site's design would retain the existing flow patterns. With development of the facilities and implementation of the practices detailed in the Final WQMP prepared for the project

(as established in **Mitigation Measure 4.9.6.2A**), no significant drainage or drainage capacity impact would result from the development of the project.

Mitigation Measures. See the previously referenced **Mitigation Measure 4.9.6.2A.**

Level of Significance After Mitigation. With implementation of **Mitigation Measure 4.9.6.2A**, impacts related to this issue are less than significant.

4.9.7 Cumulative Impacts

Cumulatively, development within the watershed will result in an increase in impervious surfaces, changes in the type and density of land use, and corresponding changes in the amount and characteristic of runoff characteristics. Increased impervious surfaces are likely to alter existing hydrology and increase potential pollutant loads. However, all future development in the City and throughout the San Diego RWQCB will be required to comply with the applicable requirements of the NPDES permit program and water quality standards defined by local, regional, State and Federal agencies. Continued growth is anticipated to occur in the City and surrounding areas and all new development and significant redevelopment will be required to minimize its individual impacts to water quality and pollutant transport through implementation of BMPs. Therefore, since all new developments will be required to mitigate for impacts to water quality, a less than significant cumulative impact to water quality will occur.

Cumulatively, continued development within the Elsinore Valley will put additional pressure on water supplies from the local groundwater basins, including the Elsinore and Temescal Valley Basins. The EVMWD 2010 UWMP took into account projected growth in its service area and found that groundwater would not be substantially depleted. The land uses proposed for the site do not vary substantially from those that were projected during preparation of the UWMP. EVMMD plans to use a variety of water sources, including imported water from the State Water Project and Colorado River Aqueduct. The EVMD's ability to import water would prevent significant groundwater depletion with cumulative project in its service area. The proposed project will make an incremental contribution to production of urban pollutants, but the site-specific water quality BMPs will help ensure that these contributions will not make a significant contribution to any cumulatively considerable regional water quality impacts.

The drainage system for the proposed project will be designed so that peak flows from post-development runoff are captured by landscape features and BMPs like infiltration basins, and treated prior their discharge into storm drains and water bodies. Similar requirements will be placed on all other development in the vicinity of the project site by the City. Therefore, the project will not result in a local or regional cumulatively significant impact related to water quality or the capacity of drainage systems.

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4.10 LAND USE AND PLANNING

This section of the EIR addresses the land use impacts that may result the proposed development, including changes in the land use designations for the site. This section analyzes the consistency of the proposed project with the goals and policies identified in the City's General Plan and Zoning Code. It also evaluates the compatibility of the project with existing land uses and its consistency with other local and regional plans.

The analysis contained in this section is also based on the following reference documents:

- *City of Wildomar General Plan*, adopted July 2008;
- *City of Wildomar Housing Element,* December 2013;
- *Municipal Code*, City of Wildomar, codified through September 2014;
- *Final Sustainable Communities Strategies Plan,* Southern California Association of Governments (SCAG), April 2012;
- *Final 2008 Regional Comprehensive Plan*, SCAG, adopted May 2008;
- *Regional Transportation Plan 2012–2035 Sustainable Communities Strategy*, SCAG, adopted April 4, 2012; and
- *The Elsinore Valley Municipal Water District Urban Water Management Plan,* Elsinore Valley Municipal Water District, July 2011.

4.10.1 Existing Setting

4.10.1.1 On-site Land Uses

The project site is undeveloped and consists primarily of disturbed fallow agricultural fields, with a smaller component of native vegetation dominated by California buckwheat (*Eriogonum fasciculatum*), California sagebrush (*Artemisia californica*), chamise (*Adenostoma fasciculatum*), and coast live oak (*Quercus agrifolia*). The project site supports four ephemeral drainage features and an earthen bermed basin at the southwest corner. Artificial disturbances consist of recent mechanical disking, trenches excavated for geotechnical studies, and some modern trash dumping. No structures are located within the boundaries of the project site.

4.10.1.2 Adjacent Land Uses

Clinton Keith Road runs along the site's northern boundary. Scattered rural residences are located north of Clinton Keith Road. A multiple-family residential development is located directly south of the project site, while undeveloped land is located to both the east and west. In the project area, commercial/retail development is located farther to the west, adjacent to I-15. The Inland Regional Medical Center, medical office uses, and other office uses are located farther southwest and south of

the project site along Inland Valley Drive and Prielipp Road. Residential development occurs on either side of Clinton Keith Road to I-215. The existing on-site and adjacent land uses are shown in Figure 3.2 in Chapter 3.0, Project Description, and in Table 4.10.A.

Table 4.10.A: Existing Land Uses and Land Use Designations

Location	Current Land Use	General Plan Land Use Designation	Zoning
Onsite	Undeveloped	Business Park (BP) & Highest Density Residential (HHDR)	R-R (Rural Residential) & R-4 (Planned Residential)
North	Undeveloped & Rural Residential	Business Park (BP)	R-R (Rural Residential) & I-P (Industrial Park)
South	Multiple-family Residential	Very High Density Residential (VHDR)	R-3 (General Residential)
East	Undeveloped	Business Park (BP)	R-R (Rural Residential) & I-P (Industrial Park)
West	Undeveloped	Commercial Retail (CR)	C-P-S (Scenic Highway Commercial)

Sources: Sources: City of Wildomar General Plan Land Use Map, January 2014; City of Wildomar Zoning Map, November 2013.

4.10.1.3 On-site General Plan and Zoning Designations

The General Plan Land Use for the northern 9.8 acres is Business Park (BP). The Business Park (BP) designation has a Floor Area Ratio (FAR) of 0.25 to 0.60, which is the ratio of the amount of non-residential building square footage to the square footage of the lot. (The project's northern portion has an FAR of approximately 0.26.[1]) The Business Park (BP) land use is intended for employee intensive uses, including research and development, technology centers, corporate offices, "clean" industry and supporting retail uses.

The General Plan Land Use for the southern 9.6 acres[2] is Highest Density Residential (HHDR). Highest Density Residential (HHDR) requires a minimum of 20 dwelling units per acre, and is intended for multifamily dwellings, including apartments and condominiums. Multistory structures of three or more stories are allowed. (The project proposes 162 multifamily units in three-story apartment buildings, with 23 dwelling units per acre.)

The City's Zoning Ordinance (Wildomar Municipal Code, Title 17) regulates the type, scale and intensity of development that may occur in specific zoning districts. The northern 9.8 acres of the project site is currently zoned R-R (Rural Residential), which allows the development of large lot (0.5-acre minimum) single-family residential, agricultural, commercial, and ancillary uses. The southern 9.6 acres are

[1] 55,000 square feet of non-residential uses/209,088 square feet of net commercial area=0.26.
[2] The southern portion of the site includes the 1.4-acre detention basin (Lot C.)

zoned Planned Residential (R-4), which allows for a variety of residential types and compatible ancillary uses.[1]

4.10.1.4 Vicinity General Plan and Zoning Designations

The Commercial Retail (CR) designation to the west anticipates the development of local and regional serving retail and service uses, while the Very High Density Residential (VHDR) designation (to the south) is assigned to areas for single-family attached residences and multifamily dwellings (14–20 dwelling units per acre [du/ac]). Parcels to the north and east are assigned the Business Park (BP) designation, while to the southwest property designated as Light Industrial (LI) envisions the development of "… Industrial and related uses including warehousing/distribution, assembly and light manufacturing, repair facilities, and supporting retail uses."

4.10.1.4 NOP/Scoping Comments

No public or agency comments related to land use or the project's consistency with local or regional plans were made during the public scoping meetings or the NOP comment periods.

4.10.2 Applicable Regulations, Plans and Policies

4.10.2.1 City of Wildomar General Plan

The City's General Plan includes the following goals, objectives, and policies applicable to the proposed project.

Residential Area Plan Land Use Designation Policies

LU 22.1 Accommodate the development of single- and multi-family residential units in areas appropriately designated by the General Plan and area plan land use maps.

LU 22.2 Accommodate higher density residential development near community centers, transportation centers, employment, and services areas.

LU 22.4 Accommodate the development of a variety of housing types, styles and densities that are accessible to and meet the needs of a range of lifestyles, physical abilities, and income levels.

LU 22.5 Integrate a continuous network of parks, plazas, public squares, bicycle trails, transit systems, and pedestrian paths to provide both connections within each community and linkages with surrounding features and communities.

[1] The area of commercial development does not overlap onto the portion of the site designated for higher density residential uses in the most recent update of the City's General Plan.

LU 22.6 Require setbacks and other design elements to buffer residential units to the extent possible from the impacts of abutting agricultural, roadway, commercial, and industrial uses.

LU 22.8 Establish activity centers within or near residential neighborhoods that contain services such as child or adult-care, recreation, public meeting rooms, convenience commercial uses, or similar facilities.

LU 22.9 Require residential projects to be designed to maximize integration with and connectivity to nearby community centers, rural villages, and neighborhood centers.

LU 22.10 Require that residential units/projects be designed to consider their surroundings and to visually enhance, not degrade, the character of the immediate area.

Business Park Area Plan Land Use Designation Policy

LU 24.1 Accommodate the continuation of existing and development of new industrial, manufacturing, research and development, and professional offices in areas appropriately designated by General Plan and area plan land use maps.

Commercial Area Plan Land Use Designation Policies

LU 23.1 Accommodate the development of commercial uses in areas appropriately designated by the General Plan and area plan land use maps.

LU 23.2 Once 40% of the area designated Commercial Retail within any Area Plan is built out, commercial retail development applications that are proposed within that Area Plan will only be considered for approval based on demonstrated market need, as well as a demonstrated ability to accommodate the traffic impacts the development will generate.

LU 23.3 Site buildings along sidewalks, pedestrian areas, and bicycle routes and include amenities that encourage pedestrian activity.

LU 23.4 Accommodate community-oriented facilities, such as telecommunications centers, public meeting rooms, daycare facilities, and cultural uses.

LU 23.5 Concentrate commercial uses near transportation facilities and high density residential areas and require the incorporation of facilities to promote the use of public transit, such as bus turnouts.

LU 23.6 Require that commercial projects abutting residential properties protect the residential use from the impacts of noise, light, fumes, odors, vehicular traffic, parking, and operational hazards.

LU 23.7 Require that adequate and available circulation facilities, water resources, and sewer facilities exist to meet the demands of the proposed land use.

LU 23.8 Allow mixed use projects to develop in commercially designated areas in accordance with the guidelines of the Community Center Land Use Designation and with special consideration of impacts to adjacent uses.

LU 23.9 Require that commercial development be designed to consider their surroundings and visually enhance, not degrade, the character of the surrounding area.

4.10.2.2 City of Wildomar Zoning Ordinance

As previously discussed, the northern and southern portions of the site are zoned R-R and R-4, respectively. The R-R (Rural Residential) Zone District does not permit the commercial/retail uses proposed by the project without a Conditional Use Permit (CUP). Accordingly, a Zone Change, from R-R (Rural Residential) to C-P-S (Scenic Highway Commercial) is requested for the northern portion of the site.

The City Zoning Ordinance, Chapter 17 of the Municipal Code, establishes requirements and regulations for these zone classifications. The City Zoning Ordinance in Section 17.76.030 includes the following development requirements for C-P-S (Scenic Highway Commercial) zones:

17.76.030 Development standards

The following shall be the standards of development in the C-P-S (Scenic Highway Commercial) zones:

A. There is no minimum lot area requirement, unless specifically required by zone classification for a particular area.

B. There are no yard requirements for buildings which do not exceed 35 feet in height, except as required for specific plans. Any portion of a building which exceeds 35 feet in height shall be set back from the front, rear and side lot lines not less than two feet for each foot by which the height exceeds 35 feet. The front setback shall be measured from the existing street line unless a specific plan has been adopted in which case it will be measured from the specific plan street line. The rear setback shall be measured from the existing rear lot line or from any recorded alley or easement; if the rear line adjoins a street, the rear setback requirement shall be the same as required for a front setback. Each side setback shall be measured from the side lot line or from an existing adjacent street line unless a specific plan has been adopted in which case it will be measured from the specific plan street line.

C. No building or structure shall exceed 50 feet in height, unless a greater height is approved pursuant to Section 17.172.230. In no event, however, shall a building or structure exceed 75 feet in height, unless a variance is approved pursuant to Chapter 17.196.

D. Automobile storage space shall be provided as required by Chapter 17.188.

E. All roof-mounted mechanical equipment shall be screened from the ground elevation view to a minimum sight distance of 1,320 feet. (Ord. 18 § 2, 2008, RCC § 17.80.030)

Development of multifamily dwellings in an R-4 (Planned Residential) is subject to the requirements of the R-3 (General Residential) zone. Section 17.44.020 outlines the following development requirements for the R-3 (General Residential) zoning classification.

17.44.020 Development standards

The following standards of development shall apply in the R-3 (General Residential) zone, except that planned residential developments shall comply with the development standards contained in Section 17.180.010.

A. The minimum lot area shall be 7,200 square feet with a minimum average width of 60 feet and a minimum average depth of 100 feet, unless different minimums are specifically required in a particular area.

B. The minimum front and rear yards shall be 10 feet for buildings that do not exceed 35 feet in height. Any portion of a building which exceeds 35 feet in height shall be set back from the front and rear lot lines no less than 10 feet plus two feet for each foot by which the height exceeds 35 feet. The front setback shall be measured from any existing or future street line as shown on any specific street plan of the City. The rear setback shall be measured from the existing rear lot line or from any recorded alley or easement; if the rear line adjoins a street, the rear setback requirement shall be the same as required for a front setback.

C. The minimum side yard shall be five feet for buildings that do not exceed 35 feet in height. Any portion of a building which exceeds 35 feet in height shall be set back from each side lot line five feet plus two feet for each foot by which the height exceeds 35 feet; if the side yard adjoins a street, the side setback requirement shall be the same as required for a front setback. No structural encroachments shall be permitted in the front, side, or rear yard except as provided in Section 17.172.140.

D. No lot shall have more than 50% of its net area covered with buildings or structures.

E. The maximum ratio of floor area to lot area shall not be greater than two to one, not including basement floor area.

F. All buildings and structures shall not exceed 50 feet in height, unless a height up to 75 feet is specifically permitted under the provisions of Section 17.172.230.

G. Automobile storage space shall be provided as required by Chapter 17.188. (Ord. 18 § 2, 2008, RCC § 17.44.020)

17.180.010 Standards for Planned Residential Developments

Planned residential developments shall be constructed in accordance with the following listed requirements. In addition, planned residential developments shall be subject to, and shall comply with, such additional conditions and requirements as are

determined to be necessary in approving the development to make it compatible with the community in which it is proposed to be located.

A. A subdivision map, prepared substantially in accordance with the conditions of approval thereof and the requirements of this section, shall be recorded pursuant to Title 16.

B. Density, Open Areas and Height Limitations. Not less than 40% of the net area of a project shall be used for open area or recreational facilities, or a combination thereof.

C. Yard Setbacks. Building setbacks from a project's exterior streets and boundary lines shall be the same as those prescribed by the zone in which the project is located.

D. Streets. Streets, which may be permitted to be private, shall be required in accordance with the provisions of Title 16.

E. Residential Structures. The number of dwelling units in one building shall not exceed two in the R-1 zone and all other zones that permit planned residential developments as an R-1 use, or eight dwelling units in one building in the R-2 and R-2-A zones. The number of dwelling units in a building in the R-3 zone and all other zones that permit planned residential developments as an R-3 use shall not exceed that permitted by the R-3 zone development standards. Residential buildings shall have a minimum ground floor living area of 1,000 square feet and each dwelling unit in a building shall have the minimum floor living area required by Section 17.172.070.

F. Recreational Buildings. Recreational, public assembly and similar buildings may be permitted within a project if they are intended for the primary use of persons residing within the project and are located so as not to be detrimental to adjacent properties.

G. Maintenance of Common Areas. A community association with the unqualified right to assess the owners of the dwelling units for all maintenance, operational and other costs of the common areas and facilities and the community association shall be established and continuously maintained.

H. Trash Areas. Adequate enclosed trash pickup areas, convenient to the residents which they are intended to serve, shall be provided in the project.

I. Screening. A six-foot high masonry wall shall be constructed on any project boundary line where the adjacent property is zoned for a lower residential density than that zone in which the project is located.

J. Walkways. Five-foot wide paved pedestrian walkways shall be installed between the dwelling units and the recreational areas of the project.

K. Access. Vehicular access openings into a project shall be limited to one for each 400 feet of public street frontage; however, all projects shall be permitted two access drives regardless of the amount of frontage.

L. Parking. Per Chapter 17.188. (Off-street parking standards).

4.10.2.3 SCAG 2008 Regional Comprehensive Plan (RCP)

The SCAG (the designated Metropolitan Planning Organization [MPO] for the Counties of Ventura, Orange, San Bernardino, Riverside, Imperial, and Los Angeles) is federally mandated to develop plans for transportation, growth management, hazardous waste management, and air quality. With its members and other regional planning entities, the SCAG prepared the 2008 RCP to serve as a framework to guide decision-making with respect to the growth and changes that can be anticipated in the region for the 2008–2012 timeframe. The RCP is a major advisory plan prepared by the SCAG that addresses important regional issues like housing, traffic/transportation, water, and air quality. The RCP serves as an advisory document to local agencies in the Southern California region for their information and voluntary use for preparing local plans and handling local issues of regional significance.

The RCP's overall goal is to reinvigorate the region's economy, avoid social and economic inequities and the geographical dislocation of communities, and to maintain the region's quality of life. The document is described as a regional policy framework for future land use decisions in the SCAG area that respects the need for strong local control, but that also recognizes the importance of regional comprehensive planning for issues of regional significance. The RCP is laid out much like a General Plan and organizes recommended policies into nine chapters. The highlight of each chapter is the regional strategy that addresses the RCP's vision for that resource area. As such, each chapter includes three levels of recommendations for the region:

- *Goals.* Each goal will help define how sustainability is defined for that resource area.
- *Outcomes.* These focus on quantitative targets that define progress toward meeting the RCP's Goals. Where possible, they are clearly defined (e.g., a 20% reduction in greenhouse gas emissions from 2007 levels), capable of being monitored with existing or reasonably foreseeable resources, and have a strong link to sustainability goals.
- *Action Plan.* This critical part of the RCP lays out a comprehensive implementation strategy that recommends how the region can systematically move to meet the RCP's quantitative Outcomes and achieve its Goals, Guiding Principles, and Vision. Each Action Plan contains:
    - *Constrained Policies.* This includes a series of recommended near-term, feasible policies that stakeholders should consider for implementation. For

example, the RCP calls on the SCAG to adopt policies that reflect its role as a planning agency, council of governments, and metropolitan planning organization. The RCP also recommends voluntary policies for consideration by local governments and other key stakeholders.

- *Strategic Initiatives.* This encompasses longer-term strategies that require significant effort to implement but are necessary to achieve the RCP's desired Goals and Outcomes. For example, identifying technological breakthroughs that can reduce air pollution from the transportation sector requires both commitment and time. Most of these initiatives are not constrained and will require political will, enabling legislation, new funding sources, and other key developments to become a reality. In most cases, this tier of strategies is the key to achieving the region's sustainability Goals and Outcomes.

4.10.2.4 2012 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)

The Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) is a long-range visioning plan that balances future mobility and housing needs with economic, environmental, and public health goals. The RTP/SCS embodies a collective vision for the region's future and is developed with input from local governments, county transportation commissions, tribal governments, non-profit organizations, businesses ,and local stakeholders within the Counties of Imperial, Los Angeles, Orange, Riverside, San Bernardino and Ventura.

The 2012 RTP/SCS identifies over 2,000 transportation projects, including freeway improvements, railroad grade separations, bicycle lanes, new transit hubs, and replacement bridges. These future investments were included in county plans developed by the six County Transportation Commissions and seek to reduce traffic bottlenecks, improve the efficiency of the region's network, and expand mobility choices for everyone.

The RTP/SCS allows project sponsors to qualify for Federal funding. SCAG's plan takes into account operations and maintenance costs to ensure reliability, longevity, and cost effectiveness. The RTP/SCS will be supported by a combination of transportation and land use strategies that will help the region achieve State greenhouse gas emission reduction goals and Federal Clean Air Act requirements, preserve open space areas, improve public health and roadway safety, support our vital goods movement industry, and utilize resources more efficiently.[1]

4.10.2.5 Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP)

The County of Riverside, eight additional land jurisdictions, and approximately fourteen cities adopted the MSHCP in 2003. The MSHCP is a habitat conservation

[1] http://scagrtpscs.net/Pages/2016RTPSCS.aspx, site accessed August 27, 2015.

plan formed and permitted under the Federal Endangered Species Act (FESA). The MSHCP builds upon existing preserves and attempts to provide connectivity and wildlife corridors, and proposes to conserve approximately 500,000 acres and 146 different species. Approximately 347,000 acres are anticipated to be conserved on existing Public/Quasi-Public lands with additional contributions of approximately 153,000 acres acquired from private land owners. The MSHCP establishes seven core reserve areas and associated linkages between the proposed and existing core areas. The MSHCP provides a Section 10(a) take permit under the FESA for property owners, developers, and participating public agencies.

The MSHCP has survey areas for narrow endemic plant species and criteria area species encompassing specified rare plants, burrowing owl, amphibians (i.e., arroyo toad, California red-legged frog, and mountain yellow-legged frog), and small mammals (i.e., Aguanga kangaroo rat, San Bernardino kangaroo rat, and Los Angeles pocket mouse). With the exception of a single-family home development, a habitat assessment must be performed when a proposed project occurs on a parcel within an MSHCP survey area. If suitable habitat is present and full avoidance cannot be met, a survey must be performed to determine the presence or absence and population of the resource. If no suitable habitat is present, then documentation of the results is provided to the county or city.[1]

The site is not located within an area that has been identified in the MSHCP as an area where conservation potentially needs to occur. Based on its location, however, the project does require compliance with the following MSHCP policies: Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools (Section 6.1.2 of the MSHCP), the Guidelines Pertaining to the Urban/Wildlands Interface (Section 6.1.4 of the MSHCP), and the Burrowing Owl Survey Area (Section 6.3.2 of the MSHCP).

4.10.2.6 Stephens' Kangaroo Rat Habitat Conservation Plan (SKR HCP)

In October 1988 the Stephens' kangaroo rat was listed as an endangered species by the USFWS.[2] Under the FESA, the SKR and its habitat were protected from any type of disturbance resulting in "take" of the species. In order to protect the SKR while allowing development to continue, the Riverside County Habitat Conservation Agency prepared the SKR HCP. The SKR HCP establishes suitable habitat areas where incidental take is permitted through a fee process and core reserve areas in occupied habitat where development projects are required to obtain individual permits. The project is located within the SKR HCP fee area.

[1] *Western Riverside County MSHCP Basics*, Campbell, Trisha A., http://naturalcommunity.org/79-2/know/articles/applied/wrmshcp-basics/#Q16 (accessed April 7, 2015).

[2] *Stephens' Kangaroo Rat: Introduction*, Riverside County Habitat Conservation Agency, http://www.skrplan.org/introduction.html (accessed April 9, 2015).

4.10.3 Methodology

The focus of the land use analysis is on land use impacts that would result from implementation of the project. Land use conflicts are identified and evaluated based on existing land uses, land uses proposed as part of the project, land use designations, and standards and policies related to land use. Land use compatibility is based on the intensity and patterns of land uses proposed in order to determine whether the project would result in incompatible uses or nuisance impacts to sensitive receptors (e.g., residences, medical facilities, or schools).

An evaluation of the potential land use impacts associated with implementation of the proposed project is based primarily on the City's General Plan and associated EIR and the previously referenced regional plans.

4.10.4 Thresholds of Significance

Appendix G of the *CEQA Guidelines* recognizes the following significance thresholds related to land use. Based on these significance thresholds, potential impacts to land use could be considered significant if the project would result in the following:

- Physically divide an established community;
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the General Plan, Specific Plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect; and/or
- Conflict with any applicable habitat conservation plan or natural community conservation plan.

4.10.5 Less than Significant Impacts

The following potential impacts were determined to be less than significant. In each instance, either no impact would occur or adherence to established regulations, standards, and policies would reduce potential impacts to a less than significant level.

4.10.5.1 Physically Divide an Established Community

Threshold	Would the proposed project physically divide an established community?

The project site consists of undeveloped land. Surrounding uses include rural residences to the north, undeveloped land to the east and west, and a multifamily development to the south. Dirt trails traverse the site: one north and south along the eastern border, one east and west through the center of the site, and across the

southwest corner. These trails do not provide connectivity for an established community in the area, however.

The project does not include any physical structures that would divide the surrounding community. The placement of multifamily dwellings and commercial/ retail and office buildings on the site would not physically affect connectivity in the surrounding area. The project also includes plans for a regional multiuse trail that would run through the preserved oak grove and across the site. The project will connect to existing roadway system, as well as to the future extension of Yamas Drive. Since the project does not include any physical structures that would affect connectivity in the surrounding area, it would not divide an established community and no significant impact would occur. No mitigation is required.

4.10.5.2 Conflict with Applicable Land Use Plans, Policies, or Regulations (Local and Regional)

Threshold	Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to, the General Plan, Specific Plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?

Section 15125 (d) of the *CEQA Guidelines* requires EIRs to "discuss any inconsistencies between the proposed project and applicable general plans and regional plans." The objective of such a discussion is to find ways to modify a project, if warranted, to eliminate any identified inconsistencies with relevant plans and policies, and thereby avoid creating an impact to the environment that consistency with the plan would otherwise mitigate. This EIR section includes an evaluation of the consistency of the proposed project with pertinent goals and targets of the adopted City's General Plan and regional plans.

Wildomar General Plan. The southern portion of the site does not require a General Plan Amendment (GPA) or Zone Change (ZC) and the proposed uses are consistent with the existing General Plan Land Use and zoning. The project would place multifamily dwellings units at a density of 23 dwelling units per acre in an area that requires a minimum of 20 dwelling units per acre. Therefore, the residential portion of the project is consistent with the planned land use of the southern portion of the site. Changes in planned land uses are limited to the northern portion of the project site.

The project proposes a GPA and ZC on the northern portion of the site. The northern portion of the site is zoned for R-R (Rural Residential). The northern portion's General Plan Land Use designation is Business Park (BP). The project proposes to change the zoning and General Plan land use designation on the northern portion of

the site to C-P-S (Scenic Highway Commercial) and Commercial Retail (CR), respectively.

The current Business Park (BP) land use designates the site for research and development, technology centers, corporate offices, "clean" industry, and supporting retail uses. The proposed Commercial Retail (CR) designation encourages "…. the development of commercial retail uses at a neighborhood, community and regional level, as well as for professional office and tourist-oriented commercial uses." Overall, the Commercial Retail (CR) designation would allow for a less intensive use of the site; Business Park (BP) requires an FAR between 0.25 and 0.60, while the Commercial Retail (CR) FAR is between 0.20 and 0.35. FAR is used by the General Plan as a measure of density in the absence of residential units. The proposed GPA would result in a less intensive use of the northern portion of the site, hence an FAR of 0.26. However, the use would be similar in that it involves retail and office development.

R-R (Rural Residential) zoning allows for single-family residences and some agricultural and public utility uses. Various commercial and retail uses are allowed with approval of a CUP or plot plan. Development standards within the R-R zone require a minimum lot size of 0.5 acre (except for public utilities for which lot sizes of 20,000 square feet are permitted) and establish minimum yard setbacks. The proposed ZC to Scenic Highway Commercial (C-P-S) would allow for commercial/ retail and office uses by right (a CUP would not be required for most commercial uses), does not establish a minimum lot size, and does not require yard requirements for buildings not exceeding 35 feet in height.[1]

While the development of commercial uses would change the existing semi-rural character of the area, this pattern of development is generally consistent with recent and planned development along this portion of Clinton Keith Road, which includes a mix of residential and commercial uses. Clinton Keith Road is a major arterial road that connects to both I-15 and I-215. The corridor along Clinton Keith Road is also one of the larger commercial areas of the City. Therefore, it is reasonable that uses proposed by the project would occur in this area of the City. The types of uses proposed by the project are similar to what could be proposed under the current General Plan Land Use and Zoning of the site.

Table 4.10.B addresses the project's consistency with General Plan land policies. Land use policies that relate to other environmental issues are addressed other in other sections of this EIR.

[1] City of Wildomar Municipal Code, Chapters 17.16 (R-R Residential Zone) and 17.76 (C-P-S Scenic Highway Commercial Zone.)

Table 4.10.B: General Plan Consistency Analysis

General Plan Goals and Targets	General Plan Consistency Analysis
Residential Land Use Policies	
LU 22.1. Accommodate the development of single- and multi-family residential units in areas appropriately designated by the General Plan and area plan land use maps.	**Consistent.** Due to the direct proximity of similar uses, the project site is appropriate for the development of multifamily residential units per the existing Highest Density Residential (HHDR) designation.
LU 22.2. Accommodate higher density residential development near community centers, transportation centers, employment, and services areas.	**Consistent.** The project will place high density residential development adjacent to commercial/retail and office development. I-15 is located 0.85 mile west of the site.
LU 22.4. Accommodate the development of a variety of housing types, styles and densities that are accessible to and meet the needs of a range of lifestyles, physical abilities, and income levels.	**Consistent.** The project will contribute a variety of housing types along Clinton Keith Road, which include rural residences, single-family residences, and multifamily housing.
LU 22.5. Integrate a continuous network of parks, plazas, public squares, bicycle trails, transit systems, and pedestrian paths to provide both connections within each community and linkages with surrounding features and communities.	**Consistent.** The project contains 3.2 acres of park space and a trailhead connecting to a multi-use regional trail.
LU 22.6. Require setbacks and other design elements to buffer residential units to the extent possible from the impacts of abutting agricultural, roadway, commercial, and industrial uses. (AI 3)	**Consistent.** The project's design separates residential units from commercial uses with a park area. The project shall conform to setbacks as required by the City Zoning Code.
LU 22.8. Establish activity centers within or near residential neighborhoods that contain services such as child or adult-care, recreation, public meeting rooms, convenience commercial uses, or similar facilities.	**Consistent.** The residential portion of the project contains park space and a recreational area featuring a pool and club house.
LU 22.9. Require residential projects to be designed to maximize integration with and connectivity to nearby community centers, rural villages, and neighborhood centers.	**Consistent.** The project will be consistent with the pattern of development on Clinton Keith Road and will provide connectivity to the surrounding area through a trail, sidewalks, and roadway improvements.
LU 22.10. Require that residential units/projects be designed to consider their surroundings and to visually enhance, not degrade, the character of the immediate area.	**Consistent.** The project will be designed in accordance will all applicable zoning codes and design guidelines.
Business Park Land Use Policy	
LU 24.1. Accommodate the continuation of existing and development of new industrial, manufacturing, research and development, and professional offices in areas appropriately designated by General Plan and area plan land use maps.	**Consistent.** The project will change the existing land use from Business Park (BP) to Commercial Retail (CR) on the northern part of the site. However, the planned uses will be substantially similar to uses that are currently permitted and/or existing uses that are adjacent to the project site.

Table 4.10.B: General Plan Consistency Analysis

General Plan Goals and Targets	General Plan Consistency Analysis
Commercial Land Use Policies	
LU 23.1. Accommodate the development of commercial uses in areas appropriately designated by the General Plan and area plan land use maps.	**Consistent.** The project will place commercial uses in areas designated for commercial uses.
LU 23.2. Once 40% of the area designated Commercial Retail within any Area Plan is built out, commercial retail development applications that are proposed within that Area Plan will only be considered for approval based on demonstrated market need, as well as a demonstrated ability to accommodate the traffic impacts the development will generate.	**Consistent.** Not more than 40% of the City that is designated Commercial Retail is built-out; therefore, this policy is not relevant to the proposed project.
LU 23.3. Site buildings along sidewalks, pedestrian areas, and bicycle routes and include amenities that encourage pedestrian activity.	**Consistent**. The project improvements include sidewalks along Clinton Keith Road, along which the commercial/retail and office buildings are located.
LU 23.5. Concentrate commercial uses near transportation facilities and high density residential areas and require the incorporation of facilities to promote the use of public transit, such as bus turnouts.	**Consistent.** The project is a mixed-use project featuring high density residential and commercial uses. Two bus routes have stops within 0.25 mile of the site.
LU 23.6. Require that commercial projects abutting residential properties protect the residential use from the impacts of noise, light, fumes, odors, vehicular traffic, parking, and operational hazards.	**Consistent.** Commercial uses associated with the project would not generate significant odors or fumes. Impacts related to noise, light, traffic, and hazards would be lessened by the placement of park space between the commercial and residential portion of the project.
LU 23.7. Require that adequate and available circulation facilities, water resources, and sewer facilities exist to meet the demands of the proposed land use.	**Consistent.** The project would have adequate circulation, water, and sewer facilities, as discussed in the Traffic and Utilities Sections of this EIR.
LU 23.9. Require that commercial development be designed to consider their surroundings and visually enhance, not degrade, the character of the surrounding area.	**Consistent.** The project will be designed in accordance with all applicable zoning codes and design guidelines.

Source: City of Wildomar General Plan, July 2008.

The project is generally consistent with the goals, objectives, and policies of the City of Wildomar General Plan. The proposed General Plan Amendment and Zone Change would not significantly affect the goals and objectives of the General Plan because they would result in uses that are similar to those envisioned in the General Plan. The overall pattern of development planned for the area along Clinton Keith Road would not change. Therefore, less than significant impacts in relation to land use plans, policies, or regulations would occur and no mitigation is required.

Regional Comprehensive Plan. Pursuant to *CEQA Guidelines* Section 15125 (d), this EIR section includes an evaluation of the consistency of the proposed project with pertinent goals and policies of relevant adopted regional plans. Because certain plans are more specifically tailored to other issue areas, such as air quality, transportation, biology, hazards, water quality, and water supply, the local and regional plans identified below are addressed in detail in other sections of this EIR. Table 4.10.C provides a summary of the project's consistency with regional plans.

Table 4.10.C: Regional Plan Consistency

Regional Plan	Consistency Analysis
Regional Comprehensive Plan, Land Use and Housing Chapter	
Goal. Focusing growth in existing and emerging centers and along major transportation corridors.	**Consistent.** While the project site is undeveloped, it is within an area of the City undergoing residential and commercial growth. Clinton Keith Road, which borders the project to the north, is a major transportation and commercial corridor within the City. Clinton Keith Road provides access to I-15 and I-215. The project is within 0.25 mile of Riverside Transit Authority (RTA) bus stops. The existing roadway system and infrastructure surrounding the project site will be utilized to the maximum extent possible, and the proposed project will install improvements and/or pay necessary fees to facilitate the continuation of satisfactory operation. The proposed project is consistent with this SCAG policy in that it exists in an urbanized area with access to a major transportation corridor of the City and will be connecting to the existing utilities underlying the arterial roadways.
Goal. Targeting growth in housing, employment, and commercial development within walking distance of existing and planned transit stations.	**Consistent.** The proposed project would comply with all City development policies, standards, and programs pertaining to supporting alternative modes of transportation included in the General Plan Circulation Element. In addition, the project is located within an urbanizing area of the City. The approved and planned development in the project area includes residential and commercial uses. There are two bus routes that could potentially serve the project, RTA Routes 23 and 7. Both are located with 0.25 mile of the project site. The design of the project would be required to adhere to applicable City standards that support and/or facilitate alternative modes of transportation. Through the City's project review process, policies, plans, and/or programs supporting alternative transportation would be reviewed and incorporated as applicable.

Table 4.10.C: Regional Plan Consistency

Regional Plan	Consistency Analysis
Goal. Inject new life into underused areas by creating vibrant new business districts, redeveloping old buildings, and building new businesses and housing on vacant lots.	**Consistent.** The project would create new commercial and residential uses along a major transportation corridor of the City. The project would facilitate the development of a mixed-use development area surrounding Clinton Keith Road, thereby increasing the intensity of uses in this area.
Outcome. Significantly increase the number and percentage of new housing units and jobs created within the Compass Blueprint 2% Strategy Opportunity Areas by 2012 and improve the regional jobs-housing balance. (Tracking the number of new units will measure the region's progress in accommodating forecast growth. The percentage of housing and jobs developed within the Opportunity Areas will indicate the locational efficiency of growth.)	**Consistent**. When a city or county has ratio of jobs to housing lower than the overall regional standard, it means there are more houses than jobs, which results in many of the local residents commuting to places of employment that are far away. These longer commutes result in freeway congestion, increased air pollution, and reduced quality of life for commuters. In 2012, Wildomar residents' commute time took an average of 43 minutes.[1] The 2011 jobs-to-housing ratios for the City, County, and SCAG region are 0.32, 0.72, and 1.14, respectively (see Table 4.13.B in the *Population, Housing, and Employment* section of the EIR). These ratios indicate that both the City of Wildomar and Riverside County are both "jobs poor" and "housing rich" because the jobs-to-housing ratios are well below that of the Southern California region as defined by SCAG. The project proposes the development of commercial/retail and office uses, which would incrementally improve the City jobs to housing ratio. The project would result in the addition of approximately 157 jobs and 162 dwelling units to the City, with a jobs-to-housing ratio of 0.62 (see Section 4.13, *Population, Housing, and Employment,* for more information). Since the proposed project has an improved jobs-to-housing ratio relative to the City, it would improve the City jobs-housing balance.
Outcome. Reduce total regional vehicle miles traveled (VMT) to 1990 levels by 2020. (The Land Use and Housing Action Plan can be expected to result in a 10% reduction in VMT in 2035 when compared to current trends. VMT serves as a proxy for jobs/housing balance, urban design, transit accessibility, and other urban form issues. VMT per household will decrease with Compass Blueprint implementation.)	**Not Consistent.** As previously identified, the proposed project would comply with all City development policies, standards, and programs pertaining to supporting alternative modes of transportation included in the General Plan Circulation Element. For example, the project includes a regional trail in the central portion, which will allow for increased pedestrian and bicycle activity. The project is along a major transportation corridor and is located in close proximity to an existing bus routes. However, since job opportunities in the project and City are

[1] *Profile of the City of Wildomar*, Southern California Association of Governments, May 2013, http://www.scag.ca.gov/Documents/Wildomar.pdf (accessed April 8, 2015).

Table 4.10.C: Regional Plan Consistency

Regional Plan	Consistency Analysis
	low relative to the rest of the SCAG region, most residents would need to commute to work. This would incrementally increase the overall VMT of the City.
Policy LU-6.2. Developers and local governments should integrate green building measures into project design and zoning such as those identified in the U.S. Green Building Council's Leadership in Energy and Environmental Design, Energy Star Homes, Green Point Rated Homes, and the California Green Builder Program.	**Consistent**. The project will be required to comply with California's CALGreen building regulations as implemented through the requirements of the UBC Title 24. The UBC Title 24 is 1) "the most stringent, environmentally friendly building codes in the U.S.;" and 2) "CALGreen is a comprehensive, far-reaching set of regulations which mandate environmentally advanced building practices and regulations designed to conserve natural resources and reduce greenhouse gas emissions, energy use, and water use." In addition, in compliance with the CALGreen building regulations, the project proposes to incorporate the following sustainable design features to further reduce its environmental footprint, including: • Building design to reduce energy consumption by complying with the most current version of Title 24 energy conservation standards; • Channelizing street runoff into landscape areas instead of storm drains; • Use of recycled and/or locally sourced building materials to the extent feasible; • Reduction in the use of impervious surfaces throughout the project; • Provide for site access via existing transit systems; • Provide for internal circulation via bicycles and walking; and • Plans to include built-in recycling bins in residential units, in or near kitchens in order to reduce waste deposited to landfills.
Regional Comprehensive Plan, Open Space and Habitat Chapter	
Policy OSC-8. Local governments should encourage patterns of urban development and land use, which reduce costs of infrastructure and make better use of existing facilities.	**Consistent.** The proposed project is adjacent to existing developed areas that are presently served by existing water, sewer, storm drainage, electrical, natural gas, and transportation services. During the construction of the project and as needed throughout the process, necessary utility and roadway improvements will be installed or extended to the project site from adjacent existing facilities. The supply of

Table 4.10.C: Regional Plan Consistency

Regional Plan	Consistency Analysis
	electricity and natural gas is demand-responsive and the project proponent would be required to meet the service requirements of these utility providers. By maximizing the use of existing facilities, the costs of expanding infrastructure would be minimized. Because the proposed project would be located in close proximity to existing industrial, commercial, and residential structures requiring similar types of infrastructure, it is consistent with this growth management policy.
Policy OSC-12. Developers and local governments should promote water-efficient land use and development.	**Consistent.** The project is required to implement water-efficient landscaping design (i.e., drought-tolerant landscaping) within the project site. All landscaping will comply with Chapter 17.276 of the Municipal Code (Water Efficient Landscapes). In addition, the project includes a native and California-friendly landscaped corridor. The Conceptual Landscape Plan indicates a plant selection that includes a mixture of drought-tolerant and native plant species irrigated by spray and drip irrigation.
Regional Comprehensive Plan, Water Chapter	
Policy WA-11. Developers and local governments should encourage urban development and land uses to make greater use of existing and upgraded facilities prior to incurring new infrastructure costs.	**Consistent.** The proposed development is located in the immediate vicinity of infrastructure for water, sewer, storm drainage, electrical, natural gas, and transportation facilities. During the construction of the project and as needed throughout the process, necessary utility and roadway improvements will be installed or extended to the project site from adjacent existing facilities. The availability of this infrastructure would reduce the cost to public agencies that would provide services to the project area. The project would be developed in an area where such infrastructure is accessible. Furthermore, the project applicant would pay all applicable development fees for the necessary infrastructure and public service improvements, including those associated with water, sewer, drainage, roadways, fire, and police.
Policy WA-12. Developers and local governments should reduce exterior uses of water in public areas, and should promote reduced use in private homes and businesses by shifting to drought-tolerant native landscape plants (xeriscaping), using weather-based irrigation systems, educating other public agencies about water use, and installing related water pricing incentives.	**Consistent.** The proposed project will be required to implement water-efficient landscaping design (i.e., drought-tolerant landscaping) within the project site. Therefore, the proposed project would be consistent with this SCAG policy. The project will have 1.3 acres of passive open space that will allow for infiltration of water and reduce off-site runoff. At present, reclaimed water is not available to the project site. In addition, the

Table 4.10.C: Regional Plan Consistency

Regional Plan	Consistency Analysis
	project will comply with the latest Green Building Code requirements for water conservation.
Regional Comprehensive Plan, Energy Chapter	
Policy EN-10. Developers and local governments should integrate green building measures into project design and zoning such as those identified in the U.S. Green Building Council's Leadership in Energy and Environmental Design, Energy Star Homes, Green Point Rated Homes, and the California Green Builder Program. Energy-saving measures that should be explored for new and remodeled buildings include: • Using energy-efficient materials in building design, construction, rehabilitation, and retrofit. • Encouraging new development to exceed Title 24 energy efficiency requirements. • Developing Cool Communities measures including tree planting and light-colored roofs. These measures focus on reducing ambient heat, which reduces energy consumption related to air conditioning and other cooling equipment. • Utilizing efficient commercial/residential space and water heaters. This could include the advertisement of existing and/or development of additional incentives for energy-efficient appliance purchases to reduce excess energy use and save money. • Encouraging landscaping that requires no additional irrigation; utilizing native, drought-tolerant plants can reduce water usage up to 60 percent compared to traditional lawns. • Encouraging combined heating and cooling (CHC), also known as cogeneration, in all buildings. • Encouraging neighborhood energy systems, which allow communities to generate their own electricity. • Orienting streets and buildings for best solar access. • Encouraging buildings to obtain at least 20 percent of their electric load from renewable energy.	**Consistent.** The project will comply with California's CALGreen building regulations and the UBC Title 24 energy conservation standards, which are considered the most stringent, environmentally friendly building codes in the U.S. In addition, the strategies listed in Section 4.7, Greenhouse Gases and Global Climate Change, of this EIR are considered to be greenhouse gas emission reduction strategies, which include green building measures. These strategies are either part of the project or requirements under local or State ordinances. Since the project would implement these strategies into its design and operation, the project would be consistent with this SCAG policy.

Table 4.10.C: Regional Plan Consistency

Regional Plan	Consistency Analysis
Regional Comprehensive Plan, Solid Waste Chapter	
Policy SW-14. Developers and local governments should integrate green building measures into project design and zoning including, but not limited to, those identified in the U.S. Green Building Council's Leadership in Energy and Environmental Design, Energy Star Homes, Green Point Rated Homes, and the California Green Builder Program. Construction reduction measures to be explored for new and remodeled buildings include: • Reuse and minimization of construction and demolition (C&D) debris and diversion of C&D waste from landfills to recycling facilities. • An ordinance that requires the inclusion of a waste management plan that promotes maximum C&D diversion. • Source reduction through (1) use of building materials that are more durable and easier to repair and maintain, (2) design to generate less scrap material through dimensional planning, (3) increased recycled content, (4) use of reclaimed building materials, and (5) use of structural materials in a dual role as finish material (e.g., stained concrete flooring, unfinished ceilings). Reuse of existing building structure and shell in renovation projects. Building lifetime waste reduction measures that should be explored for new and remodeled buildings include: • Development of indoor recycling program and space; • Design for deconstruction; and • Design for flexibility through use of moveable walls, raised floors, modular furniture, moveable task lighting, and other reusable components.	**Consistent.** Solid waste disposal and recycling services for the project site would be provided by Waste Management. Solid waste for disposal would be disposed of at the El Sobrante Landfill, which is owned and operated by Waste Management of the Inland Empire. The City of Wildomar is responsible for meeting the requirements of AB 939 and SB 1016, which includes a 50 percent reduction in disposal by the start of 2000 and preparation of a solid waste reduction plan to help reduce the amount of solid waste disposed of at the landfills. The project would be required to coordinate with the waste hauler to develop collection of recyclable materials for the project on a common schedule as set forth in applicable local, regional, and State programs. Recyclable materials that could be recycled include paper products, glass, aluminum, and plastic. Additionally, the project would be required to comply with applicable elements of AB 1327, Chapter 18 (California Solid Waste Reuse and Recycling Access Act of 1991) and other applicable local, State, and Federal solid waste disposal standards, thereby ensuring that the solid waste stream to regional landfills are reduced in accordance with existing regulations.
Regional Comprehensive Plan, Transportation Chapter	
Goal. A more efficient transportation system that reduces and better manages vehicle activity.	**Consistent.** The project would result in the development of residences in close proximity to major transportation corridors, including Clinton Keith Road, I-15, and I-215. In addition, the project proposes sidewalks, a regional trail, and landscaping treatments to provide for pedestrian access throughout the project site. The type of

Table 4.10.C: Regional Plan Consistency

Regional Plan	Consistency Analysis
	uses proposed and their proximity to each other allow for increased pedestrian activity, limiting the need for vehicle travel.
Regional Comprehensive Plan, Security and Emergency Preparedness Chapter	
Goal. Ensure transportation safety, security, and reliability for all people and goods in the region.	**Consistent.** The project is consistent with this goal in that it would be required to adhere to the City's General Plan and Municipal Code requirements that address transportation safety and security. The General Plan contains goals and policies that aim to provide adequate and reliable transportation facilities. The goals and policies identified in the City's General Plan resemble those of the RCP that address mobility, traffic safety, environmental concerns, and land use consistency as the major traffic study factors to identify existing traffic conditions and to assess the future effects on area traffic patterns/ flow.
Regional Comprehensive Plan, Economy Chapter	
Goal. Enable business to be profitable and competitive (locally, regionally, nationally, and internationally).	**Consistent.** The project would add residents in close proximity to shopping and work places. Through the addition of the project, the City would also expand its economic competitiveness with other areas in the region by bringing residents to where the shopping opportunities are.
Goal. Promote sustained economic health through diversifying the region's economy, strengthening local self-reliance and expanding competitiveness.	**Consistent.** The project would enable the City to be more self-reliant by providing houses in close proximity goods and services within the City. Through the addition of the project, the City would also expand its economic competitiveness with other areas in the region.

SCAG 2012 Regional Transportation Plan and Sustainable Communities Plan. As part of the adoption of the 2012 RTP, SCAG developed a Sustainable Communities Strategy (SCS), which was required as part of SB 375. According to SB 375, each MPO shall prepare a sustainable communities strategy, including the requirement utilizing the most recent planning assumptions considering local general plans and other factors. The SCS shall:

1. Identify the general location of uses, residential densities, and building intensities within the region;
2. Identify areas within the region sufficient to house all the population of the region, including all economic segments of the population, over the course of the planning period of the regional transportation plan taking into account net

migration into the region, population growth, household formation and employment growth;

3. Identify areas within the region sufficient to house an eight-year projection of the regional housing need for the region;
4. Identify a transportation network to service the transportation needs of the region;
5. Gather and consider the best practically available scientific information regarding resource areas and farmland in the region;
6. Consider the State housing goals specified in Sections 65580 and 65581;
7. Set forth a forecast development pattern for the region, which, when integrated with the transportation network, and other transportation measures and policies, will reduce the greenhouse gas emissions from automobiles and light trucks to achieve, if there is a feasible way to do so, the greenhouse gas emission reduction targets approved by the State Board; and
8. Allow the regional transportation plan to comply with the Federal Clean Air Act.

The SCS and the 2012 RTP contain new regional growth projections for each city in the Southern California region. Table 4.10.D contains the population and employment forecasts for the City.[1]

Table 4.10.D: SCAG Population and Employment Projections – 2020 and 2035

Population		Employment		Increase 2020–2035	
2020 Projection	2035 Projection	2020 Projection	2035 Projection	Population	Employment
42,100	53,700	5,900	9,300	21.6%	36.6%

Source: SCAG 2012 RTP

The 2012–2035 RTP/SCS contains a number of "Outcome and Performance Measures/Indicators"[2] that are used to evaluate various regional land use plan alternatives, with the objective being an improvement over the No Project (i.e., no SCS) baseline. These measures are applied on a regional basis, and are not necessarily applicable to individual projects like the proposed project. A general discussion of consistency with the relevant measures is provided in Table 4.10.E.

[1] The data provided in Table 4.10.D are slightly different than the data provided in Section 4.13 Table 4.13.A. The data provided in Table 4.10.D are based on regional SCAG projections that use a baseline of 2008. Table 4.13.A is based on local data provided by the County of Riverside Transportation Agency that use an updated baseline of 2011. However, the different data sets are not substantially different.

[2] http://rtpscs.scag.ca.gov/Documents/2012/final/SR/2012fRTP_PerformanceMeasures.pdf, Table 2.

Table 4.10.E: Discussion of RTP Outcomes and Performance Measures/ Indicators

Performance Measure/Indicator	Definition	Consistency of Proposed Project
Share of growth in High Quality Transit Areas (HQTAs)	Increase share of the region's growth in households and employment in HQTAs	**Consistent.** The project is not currently located in an SCAG-defined HQTA. Local transit has numerous bus routes that serve the City. Through the City's project review process, policies, plans, and/or programs supporting alternative transportation would be reviewed and incorporated as applicable.
Land consumption	Reduce additional land needed for development that has not previously been developed or otherwise affected, including agricultural land, forest land, desert land, and other virgin sites.	**Not Consistent.** The SCAG plan calls for reducing the amount of virgin land converted to development, as compared to the "No Project" condition. The project would use a site that has not been previously developed.
Average distance for work or non-work trips	Decrease the average distance traveled for work or non-work trips separately.	**Consistent.** The City is housing-rich, which forces many workers to commute long distances from their homes to work. The project includes commercial/retail and office uses that would incrementally reduce commute distances for residents.
Percentage of work trips less than 3 miles.	Increase the share of total work trips that are fewer than 3 miles.	**Consistent.** As noted above, the City needs additional employment. By adding commercial/retail and office uses, the project would increase total work trips that are fewer than 3 miles.
Work trip length distribution.	Reduce the statistical distribution of work trip length in the region.	**Consistent.** Due to the mixed-use nature of the project, the traffic study assumed an internal capture of vehicle trips among the multifamily, commercial, and office uses. Due to this internal capture, the daily trips generated are reduced by approximately 8 percent. The proposed co-location of the office, commercial, and residential uses may incrementally contribute to a reduction of vehicle trip length in the project area.
Criteria pollutants and greenhouse gas emissions.	Reduce CO, NO_X, $PM_{2.5}$, PM_{10}, VOC, and per capita greenhouse gas emissions (CO_2).	**Consistent.** The project air and greenhouse gas studies indicate that it will not contribute to a short- or long-term source of criteria pollutants and greenhouse gas emissions. The project would not incrementally increase emissions of pollutants and greenhouse gases.
Annual household transportation cost.	Reduce annual household spending on transportation costs of vehicle ownership, operation, and maintenance,	**Generally Consistent.** The project will reduce work-related trip lengths for people who may work in the proposed commercial development and live in the proposed high

Table 4.10.E: Discussion of RTP Outcomes and Performance Measures/ Indicators

Performance Measure/Indicator	Definition	Consistency of Proposed Project
	and public transportation.	density residential development. Generally, the majority of the residents of the proposed project will be traveling to work locations outside the Wildomar area.
Percentage of jobs within 15 minutes' walk of transit.	Increase the number of jobs within 15 minutes' walk of public transportation.	**Consistent.** The proposed project is within 15 minutes' walk of public transportation. Two bus stops are located within 0.25 mile of the project site.

Source: http://rtpscs.scag.ca.gov/Documents/2012/final/SR/2012fRTP_PerformanceMeasures.pdf

As detailed in Table 4.10.E the project design is generally consistent with the SCAG RTP/SCS performance measures, but the overall project is not consistent with regional job/housing goals due to the type of uses it proposes and the project location. However, the southern portion of the site was redesignated and rezoned to allow high density residential development during the most recent update of the City's Housing Element (2013) enabling the City to meet its the housing needs identified in the Regional Housing Needs Assessment.. Additional information and analysis in this regard is provided in Section 4.13, *Population, Housing, and Employment.*

Water Quality Control Plan for the San Diego Basin (Basin Plan). The Water Quality Control Plan for the San Diego Basin, which is implemented by the San Diego Regional Water Quality Control Board (RWQCB), specifically (1) designates beneficial uses for surface and ground waters, (2) sets qualitative and quantitative objectives that must be attained and maintained at that level in order to protect the designated beneficial uses and conform to the State's anti-degradation policy, and (3) describes implementation policies and programs to protect all waters in the region. In cases where the Basin Plan does not contain a standard for a particular pollutant, other criteria are used to establish a standard. Storm water runoff from the project will eventually make its way to the Santa Margarita River. Because the project is required to comply with all applicable water quality standards and requirements established by the RWQCB, and is therefore in compliance with the NPDES permitting system, the project would be consistent with the Basin Plan.

Riverside County Drainage Area Management Plan (DAMP). The Drainage Area Management Plan deals with the Santa Ana and Santa Margarita Regions. The DAMP describes a wide range of continuing and enhanced BMPs and control techniques for development projects within a municipality and are being implemented during the five-year terms of the third-term MS4 permits. In essence, the DAMP describes the overall urban runoff management strategies planned by the permittees in the Santa Ana Region. The project is required to comply with all

applicable drainage standards and requirements designed to protect water resources and enhance water quality and would therefore, be consistent with the DAMP.

Summary of Impact 4.10.5.2: Conflict with Applicable Regional Land Use Plans, Policies, or Regulations. The preceding analysis demonstrates that the proposed project is generally consistent with the goals of SCAG's Regional Comprehensive Plan, Compass Plan and Regional Transportation, and the Basin Plan and DAMP.

4.10.5.3 Conflict with Any Applicable Habitat or Natural Community Conservation Plan

Threshold	Would the proposed project conflict with any applicable habitat conservation plans (HCP) or natural community conservation plan (NCCP)?

While the project site is within the MSHCP area and the fee area for the Stephens' kangaroo rat, it is not within a Criteria Cell, designated cell group, or a subunit. Conservation of site not required pursuant to the MSHCP. Due to its location, the project requires compliance with the following MSHCP policies:

- Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools (Section 6.1.2 of the MSHCP);
- The Guidelines Pertaining to the Urban/Wildlands Interface (Section 6.1.4 of the MSHCP); and
- The Burrowing Owl Survey Area (Section 6.3.2 of the MSHCP).

Potential impacts related to riverine areas, burrowing owl, and urban/wildlands interface are discussed in greater detail in Section 4.4 (Biological Resources) of this EIR. Mitigation measures have been identified in Section 4.4.5 to reduce potential MSHCP resource impacts to less than significant levels. No additional mitigation other than identified in Section 4.4 included in the Biological Resources Section of this EIR is required.

4.10.6 Significant Impacts

There are no impacts related to land use that are significant with implementation of the proposed project.

4.10.7 Cumulative Impacts

As discussed in this section, the project would not have significant project-related impacts related to dividing an existing community, conflicts with applicable land use

plans, policies, or regulations with approval of the proposed GPA or zone change, or conflict with an approved habitat conservation plan. While the project would represent a shift in land use designation for the project site, this shift does not significantly contribute to a cumulative land use impact; therefore, no mitigation is warranted.

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4.11 MINERAL RESOURCES

This chapter evaluates potential impacts related to known mineral resources that may result from the proposed project. This chapter is based in part on the following document, which is incorporated by reference:

- *City of Wildomar General Plan*, Multipurpose Open Space Element, adopted July 2008.

4.11.1 Existing Setting

No land within the City is designated by the U.S. Geological Survey (USGS) as being a known significant mineral resource area. As identified in the City's General Plan (Figure OS-5), the entire City is designated MRZ-3a, as defined in Section 4.11.2, below.

4.11.1.1 NOP/Scoping Comments

No comments regarding mineral resources were received during the NOP public review periods or Public Scoping meetings.

4.11.2 Policies and Regulations

4.11.2.1 State Regulations

Surface Mining and Reclamation Act. The Surface Mining and Reclamation Act of 1975 (SMARA) requires classification of land into mineral resource zones (MRZs) according to the known or inferred mineral potential of the area. Construction aggregate resources (sand and gravel) deposits were the first commodity selected for classification by the State Mining and Geology Board. Once mapped, the State Mining and Geology Board is required to designate for future use those areas that contain aggregate deposits that are of prime importance in meeting the region's future need for construction-quality aggregates. There are three key objectives of SMARA regulations:

- Adverse environmental effects are prevented or minimized, and mined lands are reclaimed to a usable condition that is readily adaptable for alternative uses;
- The production and conservation of minerals are encouraged, while consideration is given to values relating to recreation, watershed, wildlife, range and forage, and aesthetic enjoyment; and
- Residual hazards to the public health and safety are eliminated.

The primary objective of the SMARA is for each jurisdiction to develop policies that will conserve important mineral resources, where feasible, that might otherwise be unavailable when needed. The SMARA requires that once policies are adopted,

local agency land use decisions must be in accordance with its mineral resource management policies. These decisions must also balance the mineral value of the resource to the market region as a whole, not just their importance to the local jurisdiction. Under SMARA, areas are categorized into MRZs as follows:

MRZ-1 Areas where the available geologic information indicates no significant mineral deposits or a minimal likelihood of significant mineral deposits.

MRZ-2a Areas where the available geologic information indicates that there are significant mineral deposits.

MRZ-2b Areas where the available geologic information indicates that there is a likelihood of significant mineral deposits.

MRZ-3a Areas where the available geologic information indicates that mineral deposits are likely to exist; however, the significance of the deposit is undetermined.

MRZ-4 Areas where there is not enough information available to determine the presence or absence of mineral deposits.

4.11.2.2 City General Plan Policies

No policies related to mineral resources that apply to the proposed project are identified within the City's General Plan.

4.11.3 Methodology

The California Geological Survey (CGS) provides objective geologic information about California's diverse non-fuel mineral resources. Maps, reports, and other data products developed by CGS were used to locate mineral extraction areas within the project area. In addition, the City's General Plan was used to determine the location of possible mineral extraction areas in the project area.

4.11.4 Thresholds of Significance

Appendix G of the *State CEQA Guidelines* recognizes the following thresholds related to mineral resources. Based on these significance thresholds, potential impacts to mineral resources could be considered significant if the proposed project:

- Resulted in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State; and/or
- Resulted 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 plans.

4.11.5 Less than Significant Impacts

The following potential impacts were determined to be less than significant. In both of the following issues, either no impact would occur or adherence to established regulations, standards, and policies would reduce potential impacts to a less than significant level. In both instances, no mitigation is required.

4.11.5.1 Loss of Statewide, Regional, or Locally Important Mineral Resources

Thresholds	Would the proposed project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the State?
	Would the proposed 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 plans?

The project site and the property in the surrounding area are designated as MRZ-3a. Mineral resources in this category have undetermined value and are not considered locally important mineral resource recovery sites. Neither the General Plan nor the Zoning ordinance designate the site for mining or mineral extraction uses.

According to the Geotechnical Investigation conducted for the proposed project (Appendix E), the on-site alluvium is primarily underlain with Early Pleistocene-age sandstone. The entire City is designated as MRZ-3a and is located on similar underlying geologic features. While it is possible that the site could yield mineral resources, the physical characteristics of the site provide no indication of a unique or valuable mineral resource. No historic or current mining or mineral extraction is located within the proposed project limits.

Development of the project site would not result in the loss of identified regional or local mineral resources, conversion of an identified mineral resource use, or conflict with existing mineral resource extraction activities. Therefore, the development of the project site would not result in a loss of statewide, regional, or locally important mineral resources. No significant impact associated with this issue, would occur and no mitigation is required.

4.11.6 Significant Impacts

No significant mineral resource impact would result from the construction or occupation of the proposed uses.

4.11.7 Cumulative Impacts

The cumulative area for mineral resources is the City of Wildomar. As population levels increase in the region, greater demand will be placed on mineral resources,

including sand, gravel and aggregate. Development in the City where these resources are known or expected to occur would result in the loss of availability of these mineral resources. Because the project site is not identified as a significant mineral resource site or the site of an existing mining/mineral extraction operation, development of the site as proposed would not cumulatively decrease the local or regional availability of mineral resources. No cumulatively significant impact would occur; therefore, no mitigation is required.

4.12 NOISE

This section of the EIR is intended to satisfy the City's requirements for a project-specific noise impact analysis by examining the short- and long-term noise impacts of the proposed project on sensitive uses adjacent to the proposed project area and by evaluating the effectiveness of mitigation measures. This includes the potential for the proposed project to result in impacts associated with a substantial temporary and/or permanent increase in ambient noise levels in the vicinity of the project area; exposure of people to excessive noise levels, groundborne vibration, or groundborne noise levels.

The analysis contained in this section is based on the following technical study prepared for the proposed project:

- Clinton Keith Road (APN: 380-250-003) "Grove Park" Noise Impact Analysis, City of Wildomar, Urban Crossroads, March 11, 2015 (Appendix I).

4.12.1 Existing Setting

4.12.1.1 Background

Characteristics of Noise. To the human ear, sound described in terms of its loudness (amplitude) and pitch (frequency). Pitch is generally an annoyance, while loudness can affect our ability to hear. Noise is usually defined as unwanted sound; it consists of any sound that may produce physiological or psychological damage and/or interfere with communication, work, rest, recreation, and sleep.

Measurement of Noise. The standard unit of measurement of the loudness of sound is the decibel (dB). Decibels are based on a logarithmic scale. The logarithmic scale compresses the wide range in sound levels resulting in a more usable range of sound level values (similar to the Richter scale used to measure earthquakes). To humans, a sound 10 dB higher than another is considered to be twice as loud; a sound 20 dB higher than another is considered four times as loud; etc. Typical daily sounds in the environmental range from 30 dB (very quiet) to 100 dB (very loud). Since the human ear is not equally sensitive to sound at all frequencies, a special frequency-dependent rating scale is utilized to relate noise to human sensitivity. The A-weighted decibel (dBA) scale performs this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear. Community noise levels are measured in terms of the dBA. Figure 4.12.1 shows examples of various noises sources and their typical dBA noise level.

Two categories of noise are measured to characterize noise conditions: single event noise and community, or cumulative, noise. Single event measurements describe the noise levels from an individual event such as a passing airplane or a heavy-duty

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COMMON OUTDOOR ACTIVITIES	COMMON INDOOR ACTIVITIES	A - WEIGHTED SOUND LEVEL dBA	SUBJECTIVE LOUDNESS	EFFECTS OF NOISE
THRESHOLD OF PAIN		140	INTOLERABLE OR DEAFENING	HEARING LOSS
NEAR JET ENGINE		130		
		120		
JET FLY-OVER AT 300m (1000 ft)	ROCK BAND	110		
LOUD AUTO HORN		100	VERY NOISY	
GAS LAWN MOWER AT 1m (3 ft)		90		
DIESEL TRUCK AT 15m (50 ft), at 80 km/hr (50 mph)	FOOD BLENDER AT 1m (3 ft)	80		SPEECH INTERFERENCE
NOISY URBAN AREA, DAYTIME	VACUUM CLEANER AT 3m (10 ft)	70	LOUD	
HEAVY TRAFFIC AT 90m (300 ft)	NORMAL SPEECH AT 1m (3 ft)	60		
QUIET URBAN DAYTIME	LARGE BUSINESS OFFICE	50	MODERATE	SLEEP DISTURBANCE
QUIET URBAN NIGHTTIME	THEATER, LARGE CONFERENCE ROOM (BACKGROUND)	40		
QUIET SUBURBAN NIGHTTIME	LIBRARY	30	FAINT	NO EFFECT
QUIET RURAL NIGHTTIME	BEDROOM AT NIGHT, CONCERT HALL (BACKGROUND)	20		
	BROADCAST/RECORDING STUDIO	10	VERY FAINT	
LOWEST THRESHOLD OF HUMAN HEARING	LOWEST THRESHOLD OF HUMAN HEARING	0		

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FIGURE 4.12.1

Grove Park Mixed-Use Development
Environmental Impact Report

Typical A-Weighted Noise Levels

SOURCE: Urban Crossroads Noise Report, March 2015.
(Environmental Protection Agency Office of Noise Abatement and Control, Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety (EPA/ONAC 550/9-74-004) March 1974.)

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truck. Cumulative measurements average the total noise in a community over a specific time period, which is typically 1 or 24 hours. The noise impact analysis performed for this EIR includes assessments of both single event noise and community or cumulative, noise.

Several rating scales have been developed for measurement of community noise to account for the effects, variety, variation, and time of noise in the community. They are designed to account for the known health effects of noise on people. The potential for a noise to affect people is dependent on the total acoustical energy content of the noise. A number of noise scales have been developed to account for this observation. Two of the predominant noise scales are the Equivalent Noise Level (L_{eq}) and the Community Noise Equivalent Level (CNEL).

- L_{eq} is the sound level corresponding to a steady-state sound level containing the same total energy as a time-varying signal over a given sample period. L_{eq} is the "energy" average noise level during the time period of the sample. L_{eq} can be measured for any time period, but is typically measured for 1 hour. This 1-hour noise level can also be referred to as the Hourly Noise Level (HNL). It is the energy sum of all the events and background noise levels that occur during that time period.[1]
- CNEL is the predominant rating scale now in use in California for land use noise compatibility assessment. The CNEL scale represents a time weighted 24-hour average noise level based on the dBA. Time weighted refers to the inclusion of penalties for noise that occurs during certain noise-sensitive time periods. The evening time period (7 p.m. to 10 p.m.) penalizes noises by 5 dBA, while nighttime (10 p.m. to 7 a.m.) noises are penalized by 10 dBA, reflecting people's increased sensitivity to noise during these time periods. A CNEL noise level may be reported as a CNEL of 60 dBA, 60 dBA CNEL, or simply 60 CNEL.

The maximum noise level (L_{max}) is the highest exponential time averaged sound level that occurs during a stated time period. The noise levels discussed in this analysis for short-term noise impacts are specified in terms of maximum levels denoted by L_{max}, which reflects peak noise conditions and addresses the annoying aspects of intermittent noise. It is often used together with another noise scale, or noise standards in terms of percentile noise levels, in noise ordinances for enforcement purposes. For example, the L_{10} noise level represents the noise level exceeded 10 percent of the time during a stated period. The L_{50} noise level represents the median noise level. Half the time the noise level exceeds this level, and half the time it is less than this level. The L_{90} noise level represents the noise

[1] L(%) is a statistical method of describing noise that accounts for variance in noise levels throughout a given measurement period. L(%) is a way of expressing the noise level exceeded for a percentage of time in a given measurement period. For example, since 5 minutes is 25 percent of 20 minutes, L(25) is the noise level that is equal to or exceeded for five minutes in a 20-minute measurement period. It is L(%) that is used for most Noise Ordinance standards. For example most daytime County, State and City noise ordinances use a standard of 55 dBA for 30 minutes per hour, or an L(50) level of 55 dBA. In other words, the noise ordinance may state that no noise level should exceed 55 dBA for more than 50 percent of a given period.

level exceeded 90 percent of the time and is considered the background noise level during a monitoring period. For a relatively constant noise source, the L_{eq} and L_{50} are approximately the same.

Fundamentals of Groundborne Vibration. Vibration refers to groundborne noise and perceptible motion of the earth. Similar to noise, vibration is transmitted in noise-like waves through the earth and solid objects. There are several ways to categorize vibration sources. One way is to divide vibration into natural sources (e.g., earthquakes, volcanic eruptions, sea waves, and landslides) and human sources (e.g., explosions, machinery, traffic, trains, and construction equipment). Similar to noise sources, vibration sources can also be described as continuous (e.g., operating factory machinery) or transient (e.g., explosions).

As with noise, ground vibrations can be described by amplitude and frequency. Vibration amplitude is characterized by its displacement, velocity, and acceleration. Displacement is the distance that soil particles travel from their original location as a result of vibration, as measured in inches or millimeters. Velocity is the speed of the soil particles measured in inches per second or millimeters per second. Acceleration of the soil particles is measured in inches per second per second or millimeters per second per second. Particle velocity is the most commonly used vibration attribute used to describe vibration. Table 4.12.A presents the human reaction to various levels of peak particle velocity. Vibrations also vary in frequency. Traffic vibrations generally range in frequencies from 10 to 30 hertz (Hz), and tend to average around 15 Hz. As a point of reference, city buses often generate frequencies around 3 Hz at high vehicle speeds, due to their suspension systems.

Table 4.12.A: Human Reaction to Typical Vibration Levels

Vibration Level Peak Particle Velocity (inches/second)	Human Reaction
0.0059–0.0188	Threshold of perception, possibility of intrusion.
0.0787	Vibrations readily perceptible.
0.0984	Level at which continuous vibrations begin to annoy people.
0.1968	Vibrations annoying to people in buildings.
0.3937–0.5905	Vibrations considered unpleasant by people subjected to continuous vibrations and unacceptable to some people walking on bridges.

Source: Caltrans 1992.

Groundborne vibration is almost exclusively a concern inside buildings and is rarely perceived as a problem outdoors, where the motion may be discernable. However, without the effects associated with the shaking of a building, there is less adverse reaction. Building vibration may be perceived by the occupants as motion of building surfaces, rattling of items on shelves or hanging on walls, or as a low-frequency rumbling noise. Building damage is not a factor for normal projects, with the occasional exception of blasting and pile driving during construction or mining.

Annoyance from vibration often occurs when the vibration exceeds the threshold of perception by up to 10 decibels. This is an order of magnitude below the damage threshold for normal buildings.

Typical sources of groundborne vibration are construction activities (e.g., blasting, pile driving, and operating heavy-duty earthmoving equipment), steel-wheeled trains, and occasional traffic on rough roads. Problems with groundborne vibration and noise from these sources are usually localized to within about 100 feet of the vibration source, although there are examples of groundborne vibration causing interference out to distances greater than 200 feet.[1] When roadways are smooth, vibration from traffic, even heavy trucks, is rarely perceptible.

Factors that influence groundborne vibration and noise include the following:

- *Vibration Source:* Vehicle suspension, wheel types and condition, track/roadway surface, track support system, speed, transit structure, and depth of vibration source.
- *Vibration Path:* Soil type, rock layers, soil layering, depth to water table, and frost depth.
- *Vibration Receiver:* Foundation type, building construction, and acoustical absorption.

Among the factors listed above, there are significant differences in the vibration characteristics when the source is underground versus at ground surface. In addition, soil conditions are known to have a strong influence on the levels of groundborne vibration. Among the most important factors are the stiffness and internal damping of the soil and the depth to bedrock. Vibration propagation is more efficient in stiff clay soils than in loose sandy soils, and shallow rock seems to concentrate the vibration energy close to the surface and can result in groundborne vibration problems at a great distance from the track. Factors such as layering of the soil and depth to water table can have significant effects on the propagation of groundborne vibration. Soft, loose, sandy soils tend to attenuate more vibration energy than hard, rocky materials. Vibration propagation through groundwater is more efficient than through sandy soils.

4.12.1.2 Sensitive Land Uses in the Project Vicinity

Certain land uses are considered more sensitive to noise than others. Examples include residential areas, educational facilities, hospitals, childcare facilities, and senior housing. Residential uses are located immediately north and south of the project site, and are the nearest sensitive receptors. Rural residential homes are located approximately 147 feet north of the project site across Clinton Keith Road,

[1] "Transit Noise and Vibration Impact Assessment" prepared by the Federal Transit Authority (FTA), May 2006.

while multiple-family residential homes located approximately 60 feet south of the project site along Yamas Drive.

4.12.1.3 Existing Noise Levels

Existing noise levels in the vicinity of the proposed project are used to establish baseline noise levels in key areas. As identified in the project-specific noise analysis, existing noise contours for 20 roadway segments in the project vicinity were generated. Noise contours were generated using average daily traffic volumes identified in the project-specific Traffic Impact Analysis (2015).[1] These traffic volumes were inputted in the Federal Highway Administration Traffic Noise Prediction Model, which calculated the distance to 70, 65, 60, 55 CNEL contours. The model contour outputs are identified in Table 4.12.B.

Table 4.12.B: Existing Noise Contours

ID	Road	Segment	CNEL at 100 Feet (dBA)	Distance to Contour (Feet)			
				70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	55 dBA CNEL
1	I-15 Southbound Ramps	North of Clinton Keith Road	66.1	55	119	257	553
2	I-15 Southbound Ramps	South of Clinton Keith Road	64.9	46	98	212	456
3	I-15 Northbound Ramps	North of Clinton Keith Road	65.3	48	104	224	483
4	I-15 Northbound Ramps	South of Clinton Keith Road	65.7	52	112	242	520
5	George Avenue	North of Clinton Keith Road	57.9	RW	33	72	155
6	Yamas Drive	South of Clinton Keith Road	40.7	RW	RW	RW	RW
7	Yamas Drive	South of Driveway 2	40.7	RW	RW	RW	RW
8	Yamas Drive	South of Driveway 3	40.7	RW	RW	RW	RW
9	Yamas Drive	North of Prielipp Road	49.1	RW	RW	19	41
10	Clinton Keith Road	West of I-15 Southbound Ramps	66.7	60	129	278	598
11	Clinton Keith Road	East of I-15 Southbound Ramps	66.6	59	127	274	590
12	Clinton Keith Road	East of I-15 Northbound Ramps	66.6	59	128	275	593
13	Clinton Keith Road	West of Georgia Avenue	65.6	51	109	236	507

[1] *Clinton Keith Road (APN: 380-250-003) "Grove Park," Traffic Impact Analysis, City of Wildomar, California*, Urban Crossroads, (revised) March 5, 2015.

Table 4.12.B: Existing Noise Contours

ID	Road	Segment	CNEL at 100 Feet (dBA)	Distance to Contour (Feet)			
				70 dBA CNEL	65 dBA CNEL	60 dBA CNEL	55 dBA CNEL
14	Clinton Keith Road	East of George Avenue	65.8	52	113	243	524
15	Clinton Keith Road	East of Inland Valley Drive	64.1	40	87	188	404
16	Clinton Keith Road	West of Yamas Drive	64.1	40	87	188	404
17	Clinton Keith Road	East of Yamas Drive	64.2	41	89	191	412
18	Prielipp Road	East of Yamas Drive	59.6	20	44	94	203
19	Prielipp Road	West of Elizabeth Lane	59.4	20	42	91	196
20	Prielipp Road	West of Elizabeth Lane	59.4	20	42	91	196

Source: Table 6-1, Clinton Keith Road (APN: 380-250-003) "Grove Park" Noise Impact Analysis, City of Wildomar, Urban Crossroads, March 11, 2015.
RW = the location of the respective noise contour falls within the right-of-way of the road.

4.12.1.4 Existing Ground Vibration Levels

Existing ground vibration at the site is caused by traffic on adjacent roadways. Groundborne vibration levels from automobile traffic are generally overshadowed by vibration generated by heavy trucks that roll over the same uneven roadway surfaces. However, due to the rapid drop-off rate of groundborne vibration and the short duration of the associated events, vehicular traffic-induced groundborne vibration is rarely perceptible beyond the roadway right-of-way, and rarely results in vibration levels that cause damage to buildings in the vicinity. Therefore, existing ground vibration at the project site was not measured.

4.12.1.5 NOP and Scoping Comments

No comments on this issue were received during the Public Scoping Meetings. No comments related to potential project-related noise impacts were received during either NOP period.

4.12.2 Existing Policies and Regulations

4.12.2.1 Federal Guidelines

There are no Federal regulatory requirements for noise or vibration levels relative to residential uses.

4.12.2.2 State Noise Compatibility Guidelines

The State of California Noise Compatibility Guidelines, published by the Department of Health Services (DHS) provides guidance when siting land uses. Figure 4.12.2 shows the compatibility guidelines. The guidelines have been be used to evaluate the compatibility of the proposed land uses with the noise environment. The guidelines show compatibility of various land uses with different noise environments and show that industrial uses are normally acceptable in noise environments up to 75 CNEL.

4.12.2.3 City General Plan

The applicable noise standards governing the project site are the criteria in the City's General Plan Noise Element and Municipal Code (Chapter 9.48: Noise Regulation). The noise policies cite to applicable State standards including the California Administrative Code, Section 1092 of Title 25, Chapter 1, Subchapter 1, Article 4 and Section 5014 of Title 21, Subchapter 6, Article 2. The noise-related City General Plan policies relevant to the proposed project include:

Noise Compatibility

N 1.1 Protect noise-sensitive land uses from high levels of noise by restricting noise-producing land uses from these areas. If the noise-producing land use cannot be relocated, then noise buffers such as setbacks, landscaping, or blockwalls shall be used.

N 1.3 Consider the following uses noise-sensitive and discourage these uses in areas in excess of 65 CNEL:

- Schools;
- Hospitals;
- Rest Homes;
- Long Term Care Facilities;
- Mental Care Facilities;
- Residential Uses;
- Libraries;
- Passive Recreation Uses; and
- Places of Worship.

According to the State of California Office of Planning and Research General Plan Guidelines, an acoustical study may be required in cases where these noise-sensitive land uses are located in an area of 60 CNEL or greater. Any land use that is exposed to levels higher than 65 CNEL will require noise attenuation measures.

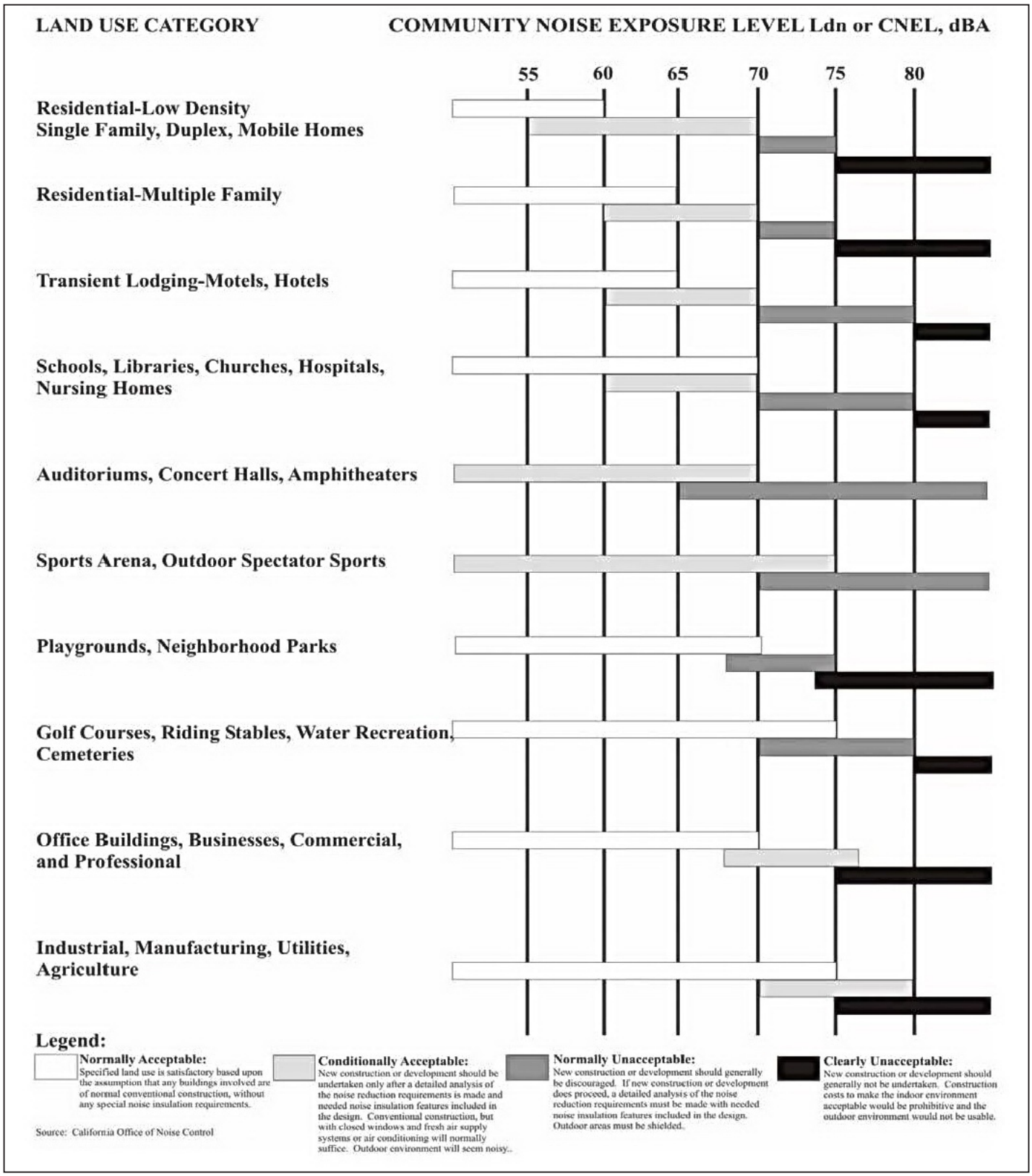

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FIGURE 4.12.2

Grove Park Mixed-Use Development
Environmental Impact Report

Land Use Compatibility for Community Noise Exposure

SOURCE: Urban Crossroads Noise Report, March 2015.

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Areas around airports may have different noise standards than those cited above. Each Area Plan affected by a public-use airport includes one or more Airport Influence Areas, one for each airport. The applicable noise compatibility criteria are fully set forth in Appendix L and summarized in the Policy Area section of the affected Area Plan.

N 1.4 Determine if existing land uses will present noise compatibility issues with proposed projects by undertaking site surveys.

N 1.5 Prevent and mitigate the adverse impacts of excessive noise exposure on the residents, employees, visitors, and noise-sensitive uses of the City.

N 1.6 Minimize noise spillover or encroachment from commercial and industrial land uses into adjoining residential neighborhoods or noise-sensitive uses.

Noise Mitigation Strategies

N 1.7 Require proposed land uses, affected by unacceptably high noise levels, to have an acoustical specialist prepare a study of the noise problems and recommend structural and site design features that will adequately mitigate the noise problem.

N 2.2 Require a qualified acoustical specialist to prepare acoustical studies for proposed noise-sensitive projects within noise impacted areas to mitigate existing noise.

N 2.3 Mitigate exterior and interior noises to the levels listed in the table below to the extent feasible, for stationary sources:

Table N-2 :Stationary Source Land Use Noise Standards

Land Use	Interior Standards	Exterior Standards
Residential 10:00 p.m. to 7:00 a.m. 7:00 a.m. to 10:00 p.m.	40 L_{eq} (10 minute) 55 L_{eq} (10 minute)	45 L_{eq} (10 minute) 65 L_{eq} (10 minute)

Noise Producers

N 3.2 Require acoustical studies and subsequent approval by the Planning Department and the Office of Industrial Hygiene, to help determine effective noise mitigation strategies in noise-producing areas.

N 3.5 Require that a noise analysis be conducted by an acoustical specialist for all proposed projects that are noise producers. Include recommendations for design mitigation if the project is to be located either within proximity of a noise-sensitive land use, or land designated for noise-sensitive land uses.

Community Noise Inventory

N 4.2 Develop measures to control non-transportation noise impacts.

N 4.4 Require that detailed and independent acoustical studies be conducted for any new or renovated land uses or structures determined to be potential major stationary noise sources.

N 4.8 Require that the parking structures, terminals, and loading docks of commercial or industrial land uses be designed to minimize the potential noise impacts of vehicles on the site as well as on adjacent land uses.

Mobile Sources

N 6.3 Require commercial or industrial truck delivery hours be limited when adjacent to noise-sensitive land uses unless there is no feasible alternative or there are overriding transportation benefits.

Vehicular

N 8.3 Require development that generates increased traffic and subsequent increases in the ambient noise level adjacent to noise-sensitive land uses to provide for appropriate mitigation measures.

N 8.5 Employ noise mitigation practices when designing all future streets and highways, and when improvements occur along existing highway segments. These mitigation measures will emphasize the establishment of natural buffers or setbacks between the arterial roadways and adjoining noise-sensitive areas.

Temporary Construction

N 12.1 Minimize the impacts of construction noise on adjacent uses within acceptable practices.

N 12.2 Ensure that construction activities are regulated to establish hours of operation in order to prevent and/or mitigate the generation of excessive or adverse noise impacts on surrounding areas.

N 12.3 Condition subdivision approval adjacent to developed/occupied noise-sensitive land uses by requiring the developer to submit a construction-related noise mitigation plan to the City for review and approval prior to issuance of a grading permit. The plan must depict the location of construction equipment and how the noise from this equipment will be mitigated during construction of this project, through the use of such methods as:

a. Temporary noise attenuation fences;

b. Preferential location of equipment; and

c. Use of current noise suppression technology and equipment.

N 12.4 Require that all construction equipment utilizes noise reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer.

Building and Design Techniques

N 13.1 Enforce the California Building Standards that sets standards for building construction to mitigate interior noise levels to the tolerable 45 CNEL limit. These standards are utilized in conjunction with the Uniform Building Code by the City's Building Department to ensure that noise protection is provided to the public. Some design features may include extra-dense insulation, double-paned windows, and dense construction materials.

N 13.3 Incorporate acoustic site planning into the design of new development, particularly large scale, mixed-use, or master-planned development, through measures which may include:

- Separation of noise-sensitive buildings from noise-generating sources;
- Use of natural topography and intervening structure to shield noise-sensitive land uses; and
- Adequate sound proofing within the receiving structure.

Mixed Use

N 18.5 Require new developments that have the potential to generate significant noise impacts to inform impacted users on the effects of these impacts during the environmental review process.

Functional Classifications and Standards

C 3.28 Reduce transportation noise through proper roadway design and coordination of truck and vehicle routing.

Circulation

C 5.3 Require parking areas of all commercial and industrial land uses that abut residential areas to be buffered and shielded by adequate landscaping.

C 6.7 Require that the automobile and truck access of commercial and industrial land uses abutting residential parcels be located at the maximum practical distance from the nearest residential parcels to minimize noise impacts.

C 20.6 Protect City residents from transportation generated noise hazards. Increased setbacks, walls, landscaped berms, other sound absorbing barriers, or a combination thereof shall be provided along freeways, expressways, and four-lane highways in order to protect adjacent noise-sensitive land uses from traffic-generated noise impacts. Additionally, noise generators such as commercial, manufacturing, and/or industrial activities shall use these techniques to mitigate exterior noise levels to no more than 60 decibels.

General Plan Consistency. Table 4.12.C evaluates the project's consistency with General Plan policies relative to noise.

Table 4.12.C: General Plan Consistency Analysis

General Plan Goals and Targets	General Plan Consistency Analysis
N 1.1. Protect noise-sensitive land uses from high levels of noise by restricting noise-producing land uses from these areas. If the noise-producing land use cannot be relocated, then noise buffers such as setbacks, landscaping, or blockwalls shall be used.	**Consistent.** The project has been designed to provide sufficient distance between on-site noise-generating uses.
N 1.3. Consider the following uses noise-sensitive and discourage these uses in areas in excess of 65 CNEL: • Schools; • Hospitals; • Rest Homes; • Long Term Care Facilities; • Mental Care Facilities; • Residential Uses; • Libraries; • Passive Recreation Uses; and • Places of worship	**Consistent.** The noise analysis addressed and, where appropriate, identified mitigation to reduce the significance of noise impacts.
N 1.4. Determine if existing land uses will present noise compatibility issues with proposed projects by undertaking site surveys.	**Consistent.** The noise analysis prepared for the project determined noise impacts were not significant.
N 1.5. Prevent and mitigate the adverse impacts of excessive noise exposure on the residents, employees, visitors, and noise-sensitive uses of the City.	
N 1.6. Minimize noise spillover or encroachment from commercial and industrial land uses into adjoining residential neighborhoods or noise-sensitive uses.	
N 1.7. Require proposed land uses, affected by unacceptably high noise levels, to have an acoustical specialist prepare a study of the noise problems and recommend structural and site design features that will adequately mitigate the noise problem.	**Consistent.** A noise analysis was prepared for the project and identified measures to reduce identified noise impacts.
N 2.2. Require a qualified acoustical specialist to prepare acoustical studies for proposed noise-sensitive projects within noise impacted areas to mitigate existing noise.	
N 2.3. Mitigate exterior and interior noises to the levels listed … to the extent feasible, for stationary sources	**Consistent.** The noise analysis prepared for the project determined noise impacts were not significant.
N 3.2. Require acoustical studies and subsequent approval by the Planning Department and the Office of Industrial Hygiene, to help determine effective noise mitigation strategies in noise-producing areas.	**Consistent.** A noise analysis was prepared for the project and identified measures to reduce identified noise impacts.
N 3.5. Require that a noise analysis be conducted by an acoustical specialist for all proposed projects that are noise producers. Include recommendations for design mitigation if the project is to be located either within proximity of a noise-	

Table 4.12.C: General Plan Consistency Analysis

General Plan Goals and Targets	General Plan Consistency Analysis
sensitive land use, or land designated for noise-sensitive land uses.	
N 4.2. Develop measures to control non-transportation noise impacts.	**Consistent.** Measures to reduce stationary noise impacts were identified.
N 4.4. Require that detailed and independent acoustical studies be conducted for any new or renovated land uses or structures determined to be potential major stationary noise sources.	**Consistent.** A noise analysis was prepared for the project and identified measures to reduce identified noise impacts.
N 4.8. Require that the parking structures, terminals, and loading docks of commercial or industrial land uses be designed to minimize the potential noise impacts of vehicles on the site as well as on adjacent land uses	**Consistent.** The noise analysis concluded the operational noise levels were not significant.
N 6.3. Require commercial or industrial truck delivery hours be limited when adjacent to noise-sensitive land uses unless there is no feasible alternative or there are overriding transportation benefits.	
N 8.3. Require development that generates increased traffic and subsequent increases in the ambient noise level adjacent to noise-sensitive land uses to provide for appropriate mitigation measures.	**Consistent.** Off-site traffic noise impacts were found to be less than significant. Mitigation was identified to reduce on-site traffic noise impacts to a less than significant level.
N 8.5. Employ noise mitigation practices when designing all future streets and highways, and when improvements occur along existing highway segments. These mitigation measures will emphasize the establishment of natural buffers or setbacks between the arterial roadways and adjoining noise-sensitive areas.	
N 12.1. Minimize the impacts of construction noise on adjacent uses within acceptable practices.	**Consistent.** The noise analysis determined construction noise impacts were less than significant with the incorporation of mitigation.
N 12.2. Ensure that construction activities are regulated to establish hours of operation in order to prevent and/or mitigate the generation of excessive or adverse noise impacts on surrounding areas.	
N 12.3. Condition subdivision approval adjacent to developed/occupied noise-sensitive land uses by requiring the developer to submit a construction-related noise mitigation plan to the City for review and approval prior to issuance of a grading permit. The plan must depict the location of construction equipment and how the noise from this equipment will be mitigated during construction of this project, through the use of such methods as: a. Temporary noise attenuation fences; b. Preferential location of equipment; and c. Use of current noise suppression technology and equipment.	
N 12.4. Require that all construction equipment utilizes noise	

Table 4.12.C: General Plan Consistency Analysis

General Plan Goals and Targets	General Plan Consistency Analysis
reduction features (e.g., mufflers and engine shrouds) that are no less effective than those originally installed by the manufacturer.	
N 13.1. Enforce the California Building Standards that sets standards for building construction to mitigate interior noise levels to the tolerable 45 CNEL limit. These standards are utilized in conjunction with the Uniform Building Code by the City's Building Department to ensure that noise protection is provided to the public. Some design features may include extra-dense insulation, double-paned windows, and dense construction materials.	**Consistent.** The project includes mitigation requiring the installation of appropriate sound-reducing material in areas subject to on-site traffic noise.
N 13.3. Incorporate acoustic site planning into the design of new development, particularly large scale, mixed-use, or master-planned development, through measures which may include: • Separation of noise-sensitive buildings from noise-generating sources; • Use of natural topography and intervening structure to shield noise-sensitive land uses; and • Adequate sound proofing within the receiving structure.	**Consistent.** The noise analysis concluded the operational noise levels were not significant.
C 3.28. Reduce transportation noise through proper roadway design and coordination of truck and vehicle routing.	**Consistent:** The noise analysis identified mitigation to offset noise from construction traffic.
C 5.3. Require parking areas of all commercial and industrial land uses that abut residential areas to be buffered and shielded by adequate landscaping.	**Consistent.** The noise analysis concluded the operational noise levels were not significant.
C 6.7. Require that the automobile and truck access of commercial and industrial land uses abutting residential parcels be located at the maximum practical distance from the nearest residential parcels to minimize noise impacts.	
C 20.6. Protect City residents from transportation generated noise hazards. Increased setbacks, walls, landscaped berms, other sound absorbing barriers, or a combination thereof shall be provided along freeways, expressways, and four-lane highways in order to protect adjacent noise-sensitive land uses from traffic-generated noise impacts. Additionally, noise generators such as commercial, manufacturing, and/or industrial activities shall use these techniques to mitigate exterior noise levels to no more than 60 decibels.	**Consistent.** Off-site traffic noise impacts were found to be less than significant. Mitigation was identified to reduce on-site traffic noise impacts to a less than significant level.

4.12.2.4 City Municipal Code

Chapter 9.48 of the City's Municipal Code has established noise standards relating to both construction and operational (stationary) noise sources. Section 9.48.040 establishes "general sound level standards" for exterior noise. For the residential areas, exterior noise levels shall not exceed 55 dBA during daytime hours (7:00 a.m.

to 10:00 p.m.) and shall not exceed 45 dBA during the nighttime hours (10:00 p.m. to 7:00 a.m.).

Section 9.48.020(I) of the Municipal Code states that noise emanating from private construction projects located within one quarter of a mile from an inhabited dwelling are exempt from the regulations in Chapter 9.48 if the construction occurs between the hours of 6:00 a.m. and 6:00 p.m. during the months of June through September, and between the hours of 7:00 a.m. and 6:00 p.m. during the months of October through May. Construction outside of these hours is subject to the noise limits in Chapter 9.48. However, the Noise Ordinance further states that the decibel standards in the Ordinance are not thresholds of significance for the purposes of CEQA.

4.12.3 Methodology

The evaluation of noise impacts associated with the project includes the following:

- Determination of the short-term construction noise impacts on off-site noise-sensitive uses;
- Determination of the long-term noise impacts, including vehicular traffic and stationary noise sources, on on-site and off-site noise-sensitive uses; and
- Determination of the required mitigation measures to reduce long-term noise impacts from all sources.

The noise study for the project focused on on-site and off-site noise impacts from roadway traffic and construction-related and operational noise impacts. The traffic noise levels provided in this analysis are based on the traffic forecasts found in project-specific Traffic Impact Analysis. To assess the off-site noise level impacts associated with the proposed project, noise contour boundaries were developed for Existing, Year 2018, and Year 2035 traffic conditions. Construction noise was estimated using the Federal Highway Administration (FHWA) Roadway Construction Noise Model (RCNM).

4.12.4 Thresholds of Significance

A noise impact is considered significant if the project results in:

- Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels;
- A substantial permanent increase in ambient noise levels in the project vicinity above existing levels without the proposed project;

- A substantial temporary or periodic increase in ambient noise levels in the project vicinity above noise levels existing without the proposed project; and/or
- Exposure of persons to excessive noise levels from a public, public use or private airport.

The standards within the *City General Plan* and *Municipal Code* determine the acceptable noise environment for proposed project and its vicinity. The standards are as follows:

- For residential properties, a new stationary source shall not cause the exterior noise level to exceed 55 dBA during daytime hours (7:00 a.m. to 10:00 p.m.) or 45 dBA during the nighttime hours (10:00 p.m. to 7:00 a.m.).
- Based on a review of agency guidelines, the City has determined that exposure of noise-sensitive receptors to construction noise levels above 85 dBA would result in a potentially significant impact.
- If short-term project generated construction source vibration levels could exceed the FTA maximum acceptable vibration standard of 80 vibration decibels (VdB) at noise sensitive receiver locations.

4.12.5 Less than Significant Impacts

The following impacts were identified as having a less than significant impact or no impact on the environment with implementation of the proposed project.

4.12.5.1 Airport Noise Impacts

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

The nearest airport to the project site is Skylark Field airport in the City of Lake Elsinore, located approximately 4.5 miles northwest of the project. The site is not located within any airport noise contour established for this facility; therefore, the proposed project would not have the potential to expose people to excessive noise levels from airport operations. In the absence of any such exposure, no airport-related noise impact would occur. No mitigation is warranted.

4.12.5.2 Groundborne Vibration Impacts

Threshold	Would the project result in exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels?

Construction activity can result in varying degrees of ground vibration, depending on the equipment and methods used, distance to the affected structures and soil type. It is expected that groundborne vibration from project construction activities would cause only intermittent, localized intrusion. The proposed project's construction activities most likely to cause vibration impacts are:

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

Groundborne vibration levels resulting from construction activities occurring within the project site were estimated using data published by the Federal Transit Administration (FTA). Construction activities that would occur within the project site are expected to include excavation and grading, which would have the potential to generate low levels of groundborne vibration.

The location of noise receivers identified in the Noise Impact Analysis is depicted in Figure 4.12.3. The anticipated project-related vibration level at each receptor is detailed in Table 4.12.D.

As detailed in Table 4.12.D, construction activity is not expected to generate vibration levels that exceed the FTA maximum acceptable vibration standard of 80 VdB. Further, activity at the receiver closest to the site is unlikely to be sustained during the entire construction period, but will occur rather only during the times that heavy construction equipment is operating near the project boundary. Moreover, construction at the project site will be restricted to daytime hours consistent with City requirements thereby eliminating potential vibration impacts during the sensitive nighttime hours. On this basis, no significant groundborne vibration impact would occur; therefore, no mitigation is warranted.

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FIGURE 4.12.3

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Project Boundary

Noise Receiver Location

Grove Park Mixed-Use Development
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Noise Receiver Locations

SOURCE: Google Earth, 2013; Urban Crossroads, Noise Impact Analysis, 2015.

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Table 4.12.D: Construction Equipment Vibration Levels

Noise Receiver[1]	Distance to Property Line (feet)	Receiver Vibration Level (VdB)[2]					Significant Impact?[3]
		Small Bulldozer	Jack-hammer	Loaded Trucks	Large Bulldozer	Peak Vibration	
R1	894	11.4	32.4	39.4	40.4	40.4	No
R2	147	34.9	55.9	62.9	63.9	63.9	No
R3	1,385	5.7	26.7	33.7	34.7	34.7	No
R4	2,085	0.4	21.4	28.4	29.4	29.4	No
R5	60	46.6	67.6	74.6	75.6	75.6	No
R6	1,539	4.3	25.3	32.3	33.3	33.3	No
R7	1,462	5.0	26.0	33.0	34.0	34.0	No
R8	1,823	2.1	23.1	30.1	31.1	31.1	No
R9	2,028	0.74	21.7	28.7	29.7	29.7	No
R10	3,321	0.0	15.3	22.3	23.3	23.3	No

Source: Table 9-7, Clinton Keith Road (APN: 380-250-003) "Grove Park" Noise Impact Analysis, City of Wildomar, Urban Crossroads, March 11, 2015.
1. Noise receiver locations identified in Figure 4.12.3.
2. Based on vibration source levels of construction.
3. Does the peak vibration exceed the FTA maximum acceptable standard of 80 VdB.

4.12.5.3 Operational Noise Impacts

Threshold	Would the project result in a substantial temporary, periodic, and/or permanent increase in ambient noise levels in the project vicinity above levels existing without the project? Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

The City's General Plan establishes noise level criteria for residential properties affected by stationary noise sources, Interior and exterior noise levels shall not exceed 55 L_{eq} and 65 L_{eq}, respectively, during daytime hours (7:00 a.m. to 10:00 p.m.). During nighttime hours (10:00 p.m. to 7:00 a.m.), interior and exterior noise levels shall not exceed 40 L_{eq} and 45 L_{eq}, respectively.

Project-related operational noise sources are expected to include parking lot vehicle movements and rooftop air conditioning units. Figure 4.12.4 depicts the location of on-site operational noise sources relative to proposed on-site residential uses. The projected operational noise levels assume the worst-case noise environment with parking lot vehicle movements and rooftop air conditioning units operating simultaneously. In reality, the noise level impacts will vary throughout the day.

Based on noise conditions at representative uses, parking lot activity generates a reference noise level of 61.8 dBA L_{eq} at a distance of 10 feet. The parking lot noise sources consist mainly of cars pulling in and out of spaces and the opening and

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FIGURE 4.12.4

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Grove Park Mixed-Use Development
Environmental Impact Report

Operational Noise Source and Receiver Locations

SOURCE: Urban Crossroads Noise Anaysis Report, March 2015.

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closing of car doors. For rooftop air conditioning equipment, reference noise levels at a distance of 5 feet were measured at 81.9 dBA L_{eq} (Table 4.12.E).

Table 4.12.E: Reference Noise Measurements (Operational Noise)

Noise Source	Duration (mm:ss) [1]	Distance From Source (feet)	Noise Source Height (feet)	Hourly Activity (minutes)	Hourly (dBA L_{eq})
Parking Lot Activity [2]	60:00	10	5	60	61.8
Air Conditioning Units [3]	1:00	5	25	30	81.9

1 Duration (minutes within the hour) of noise activity during peak hourly conditions.
2 As measured by Urban Crossroads, Inc. on 11/19/2013 at the Redlands McDonald's fast food restaurant.
3 As measured by Urban Crossroads, Inc. on 10/13/2010 at the Rancho Cordova Walmart #2457.
Source: Table 10-1, Clinton Keith Road (APN: 380-250-003) "Grove Park" Noise Impact Analysis, City of Wildomar, Urban Crossroads, March 11, 2015.

Based on representative noise measurements and the distance to on-site sensitive receivers (residential units), combined operational noise levels are projected to range from 50.4 to 51.2 dBA L_{eq} (Table 4.12.F). While this level of operational noise would not exceed the City's daytime standard, the stated project activities will exceed the City's nighttime exterior noise standards of 45 dBA L_{eq} at the residential land uses within the project site.

Table 4.12.F: Operational Noise Levels

Noise Source	Noise Levels at Receiver Locations (dBA L_{eq})[1]		
	Receiver 1	Receiver 2	Receiver 3
Parking Lot Activity	48.5	48.6	44.2
Air Conditioning Units	45.8	47.7	49.4
Combined Noise Levels	50.4	51.2	50.5

Source: Table 10-2, Clinton Keith Road (APN: 380-250-003) "Grove Park" Noise Impact Analysis, City of Wildomar, Urban Crossroads, March 11, 2015.
1. The locations of the receivers are identified in Figure 4.12.4.

It is reasonable to conclude that the nature of the adjacent office use would generally limit on-site vehicle movement and rooftop air conditioning unit activities to daytime hours (7:00 a.m. to 10:00 p.m.). Parking lot and air conditioning unit activities should be limited during the sensitive nighttime hours of 10:00 p.m. to 7:00 a.m. While some parking lot vehicle movement may occur during nighttime hours, any such noise will likely be overshadowed by background traffic noise from Clinton Keith Road.

As identified in previously referenced Table 4.12.C, the project is generally consistent with the City's General Plan. In addition, as the project would not generate operational noise levels in excess of the City's 55 dBA L_{eq} standard and would not operate during nighttime hours, the project would not generate noise in excess of standards established in the City's General Plan or noise ordinance. No significant operational noise impact would occur. In the absence of a significant impact, no mitigation is warranted.

4.12.6 Significant Impacts

4.12.6.1 Construction Noise Impacts

Impact 4.12.6.1: *The proposed project may result in significant noise impacts during construction.*

Threshold	Would the project result in a substantial temporary, periodic, and/or permanent increase in ambient noise levels in the project vicinity above levels existing without the project? Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Construction noise represents a short-term impact on the ambient noise levels. Noise generated by construction equipment, including trucks, power tools, concrete mixers, and portable generators, can reach high levels. Project construction is expected to occur in the following four stages:

- Grading;
- Building Construction;
- Paving; and
- Architectural Coating.

Based on FHWA published RCNM[1] and the projected mix of equipment used during typical construction activities, noise levels generated by heavy construction equipment can range from approximately 70 dBA to over 100 dBA when measured at 50 feet. However, these noise levels diminish with distance from the construction site at a rate of 6 dBA per doubling of distance. For example, a noise level of 78 dBA measured at 50 feet from the noise source to the receiver would be reduced to 72 dBA at 100 feet from the source to the receiver, and would be further reduced to 66 dBA at 200 feet from the source to the receiver.

To determine a threshold for construction noise, worker noise safety standards of other agencies were reviewed. The rationale is that if a maximum construction noise level is generally safe for construction workers who are exposed to the noise all day, then the noise level should be also be safe for adjacent residents who are typically farther from the noise source and exposed only briefly during the day.

Noise standards from the California Department of Transportation (Caltrans), the American National Standards Institute (ANSI), the American Conference of Governmental Industrial Hygienists (ACGIH), the Federal Railroad Administration

[1] The FHWA RCNM database of referenced construction noise emission levels is included as Appendix 9-1 of the Noise Impact Analysis (Appendix I) prepared for the project.

(FRA), and the California Department of Industrial Relations (DIR) were reviewed. Their limits are as follows:

- Caltrans Standard Specifications Section 14-8
  - Do not exceed 86 dBA L_{max} at 50 feet from the job site activities from 9 p.m. to 6 a.m.
- The American National Standards Institute
  - A10.46-2007, Hearing Loss Prevention in Construction and Demolition Workers. Applies to all construction and demolition workers with potential noise exposures (continuous, intermittent, and impulse) of 85 dBA and above.
- The American Conference of Governmental Industrial Hygienists
  - The ACGIH has established exposure guidelines for occupational exposure to noise in its Threshold Limit Values (TLVs) (85 dBA PEL with a 3 dBA exchange rate).
- Federal Railroad Administration
  - 49 CFR 227, Occupational Noise Exposure for Railroad Operating Employees. Requires railroads to conduct noise monitoring and implement a hearing conservation program for employees whose exposure to cab noise equals or exceeds an 8-hour time-weighted-average of 85 dBA. This final rule became effective February 26, 2007.
- California Department of Industrial Relations
  - Employers shall make hearing protectors available to all employees exposed to an 8-hour time-weighted average of 85 decibels or greater at no cost to the employees. Hearing protectors shall be replaced as necessary. The DIR also establishes time-based exposure limits to different noise levels; however, its table starts at the 90 dBA level.

As stated above, these agencies seem to settle on 85 dBA as a reasonable threshold of noise exposure for construction workers. It should be noted that this threshold is based on worker protection, which assumes continuous exposure for the worker. Construction activities would be intermittent and temporary, and it is unlikely that a noise-sensitive receptor would be exposed to construction-related noise levels above 85 dBA continuously for the length of the project's construction. However, the City has determined that exposure of noise-sensitive receptors to construction noise levels above 85 dBA would result in a potentially significant impact.

Using the stationary-source RCNM noise prediction model, calculations of the project construction noise level impacts at the ten noise receiver locations were completed. The unmitigated noise levels at the noise receiver locations for each phase of construction are identified in Table 4.12.G. The unmitigated peak construction noise levels are expected to range from 37.6 to 85.2 dBA L_{eq}. As detailed in Table 4.12.G, grading operations will generate the highest noise levels

during construction; therefore, this level of noise is identified as the "peak" noise used to identify construction-related noise impacts.

Table 4.12.G: Construction Noise Levels[1]

Noise Receiver[2]	Distance to Property Line (feet)[3]	Distance Attenuation (L_{eq} dBA)[4]	Grading Noise Levels	Building Construction Noise Level	Paving Equipment Noise Level	Architectural Coating Noise Levels	Peak Noise Level
R1	894	-25.0	61.7	57.7	55.8	49.0	61.7
R2	147	-9.4	77.4	73.4	71.5	64.7	77.4
R3	1,385	-28.8	57.9	53.9	52.0	45.2	57.9
R4	2,085	-32.4	54.4	50.3	48.5	41.6	54.4
R5	60	-1.6	85.2	81.2	79.3	72.4	85.2
R6	1,539	-29.8	57.0	53.0	51.1	44.3	57.0
R7	1,462	-29.3	57.5	53.4	51.5	44.7	57.5
R8	1,823	-31.2	55.5	51.5	49.6	42.8	55.5
R9	2,028	-32.1	54.6	50.6	48.7	41.9	54.6
R10	3,321	-36.4	50.3	46.3	44.4	37.6	50.3

Source: Tables 9-1 through 9-5, Clinton Keith Road (APN: 380-250-003) "Grove Park" Noise Impact Analysis, City of Wildomar, Urban Crossroads, March 11, 2015.

1. Assumes equipment mix and operational characteristics detailed in the Noise Impact Analysis.
2. Noise Receiver locations identified in Figure 4.12.3.
3. Distance from nearest point of construction activity to the nearest receiver.
4. Point (stationary) source drop-off rate of 6.0 dBA per doubling of distance.

Construction noise experienced by the closest sensitive receiver could reach up to 85.2 L_{eq} dBA. An attainable attenuation of 10 dBA is achievable through the use of temporary construction noise barriers. With the use of construction barriers, construction noise would be attenuated to levels below the City's identified construction noise threshold. Table 4.12.H identifies the attenuated levels of construction noise at the noise receivers.

Even with attenuated noise levels, the multiple-family residences south of the project site (Noise Receiver 5) could experience noise in excess of the construction noise standard identified by the City. The City's Municipal Code (Section 9.48.020(I)) exempts noise from construction within 0.25 mile from an inhabited dwelling from this standard provided the following conditions are met:

- Construction does not occur between the hours of 6:00 p.m. and 6:00 a.m. during the months of June through September; and
- Construction does not occur between the house of 6:00 p.m. and 7:00 a.m. during the months of October through May.

Table 4.12.H: Attenuated Peak Construction Noise Levels

Noise Receiver[1]	Peak Construction Noise Level (dBA L_{eq})	Construction Noise Level Criteria (dBA L_{eq})[2]	Compliance?	Temporary Noise Barrier Attenuation	Construction Noise Levels with Attenuation (dBA L_{eq})	Compliance with Attenuation?[3]
R1	61.7	55.0	No	-10.0	51.7	Yes
R2	77.4	55.0	No	-10.0	67.4	Yes
R3	57.9	55.0	No	-10.0	47.9	Yes
R4	54.4	55.0	Yes	-10.0	44.4	Yes
R5	85.2	55.0	No	-10.0	75.2	**Yes**
R6	57.0	55.0	No	-10.0	47.0	Yes
R7	57.5	55.0	No	-10.0	47.5	Yes
R8	55.5	55.0	No	-10.0	45.5	Yes
R9	54.6	55.0	Yes	-10.0	44.6	Yes
R10	50.3	55.0	Yes	-10.0	40.3	Yes

Source: Table 9-6, Clinton Keith Road (APN: 380-250-003) "Grove Park" Noise Impact Analysis, City of Wildomar, Urban Crossroads, March 11, 2015.
1. Noise Receiver locations identified in Figure 4.12.3.
2. Based on the maximum City exterior noise level standards.
3. Based on the construction noise threshold established by the City (see discussion above.)

Because construction noise may create a temporary increase in noise, the following mitigation has been identified.

Mitigation Measures. The following measures will further reduce the short-term construction-related noise impacts associated with the proposed project:

4.12.6.1A A noise mitigation plan shall be prepared and submitted to the City for review and approval prior to start of construction. The plan shall identify the location of construction equipment and how the noise from this equipment will be mitigated during construction of the project. Methods to mitigate construction noise may include (but shall not be limited to):

- Install temporary noise control barriers, or equally effective noise protection measures, that provide a minimum noise level attenuation of 10 dBA when project construction occurs near existing noise-sensitive structures. The noise control barrier must present a solid face from top to bottom. The noise control barrier must be high enough and long enough to block the view of the noise source. Unnecessary openings shall not be made. The noise barriers must be maintained and any damage promptly repaired. Gaps, holes, or weaknesses in the barrier or openings between the barrier and the ground shall be promptly repaired.
- The noise control barriers and associated elements shall be completely removed and the site appropriately restored upon the conclusion of the construction activity.

- During all project site construction, the construction contractors shall equip all construction equipment, fixed or mobile, with properly operating and maintained mufflers, consistent with manufacturers' standards. The construction contractor shall place all stationary construction equipment so that emitted noise is directed away from the noise-sensitive receivers nearest the project site.
- The construction contractor shall locate equipment staging in areas that will create the greatest distance between construction-related noise sources and noise-sensitive receivers nearest the project site during all project construction.
- The construction contractor shall limit haul truck deliveries to the same hours specified in the Clinton Keith Road (APN: 380-250-003) Traffic Impact Analysis with no more than 16 (two-way) haul trips per hour between 7:00 a.m. and 10:00 a.m., up to 30 (two-way) haul trips per hour between 10:00 a.m. and 2:00 p.m., and no more than 16 (two-way) haul trips per hour between 2:00 p.m. and 4:00 p.m. To the extent feasible, the plan shall denote haul routes that do not pass sensitive land uses or residential dwellings.

4.12.6.1B Prior to approval of grading plans and/or issuance of building permits, plans shall include a requirement that noise-generating project construction activities shall occur between the permitted hours of 6:00 a.m. and 6:00 p.m. during the months of June through September, and between the hours of 7:00 a.m. and 6:00 p.m. during the months of October through May (Section 9.48.020). The project construction supervisor shall ensure compliance with the requirement and the City shall conduct periodic inspection at its discretion.

4.12.6.1C The construction contractor shall post a publicly visible sign with the telephone number and person to contact regarding noise complaints. The construction manager, within 72 hours of receipt of a noise complaint, shall either take corrective actions or, if immediate action is not feasible, provide a plan or corrective action to address the source of the noise complaint.

Level of Significance after Mitigation. While noise from construction activities will exceed the City's noise standard, construction noise is generally exempt from this standard. The provision of a temporary noise barrier and adherence to the requirements detailed in **Mitigation Measures 4.12.6.1A** through **4.12.6.1C** would further limit the effect of construction noise on nearby uses. Compliance with applicable provisions of the City's construction noise ordinance and the stated mitigation will reduce potential construction-related noise impacts to a less than significant level.

4.12.6.2 Traffic Noise Impacts

Impact 4.12.6.2: *The project may result in a significant increase in ambient noise levels from project-generated traffic.*

Threshold	Would the project result in a substantial temporary, periodic, and/or permanent increase in ambient noise levels in the project vicinity above levels existing without the project? Would the project result in exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?

Offsite Mobile-Source Noise Levels. To assess the off-site transportation CNEL noise level impacts associated with development of the proposed project, noise contours were developed based on the traffic volumes modeled in the Traffic Impact Analysis prepared for the project. The noise contours developed represent the equal levels of noise exposure and are measured in CNEL from the center of the roadway. Noise contours were developed for the following traffic scenarios:

- *Existing Without/With Project:* This scenario refers to the existing present-day noise conditions, without the project and with the construction of the proposed project.
- *Year (2018) Without/With Project:* This scenario refers to the background noise conditions at future Year 2018 with and without the proposed project. This scenario corresponds to 2018 conditions and includes all cumulative projects identified in the Traffic Impact Analysis.
- *Year (2035) Without/With Project:* This scenario refers to the background noise conditions at future Year 2035 with and without the proposed project. This scenario corresponds to 2035 conditions and includes all cumulative projects identified in the Traffic Impact Analysis.

The noise study examined potential long-term noise impacts of the project by modeling the increase in traffic noise on 20 study area roadway segments. Both off-site and on-site noise impacts were considered. For mobile sources, the significance of noise impacts is based on the perceptibility of project-induced noise. A significant off-site traffic noise impact occurs when:

- The “Without Project” noise levels are less than 60 dBA and the project creates a “readily perceptible” 5 dBA or greater project-related noise level increase; or
- The “Without Project” noise levels range from 60 to 65 dBA and the project creates a “barely perceptible” 3 dBA or greater project noise level increase; or
- The “Without Project” noise levels already exceed 65 dBA, and the project creates a community noise level impact of greater than 1.5 dBA.

Tables 4.12.I through 4.12.K detail the results of the roadway traffic noise analysis.

Under "Existing with Project" conditions (Table 4.12.L), "readily perceptible" exterior noise levels will increase of up to 12.3 dBA CNEL at Yamas Drive south of Clinton Keith Road and 10.0 dBA CNEL on Yamas Drive, south of Driveways 2 and 3. Because noise levels at these locations are currently below 60 dBA, this increase would typically be considered a significant impact. However, there are no sensitive receptors that would be affected by this increase in long-term noise; therefore, no significant project-related impact would occur under the "Existing with Project" condition. No mitigation is required.

As detailed in Table 4.12.M, "Year 2018 with Project" exterior noise levels will increase of up to 12.3 dBA CNEL and 10.0 dBA CNEL would occur at the same locations as the "Existing with Project" condition. While the project will create a potentially significant off-site traffic noise level impact on roadway segments under the "Year 2018" condition, the expected noise level of 53.0 dBA CNEL on Yamas Drive does not exceed the noise level criteria and no off-site noise-sensitive residential receivers are located near the affected roadway segment for Year 2018 conditions. Therefore, the project will have a less than significant off-site traffic noise impact under this "Year 2018" condition.

As detailed in Table 4.12.N, the project is expected to generate an exterior noise level increase of up to 20.1 dBA CNEL. The impacts will be experienced on the planned extension of Yamas Drive, south of Clinton Keith Road, due to traffic noise along the new roadway segment south of Driveways 2 and 3. Even though the expected unmitigated exterior noise level of 60.8 dBA CNEL does not exceed the noise level criteria, based on the cumulative noise impact significance criteria, the project will create a potentially significant off-site traffic noise level impact on the study area roadway segments for Year 2035 conditions. However, there are no off-site noise-sensitive residential land uses that would be affected by the exterior noise level increase. Therefore, the project will create a less than significant off-site traffic noise level impact on the study area roadway segments for Year 2035 conditions.

On-site Mobile Source Noise Levels. The noise analysis examined the project-related traffic noise impact on on-site uses. The City's General Plan identifies a noise standard for residential uses of 65 dBA CNEL (exterior) and 45 dBA CNEL (interior). For commercial uses, the City maintains a noise standard of 70 dBA CNEL (exterior) and 45 dBA (interior).[1] Future noise levels were calculated at the first-, second-, and third-floor building façades (refer to Table 4.12.O).

[1] The transportation noise standards (mobile noise source criteria) are derived from standards contained in the *General Plan Guidelines*, a publication of the California Office of Planning and Research. For noise sensitive residential uses the exterior noise levels shall not exceed 65 dBA CNEL. In addition, the City requires that residential developments achieve an indoor noise standard of 45 dBA CNEL with windows closed, based on the California Building Code requirements. Consistent with the residential land use noise criteria and the transportation noise standards of the Noise Element, this noise study and EIR analysis has been prepared to satisfy an exterior noise level of less than 65 dBA CNEL for residential land uses and 70 dBA CNEL for office and commercial land uses, and an interior noise level of less than 45 dBA CNEL.

Table 4.12.I: Noise Contours – Existing With and Without Project

ID	Road	Segment	CNEL at 100 Feet (dBA)		Distance to Contour (Feet)							
					70 dBA CNEL		65 dBA CNEL		60 dBA CNEL		55 dBA CNEL	
			Without	With	Without	With	Without	With	Without	With	Without	with
1	I-15 Southbound Ramps	North of Clinton Keith Rd.	66.1	66.2	55	56	119	121	257	260	553	560
2	I-15 Southbound Ramps	South of Clinton Keith Rd.	64.9	65.0	46	47	98	101	212	217	456	467
3	I-15 Northbound Ramps	North of Clinton Keith Rd.	65.3	65.4	48	49	104	106	224	228	483	491
4	I-15 Northbound Ramps	South of Clinton Keith Rd.	65.7	65.8	52	53	112	114	242	245	520	528
5	George Av.	North of Clinton Keith Rd.	57.9	58.1	RW	RW	33	34	72	74	155	160
6	Yamas Dr.	South of Clinton Keith Rd.	40.7	53.0	RW	RW	RW	RW	RW	34	RW	73
7	Yamas Dr.	South of Driveway 2	40.7	50.7	RW	RW	RW	RW	RW	24	RW	52
8	Yamas Dr.	South of Driveway 3	40.7	50.7	RW	RW	RW	RW	RW	24	RW	52
9	Yamas Dr.	North of Prielipp Rd.	49.1	51.1	RW	RW	RW	RW	19	26	55	55
10	Clinton Keith Rd.	West of I-15 Southbound Ramps	66.7	66.7	60	60	129	130	278	280	598	604
11	Clinton Keith Rd.	East of I-15 Southbound Ramps	66.6	66.7	59	60	127	130	274	280	590	604
12	Clinton Keith Rd.	East of I-15 Northbound Ramps	66.6	66.8	59	61	128	132	275	285	593	615
13	Clinton Keith Rd.	West of Georgia Av.	65.6	65.9	51	53	109	115	236	247	507	532
14	Clinton Keith Rd.	East of George Av.	65.8	66.1	52	55	113	119	243	256	524	551
15	Clinton Keith Rd.	East of Inland Valley Dr.	64.1	64.6	40	44	87	94	188	203	404	437
16	Clinton Keith Rd.	West of Yamas Dr.	64.1	64.6	40	44	87	94	188	202	404	435
17	Clinton Keith Rd.	East of Yamas Dr.	64.2	64.3	41	42	89	90	191	194	412	417

Table 4.12.I: Noise Contours – Existing With and Without Project

ID	Road	Segment	CNEL at 100 Feet (dBA)		Distance to Contour (Feet)							
					70 dBA CNEL		65 dBA CNEL		60 dBA CNEL		55 dBA CNEL	
			Without	With	Without	With	Without	With	Without	With	Without	with
18	Prielipp Rd.	East of Yamas Dr.	59.6	59.9	20	21	44	46	94	99	203	212
19	Prielipp Rd.	West of Elizabeth Ln.	59.4	59.7	20	21	42	44	91	95	196	205
20	Prielipp Rd.	West of Elizabeth Ln.	59.3	59.6	19	20	42	44	90	94	193	203

Source: Tables 6-1 and 6-2, Clinton Keith Road (APN: 380-250-003) "Grove Park" Noise Impact Analysis, City of Wildomar, Urban Crossroads, March 11, 2015.
RW: The location of the respective noise contour falls within the right-of-way of the road.

Table 4.12.J: Noise Contours – Year 2018 With and Without Project

ID	Road	Segment	CNEL at 100 Feet (dBA)		Distance to Contour (Feet)							
					70 dBA CNEL		65 dBA CNEL		60 dBA CNEL		55 dBA CNEL	
			Without	With	Without	With	Without	With	Without	With	Without	With
1	I-15 Southbound Ramps	North of Clinton Keith Rd.	67.7	67.7	70	71	151	152	325	328	701	708
2	I-15 Southbound Ramps	South of Clinton Keith Rd.	66.8	66.8	61	62	131	133	283	286	609	616
3	I-15 Northbound Ramps	North of Clinton Keith Rd.	67.0	67.1	63	64	136	138	294	297	633	639
4	I-15 Northbound Ramps	South of Clinton Keith Rd.	67.4	67.4	67	68	144	146	311	314	669	676
5	George Av.	North of Clinton Keith Rd.	59.4	59.5	20	20	42	43	91	93	196	201
6	Yamas Dr.	South of Clinton Keith Rd.	40.7	53.0	RW	RW	RW	RW	RW	34	RW	73
7	Yamas Dr.	South of Driveway 2	40.7	50.7	RW	RW	RW	RW	RW	24	RW	52
8	Yamas Dr.	South of Driveway 3	40.7	50.7	RW	RW	RW	RW	RW	24	RW	52
9	Yamas Dr.	North of Prielipp Rd.	53.5	54.1	RW	RW	RW	19	37	41	79	87
10	Clinton Keith Rd.	West of I-15 Southbound Ramps	68.1	68.1	75	75	161	162	346	349	746	752

Table 4.12.J: Noise Contours – Year 2018 With and Without Project

ID	Road	Segment	CNEL at 100 Feet (dBA)		Distance to Contour (Feet)							
					70 dBA CNEL		65 dBA CNEL		60 dBA CNEL		55 dBA CNEL	
			Without	With	Without	With	Without	With	Without	With	Without	With
11	Clinton Keith Rd.	East of I-15 Southbound Ramps	68.4	68.5	78	79	168	170	361	366	778	788
12	Clinton Keith Rd.	East of I-15 Northbound Ramps	68.7	68.8	82	84	176	180	380	388	819	835
13	Clinton Keith Rd.	West of Georgia Av.	67.8	68.0	71	73	154	158	332	341	715	734
14	Clinton Keith Rd.	East of George Av.	67.9	68.1	72	74	155	160	334	345	720	744
15	Clinton Keith Rd.	East of Inland Valley Dr.	66.4	66.7	58	60	124	130	268	280	576	604
16	Clinton Keith Rd.	West of Yamas Dr.	66.4	66.7	58	60	124	129	268	279	576	601
17	Clinton Keith Rd.	East of Yamas Dr.	66.5	66.5	58	59	126	127	270	273	583	589
18	Prielipp Rd.	East of Yamas Dr.	61.8	62.0	28	29	61	63	132	135	283	291
19	Prielipp Rd.	West of Elizabeth Ln.	61.5	61.6	27	28	58	60	125	129	269	277
20	Prielipp Rd.	West of Elizabeth Ln.	61.7	61.9	28	29	61	62	131	133	281	287

Source: Tables 6-3 and 6-4, Clinton Keith Road (APN: 380-250-003) "Grove Park" Noise Impact Analysis, City of Wildomar, Urban Crossroads, March 11, 2015.
RW: The location of the respective noise contour falls within the right-of-way of the road.

Table 4.12.K: Noise Contours – Year 2035 With and Without Project

ID	Road	Segment	CNEL at 100 Feet (dBA)		Distance to Contour (Feet)							
					70 dBA CNEL		65 dBA CNEL		60 dBA CNEL		55 dBA CNEL	
			Without	With	Without	With	Without	With	Without	With	Without	with
1	I-15 Southbound Ramps	North of Clinton Keith Rd.	70.1	70.1	102	102	219	220	472	475	1,018	1,023
2	I-15 Southbound Ramps	South of Clinton Keith Rd.	64.9	65.0	46	46	98	100	212	215	456	464
3	I-15 Northbound Ramps	North of Clinton Keith Rd.	70.3	70.3	104	105	225	226	485	487	1,044	1,049

Table 4.12.K: Noise Contours – Year 2035 With and Without Project

ID	Road	Segment	CNEL at 100 Feet (dBA)		Distance to Contour (Feet)							
					70 dBA CNEL		65 dBA CNEL		60 dBA CNEL		55 dBA CNEL	
			Without	With	Without	With	Without	With	Without	With	Without	with
4	I-15 Northbound Ramps	South of Clinton Keith Rd.	67.1	67.1	64	64	137	138	295	298	636	643
5	George Av.	North of Clinton Keith Rd.	61.5	61.5	27	27	58	59	125	127	269	273
6	Yamas Dr.	South of Clinton Keith Rd.	60.5	61.1	23	25	50	55	108	118	233	254
7	Yamas Dr.	South of Driveway 2	40.7	60.8	RW	24	RW	52	RW	113	RW	243
8	Yamas Dr.	South of Driveway 3	40.7	60.8	RW	24	RW	52	RW	113	RW	243
9	Yamas Dr.	North of Prielipp Rd.	58.2	58.5	RW	RW	35	37	76	79	163	170
10	Clinton Keith Rd.	West of I-15 Southbound Ramps	70.3	70.3	105	105	226	227	487	489	1,049	1,053
11	Clinton Keith Rd.	East of I-15 Southbound Ramps	70.4	70.5	106	108	229	232	494	499	1,065	1,076
12	Clinton Keith Rd.	East of I-15 Northbound Ramps	69.7	69.8	95	97	205	208	442	449	952	967
13	Clinton Keith Rd.	West of Georgia Av.	69.7	69.8	95	97	205	208	442	346	952	967
14	Clinton Keith Rd.	East of George Av.	67.9	68.1	73	75	156	161	337	360	726	746
15	Clinton Keith Rd.	East of Inland Valley Dr.	68.2	68.4	75	78	162	167	350	360	753	776
16	Clinton Keith Rd.	West of Yamas Dr.	68.2	68.3	75	77	162	185	350	399	753	775
17	Clinton Keith Rd.	East of Yamas Dr.	69.0	69.0	85	86	184	98	397	210	855	860
18	Prielipp Rd.	East of Yamas Dr.	64.8	64.8	45	45	96	98	207	210	447	453
19	Prielipp Rd.	West of Elizabeth Ln.	64.8	64.8	45	45	96	117	207	210	447	453
20	Prielipp Rd.	West of Elizabeth Ln.	66.0	66.0	54	54	116		250	253	538	544

Source: Tables 6-5 and 6-6, Clinton Keith Road (APN: 380-250-003) “Grove Park” Noise Impact Analysis, City of Wildomar, Urban Crossroads, March 11, 2015.
RW: The location of the respective noise contour falls within the right-of-way of the road.

Table 4.12.L: Existing Off-site Traffic Noise Impacts

ID	Road	Segment	CNEL at 100 Feet (dBA)			Potential Significant Impact
			Without Project	With Project	Project Addition	
1	I-15 Southbound Ramps	North of Clinton Keith Rd.	66.1	66.2	0.1	No
2	I-15 Southbound Ramps	South of Clinton Keith Rd.	64.9	65.0	0.1	No
3	I-15 Northbound Ramps	North of Clinton Keith Rd.	65.3	65.4	0.1	No
4	I-15 Northbound Ramps	South of Clinton Keith Rd.	65.7	65.8	0.1	No
5	George Av.	North of Clinton Keith Rd.	57.9	58.1	0.2	No
6	Yamas Dr.	South of Clinton Keith Rd.	40.7	53.0	12.3	Yes
7	Yamas Dr.	South of Driveway 2	40.7	50.7	10.0	Yes
8	Yamas Dr.	South of Driveway 3	40.7	50.7	10.0	Yes
9	Yamas Dr.	North of Prielipp Rd.	49.1	51.1	2.0	No
10	Clinton Keith Rd.	West of I-15 Southbound Ramps	66.7	66.7	0.0	No
11	Clinton Keith Rd.	East of I-15 Southbound Ramps	66.6	66.7	0.1	No
12	Clinton Keith Rd.	East of I-15 Northbound Ramps	66.6	66.8	0.2	No
13	Clinton Keith Rd.	West of Georgia Av.	65.6	65.9	0.3	No
14	Clinton Keith Rd.	East of George Av.	65.8	66.1	0.3	No
15	Clinton Keith Rd.	East of Inland Valley Dr.	64.1	64.6	0.5	No
16	Clinton Keith Rd.	West of Yamas Dr.	64.1	64.6	0.5	No
17	Clinton Keith Rd.	East of Yamas Dr.	64.2	64.3	0.1	No
18	Prielipp Rd.	East of Yamas Dr.	59.6	59.9	0.3	No
19	Prielipp Rd.	West of Elizabeth Ln.	59.4	59.7	0.3	No
20	Prielipp Rd.	West of Elizabeth Ln.	59.3	59.6	0.3	No

Source: Table 6-7, Clinton Keith Road (APN: 380-250-003) “Grove Park” Noise Impact Analysis, City of Wildomar, Urban Crossroads, March 11, 2015.

Table 4.12.M: Year 2018 Project-Related Traffic Noise

ID	Road	Segment	CNEL at 100 Feet (dBA)			Potential Significant Impact
			No Project	With Project	Project Addition	
1	I-15 Southbound Ramps	North of Clinton Keith Rd.	67.7	67.7	0.0	No
2	I-15 Southbound Ramps	South of Clinton Keith Rd.	66.8	66.8	0.0	No
3	I-15 Northbound Ramps	North of Clinton Keith Rd.	67.0	67.1	0.1	No
4	I-15 Northbound Ramps	South of Clinton Keith Rd.	67.4	67.4	0.0	No
5	George Av.	North of Clinton Keith Rd.	59.4	59.5	0.1	No
6	Yamas Dr.	South of Clinton Keith Rd.	40.7	53.0	12.3	Yes
7	Yamas Dr.	South of Driveway 2	40.7	50.7	10.0	Yes
8	Yamas Dr.	South of Driveway 3	40.7	50.7	10.0	Yes
9	Yamas Dr.	North of Prielipp Rd.	53.5	54.1	0.6	No
10	Clinton Keith Rd.	West of I-15 Southbound Ramps	68.1	68.1	0.0	No
11	Clinton Keith Rd.	East of I-15 Southbound Ramps	68.4	68.5	0.1	No
12	Clinton Keith Rd.	East of I-15 Northbound Ramps	68.7	68.8	0.1	No
13	Clinton Keith Rd.	West of Georgia Av.	67.8	68.0	0.2	No
14	Clinton Keith Rd.	East of George Av.	67.9	68.1	0.2	No
15	Clinton Keith Rd.	East of Inland Valley Dr.	66.4	66.7	0.3	No
16	Clinton Keith Rd.	West of Yamas Dr.	66.4	66.7	0.3	No
17	Clinton Keith Rd.	East of Yamas Dr.	66.5	66.5	0.0	No
18	Prielipp Rd.	East of Yamas Dr.	61.8	62.0	0.2	No
19	Prielipp Rd.	West of Elizabeth Ln.	61.5	61.6	0.1	No
20	Prielipp Rd.	West of Elizabeth Ln.	61.7	61.9	0.2	No

Source: Table 6-8, Clinton Keith Road (APN: 380-250-003) “Grove Park” Noise Impact Analysis, City of Wildomar, Urban Crossroads, March 11, 2015.

Table 4.12.N: Year 2035 Project-Related Traffic Noise

ID	Road	Segment	CNEL at 100 Feet (dBA)			Potential Significant Impact
			No Project	With Project	Project Addition	
1	I-15 Southbound Ramps	North of Clinton Keith Rd.	70.1	70.1	0.0	No
2	I-15 Southbound Ramps	South of Clinton Keith Rd.	64.9	65.0	0.1	No
3	I-15 Northbound Ramps	North of Clinton Keith Rd.	70.3	70.3	0.0	No
4	I-15 Northbound Ramps	South of Clinton Keith Rd.	67.1	67.1	0.0	No
5	George Av.	North of Clinton Keith Rd.	61.5	61.5	0.0	No
6	Yamas Dr.	South of Clinton Keith Rd.	60.5	61.1	0.6	No
7	Yamas Dr.	South of Driveway 2	40.7	60.8	20.1	Yes
8	Yamas Dr.	South of Driveway 3	40.7	60.8	20.1	Yes
9	Yamas Dr.	North of Prielipp Rd.	58.2	58.5	0.3	No
10	Clinton Keith Rd.	West of I-15 Southbound Ramps	70.3	70.3	0.0	No
11	Clinton Keith Rd.	East of I-15 Southbound Ramps	70.4	70.5	0.1	No
12	Clinton Keith Rd.	East of I-15 Northbound Ramps	69.7	69.8	0.1	No
13	Clinton Keith Rd.	West of Georgia Av.	69.7	69.8	0.1	No
14	Clinton Keith Rd.	East of George Av.	67.9	68.1	0.2	No
15	Clinton Keith Rd.	East of Inland Valley Dr.	68.2	68.4	0.2	No
16	Clinton Keith Rd.	West of Yamas Dr.	68.2	68.3	0.1	No
17	Clinton Keith Rd.	East of Yamas Dr.	69.0	69.0	0.0	No
18	Prielipp Rd.	East of Yamas Dr.	64.8	64.8	0.0	No
19	Prielipp Rd.	West of Elizabeth Ln.	64.8	64.8	0.0	No
20	Prielipp Rd.	West of Elizabeth Ln.	66.0	66.0	0.0	No

Source: Table 6-9, Clinton Keith Road (APN: 380-250-003) “Grove Park” Noise Impact Analysis, City of Wildomar, Urban Crossroads, March 11, 2015.

Table 4.12.O: On-site Related Noise Levels

Building	Noise Standard (dBA CNEL)	First Floor		Second Floor		Third Floor	
		Noise Level at Façade	Interior Noise Level[1]	Noise Level at Façade	Interior Noise Level[1]	Noise Level at Façade	Interior Noise Level[1]
Building 1	70 (exterior) 45 (interior)	**69.3**	44.3	**69.2**	—[3]	69.1	—[3]
Building 4		61.9	36.9	61.9	36.9	61.9	—[3]
Building 3		62.0	37.0	62.0	—[3]	62.0	—[3]
Building 2		68.9	43.9	68.8	—[3]	68.8	—[3]
Building 2		64.4	39.4	64.2	—[3]	63.8	—[3]
Building 3		56.9	31.9	56.9	—[3]	56.8	—[3]
Building 4		52.1	27.1	52.1	27.1	52.1	—[3]
Residential Building 6	65 (exterior) 45 (interior)	41.3	41.3[2]	52.3	27.3	52.3	—[3]
Residential Building 10		43.9	43.9[2]	55.0	30.0	55.0	—[3]
Residential Building 11		51.7	26.7	**64.6**	39.6	**64.4**	—[3]
Residential Building 12		43.8	43.8	54.9	29.9	54.9	29.9
Residential Building 13		50.8	25.8	50.8	25.8	50.8	—[3]

Source: Tables 7-2 through 7-4, Clinton Keith Road (APN: 380-250-003) “Grove Park” Noise Impact Analysis, City of Wildomar, Urban Crossroads, March 11, 2015.

[1] A reduction of 25 dBA is achieved through use of standard building construction, including minimum STC rating greater than 27.

[2] Reduction was not applied where interior noise level met 45 dBA CNEL standard.

[3] Lot does not have this level floor.

No exceedance of exterior noise level standards would occur. Future exterior noise levels at the first-floor building façades are expected to range from 41.3 to 69.3 dBA CNEL. The second-floor façades are estimated to range from 50.8 to 69.2 dBA CNEL while exterior noise levels at the third-floor facades are estimated to range from 50.8 to 69.1 dBA CNEL. The interior noise level is the difference between the predicted exterior noise level at the building façade and the noise reduction attributable to the structure. Since exterior noise levels approach the established standard (Commercial Building 1 and Residential Building 11, second- and third-floor façades), the noise study analyzed "windows closed" conditions to ensure interior noise is below the 45 dBA CNEL interior standard.

With "windows open," typical building construction will reduce noise by approximately 12 dBA. A noise reduction of at least 25 dBA is typically achieved under a "windows open" condition. However, sound leaks, cracks, and openings within the window assembly can greatly diminish its effectiveness in reducing noise. Several methods are used to improve interior noise reduction, including (1) weather-stripped solid core exterior doors; (2) upgraded dual-glazed windows; (3) mechanical ventilation/air conditioning; and (4) exterior wall/roof assemblies free of cut outs or openings. Therefore, the project's traffic-related noise impact is potentially significant and mitigation is required.

Mitigation Measures. The following measure has been identified to reduce traffic-related noise impacts to on-site uses:

4.12.6.2A Buildings adjacent to Clinton Keith Road and Yamas Drive will require a Noise Level Reduction (NLR) of up to 24.3 dBA and a windows closed condition requiring a means of mechanical ventilation (e.g., air conditioning). In order to meet the City of Wildomar 45 dBA CNEL interior noise standards, the project plans shall include measures to achieve the following:

- *Windows:* All windows and sliding glass doors shall be well fitted, with well weather-stripped assemblies and shall have a minimum sound transmission class (STC) rating of 27. Air gaps and rattling shall not be permitted.
- *Doors:* All exterior doors shall be well weather-stripped solid core assemblies at least 1.25 inches thick.
- *Roof: Roof sheathing of wood construction shall be well fitted or caulked* plywood of at least 0.5 inch thick. Ceilings shall be well fitted, well-sealed gypsum board of at least 0.5 inch thick. Insulation with at least a rating of R-19 shall be used in the attic space.
- *Ventilation:* Arrangements for any habitable room shall be such that any exterior door or window can be kept closed when the room is in use. A forced air circulation system (e.g., air conditioning) shall be

provided which satisfy the requirements of the Uniform Mechanical Code.

Level of Significance after Mitigation. The incorporation of building standards detailed in **Mitigation Measure 4.12.6.2A** will ensure interior noise levels at on-site structures do not exceed established City standards; therefore, noise impacts to on-site uses are reduced to a less than significant level.

4.12.7 Cumulative Impacts

The cumulative area for noise impacts is the City. Implementation of the project would result in the introduction of new noise sources and levels from on-site activities and from increased traffic volumes on local roadways.

Construction crew commutes and the transport of construction equipment, and materials to the project area would incrementally increase noise levels on access roads leading to the site. Secondary sources of noise would include noise generated during excavation, grading, and building erection on the project site. The net increase in project site noise levels generated by these activities and other sources has been quantitatively estimated and compared to the applicable noise standards and thresholds of significance. Although it is not possible to predict if contiguous properties may be constructed at the same time, each project's adherence to applicable provisions of the City's Municipal Code regulating construction activities would render cumulative construction-related noise impacts less than significant.

The project's anticipated traffic volumes were utilized to determine existing, Year 2018, and Year 2035 traffic noise. The cumulative traffic noise analysis indicates that the project's contributions to roadway noise levels may cause a potentially significant impact to future sensitive noise receptors. Currently, the area surrounding the project site is largely undeveloped with noise-sensitive receptors only located north of Clinton Keith Road and south of the project site on Yamas Drive. These roadway segments are not expected to experience significant exterior noise level impacts under "With Project" conditions. Given that the exterior noise level increases will largely be at the driveways to the project site on Yamas Drive and remain below exterior noise level criteria, the project will not create a substantial permanent increase in traffic-related noise levels or expose persons to noise levels in excess of the exterior noise level standards.

On-site operational noises are individual occurrences and are not typically additive in nature. Noise sources would have to be adjacent to or in close proximity to one another in order for individual noise sources to intermingle. Similarly, noise receivers would also have to be adjacent to or in close proximity to the noise generators. It is reasonable to conclude the owner/operator/occupant of adjacent properties would adhere to applicable provisions of the City's Municipal Code related to operational and nuisance noise from their respective properties; therefore, the cumulative nature

of operational noise from the project and other development would be less than significant. In the absence of a cumulatively significant noise impact, no mitigation is required.

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4.13 POPULATION, HOUSING, AND EMPLOYMENT

This section identifies population and housing conditions within the City and addresses potential impacts that may result from the construction and operation of the project. The analysis is based on population and housing projections identified by the California Department of Finance (DOF), the City's General Plan and Housing Element, Southern California Association of Governments (SCAG), and data from the Riverside County Traffic and Land Agency (RCTLA) Wildomar 2013 Progress Report. Population estimates for the project are based on the City of Wildomar Impact Fee Study Report and the City of Wildomar General Plan Draft EIR.

4.13.1 Existing Setting

4.13.1.1 Population

The DOF estimates the City's current (2014) population to be 33,718 persons.[1] The SCAG projects City population will continue to grow, reaching 42,474 persons by the year 2020 and 54,643 persons by the year 2035.[2]

4.13.1.2 Housing

The number of housing units in the City has increased to accommodate its growing population (Table 4.13.A). Currently, the DOF identifies that approximately 68.7 percent of the existing housing units in the City are single-family detached units. Multiple-unit dwellings comprise approximately 5 percent of the City's current housing stock, mobile homes represent 26.2 percent, and 7.5 percent of the housing units remain unoccupied.

Table 4.13.A: Population and Housing Forecasts

	Existing 2011	Projected 2020	Projected 2035
Population			
City of Wildomar[1]	32,414	42,474	54,643
Riverside County[2]	2,205,731	2,595,259	3,354,958
SCAG[3]	—	19,663,000	22,091,000
Households			
City of Wildomar[1]	10,840	14,537	18,573
Riverside County[2]	804,913	955,853	1,228,188
SCAG[3]	—	6,458,000	7,325,000

[1] E-5 Population and Housing Estimates, for Cities, Counties, and the State, 2010–2013, with 2010 Benchmark, State of California Department of Finance, http://www.dof.ca.gov/research/demographic/reports/estimates/e-5/2011-20/view.php, website accessed March 17, 2014.

[2] Regional Transportation Plan, Growth Forecast Appendix, SCAG, http://rtpscs.scag.ca.gov/Documents/2012/pfinal/SR/2012pfRTP_GrowthForecast.pdf (accessed November 13. 2014).

Table 4.13.A: Population and Housing Forecasts

	Existing 2011	Projected 2020	Projected 2035
Employment			
City of Wildomar[1]	3,500	5,837	9,807
Riverside County[2]	581,470	927,300	1,285,284
SCAG[3]	—	8,414,000	9,441,000

Sources:
1. Wildomar Progress Report 2013, RCTLA, http://rctlma.org/Departments/Administrative-Services/Riverside-County-Center-for-Demographic-Research/Progress-Reports/Current-Progress-Report. Accessed November 13, 2014.
2. Riverside County Progress Report 2013, RCTLA, http://rctlma.org/Departments/Administrative-Services/Riverside-County-Center-for-Demographic-Research/Progress-Reports/Current-Progress-Report. Accessed November 13, 2014.
3. Regional Transportation Plan, Growth Forecast Appendix, SCAG, http://rtpscs.scag.ca.gov/Documents/2012/pfinal/SR/2012pfRTP_GrowthForecast.pdf. Accessed November 13, 2014.

4.13.1.3 Jobs/Housing Ratio

The jobs-to-housing ratio measures the extent to which job opportunities in a given geographic area are sufficient to meet the employment needs of area residents. This ratio identifies the number of jobs available in a given region compared to the number of housing units in the same region. For example, a region with a jobs-to-housing factor of 1.5 would indicate that 1.5 jobs exist for every housing unit within that region. The standard used for comparison in the City is the jobs-to-housing ratio of the SCAG region, which is currently 1.14 jobs for every household. This standard is used because most residents of the City are employed somewhere in the SCAG region. A City or sub-region with a jobs-to-housing ratio lower than the overall standard of 1.14 jobs per household would be considered a "jobs poor" area, indicating that many of the residents must commute to places of employment outside the City or sub-area. Table 4.13.B details the current and estimated future potential jobs/housing ratios for the City, Riverside County, and SCAG.

Table 4.13.B: Existing and Future Jobs/Housing Ratios

	2011 Jobs/Housing Ratio	2035 Jobs/Housing Ratio
City of Wildomar[1]	0.32	0.53
Riverside County[2]	0.72	1.05
SCAG[3]	1.14	1.29

Source:
1. Wildomar Progress Report 2013, RCTLA, http://rctlma.org/Departments/Administrative-Services/Riverside-County-Center-for-Demographic-Research/Progress-Reports/Current-Progress-Report. Accessed November 13, 2014. Note: 2011 values are used because the most recent estimate of total jobs in the City was calculated for 2011.
2. Riverside County Progress Report 2013, RCTLA, http://rctlma.org/Departments/Administrative-Services/Riverside-County-Center-for-Demographic-Research/Progress-Reports/Current-Progress-Report. Accessed November 13, 2014.
3. Regional Transportation Plan, Growth Forecast Appendix, SCAG, http://rtpscs.scag.ca.gov/Documents/2012/pfinal/SR/2012pfRTP_GrowthForecast.pdf. Accessed November 13, 2014.

The City has a lower jobs/housing ratio than both the County and SCAG. These jobs/housing ratios indicate that both the City and Riverside County are currently "job poor" because their jobs-to-housing ratios are below the Southern California regional values as defined by SCAG. A low jobs/housing ratio results in longer distances that City residents must commute to and from work. Based on existing projections, the City's projected 2035 jobs/housing ratio will continue to be less than that for County and region.

4.13.1.4 NOP/Scoping Comments

One City resident made a comment during the Public Scoping Meeting regarding the affordability of the proposed apartments. No other comments on housing and population were received during the NOP comment periods.

4.13.2 Existing Policies and Regulations

4.13.2.1 Federal Regulations

There are no Federal regulations that apply to the project with regard to population and housing.

4.13.2.2 State Regulations

The Regional Housing Needs Assessment (RHNA) is mandated by State Housing Law (Government Code Section 65584) as part of the periodic process of updating local housing elements of the General Plan. The RHNA quantifies the need for housing within each jurisdiction during specified planning periods. The RHNA for Riverside County is developed by SCAG and allocates to cities and the unincorporated county their "fair share" of the region's projected housing needs. The most recently completed RHNA planning period is January 1, 2006, to June 30, 2014.

The projected housing needs in the RHNA are categorized by income levels (very low, low, moderate, and above moderate income) established by the U.S. Department of Housing and Urban Development (HUD). According to the 2014–2021 RHNA, Wildomar will need to accommodate a total of 2,535 units including 310 extremely low-income, 311 very low-income, 415 low-income, 461 moderate-income, and 1,038 above moderate-income housing units.

4.13.2.3 Local Regulations

The specific policies outlined in the City's General Plan Land Use, Air Quality, and Housing Elements related to population and housing include the following:

Land Use

LU 10.1 Provide sufficient commercial and industrial development opportunities in order to increase local employment levels and thereby minimize long-distance commuting.

LU 22.1 Accommodate the development of single- and multi-family residential units in areas appropriately designated by the General Plan and area plan land use maps.

Jobs-to-Housing Ratio

AQ 8.2 Emphasize job creation and reductions in vehicle miles traveled in job-poor areas to improve air quality over other less efficient methods.

Housing

GOAL H-1 Assist in the development of adequate housing to meet the city's fair share of the region's housing needs for all economic segments of the population.

GOAL H-3 Address the housing needs of special needs population groups.

GOAL H-4 Conserve and improve the condition of the housing stock, particularly affordable housing.

GOAL H-5 Promote equal housing opportunities of all persons regardless of race, age, sexual orientation, religion, or gender.

4.13.3 Methodology

To determine the project's potential population- and housing-related impacts, the site's current use and condition and existing and estimated population and housing information was identified and compared against estimates for the County and the SCAG region.

4.13.4 Thresholds of Significance

The following thresholds of significance regarding potential impacts related to population and housing are based on Appendix G of the State CEQA Guidelines. A project would have a significant impact on population and housing if it would:

- Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure);
- 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) that may lead to fiscal or economic impacts;

- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; and/or
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

In addition, this section will evaluate the project's consistency with applicable General Plan policies and goals regarding population, housing, and growth.

4.13.5 Less than Significant Impacts

4.13.5.1 Population Growth

Threshold	Would the proposed project induce substantial population growth in an area, either directly (e.g., new homes and businesses) or indirectly (e.g., extension of roads and infrastructure)?

CEQA requires a discussion of ways in which the proposed project could be growth inducing (see also Section 5.0, *Other CEQA Topics*). The *CEQA Guidelines* identify a project as growth inducing if it fosters economic or population growth, or the construction of additional housing either directly or indirectly in the surrounding environment (*CEQA Guidelines* Section 15126.2[d]). New employees from commercial or industrial development and new population from residential development represent direct forms of growth. These direct forms of growth have a secondary effect of expanding the size of local markets and inducing additional economic activity in the area.

A project could indirectly induce growth by reducing or removing barriers to growth, or by creating a condition that attracts additional population or new economic activity. Growth can only happen through capital investment in new economic opportunities by the private or public sectors. Under CEQA, growth inducement is not considered necessarily detrimental, beneficial, or of little significance to the environment. Typically, the growth-inducing potential of a project would be considered substantial if it fosters growth or a concentration of population in excess of what is assumed in pertinent master plans, land use plans, or in projections made by regional planning agencies (e.g., SCAG). Substantial growth impacts could also occur if a project provides infrastructure or service capacity to accommodate growth beyond the levels currently permitted by local or regional plans and policies. In general, growth induced by a project is considered a significant impact if it can be demonstrated that the potential growth significantly affects the environment in some way.

A project could indirectly induce growth at the local level by increasing the demand for additional goods and services associated with the increase in project population and thus reducing or removing the barriers to growth. This occurs in suburban or rural areas where population growth results in increased demand for service and commodity markets responding to the new population such as a shopping center or

grocery store. This type of growth is, however, a regional phenomenon resulting from introduction of a major employment center or regionally significant housing project. Additional commercial uses may be drawn to the area by the increased number of residents in the area as a result of a project; however, it is expected that any such development would occur consistent with planned growth identified in the General Plan or applicable specific plans.

The City's population has grown steadily over the past decades. Population projections developed by the DOF estimate the City's population will reach approximately 42,474 persons by the year 2020 and approximately 54,643 persons by the year 2035. The City and the SCAG region are expected to continue to grow in population, albeit at a slower rate than in previous decades. Between 2010 and 2035, the SCAG predicts a 0.9 percent annual rate of population growth for the region. Based on the projected population for the City between 2020 and 2035, the City will experience a 28.7 percent increase in population over these years, or approximately 1.9 percent annually. Therefore, the City is expected to grow at a higher rate relative to the rest of SCAG.[1]

Table 4.13.C analyzes the project's consistency with Wildomar General Plan.

Table 4.13.C: General Plan Consistency Analysis

General Plan Goals and Targets	General Plan Consistency Analysis
Land Use	
LU 10.1. Provide sufficient commercial and industrial development opportunities in order to increase local employment levels and thereby minimize long-distance commuting.	**Consistent.** The project includes 55,000 square feet of commercial/retail and offices uses, which will contribute approximately 157 jobs to the City.
LU 22.1. Accommodate the development of single- and multi-family residential units in areas appropriately designated by the General Plan and area plan land use maps.	**Consistent.** The project will result in the development of multifamily housing in an area with a General Plan Land Use of Highest Density Residential (HHDR) and would support the provision of adequate housing for all economic segments of the community.
Housing Element	
GOAL H-1. Assist in the development of adequate housing to meet the city's fair share of the region's housing needs for all economic segments of the population.	**Consistent.** The project is assisting in meeting the City's fair share by contributing 162 multifamily units in an area designated for high density residential housing.
GOAL H-3. Address the housing needs of special needs population groups.	**Consistent.** Development of the multifamily units would support the provision of housing for all segments of the community.
GOAL H-4. Conserve and improve the condition of the housing stock, particularly affordable housing.	**Consistent.** The project will improve the housing mix of the City by proving high density multifamily housing.

[1] (54,643-42,474) ÷ 42,474 × 100=28.65%; 28.65% ÷ 15 years = 1.91% per year

Table 4.13.C: General Plan Consistency Analysis

General Plan Goals and Targets	General Plan Consistency Analysis
GOAL H-5. Promote equal housing opportunities of all persons regardless of race, age, sexual orientation, religion, or gender.	**Consistent.** The project shall comply with fair housing laws.

Source: City of Wildomar General Plan, July 2008; City of Wildomar Housing Element, December 2013.

Although the project will require a General Plan amendment and a zone change, it is generally consistent with the General Plan. The project is placing multifamily units in an area designated for residential uses and is adjacent to other multifamily residential developments. Additionally, the on-site commercial and retail uses will provide employment opportunities. Therefore, less than significant impacts would occur in relation to General Plan policies regarding population growth.

The proposed project is horizontal mixed use development that will contribute both jobs and housing to the City. Based on the most recent site plan, commercial development will include an approximately 35,000-square foot office building, two single-story "pad" buildings of approximately 6,000 square feet each, and an approximately 8,000-square foot retail building. Based on employment density data calculated for the General Plan EIR, the commercial/retail and office portion could provide approximately 157 jobs.[1] The southern half of the site will contain 162 housing units, envisioned as follows: 48 one-bedroom, 90 two-bedroom, and 24 three-bedroom units. The housing portion of the project would increase the City's population by up to 356 people.[2]

The project will develop high density housing within the City, which will contribute to the "fair share" of housing required under the RHNA. Since this housing will be used to satisfy the requirements of the RHNA, and the placement of housing is consistent with the General Plan, population increase as a result of the project is not considered substantial. Therefore, the project will not induce a population increase above which has been planned for by the City or which would be expected to result in fiscal or economic impacts. Impacts related to this issue are less than significant and no mitigation is required.

4.13.5.2 Displace Substantial Housing/People

Threshold	Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?

[1] Based on an employment factor of 1 employee per 500 square feet of Commercial Retail space and 1 employee per 300 square feet of Commercial Office space from the Riverside County General Plan Update EIR (2014).

[2] The City Development Impact Fee Study estimated that multifamily residential dwellings average 2.20 persons per unit.

	Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?

The project site is currently undeveloped; therefore, there is no potential for the displacement of persons or housing. The project would increase the availability of multifamily residential dwellings in the City, which satisfies the goals and objectives detailed in the recent update of the City's Housing Element. No impact related to this issue would occur; therefore, no mitigation is required.

4.13.6 Significant Impacts

The project would not have any significant impacts related to population and housing.

4.13.7 Cumulative Impacts

The cumulative area for the discussion of population and housing impacts is the City of Wildomar. The proposed project would require a General Plan Amendment and Zone Change for the northern half of the site. While the project would generate approximately 157 jobs and 356 residents, this growth has been anticipated by the General Plan and therefore not considered substantial. The project would contribute to the City's "fair share" of housing required under the RHNA. Therefore, the project would not significantly contribute to a City or regional cumulative housing or population impact.

4.14 PUBLIC SERVICES AND FACILITIES

The following discussion includes an evaluation of the project's impacts on law enforcement, fire protection, school, and park services. Impacts to parks are analyzed in Section 4.15, Recreation and Parks, in this EIR. The analysis considers the existing public services provided in the project area and evaluates the impacts to service providers that would result from the construction and occupancy of the proposed project. The analysis contained in this section is based on the following reference documents:

- *City of Wildomar General Plan,* adopted July 2008; and
- *City of Wildomar General Plan Update Draft EIR,* City of Wildomar, January 2015.

4.14.1 Police Protection

4.14.1.1 Existing Setting

Law enforcement services for the City are provided by the Riverside County Sheriff's Department (RCSD).[1] The RCSD currently serves the project site from the Lake Elsinore Sheriff's Station (333 Limited Avenue, Lake Elsinore) approximately 7.4 miles northwest of the project site. The RCSD has mutual aid agreements with all surrounding cities, which allow for the services of nearby police departments to provide assistance to the RCSD. In addition to providing contract law enforcement services to the Cities of Wildomar and Lake Elsinore, staff at this station also serve the communities of Alberhill, El Cariso, Glen Ivy Hot Springs, Good Hope, La Cresta, Lakeland Village, Meadowbrook, Ortega Hills, Temescal Canyon, and Warm Springs.

NOP/Scoping Comments. Comments were made by residents during the scoping process about the potential significant impacts on existing and future public services like schools, police, and fire. No comment letters were received during the NOP periods regarding police services.

4.14.1.2 Existing Policies and Regulations

The General Plan identifies the following policies relative to police services:

Infrastructure, Public Facilities & Service Provision

LU 5.1 Ensure that development does not exceed the ability to adequately provide supporting infrastructure and services, such as libraries,

[1] Riverside County Sheriff Department website, http://www.riversidesheriff.org/ (accessed November 14, 2014).

recreational facilities, transportation systems, and fire/police/medical services.

Land Use

LU 9.1 Require that new development contribute their fair share to fund infrastructure and public facilities such as police and fire facilities.

4.14.1.3 Methodology

The evaluation of police services impacts takes into account information on current police service levels, and whether the project would require new or physically altered law enforcement facilities in order to main satisfactory service levels.

4.14.1.4 Thresholds of Significance

Based on Appendix G of the *CEQA Guidelines,* police protection impacts would be considered significant if the following condition resulted from the construction or operation of the proposed project:

- Substantial adverse physical impacts associated with the provision of 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.

4.14.1.5 Less than Significant Impacts

Threshold	Would the proposed project result in substantial adverse physical impacts associated with the provision of new or physically altered law enforcement facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for police services?

The development and operation of the project would increase demand for police protection services. Initially, crimes of grand theft and malicious mischief during construction would be the potential major crime issue. Similar to other construction projects in the City, it is anticipated that private security would be utilized during the construction process. Law enforcement services required during this period may include responses to trespass, vandalism, or theft of construction materials.

The project proposes to construct 55,000 square feet of commercial/retail space and 162 multifamily residential units. The proposed residential uses would increase the City's population by approximately 356 persons. During occupation of the project, potential impacts would be an increased need for police protection services routinely associated with residential and commercial growth, including routine patrols, responding to calls for service such as graffiti or vandalism, robbery, domestic

violence, etc. The City collects fees from developers to offset police-related service impacts associated with new development, per City Municipal Code Chapter 3.44. These development impact fees (DIFs) are one-time charges applied to new development and are imposed to raise revenue for the construction or expansion of capital facilities. DIFs enable the City to collect fair-share fees from new development projects to fund new infrastructure and services. The project would be designed and operated per applicable standards required by the City for new development in regard to public safety. In addition, development fees would be used to fund capital costs associated with constructing new public safety structures and purchasing equipment for new public safety structures.

According to the City General Plan Update EIR, there were 12,881 calls for law enforcement service from the City in 2012.[1] The average response time in 2012 was 12 minutes for priority one calls, approximately 48 minutes for priority two calls, approximately 121 minutes for priority three calls, and approximately 248 minutes for priority four calls.

The project's incremental increase in the population of the service area would not require new or physically altered law enforcement facilities. Payment of DIFs would offset any increase in demand for police services. Therefore, impacts related to law enforcement facilities are less than significant.

General Plan Consistency. Table 4.14.A evaluates the project's consistency with General Plan policies relative to law enforcement services.

Table 4.14.A: General Plan Consistency Analysis

General Plan Goals and Targets	General Plan Consistency Analysis
Land Use	
LU 5.1. Ensure that development does not exceed the ability to adequately provide supporting infrastructure and services, such as libraries, recreational facilities, transportation systems, and fire/police/medical services.	**Consistent:** The project would only incrementally increase demand for infrastructure and services. Existing police services would adequately serve the project.
LU 9.1. Require that new development contribute their fair share to fund infrastructure and public facilities such as police and fire facilities.	**Consistent:** The project will contribute its fair share through payment of development impact fees (DIFs).

Source: City of Wildomar General Plan, July 2008.

[1] **Priority 1:** Emergency call that requires immediate response and there is reason to believe that an immediate threat to life exists. **Priority 2:** Emergency call that requires immediate response and there exists an immediate and substantial risk of major property loss or damage. **Priority 3:** Crimes in progress that require an immediate response but present no significant threat of serious physical injury or major property damage or any active incident or activity that could be classified as a possible crime or potential threat to life or property. **Priority 4:** Requests for police response that do not require an immediate response but there exists a likelihood that an officer's investigation will lead to the apprehension of a suspect based on suspect information or physical evidence.

Table 4.14.A demonstrates that the proposed project is consistent with the City's General Plan policies regarding law enforcement services. The project would not require the construction of a new police station or necessitate the need for additional police officers; therefore, impacts are less than significant and no mitigation is required.

4.14.1.6 Significant Impacts

The project will not have any significant impacts related to police protection services.

4.14.2 Fire Protection

4.14.2.1 Existing Setting

The Riverside County Fire Department (RCFD) in cooperation with the California Department of Forestry and Fire Protection (CAL Fire) is the City's source for fire protection, fire prevention, and emergency services. The CAL Fire/RCFD Fire Headquarters is located in Perris and averages over 360 incidents per day.[1] The Perris Emergency Command Center (ECC) processed 133,536 incidents in 2013[2] and serves 94 fire stations and 19 bureaus.

In the City, the RCFD Fire operates from the Wildomar Fire Station 61 (32637 Gruwell Street), located approximately 2.6 miles west of the project site.[3] Station 61 has one Type 1 engine with three full-time employees. During 2013, this station responded to responded to 2,794 calls (including paramedic calls) in the City. Fire stations that support Station 61 include Station 75 (38900 Clinton Keith Road) in Murrieta, Station 68 (located at 26020 Wickard Road in Menifee), and Station 95 (22770 Railroad Canyon Road in Lake Elsinore).[4]

NOP/Scoping Comments. No comments were made by residents during the scoping process about impacts to existing and future public services like schools, police, and fire. No comment letters were received during the NOP periods regarding fire services.

4.14.2.2 Existing Policies and Regulations

The General Plan includes the following policies and goals relative to fire protection services in the City:

1 Annual Report 2013, Riverside County Fire Department in Cooperation with CAL Fire. http://www.rvcfire.org/ourDepartment/Documents/2013%20Annual%20Report.pdf (accessed November 14, 2014).
2 Ibid.
3 Riverside County Fire Department website, http://www.rvcfire.org/Pages/default.aspx (accessed November 2014).
4 LAFCo (Local Agency Formation Commission for Riverside County). 2009. Wildomar Municipal Service Review.

Infrastructure, Public Facilities & Service Provision

LU 5.1 Ensure that development does not exceed the ability to adequately provide supporting infrastructure and services, such as libraries, recreational facilities, transportation systems, and fire/police/medical services.

Land Use

LU 9.1 Require that new development contribute their fair share to fund infrastructure and public facilities such as police and fire facilities.

4.14.2.3 Methodology

The evaluation of fire protection impacts takes into account information on current fire protection service levels, and whether the project would require new or physically altered firefighting facilities in order to main satisfactory service levels. Applicable fire codes and regulations and the City Municipal Code were also reviewed in determining impacts.

4.14.2.4 Threshold of Significance

Based on Appendix G of the *CEQA Guidelines*, impacts related to fire protection services would be considered significant if the following condition resulted from the construction or operation of the proposed project:

- Substantial adverse physical impacts associated with the provision of 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.

4.14.2.5 Less than Significant Impacts

Threshold	Would the proposed project result in substantial adverse physical impacts associated with the provision of new or physically altered fire-fighting facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for fire services?

The project site is currently undeveloped. The construction and occupation of the proposed uses would incrementally increase the demand for fire protection, prevention, and emergency medical services in the City. Efficient response times are critical in addressing fire and medical emergencies. Reductions in the emergency response time or the distance between fire/medical facilities and the site of an emergency would result in improved service and saved lives and property.

The RCFD has a response time goal of 5 minutes within 1.5 miles, 7 minutes within 3 miles, 11 minutes within 5 miles, and 17 minutes within 8 miles. In addition, RCFD standards hold that urban development, such as that anticipated under the proposed project, should be located no more than 3 miles from a County fire station. As discussed previously, RCFD Station 61 is located 2.6 miles from the project site. Based on an independent evaluation by the Insurance Services Office (ISO), the Station currently operates at an above average level of service. Current response times are therefore considered adequate.

The project's incremental increase in the amount of fire protection-requiring responses within the City would not cause the Station 61 to have unacceptable response times. As with all new development within the City, the project would be required to pay DIFs to the City. These fees are determined by the City Council, in consultation with the Fire Prevention Bureau, based on an assessment of the activity occurring within the City as well as the needs of the City. Such fees would be used to fund capital costs associated with land acquisition, construction, purchasing equipment, and providing for additional staff.

The project would be required to be designed, constructed, and operated per applicable fire prevention/protection standards established by the City. Such requirements include, but are not limited to, provisions for smoke alarms; sprinklers; building and emergency access; adequate emergency notification; and hydrant sizing, pressure, and siting. With these provisions, the proposed project will not require the construction of new firefighting facilities and will have a less than significant impact on fire services and no mitigation is required.

General Plan Consistency. Table 4.14.B evaluates whether the proposed project is consistent with the City's General Plan policies relative to fire service.

Table 4.14.B: General Plan Consistency Analysis

General Plan Goals and Targets	General Plan Consistency Analysis
Land Use	
LU 5.1. Ensure that development does not exceed the ability to adequately provide supporting infrastructure and services, such as libraries, recreational facilities, transportation systems, and fire/police/medical services.	**Consistent:** The project would not cause a deficiency in fire protection services.
LU 9.1. Require that new development contribute their fair share to fund infrastructure and public facilities such as police and fire facilities.	**Consistent:** The project will pay its fair share through the payment of development impact fees (DIFs) to the City.

Source: City of Wildomar General Plan, July 2008.

Table 4.14.B demonstrates that the proposed project is consistent with the City's General Plan policies relative to fire protection services.

4.14.2.6 Significant Impacts

Based on the analysis in Section 4.14.2.5, the project will have no significant impact relative to fire protection.

4.14.3 Schools

4.14.3.1 Existing Setting

The project area is served by the Lake Elsinore Unified School District (LEUSD), which operates 25 schools with a combined enrollment of 22,316 students during the 2013–14 school year.[1] According to the district's website, the LEUSD's facilities include 13 elementary schools, two K–8 schools, four middle schools, three high schools, two alternative schools, and a K–12 virtual school.[2] While attendance boundaries may change, currently schools in the project area that may accommodate project residents include Donald Graham Elementary School, David A. Brown Middle School, and Elsinore High School.[3] All three schools that would serve the project have adequate student capacity. Table 4.14.C details the enrollment characteristics for these schools.

Table 4.14.C: Project Area School Enrollment

School	Maximum Capacity	Project Enrollment (2015–2016)
Donald Graham Elementary School	850	627
David A. Brown Middle School	1,450	1,010
Elsinore High School	2,600	2,090

Source: Personal email with Tina Sayers (Director of Facilities and Operations for the LEUSD) November 14, 2014.

NOP/Scoping Process. No comments were made by residents during the scoping process about impacts to existing and future public services, including schools. No comment letters were received during the NOP periods regarding schools.

4.14.3.2 Existing Policies and Regulations

While the City's General Plan contains policies related to providing adequate community services and facilities, the provision of school services and maintenance of school facilities is the responsibility of the LEUSD, which is an entity independent from the City.

1 Dataquest. California Department of Education Data Reporting Office. Found online: http://dq.cde.ca.gov/dataquest/ (accessed November 14, 2014).
2 Lake Elsinore Unified School District website http://leusd.schoolfusion.us/modules/cms/pages.phtml?pageid=65550&sessionid=d6fe4ed7be1b27039a7d6b74987effe1 (accessed November 14, 2014).
3 Ibid.

4.14.3.3 Methodology

School service impacts are determined by calculating how many schoolchildren would be generated by the project, and then determining whether this increase would cause negative impacts to existing or future school facilities or programs.

4.14.3.4 Thresholds of Significance

According to Appendix G of the *CEQA Guidelines*, a project would have a significant impact to schools if it would result in:

- Substantial adverse physical impacts associated with the provision of new or physically altered school facilities, need for new or physically altered school facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives.

4.14.3.5 Less than Significant Impacts

Threshold	Would the proposed project result in substantial adverse physical impacts associated with the provision of new or physically altered school facilities, need for new or physically altered school facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

As detailed in Table 4.14.D, based on the LEUSD's student generation factors, the proposed project may increase attendance at District schools by approximately 37 additional students.

Table 4.14.D: Project Student Generation

Grade Level	Students/Unit	Students (at buildout)
K-6	0.12	19
7-8	0.05	8
9-12	0.06	10
Project Total	**0.23**	37

Source: Lake Elsinore Unified School District Master Plan 2012, Table 2: Student Generation Factors for Multi-family Attached Units, accessed November 14, 2014.

Donald Graham Elementary School has a maximum capacity of 850 students and the LEUSD projects enrollment of 627 students for the upcoming (2015–2016) school year. The project, over time, would add a total of approximately 19 students making the projected enrollment at least 646 students. David A. Brown Middle School has a maximum capacity of 1,450 students and has a projected enrollment of 1,010 students for the upcoming year. The project, over time, would add a total of approximately 8 students, making the projected enrollment at least 1,018 students.

Elsinore High School has a maximum capacity of 2,600 students and has a projected enrollment of 2,090 students for the upcoming year. The project would add a total of approximately 10 students, bringing anticipated enrollment to up to 2,100. See Table 4.14.E.

Table 4.14.E: Project Area School Enrollment

School	Maximum Capacity	Projected Enrollment (2015-2016)	Project Enrollment (2015-2016) with Project
Donald Graham Elementary School	850	627	646
David A. Brown Middle School	1,450	1,010	1,018
Elsinore High School	2,600	2,090	2,100

Source: Personal email with Tina Sayers (Director of Facilities and Operations for the LEUSD) November 14, 2014.

As detailed in Table 4.14.E, the addition of 37 students would not cause project area schools to exceed capacity. Therefore, the construction of new or physically altered school facilities would not be required. In addition, the project would be required to pay development fees to the school district that would help fund school facilities and programs.

California Government Code (Section 65995[b]) establishes the base amount of allowable developer fees imposed by school districts. These base amounts are commonly referred to as “Level 1 fees” and are subject to inflation adjustment every two years. School districts are placed into a specific “level” based on school impact fee amounts that are imposed on the development. With the adoption of Senate Bill 50 and Proposition 1A in 1998, schools meeting certain criteria can now adopt Level 2 and 3 developer fees. The amount of fees that can be charged over the Level 1 amount is determined by the district's total facilities needs and the availability of State matching funds. If there is State facility funding available, districts are able to charge fees equal to 50 percent of their total facility costs, termed “Level 2” fees. If, however, there are no State funds available, “Level 3” fees may be imposed for the full cost of their facility needs.[1] The LEUSD currently collects Level 2 fees.

The LEUSD currently imposes development fees of $0.47 per square foot for commercial, industrial, and federally qualified senior housing and $3.10 for residential development.[2] Per California Government Code, “The payment or satisfaction of a fee, charge, or other requirement levied or imposed … are hereby deemed to be full and complete mitigation of the impacts … on the provision of adequate school facilities.” The project will be required to pay these development fees in accordance with Government Code 65995 and Education Code 17620.

[1] An Evaluation of the School Facility Fee Affordable Housing Assistance Programs, Legislative Analyst’s Office, January 2001. http://www.lao.ca.gov/2001/011701_school_facility_fee.html (accessed November 14, 2014).

[2] Facilities Services. LUESD website. http://leusd.schoolfusion.us/modules/cms/pages.phtml?pageid=86566 (accessed November 14, 2014).

General Plan Consistency. The City has no General Plan policies that are directly related to the provision of school services or facilities since those are the responsibility of the LEUSD. The proposed project will be required to pay applicable LEUSD fees as development occurs. As the project will not increase student populations beyond the capacity of schools currently serving the project area, and because the payment of required school fees provides sufficient mitigation to offset any impact to school services or facilities, no significant school impact would occur. No mitigation is required.

4.14.3.6 Significant Impacts

Based on the analysis in Section 4.14.3.5, the proposed project will not produce any significant school-related impacts.

4.14.4 Other Public Facilities

4.14.4.1 Existing Setting

Libraries. The Riverside County Library System comprises 35 branch libraries and two bookmobiles serving a population of more than two million residents. The County library system's collection includes over 1.5 million books and periodicals, 52,700 audio materials (CDs, audio books) and nearly 24,000 video items (DVD/VHS).[1] The Riverside County library serving the City is the Mission Trail Community library, located approximately 5.4 miles from the project site at 34303 Mission Trail. This library provides access to the County-wide library collection and internet access six days (Monday–Saturday) per week.

Hospitals. Medical services are provided throughout Riverside County by a complex network of public and private providers.[2] In some cases, both populations of patients are served by the same providers and facilities.

According to Riverside County's "Financial Highlights (Fiscal Year 2008–2009)" report, the Riverside County Community Health Agency provided nearly 125,800 patient visits and performed 466,800 patient services including family planning, primary health care, prenatal care, urgent care, child health and disability prevention. The Riverside County Regional Medical Center (RCRMC) also provided nearly 88,550 treatments and over 9,700 mental health services through its emergency department (emergency room), nearly 129,200 clinic visits, and 23,250 admissions with a total of over 118,450 patient-days of in-patient care provided. According to the 2008 Regional Medical Facility Profile report, in 2005, there were 80,932 licensed hospital beds in California, a rate of 2.2 beds per 1,000 residents. Riverside County had 2,880 licensed beds, a rate of 1.47 beds per 1,000 residents.

[1] https://en.wikipedia.org/wiki/Riverside_County_Library_System, site accessed July 22, 2015.
[2] Riverside County General Plan Environmental Impact Report (Environmental Impact Report No. 521), February 2015.

The nearest Riverside County Community Health Agency facility to the site is the Lake Elsinore Family Care Center at 2499 E. Lakeshore Drive in Lake Elsinore. However, the City is primarily served by two private hospitals: Inland Valley Medical Center at 36485 Inland Valley Drive in Wildomar, and Rancho Springs Medical Center at 25500 Medical Center Drive in Murrieta. Both of these are for-profit hospitals owned by Universal Health Services, Inc. Inland Valley Medical Center currently has 80 beds, while Ranch Springs Medical Center provides 51 beds.[1]

City Hall. Wildomar's City Hall is located at 23873 Clinton Keith Road, Suite 201. At present, the City leases this space for City offices. Ultimately, the City intends to construct its own City Hall building utilizing fees collected during development.[2]

NOP/Scoping Process. No comments were made by residents during the scoping process regarding impacts to existing and future public facilities including medical facilities, libraries, and other public facilities. No comment letter related to this issue was received during the NOP periods related to the provision of school services.

4.14.4.2 Existing Policies and Regulations

The General Plan includes the following policies and goals relative to other public facilities in the City:

Infrastructure, Public Facilities & Service Provision

LU 5.1 Ensure that development does not exceed the ability to adequately provide supporting infrastructure and services, such as libraries, recreational facilities, transportation systems, and fire/police/medical services.

Land Use

LU 9.1 Require that new development contribute their fair share to fund infrastructure and public facilities such as police and fire facilities.

4.14.4.3 Methodology

In the absence of specific demand factors for other public facilities, a general discussion of other public facilities and potential impact project-related increase on these facilities is provided.

[1] U.S. Hospital Finder, http://www.ushospitalfinder.com/ (website accessed July 9, 2015).
[2] Impact Fee Study Report, City of Wildomar, January 2014.

4.14.4.4 Thresholds of Significance

According to Appendix G of the *CEQA Guidelines*, a project would have a significant impact to schools if it would result in:

- Substantial adverse physical impacts associated with the provision of new or physically altered public facilities in order to maintain acceptable service ratios, which would cause significant environmental impacts.

4.14.4.5 Less than Significant Impacts

Threshold	Would the proposed project result in substantial adverse physical impacts associated with the provision of new or physically altered public facilities, the construction of which would cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives?

The population increase associated with the proposed project is approximately 356 persons. This increase represents approximately 1.1 percent of the City of Wildomar's estimated 2014 population of 33,718. Within the City's Development Impact Fee program, $286.00 is collected per multifamily unit for library-related facilities/services. Medical services are demand responsive and it is not possible to accurately predict how or when said services would be required. Based on the County's existing licensed bed/1,000 resident ratio, 0.52 licensed hospital bed could potentially be required for the project. Given the current availability of medical facilities in the project area and the minor population increase anticipated, it is reasonable to anticipate that no significant impact to medical facilities would result from development of the project. The operation and maintenance of City-owned facilities such as City Hall is supported through the payment of applicable fees and taxes collected throughout the City. Even if every new resident utilized existing local library or City facilities, the relatively minor population increase associated with the proposed project is not expected to substantially affect the current level of service at these facilities.

It is reasonable to conclude the payment of required fees, taxes, and other payments by the owners/occupants of the proposed development would sufficiently offset any incremental increase in demand or use of these facilities. Due to the minor increase in population, use, or demand, the construction of new or expansion of existing library, medical, or governmental facilities is not required. No significant impact to these facilities would occur; therefore, no mitigation is required.

4.14.5 Cumulative Impacts

The cumulative areas for law enforcement police and fire protection services are the service areas within the City. The need for new and/or maintenance of existing public services and associated facilities is measured by service area population, or

the number of residents and workers within the City's service area, as well as the type and density of development.

As additional development occurs in the City, there may be an overall increase in the demand for law enforcement and fire protection services, including personnel, equipment, and/or facilities. Increases in demand are routinely assessed by these agencies as part of the annual monitoring and budgeting process. All development within the service areas of the Riverside County Sheriff's and Fire Departments would be required to adhere to conditions established by these agencies and would be subject to applicable fees that will contribute to the maintenance of their facilities. The project would result in the development of uses that are typical of those currently present in the service area for the Riverside County Sheriff's and Fire Departments, and does not include any use or structure anticipated to disproportionally increase service demand beyond that which currently exists. With adherence to standard conditions and payment of required fees, no significant cumulative impact on law enforcement and fire services in the City would occur.

The cumulative area for school-related services is the LEUSD. The LEUSD requires the payment of development fees to provide for maintenance of existing and the expansion or construction of new facilities. All new development is required to provide school impact fees at the level identified by the LEUSD, it is anticipated that no cumulatively significant impact to school services would occur with implementation of the proposed project.

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4.15 RECREATION AND PARKS

This chapter analyzes the impact of the proposed project on existing local and regional recreational services or the need to construct or expand additional recreational facilities due to the implementation of the proposed project. This section is based in part on the following reference documents:

- *City of Wildomar General Plan,* adopted July 2008.
- *City of Wildomar Parks Master Plan,* Public Draft, October 2014.

4.15.1 Existing Setting

The public parks and recreational areas with the City are maintained by the City of Wildomar. The City undertook park maintenance after the City incorporated and the parks were no longer overseen by the Riverside County. The City has established a Parks Subcommittee comprising two council members and is in the process organizing a Parks and Recreation Commission, which will serve as an advisory body to the City Council on issues related to parks, including the implementation of the City's Park Master Plan.

The City's park and recreation areas consist of open space, public parks, and local and regional trails. The City operates three public parks: Marna O'Brien Park, Regency Heritage Park, and Windsong Park. Currently, the City does not own any facility for organized sports and other recreational activities. School sites within the City may provide additional park and activity space outside of normal school operating hours.

4.15.1.1 Wildomar Local Parks and Open Spaces

There are three active parks operated by the City:

- **Marna O' Brien Park** is located at 20505 Palomar Street and covers approximately 9.66 acres. The park's amenities include a children's playground, restrooms, a basketball court, baseball fields, football-soccer fields, and picnic areas.
- **Regency Heritage Park** is located at 20171 Autumn Oaks Place and covers 3.26 acres. The park includes a children's play area, two basketball courts, picnic shelters, and a dog park.
- **Windsong Park** is a 2.12-acre neighborhood park located at 35459 Prairie Road. It features walkways around its perimeter, picnic areas, and a tot lot.

There are no recreational facilities on site or adjacent to the project area.

Open spaces in the City consist mostly of wildlife conservation areas scattered throughout the northeastern part of the City. Conservation lands in the City total approximately 1,122 acres, with about 65 acres accessible to the public. However, since the primary purpose of these areas to protect sensitive habitat, conservation areas do not contribute toward minimum open space and parkland requirements.

4.15.1.2 City and Regional Trails

As detailed in the City's Multi-Use Adopt-A-Trail Map, the City maintains approximately 90 miles of local community trails, regional trails, and historic trails. The City recognizes that a series of multi-use trails is a key component in providing recreational amenities and developing a linked park and open space system. A primary objective for the trail system is to provide connectivity between neighborhoods, open space and park areas, and regional trails beyond the city limits. Trails are also designed to incorporate the historic trails throughout the city while preserving sensitive open space and wildlife corridors. At present, only two existing trails link to city parks. The Palomar Street Trail is an unimproved trail corridor that runs along Palomar Street from the City's southern boundary to Corydon Road, passing by Marna O'Brien Park. Windsong Park is connected to a historic trail that runs from Palomar Street north to Walnut Street.

The regional trails running through Wildomar are outlined in the Murrieta Creek Regional Trail Project, which aims to create a multi-use, non-motorized trail system along the river that connects the Cities of Temecula, Murrieta, Wildomar, and Lake Elsinore, ultimately re-creating the trail that existed there in the late 19th century. The project planning team is made up of agencies from these participating cities. The goals of the project are to promote urban accessibility and connectivity, healthy lifestyles, community economics, sustainable development, community partnerships, and awareness and appreciation of the outdoors.

Based on the City's Multi-Use Adopt-A-Trail Map, two trails are located on site or adjacent to the project. As detailed in Figure 4.15.1, the Jon Rodarme Regional Trail crosses the southeast corner of the site, while the Daniel Ray Parker Regional Memorial Trail runs along the project's eastern boundary.

4.15.1.3 NOP/Scoping Comments

One resident raised concerns regarding the proposed passive park and trail during the first Public Scoping Meeting. Concerns were related to park access, trail connectivity, and locations of active parks in the project area. No additional comment related to park or recreation issues was received during either NOP comment period.

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Project Site

Trails

Historic and Patron Trail

Regional Roadside\Countryside\Creekside Multi-Use Trail

Proposed Trail (Approximate Location)

FIGURE 4.15.1

Grove Park Mixed-Use Development
Environmental Impact Report

Trails in the Project Area

SOURCE: Google Earth, 2013; Riverside County, 2015; City of Wildomar, 2013.

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4.15.2 Policies and Regulations

4.15.2.1 State Regulations

Quimby Act (California Government Code 66477). This State policy requires the dedication of land and/or imposes a requirement of fees for park and recreational purposes as a condition of approval of certain tentative maps or parcel maps. The Quimby Act provides that park land dedication requirements may be based on a ratio of at least 3.0 acres per thousand residents, and may increase to a maximum of 5.0 acres per thousand to match the existing ratio if the existing ratio (as of the last Census) exceeds 3.0 acres per thousand.

4.15.2.2 Local Policies

Ordinance 71 (Measure Z). Ordinance 71 of the City of Wildomar Municipal Code, became effective July 1, 2013, after the passage adoption of Measure Z by the voters. Ordinance 71, authorizes a special tax to provide funding for community parks and park-related facilities, programs, and services. The tax is set at $28 per parcel per year and applies to all parcels in Wildomar. This revenue, designated the "Wildomar Community Parks Special Tax Fund," may only be used for funding, repair, operation, and maintenance of community parks and community park-related facilities, programs, and services within the City.

City of Wildomar Subdivision Ordinance. Section 16.20.020 of the Zoning Ordinance, titled "Park and recreation fees and dedications," outlines the process for the dedication of land or the payment of in-lieu fees for park and recreational facilities in Wildomar pursuant to the Quimby Act. According to the code, these regulations apply in cases where land is to be subdivided for residential use. The amount of land to be dedicated or fees paid is determined by multiplying the number of dwelling units in the subdivision by the average number of persons per unit by the number of acres of parkland required per person. Fees are based either on the fair market value of the land or on a fixed in-lieu fee rate, as adopted by the City Council. Fees paid are to be deposited into a Subdivision Park Trust Fund and may only be used to develop new parks or rehabilitate existing parks and recreational facilities.

City of Wildomar Park Impact Fee. Park impact fees are calculated using the same standards prescribed by the Quimby Act. The basic standard for determining the dedication or in-lieu fee requirement is 3.0 acres of park land per thousand new residents. That standard applies, even if, as is the case in Wildomar, the existing ratio of park land to population is less than 3.0 acres per thousand.

City of Wildomar General Plan Policies. The City of Wildomar General Plan includes policies that aim to provide for and maintain recreational facilities. Table 4.15.A identifies applicable goals and policies that apply to the proposed project.

Table 4.15.A: General Plan Consistency Analysis

General Plan Policies	General Plan Consistency Analysis
Land Use	
LU 8.3. Incorporate open space, community greenbelt separators, and recreational amenities into Community Development areas in order to enhance recreational opportunities and community aesthetics, and improve the quality of life.	**Consistent:** The project includes 3.2 acres of open space, including a passive park and preserved oak grove.
LU 19.5. Require that new development meet the parkland requirements as established in the Quimby Act and County enabling ordinances.	**Consistent:** The project would establish parkland at a ratio that satisfies Quimby Act provisions.
LU 22.8. Establish activity centers within or near residential neighborhoods that contain services such as child or adult-care, recreation, public meeting rooms, convenience commercial uses, or similar facilities.	**Consistent:** The project includes commercial/retail uses**.**
Circulation	
C 15.3. Develop a trail system which connects County parks and recreation areas while providing links to open space areas, equestrian communities, local municipalities, and regional recreational facilities (including other regional trail systems).	**Consistent:** The project will develop a regional multi-use trail on site consistent with and implementing the Jon Rodarme Regional Trail that will connect to Yamas Drive and the Daniel Ray Parker Memorial Regional Trail.
C 15.5. Compliance with the Americans with Disabilities Act (ADA) standards will be assured so as to make the entire trails system user-friendly.	**Consistent:** The City will require all public improvements, such as trails, be ADA compliant.
C 16.1. Implement the County trail system as depicted in the Bikeways and Trails Plan, Figure C-7.	**Consistent:** The project will develop a regional multi-use trail on site consistent with and implementing the Jon Rodarme Regional Trail that will connect to Yamas Drive and the Daniel Ray Parker Memorial Regional Trail.
C 16.2. Develop a multi-purpose recreational trail network with support facilities which provide a linkage with regional facilities.	**Consistent:** The project will develop a regional multi-use trail on-site consistent with and implementing the Jon Rodarme Regional Trail that will connect to Yamas Drive and the Daniel Ray Parker Memorial Regional Trail.
C 16.3. Require that trail alignments either provide access to or link scenic corridors, schools, parks, and other natural areas. a. Require that all development proposals located along a planned trail or trails provide access to the trails system. i) Ensure that existing and new gated communities do not preclude trails from traversing through their boundaries. b. Require that existing and proposed trails within Riverside County connect with those in other neighboring jurisdictions.	**Consistent:** The project will develop a regional multi-use trail that passes through the on-site preserved coast live oak grove and native and California-friendly plant corridor.

Table 4.15.A: General Plan Consistency Analysis

General Plan Policies	General Plan Consistency Analysis
C 16.6. Adhere to the following trail-development guidelines when siting a trail:	**Consistent:** The project will comply with trail-development guidelines.
a. Permit urban trails to be located in or along transportation rights-of-way in fee, utility corridors, and irrigation and flood control waterways so as to mix uses, separate traffic and noise, and provide more services at less cost in one corridor.	
b. Secure separate rights-of-way for non-motorized trails when physically, financially and legally feasible.	
i) Where a separate right-of-way is not feasible, maintain recreation trails within the County right-of-way	
c. Use trail design standards which will minimize maintenance due to erosion or vandalism.	
d. When a trail is to be reserved through the development approval process, base the precise trail alignments on the physical characteristics of the property, assuring connectivity through adjoining properties.	
e. Consider the use of abandoned rail lines as multipurpose "rail-trails" for multi-purpose trails.	
f. Place all recreation trails a safe distance from the edge of active aggregate mining operations and separate them by physical barriers.	
i) Avoid placing a trail where it will cross an active haul route.	
g. Install warning signs indicating the presence of a trail at locations where regional or community trails cross public roads with high amounts of traffic.	
h. Take into consideration such issues as sensitive habitat areas, flood potentials, access to neighborhoods and open space, safety, alternate land uses, and usefulness for both transportation and recreation when designing and constructing trails.	
i. Coordinate with other agencies and/or organizations (such as the U.S. Fish and Wildlife Service and the Department of Transportation) to encourage the development of multi-purpose trails. Potential joint uses may include historic and environmental interpretation, access to fishing areas and other recreational uses, opportunities for education, and access for the disabled.	
j. Work with landowners to address concerns about privacy, liability, security, and trail maintenance.	

Table 4.15.A: General Plan Consistency Analysis

General Plan Policies	General Plan Consistency Analysis
Environmental Justice	
EJ 3.14. Increase access to urban parks, green space and natural environments for traditionally underserved communities.	**Consistent:** The project includes a regional multi-use trail, 1.9 acres of passive recreation space, and 1.3 acres of natural open space that is publicly accessible.

4.15.3 Methodology

The assessment of potential impacts to recreation and park resources included an evaluation of whether the project would result in increased use of existing recreation and park resources or necessitate the construction or expansion of recreation and park facilities.

4.15.4 Thresholds of Significance

The following thresholds of significance regarding potential impacts to recreational facilities and resources are based on questions contained in Appendix G of the *CEQA Guidelines.* The proposed project would result in a significant impact on recreation resources if either of the following occurs:

- The project increases the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; and/or
- The project includes recreational facilities or requires the construction or expansion of recreational facilities that have an adverse physical effect on the environment.

4.15.5 Less than Significant Impacts

The following impacts were determined to be less than significant. In each of the following issues, either no impact would occur (therefore, no mitigation would be required) or adherence to established regulations, standards, and policies would reduce potential impacts to a less than significant level.

4.15.5.1 Existing Recreational Facilities

Threshold	Would the project result in increased use of existing neighborhood and regional parks or other recreational facilities where substantial physical deterioration would occur or be accelerated?

The current park standard established by the City is to provide 3.0 acres of parkland for every 1,000 residents. The implementation of the proposed project would result

in the development of 162 residential units and 55,000 square feet of commercial/retail space. The project would result in an increase in population within the City of approximately 356 people.[1] Based on this increase, the project would be required to provide approximately 1.07 acres of parkland. The project includes 3.2 total acres of open space: 1.9 acres of passive park and 1.3 acres of conserved oak grove area, both of which would accessible for public use. Additionally, the residential component of the project includes a pool, trail, and clubhouse amenity for the use of residents. While the passive park, oak grove and trail would be accessible to the public, these areas will be not be dedicated to the City.

The project proponent would be required to pay the Quimby Act fee and the City's park Development Impact Fee (DIF). Payment of these fees and taxes will result in project impacts associated with this issue being less than significant. No mitigation is required. As the project will pay the required Quimby Act fee and park DIF, no significant impact would occur. No mitigation is required.

4.15.5.2 New or Physically Altered Recreation and Park Facilities

Threshold	Would the project result in construction or expansion of recreational facilities that would have an adverse physical effect on the environment?

Approximately 3.2 acres of passive park/preserved oak grove areas would be provided during development of the project. As previously identified, the development of the project site could potentially result in a population increase of approximately 356 people. The increase in population associated with the proposed project would require approximately 1.07 acres of parkland to meet the City requirement of 3.0 acres per 1,000 residents.

The proposed project would include the construction and provision of a 1.9-acre passive park directly south of the commercial development; no play structures or active recreation features are planned for this area. South of this park, the existing on-site coast live oak grove will be preserved on approximately 1.3 acres. A decomposed granite trail will lead from the southwest corner of the oak grove and will continue through the southern multifamily portion of the development to the southwest corner of the site. This on-site trail generally follows the portion of the Rodarme Regional Trail within the project site. The residential area of the project will include a pool and clubhouse facilities for the exclusive use of its residents.

The project's recreation facilities are included as part of proposed development. The environmental effects associated with the development of on-site recreation features have been considered through the analysis of the project as a whole. The construction of these features would not result in an adverse physical effect on the

[1] City of Wildomar Impact Fee Study, 2013. http://cityofwildomar.org/uploads/files/notices/Wildomar%20DIF%20Final%20Draft%204_30_13.pdf, accessed November 19, 2014.

environment beyond those analyzed for the overall development of the project. It is not possible at this time to determine if or how frequently future project residents would utilize existing City parks or recreation facilities. As the project provides sufficient park/open space for the projected number of residents, and because the project will be required to pay applicable park and recreation fees that will be used in part to maintain existing park facilities, the project would not reasonably result in the construction of new or expansion of existing recreation facilities in the City; therefore, no significant impact would occur. No mitigation is warranted.

4.15.6 Significant Impacts

No significant park and recreation impacts would result from development of the project.

4.15.7 Cumulative Impacts

The cumulative area for recreation and parks for the proposed project is the City of Wildomar. Increases in the City's population would result in an increased demand for parks and recreational facilities. Table 4.15.B compares the existing parkland available with and without development of the project.

Table 4.15.B: Park Requirements

	Without Project (Existing)	With Project
Population[1]	33,718 people	34,074 people
Parkland Required[2]	101.15 acres	102.23 acres
Existing Parkland[3]	14.27 acres	17.38 acres
Parkland Deficit	Deficit (86.88 acres)	Deficit (84.84 acres)

Sources
1. Wildomar Progress Report 2013, RCTLA, http://rctlma.org/Departments/Administrative-Services/Riverside-County-Center-for-Demographic-Research/Progress-Reports/Current-Progress-Report, accessed November 19, 2014.
2. City Parkland Requirement of 3.0 acres of parkland per 1,000 residents.
3. Only includes City parks.

As identified in Table 4.15.B, the City currently has a deficit of approximately 86.88 acres of parkland. The potential increase in population resulting from development of the project, would contribute to this deficit of parkland. The City does not have adequate recreation facilities for existing and anticipated residents. However, as the project's anticipated population increase (356 persons) is minor compared to the City as a whole, the increased impact would not be significant. The City requires 0.0066 acres per dwelling unit of parkland be set aside if the developer chooses dedication of land to comply with the Quimby Act.[1] For the proposed project, the required amount of park land, would be approximately 1.07 acres. While public

[1] City of Wildomar Impact Fee Study, 2013. http://cityofwildomar.org/uploads/files/notices/Wildomar%20DIF%20Final%20Draft%204_30_13.pdf (Accessed November 19, 2014)

access to the project's open space areas is possible, these areas are not planned to be dedicated to the City.

Implementation of the proposed project in combination with cumulative projects in the City would increase use of existing parks and recreation facilities. However, as future residential development is proposed, the City will require developers to provide the appropriate amount of parkland or pay the in-lieu fees, which will contribute to future recreational facilities. Payment of these fees and/or implementation of facilities on a project-by-project basis would offset cumulative parkland impacts by providing funding for new and/or renovated parks equipment and facilities. When considered with other projects in the City, the cumulative park impact of the proposed project is less than significant and no mitigation is required.

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4.16 TRANSPORTATION AND TRAFFIC

This section analyzes the potential traffic and circulation impacts of the project based on the following project-specific study:

- *Clinton Keith Road (APN: 380-250-003) "Grove Park," Traffic Impact Analysis, City of Wildomar, California*, Urban Crossroads, (revised) March 5, 2015 (Appendix J-1).
- *Grove Park Supplemental Freeway Segment and Ramp Section Operations Analysis*, Urban Crossroads, March 6, 2015 (Appendix J-2).

As discussed in this section, the purpose of this analysis is to evaluate the potential traffic and circulation impacts associated with development of the project. For the purpose of this analysis, the project is anticipated to be developed in a single phase with the Opening Year of 2018. This analysis examines baseline and with-project traffic conditions for the existing (2013) condition. The cumulative assessment considers current and future projects and City General Plan Buildout (post-2035) conditions with the circulation system proposed in the City's General Plan Circulation Element.

4.16.1 Existing Setting

4.16.1.1 Existing Intersection Conditions

An inventory of the project's study area street system identified a number of street network segments and intersections for further study (Table 4.16.A and Figure 4.16.1). This study area was defined in coordination with City staff. The study area includes any intersection of "Collector" or higher classification streets at which the proposed project will add 50 or more peak hour trips. Additional intersections were included at the direction of City staff. The study area includes 11 intersections in the project area. Of these, seven intersections currently exist, while four are planned with development of the project. Driveway 1 on Clinton Keith Road would provide primary access to the proposed commercial/retail uses; secondary access would be provided at Driveway 2 on the future extension of Yamas Drive. Driveways 3 and 4 on Yamas Drive would provide access to the park and residential component of the project. The existing lane configuration and intersection control within the study area is provided in Figure 4.16.2.

The existing Level of Service at study area intersections is identified in Table 4.16.B. With the exception of the Salida del Sol/Clinton Keith Road intersection (in the p.m. peak hour), all study area intersections currently operate at an acceptable level of service (LOS).

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Project Boundary

Study Area Intersections

Existing Intersection Analysis Location

Future Intersection Analysis Location

FIGURE 4.16.1

Grove Park Mixed-Use Development
Environmental Impact Report

Study Area Intersections

SOURCE: Google Earth, 2013; Urban Crossroads, Traffic Impact Analysis, 2015.

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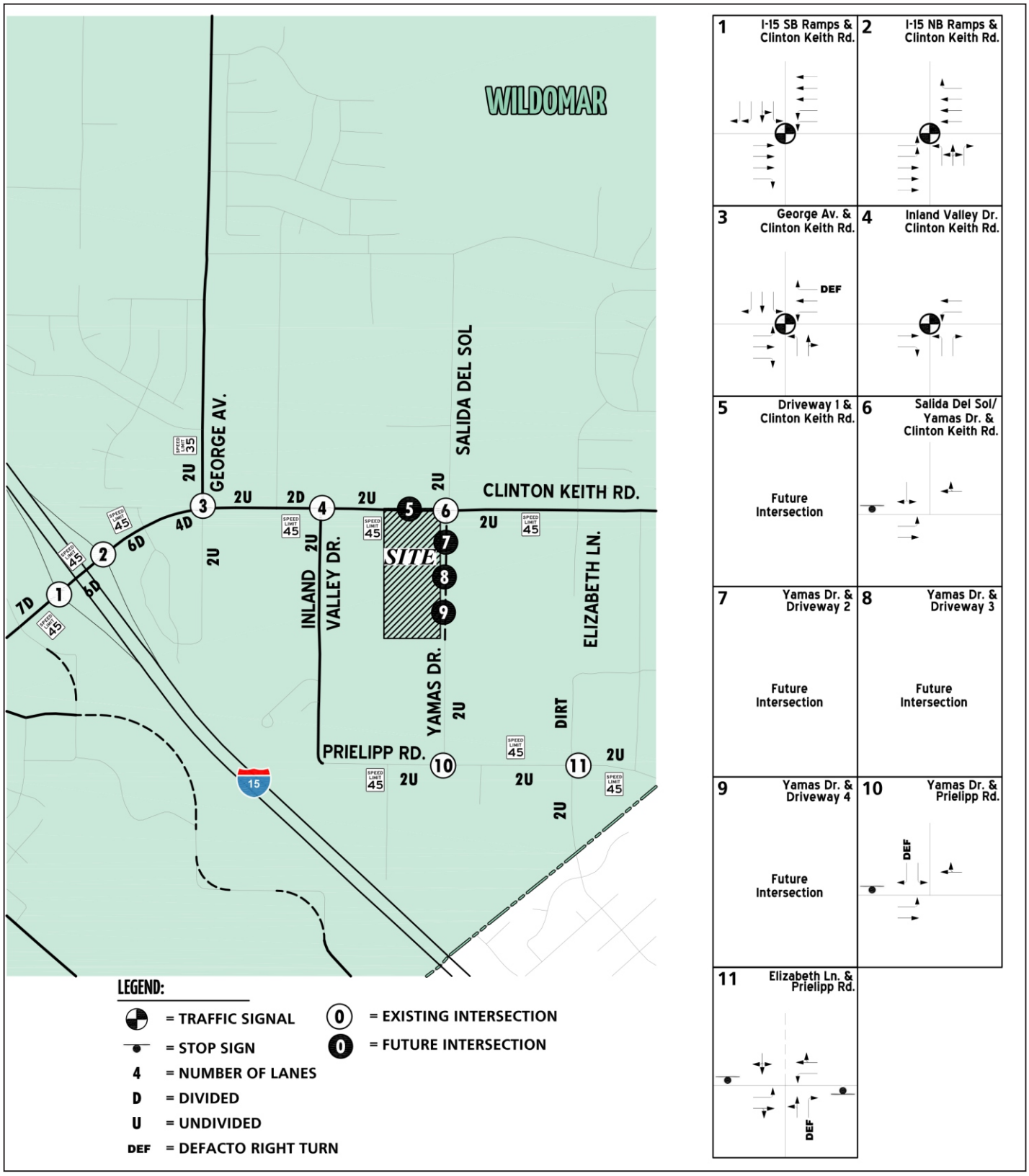

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FIGURE 4.16.2

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Grove Park Mixed-Use Development
Environmental Impact Report

Existing Lane Configuration and Traffic Control

SOURCE: Urban Crossroads, Traffic Impact Analysis, 2015.

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Table 4.16.A: Intersection Analysis Locations

Intersection ID[1]	Traffic Control	Intersection Location	Jurisdiction
1	Signal	I-15 Southbound Ramps/Clinton Keith Road	Caltrans
2	Signal	I-15 Northbound Ramps/Clinton Keith Road	Caltrans
3	Signal	George Avenue/Clinton Keith Road	Wildomar
4	Signal	Inland Valley Drive/Clinton Keith Road	Wildomar
5	—	Driveway 1/Clinton Keith Road	Wildomar
6	Cross-Street Stop	Salida Del Sol/Yamas Drive/Clinton Keith Road	Wildomar
7	—	Yamas Drive/Driveway 2	Wildomar
8	—	Yamas Drive/Driveway 3	Wildomar
9	—	Yamas Drive/Driveway 4	Wildomar
10	Cross-Street Stop	Yamas Drive/Prielipp Road	Wildomar
11	Cross-Street Stop	Elizabeth Lane/Prielipp Road	Wildomar

Source: Tables 1-1 and 3-1, Clinton Keith Road (APN: 380-250-003) "Grove Park," Traffic Impact Analysis, City of Wildomar, California, Urban Crossroads, (revised) March 5, 2015.
1. The locations of the intersections are identified in Figure 4.16.1.

Table 4.16.B: Existing Levels of Service

Intersection ID[1]	Traffic Control	Intersection Location	Level of Service	
			A.M.	P.M.
1	Signal	I-15 Southbound Ramps/Clinton Keith Road	B	B
2	Signal	I-15 Northbound Ramps/Clinton Keith Road	B	B
3	Signal	George Avenue/Clinton Keith Road	C	C
4	Signal	Inland Valley Drive/Clinton Keith Road	B	C
5	—	Driveway 1/Clinton Keith Road	—	—
6	Cross-Street Stop	Salida Del Sol/Yamas Drive/Clinton Keith Road	C	D
7	—	Yamas Drive/Driveway 2	—	—
8	—	Yamas Drive/Driveway 3	—	—
9	—	Yamas Drive/Driveway 4	—	—
10	Cross-Street Stop	Yamas Drive/Prielipp Road	B	B
11	Cross-Street Stop	Elizabeth Lane/Prielipp Road	B	B

Source: Table 3-1, Clinton Keith Road (APN: 380-250-003) "Grove Park," Traffic Impact Analysis, City of Wildomar, California, Urban Crossroads, (revised) March 5, 2015.
1. The locations of the intersections are identified in Figure 4.16.1.

As detailed in Figure 4.16.3, Clinton Keith Road is classified as an "Urban Arterial," while Inland Valley Drive and Prielipp Road are designated as "Secondary Arterials." Salida del Sol is identified as a "Collector" in the City General Plan Circulation Element.

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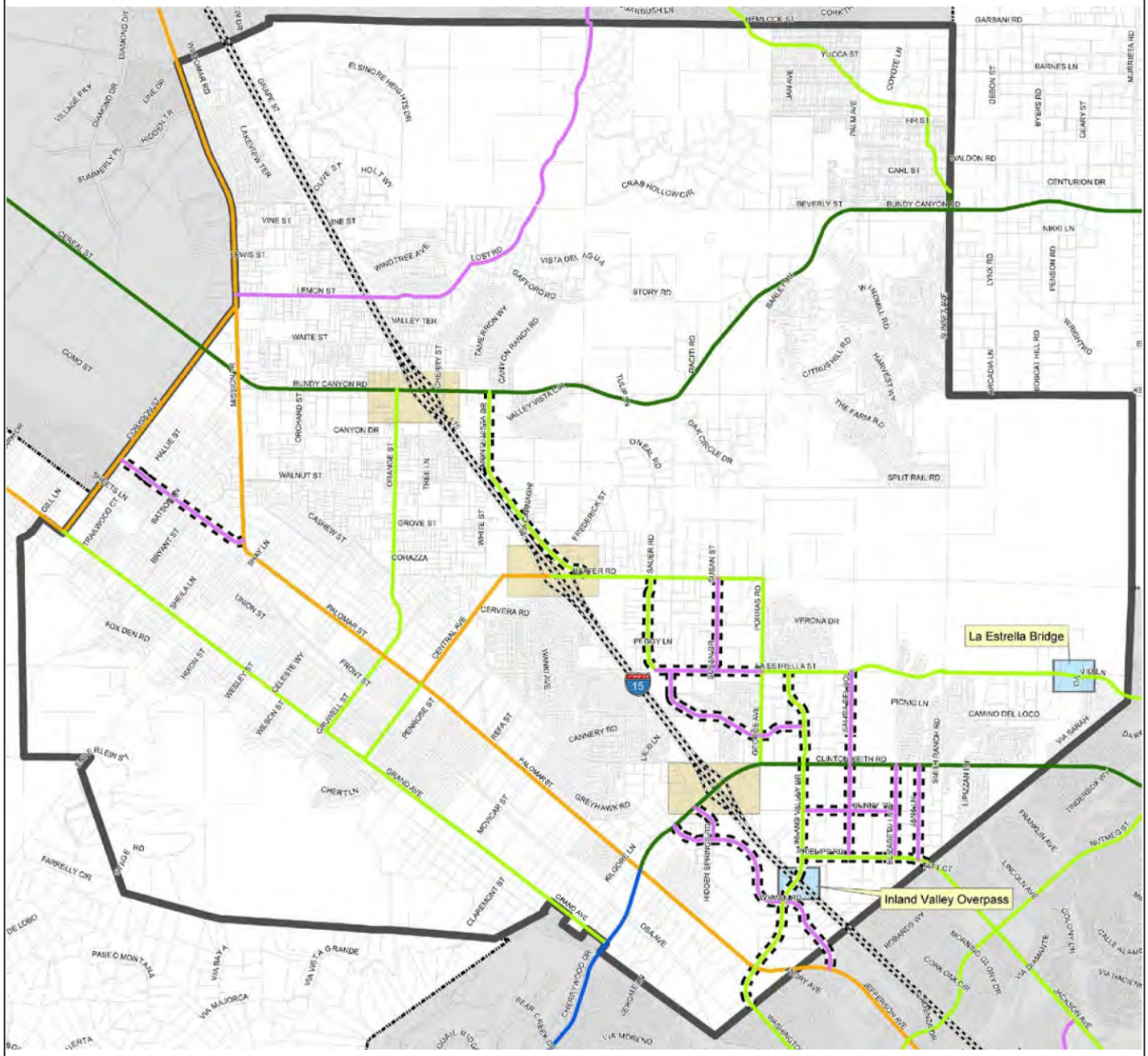

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FIGURE 4.16.3

Grove Park Mixed-Use Development
Environmental Impact Report

City of Wildomar General Plan Circulation Element

SOURCE: Urban Crossroads, Traffic Impact Analysis, 2015.

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4.16.1.2 Interstate 15

Located less than one mile west of the project site, Interstate 15 (I-15) is a north-south oriented interstate highway that connects Southern California to Nevada. There are currently three lanes in each direction of travel along I-15 near Clinton Keith Road. Study area freeway segments and freeway ramp merge/diverge junctions for Existing (2013) conditions were all found operate at a satisfactory LOS.

4.16.1.3 Bicycle and Pedestrian Facilities

Field observations of the project area showed minimal pedestrian and bicycle activity within the study area. The Daniel Ray Parker Memorial Trail extends along the project's eastern boundary while the Jon Rodarme Trail crosses the southern portion of the site. Neither sidewalks nor marked bike lanes are located along project frontages.

4.16.1.4 Transit Service

The study area is currently served by the Riverside Transit Authority (RTA), a public transit agency serving the unincorporated region of Riverside County near the City of Wildomar. Based on a review of the existing transit routes in the vicinity of the proposed project, there appear to be two existing lines that could feasibly serve the project, RTA Route 23 and Route 7, both of which run along Inland Valley Drive. Transit service is reviewed and updated by RTA periodically to address ridership, budget and community demand needs. Changes in land use can affect these periodic adjustments, which may lead to either enhanced or reduced service where appropriate.

4.16.1.5 NOP and Scoping Comments

In its response to the NOPs, the California Department of Transportation (Caltrans) identified several issues related to operation of the State Highway System (SHS) that required assessment in the EIR. Caltrans stated the project-specific traffic study should address the near-term and long-term impacts to State facilities and the identification of mitigation to offset these impacts. Caltrans further provided guidance on the format, extent, and methodology utilized in traffic studies, information on SHS level of service standards, and suggested how impacts to SHS facilities should be represented. In response to Caltrans comments, a supplemental traffic analysis focusing on freeway facilities has been prepared for the project. The discussion of the project's effects on SHS facilities is provided in Section 4.16.6.5.

4.16.2 Existing Policies and Regulations

The following specific policies and recommendations for implementation of the General Plan are applicable to the project:

Planned Circulation System

C 1.7 Encourage and support the development of projects that facilitate and enhance the use of alternative modes of transportation, including pedestrian-oriented retail and activity centers, dedicated bicycle lanes and paths, and mixed-use community centers.

Functional Classifications and Standards

C 3.9 Design off-street loading facilities for all new commercial and industrial developments so that they do not face surrounding roadways or residential neighborhoods. Truck backing and maneuvering to access loading areas shall not be permitted on the public road system, except when specifically permitted by the Transportation Department.

C 3.13 Design street intersections, where appropriate, to assure the safe, efficient passage of through-traffic and the negotiation of turning movements.

C 3.14 Design curves and grades to permit safe movement of vehicular traffic at the road's design speed. Design speed should be consistent with and complement the character of the adjacent area.

C 3.15 Provide adequate sight distances for safe vehicular movement at a road's design speed and at all intersections.

C 3.23 Consider the utilization of traffic-calming techniques in the design of new community local street and road systems and within existing communities where such techniques will improve safety and manage traffic flow through sensitive neighborhoods.

C 3.24 Provide a street network with quick and efficient routes for emergency vehicles, meeting necessary street widths, turn-around radius, and other factors as determined by the Transportation Department in consultation with the Fire Department and other emergency service providers.

C 3.26 Plan off-street parking facilities to support and enhance the concept of walkable and transit-oriented communities.

Level of Service (LOS)

C 2.1 Maintain the following Levels of Service: LOS "C" along all County maintained roads and conventional state highways. As an exception, LOS "D" may be allowed in Community Development areas, only at intersections of any combination of Secondary Highways, Major Highways, Arterials, Urban Arterials, Expressways, conventional state highways or freeway ramp intersections. LOS "E" may be allowed in designated community centers to the extent that it would support transit-oriented development and walkable communities.

C 2.2 Apply level of service standards to new development via a program establishing traffic study guidelines to evaluate traffic impacts and identify appropriate mitigation measures for new development.

C 2.3 Traffic studies prepared for development entitlements (tracts, plot plans, public use permits, conditional use permits, etc.) shall identify project related traffic impacts and determine the "significance" of such impacts in compliance with CEQA.

C 2.4 The direct project related traffic impacts of new development proposals shall be mitigated via conditions of approval requiring the construction of any improvements identified as necessary to meet level of service standards.

C 2.5 The cumulative and indirect traffic impacts of development may be mitigated through the payment of various impact mitigation fees such as County Development Impact Fees, Road and Bridge Benefit District Fees, and Transportation Uniform Mitigation Fees to the extent that these programs provide funding for the improvement of facilities impacted by development.

Circulation

C 4.1 Provide facilities for the safe movement of pedestrians within developments, as specified in the County Ordinances Regulating the Division of Land of the County of Riverside.

C 4.2 Maximize visibility and access for pedestrians and encourage the removal of barriers (walls, easements, and fences) for safe and convenient movement of pedestrians. Special emphasis should be placed on the needs of disabled persons considering Americans with Disabilities Act (ADA) regulations.

C 4.3 Assure pedestrian access from developments to existing and future transit routes and terminal facilities through project design.

C 4.4 Plan for pedestrian access that is consistent with road design standards while designing street and road projects. Provisions for pedestrian paths or sidewalks and timing of traffic signals to allow safe pedestrian street crossing shall be included.

C 6.2 Require all-weather access to all new development.

C 21.5 Construct and improve traffic signals at appropriate intersections. Whenever possible, traffic signals should be spaced and operated as part of coordinated systems to optimize traffic operation.

LU 12.1 Provide land use arrangements that reduce reliance on the automobile and improve opportunities for pedestrian, bicycle, and transit use in order to minimize congestion and air pollution.

LU 12.4 Incorporate safe and direct multi-modal linkages in the design and development of projects, as appropriate.

Pedestrian Facilities

C 4.5 Collaborate with local communities to ensure that school children have adequate transportation routes available, such as a local pedestrian or bike path, or local bus service.

C 4.6 Consult the County Transportation Department as part of the development review process regarding any development proposals where pedestrian facilities may be warranted. The County may require both the dedication and improvement of the pedestrian facilities as a condition of development approval.

C 4.7 Encourage safe pedestrian walkways that comply with the Americans with Disabilities Act (ADA) requirements within commercial, office, industrial, mixed use, residential, and recreational developments.

C 4.9 Coordinate with all transit operators to ensure that pedestrian facilities are provided along and/or near all transit routes, whenever feasible. New land developments may be required to provide pedestrian facilities due to existing or future planned transit routes even if demand for pedestrian facility is not otherwise warranted.

C 4.10 Review all existing roadways without pedestrian facilities when they are considered for improvements (whether maintenance or upgrade) to determine if new pedestrian facilities are warranted. New roadways should also be assessed for pedestrian facilities.

System Access

C 6.7 Require that the automobile and truck access of commercial and industrial land uses abutting residential parcels be located at the maximum practical distance from the nearest residential parcels to minimize noise impacts.

General Plan Consistency. Table 4.16.C analyzes the consistency of the proposed Project with City's General Plan goals and policies.

Table 4.16.C: General Plan Consistency Analysis

General Plan Goals and Targets	General Plan Consistency Analysis
Planned Circulation System	
C 1.7. Encourage and support the development of projects that facilitate and enhance the use of alternative modes of transportation, including pedestrian-oriented retail and activity centers, dedicated bicycle lanes and paths, and mixed-use community centers.	**Consistent.** The project provides commercial and office uses in proximity to residential development, will install sidewalks along the project frontage, and includes connection to the local trail system.

Table 4.16.C: General Plan Consistency Analysis

General Plan Goals and Targets	General Plan Consistency Analysis
Functional Classifications and Standards	
C 3.9. Design off-street loading facilities for all new commercial and industrial developments so that they do not face surrounding roadways or residential neighborhoods. Truck backing and maneuvering to access loading areas shall not be permitted on the public road system, except when specifically permitted by the Transportation Department.	**Consistent.** The commercial and office component of the project has been sited to provide area(s) adequate for on-site loading and vehicle maneuvering that do not face adjacent roadways or residential areas.
C 3.13. Design street intersections, where appropriate, to assure the safe, efficient passage of through-traffic and the negotiation of turning movements.	**Consistent.** All roadway improvements, intersections, and site access features will be designed to address the applicable safety and emergency access requirements of the City. The design of all such improvements will be reviewed and approved by the City prior to the issuance of applicable permits.
C 3.14. Design curves and grades to permit safe movement of vehicular traffic at the road's design speed. Design speed should be consistent with and complement the character of the adjacent area.	
C 3.15. Provide adequate sight distances for safe vehicular movement at a road's design speed and at all intersections.	
C 3.24. Provide a street network with quick and efficient routes for emergency vehicles, meeting necessary street widths, turn-around radius, and other factors as determined by the Transportation Department in consultation with the Fire Department and other emergency service providers.	
Level of Service (LOS)	
C 2.1. Maintain the following Levels of Service: LOS "C" along all County maintained roads and conventional state highways. As an exception, LOS "D" may be allowed in Community Development areas, only at intersections of any combination of Secondary Highways, Major Highways, Arterials, Urban Arterials, Expressways, conventional state highways or freeway ramp intersections. LOS "E" may be allowed in designated community centers to the extent that it would support transit-oriented development and walkable communities.	**Consistent.** The TIA prepared for the project addressed potential traffic impacts resulting from site development under the Existing plus Project, Opening Year (2018) and General Plan Buildout (2035) condition. The project includes roadway and intersection improvements that will be installed as part of the project. Additionally, for affected intersections, mitigation has been identified that will reduce LOS impact to acceptable levels.
C 2.2 Apply level of service standards to new development via a program establishing traffic study guidelines to evaluate traffic impacts and identify appropriate mitigation measures for new development.	

Table 4.16.C: General Plan Consistency Analysis

General Plan Goals and Targets	General Plan Consistency Analysis
C 2.3. Traffic studies prepared for development entitlements (tracts, plot plans, public use permits, conditional use permits, etc.) shall identify project related traffic impacts and determine the "significance" of such impacts in compliance with CEQA.	
C 2.4. The direct project related traffic impacts of new development proposals shall be mitigated via conditions of approval requiring the construction of any improvements identified as necessary to meet level of service standards.	
C 2.5. The cumulative and indirect traffic impacts of development may be mitigated through the payment of various impact mitigation fees such as County Development Impact Fees, Road and Bridge Benefit District Fees, and Transportation Uniform Mitigation Fees to the extent that these programs provide funding for the improvement of facilities impacted by development.	
Circulation	
C 4.1. Provide facilities for the safe movement of pedestrians within developments, as specified in the County Ordinances Regulating the Division of Land of the County of Riverside.	**Consistent.** The provision and design of pedestrian access features will meet applicable City and ADA requirements. The design of all such improvements will be reviewed and approved by the City prior to the issuance of applicable permits.
C 4.2. Maximize visibility and access for pedestrians and encourage the removal of barriers (walls, easements, and fences) for safe and convenient movement of pedestrians. Special emphasis should be placed on the needs of disabled persons considering Americans with Disabilities Act (ADA) regulations.	
C 4.3. Assure pedestrian access from developments to existing and future transit routes and terminal facilities through project design.	
C 4.4. Plan for pedestrian access that is consistent with road design standards while designing street and road projects. Provisions for pedestrian paths or sidewalks and timing of traffic signals to allow safe pedestrian street crossing shall be included.	
C 21.5. Construct and improve traffic signals at appropriate intersections. Whenever possible, traffic signals should be spaced and operated as part of coordinated systems to optimize traffic operation.	**Consistent.** All street, intersection, and access improvements will be designed and constructed per the applicable standard of the City or other relevant agency, be reviewed, and approved by the City prior to the issuance of applicable permits.

Table 4.16.C: General Plan Consistency Analysis

General Plan Goals and Targets	General Plan Consistency Analysis
LU 12.1. Provide land use arrangements that reduce reliance on the automobile and improve opportunities for pedestrian, bicycle, and transit use in order to minimize congestion and air pollution.	**Consistent.** The project will install sidewalks along street frontages and include a connection to the local trail system. The provision and design of pedestrian access features will meet applicable City and ADA requirements. The design of all such improvements will be reviewed and approved by the City prior to the issuance of applicable permits.
LU 12.4. Incorporate safe and direct multi-modal linkages in the design and development of projects, as appropriate.	
Pedestrian Facilities	
C 4.5. Collaborate with local communities to ensure that school children have adequate transportation routes available, such as a local pedestrian or bike path, or local bus service.	**Consistent.** The project will install sidewalks along street frontages and will include a connection to the local trail system. The provision and design of pedestrian access features will meet applicable City and ADA requirements. The design of all such improvements will be reviewed and approved by the City prior to the issuance of applicable permits.
C 4.6. Consult the County Transportation Department as part of the development review process regarding any development proposals where pedestrian facilities may be warranted. The County may require both the dedication and improvement of the pedestrian facilities as a condition of development approval.	
C 4.7. Encourage safe pedestrian walkways that comply with the Americans with Disabilities Act (ADA) requirements within commercial, office, industrial, mixed use, residential, and recreational developments.	
C 4.9. Coordinate with all transit operators to ensure that pedestrian facilities are provided along and/or near all transit routes, whenever feasible. New land developments may be required to provide pedestrian facilities due to existing or future planned transit routes even if demand for pedestrian facility is not otherwise warranted.	
C 4.10. Review all existing roadways without pedestrian facilities when they are considered for improvements (whether maintenance or upgrade) to determine if new pedestrian facilities are warranted. New roadways should also be assessed for pedestrian facilities.	
System Access	
C 6.7. Require that the automobile and truck access of commercial and industrial land uses abutting residential parcels be located at the maximum practical distance from the nearest residential parcels to minimize noise impacts	**Consistent.** The noise impact analysis prepared for the project concluded that no noise impact would be generated by on-site stationary noise sources during project operation. Off-site mobile noise impacts were determined to not exceed City standards, while on-site mobile noise impacts where reduced to below the City interior standard with the application of appropriate mitigation.

4.16.3 Methodology

4.16.3.1 Level of Service

Roadway operations and the relationship between capacity and traffic volumes are generally expressed in terms of LOS, which is defined using the letter grades A through F (Table 4.16.D) and reflect the reality that conditions rapidly deteriorate as traffic approaches the absolute capacity of the roadway facility. Under such conditions, congestion is experienced. There is general instability in the traffic flow, which means that relatively small incidents (e.g., momentary engine stall) can cause considerable fluctuations in speeds and delays. This near-capacity situation is labeled LOS E. Beyond LOS E, capacity has been exceeded, and arriving traffic will exceed the ability of the intersection to accommodate it.

Table 4.16.D: Traffic Level of Service (LOS) Definitions

LOS	Description
A	No approach phase is fully utilized by traffic and no vehicle waits longer than one red indication. The approach appears quite open, turns are made easily, and nearly all drivers find freedom of operation.
B	This service level represents stable operation, where an occasional approach phase is fully utilized and a substantial number approach full use. Many drivers begin to feel restricted within platoons of vehicles.
C	This level still represents stable operating conditions. Occasionally drivers may have to wait through more than one red signal indication, and backups may develop behind turning vehicles. Most drivers feel somewhat restricted, but not objectionably so.
D	This level encompasses a zone of increasing restriction approaching instability at the intersection. Delays to approaching vehicles may be substantial during short peaks within the peak period; however, enough cycles with lower demand occur to permit periodic clearance of developing queues, thus preventing excessive backups.
E	Capacity occurs at the upper end of this service level. It represents the most vehicles that any particular intersection approach can accommodate. Full utilization of every signal cycle is seldom attained no matter how great the demand.
F	This level describes forced flow operations at low speeds, where volumes exceed capacity. These conditions usually result from queues of vehicles backing up from a restriction downstream. Speeds are reduced substantially and stoppages may occur for short or long periods of time due to the congestion. In the extreme case, both speed and volume can drop to zero.

Source: *Highway Capacity Manual, Special Report 209,* Transportation Research Board, Washington, DC, 1985.

The LOS analysis was conducted to determine whether there is adequate traffic operation at each of the study intersections. These intersections were selected based on the City's Public Works Department staff recommendations. The distribution of project trips was developed in consultation with City staff by examining the location of the proposed project trips in relation to the surrounding residential areas, as well as the regional roadway network, which follows current practice. Table 4.16.E identifies the level of service criteria for unsignalized and signalized intersections.

Table 4.16.E: Level of Service Criteria for Unsignalized and Signalized Intersections

Level of Service	Unsignalized Intersection Average Delay per Vehicle (seconds)	Signalized Intersection Average Delay per Vehicle (seconds)
A	≤ 10	≤ 10
B	> 10 and ≤ 15	> 10 and ≤ 20
C	> 15 and ≤ 25	> 20 and ≤ 35
D	> 25 and ≤ 35	> 35 and ≤ 55
E	> 35 and ≤ 50	> 55 and ≤ 80
F	> 50	> 80

Source: Transportation Research Board, *2010 Highway Capacity Manual, Intersection Level of Service Criteria,* December 2010.

The majority of study area intersections fall under the jurisdiction of the City. However, the Intersections 1 and 2 (I-15 Southbound Ramps/Clinton Keith Road and I-15 Northbound Ramps/Clinton Keith Road) are under the jurisdiction of Caltrans. The target LOS for intersections under the jurisdiction of the City is LOS C. For intersections under the jurisdiction of Caltrans, the minimum acceptable standard is LOS D.

The analysis of freeway operations also used LOS thresholds. The freeway segment analysis was based on the methodology described in the *Highway Capacity Manual* (*HCM* 2010) and performed using HCS2010 software. The merge/diverge analysis was based on the *HCM* 2010 Ramps and Ramp Junctions analysis method and performed using HCS2010 software. Density was calculated in terms of passenger cars per mile per lane. Freeway LOS criteria are defined in Table 4.16.F.

Table 4.16.F: Level of Service Criteria for Freeway Operations

Level of Service	Density Range (passenger cars/mile/lane)
A	0.0–11.0
B	11.1–18.0
C	18.1–26.0
D	26.1–35.0
E	35.1–45.0
F	>45.0

Source: Tables 1 and 2, Grove Park Supplemental Freeway Segment and Ramp Section Operations Analysis, Urban Crossroads, March 6, 2015.

Based on Caltrans traffic study guidelines, LOS D is considered to be the limit of acceptable traffic operations during the peak hour at freeway segments and future merge/diverge ramp junctions.

4.16.3.2 Traffic Impact Analysis Scope

The Traffic Impact Analysis (TIA) examines traffic operations in the vicinity of the project under the following six scenarios:

- Existing (2013) Conditions;
- Existing with Project (2013) Conditions;
- Opening Year (2018) without Project;
- Opening Year (2018) with Project;
- General Plan Buildout (Post-2035) Cumulative without Project; and
- General Plan Buildout (Post-2035) Cumulative with Project Conditions.

Traffic conditions were examined for the weekday a.m. and p.m. peak hour conditions. The a.m. peak hour is defined as the one hour of highest traffic volumes occurring between 7:00 and 9:00 a.m. The p.m. peak hour is the one hour of highest traffic volumes occurring between 4:00 and 6:00 p.m.

4.16.3.3 Project Trip Generation and Assignment

Trip generation for the project was based on its proposed uses: apartments, offices, commercial retail, and proposed park.[1] Internal capture, or trips reduced by the placement of housing, commercial, and office uses adjacent to each other, was subtracted from gross trip generation. As Table 4.16.G depicts, the project is expected to generate 2,691 daily total trips, with 181 trips occurring the a.m. peak hour and 256 trips occurring during the p.m. peak hour.

Table 4.16.G: Project Trip Generation

Land Use	A.M. Peak Hour			P.M. Peak Hour			Daily Trips
	In	Out	Total	In	Out	Total	
Apartments	15	65	81	59	33	91	979
Medical Office	66	18	84	34	88	122	1,222
Commercial Retail	11	6	17	21	22	43	488
Neighborhood Park	0	0	0	0	0	0	3
Total Trips	92	89	181	114	142	256	2,691

Source: Table 4-2, Clinton Keith Road (APN: 380-250-003) "Grove Park," Traffic Impact Analysis, City of Wildomar, California, Urban Crossroads, (revised) March 5, 2015.

Generalized trip distribution patterns were developed based on the location of the project in relation to surrounding land uses and the regional roadway network. The

[1] Trip generation rates were obtained from the Institute of Transportation Engineers (ITE) *Trip Generation* manual (9th Ed.) 2012 for the apartments, office, and commercial retail uses. Trip generation for the park component was found in the *(Not So) Brief Guide to Vehicular Traffic Generation Rates for the San Diego Region* (2002), published by the San Diego Association of Governments (SANDAG).

trip distribution was developed based on consultation with City staff and reflects the locations of surrounding residential, commercial and employment uses. The average daily traffic and peak hour volumes at the study area intersections were determined based on project traffic generation and trip distribution patterns.[1] Existing, future year, and future year cumulative with project traffic volumes were developed by adding project traffic to the corresponding background traffic volumes. Figure 4.16.4 illustrates project average daily traffic (ADT) and weekday a.m. and p.m. peak hour volumes (morning peak hour, 7:00–9:00 a.m., evening peak hour, 4:00–6:00 p.m.).

4.16.3.4 Construction Traffic

Traffic operations during the proposed construction phase of the project may potentially result in traffic impacts related to the following construction-related activities:

- Employee trips;
- Import of materials;
- Import of construction materials; and
- Use of heavy equipment.

Construction activity typically occurs during the hours of 7:00 a.m. and 4:00 p.m. More specifically, to minimize the effect of truck traffic, soil import hauling activities would generally occur between the hours of 9:00 a.m. and 4:00 p.m., which would be outside the typical "commuter traffic" peak hours in the project vicinity (see Section 4.16.2.2).

Construction of the project will require the import of construction materials to and from the site. The imported materials will be transported via dump trucks. Each truck will generate one inbound and one outbound trip, accounting for a total of two truck trips per load of material imported. Import of construction materials is anticipated to consist of the import of "fill" soil to the site (approximately 78,300 cubic yards) and the importation of raw building materials, concrete, asphalt, etc.

Heavy equipment to be utilized on site during construction includes, but is not limited to, flatbeds, dozers, scrapers, graders, track hoes, dump trucks, forklifts, cranes, cement trucks, pavers, rollers, water trucks, rolling container trucks, and bobcats. Heavy equipment will be delivered and removed from the site throughout the construction phase.

A detailed accounting of construction traffic is provided in Section 4.16.6.2.

[1] The Project Trip Distribution and Assignment are discussed in further detail in Sections 4.2 and 4.3, respectively, of the TIA (EIR Appendix J-1).

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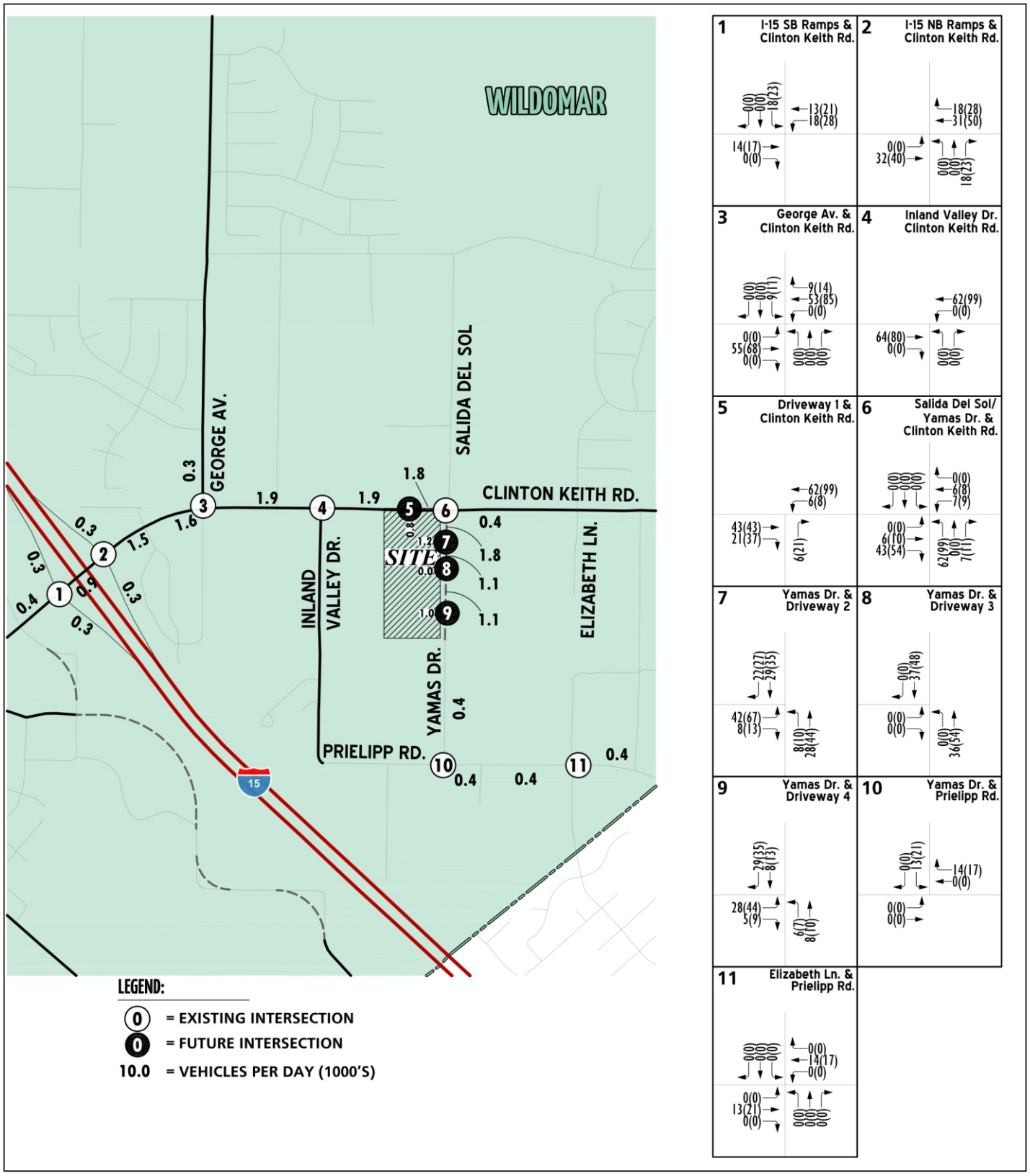

LSA

FIGURE 4.16.4

N

Grove Park Mixed-Use Development
Environmental Impact Report

Project Only Conditions:
Average Daily Traffic (ADT) Peak Hour Volumes

SOURCE: Urban Crossroads, Traffic Impact Analysis, 2015.

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4.16.3.5 Freeway Mainline Analysis

Caltrans traffic study guidelines require a focused analysis of State highways where a project is anticipated to contribute 50 or more two-way peak hour trips when the affected State highway facilities are experiencing noticeable delay; that is, approaching unstable traffic flow conditions (LOS C or D). Based on recent analysis of the I-15 mainline conducted for other developments in the area, I-15 segments in the vicinity of Clinton Keith Road were found to operate at LOS C and D in the weekday a.m. and weekday p.m. peak hours.

An assessment of I-15 mainline operations was consistent with those evaluated in the TIA. The analysis of the freeway operations consists of two parts. The first part is the freeway mainline segment analysis, which assesses the performance of the basic freeway segments on either side of the ramp-to-arterial intersections. The second is the merge/diverge ramp junction analysis, which assesses the performance of the on- and off-ramp junction at I-15/Clinton Keith Road.

The freeway system in the study area has been broken into segments defined by freeway-to-arterial interchange locations resulting in four existing on- and off-ramp locations. The merge/diverge analysis is based on the *HCM* 2010 Ramps and Ramp Junctions analysis method and performed using HCS2010 software.

4.16.3.6 Cumulative Traffic

CEQA guidelines require that other reasonably foreseeable development projects that 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 City and is summarized in previously referenced Table 2.A and Figure 2.1.

4.16.3.7 Traffic Forecasts

The assessment of potential project-related traffic impacts addresses two types of analyses, “buildup” and “buildout.” The “buildup” method was used to approximate traffic forecasts for both the “Existing plus Project” and “Opening Year (2018)” traffic conditions. The “Existing plus Project” scenario is intended to identify the significant project impacts associated with the proposed project while the Opening Year (2018) scenario is intended to identify near-term cumulative impacts on both the existing and planned near-term circulation system.

The “Existing plus Project” traffic conditions include existing traffic in addition to the traffic generated by the proposed project. The Opening Year (2018) traffic conditions include background traffic, traffic generated by other cumulative development projects within the study area and the traffic generated by the proposed project.

The "buildout" approach is used to forecast the General Plan Buildout (Post-2035) without and with project conditions of the study area.

4.16.4 Thresholds of Significance

To determine whether the addition of project-related traffic at a study intersection would result in a significant project-related impact, the following significance thresholds will be utilized.

For intersections under the jurisdiction of the City:

- A significant project-related impact occurs at a study intersection if the addition of project-generated trips reduces the peak hour level of service of the study intersection to change from acceptable "pre-project" operation (LOS A, B, C or D) to deficient operation (LOS E or F); or
- At intersections with a pre-project LOS of E or F, a significant project-related impact occurs at a study intersection if the addition of project-generated trips changes the pre-project delay by more than 5.0 seconds.

Impacts to SHS facilities will be considered significant if:

- The traffic study finds that the LOS of a facility will degrade from D or better to E or F.
- The traffic study finds that the project will exacerbate an already deficient condition.

As detailed in the State CEQA Guidelines (Appendix G), the project could have a significant impact if any of the following conditions occurs:

- A change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks.
- Substantially increased hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- Inadequate emergency access.
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise cause a decrease in the performance or safety of such facilities

4.16.5 Less than Significant Impacts

The following potential impacts were determined to be less than significant. In each of the following issues, either no impact would occur (therefore, no mitigation would

be required) or adherence to established regulations, standards, and policies would reduce potential impacts to a less than significant level.

4.16.5.1 Air Traffic Patterns

Threshold	Would the proposed project 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?

The nearest air facility to the project site is Skylark Field airport in the City of Lake Elsinore, located approximately located 4.5 miles northwest of the site. The project does not include any use that would interfere with or alter air traffic volumes or otherwise affect air traffic patterns, nor does the project include any visual, electronic, or physical feature that would present a flight hazard to aircraft using Skylark Field or any other air facility. As such, no impacts associated with this issue would occur and no mitigation is required.

4.16.5.2 Design Features or Incompatible Uses

Threshold	Would the proposed project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

The project would be accessed from new driveways on Clinton Keith Road and the future extension of Yamas Drive. The project proposes improvements to both of these roadways including widening Clinton Keith Road between the project's western boundary and Salida del Sol Drive and the extension of Yamas Drive to meet Salida del Sol.

Improvements along the project's frontage on both of these roadways would be those identified in the final conditions of approval for the proposed Project and applicable City standards.

The design of project's circulation system does not include any sharp curves or dangerous intersections. Roadway improvements in and around the project site would be designed and constructed to satisfy all City requirements for street widths, corner radii, intersection control, site access requirements and internal circulation. As part of the City's standard plan check process, the final design of all roadways, intersections, and circulation within and adjacent to the project site would be reviewed by and subject to approval by City staff prior to issuance (as relevant) of any grading, construction, or occupancy permit. The review and approval by City staff sufficiently ensures the project will incorporate the necessary design features to ensure safe travel to, from, and within the project site.

Construction-traffic impacts are addressed in Section 4.16.6.1. The project does not include uses that are incompatible with existing on-site or adjacent development.

Adherence to applicable existing requirements of the City would reduce impacts associated with this issue to a less than significant level and no mitigation is required.

4.16.5.3 Inadequate Emergency Access

Threshold	Would the proposed project result in inadequate emergency access?

The project would be designed, constructed, and maintained to provide required emergency/evacuation access. As part of the development process, project plans will be submitted to law enforcement, fire protection, and/or other emergency service providers (as appropriate) for review. Adherence to applicable existing requirements of the City of Wildomar, emergency service providers, and other agencies would reduce impacts associated with this issue to a less than significant level and no further discussion is required.

The project is not expected to cause any significant impacts at study area intersections that may be used by emergency vehicles. With the installation of project improvements and full participation in the applicable fee programs, it is reasonable to conclude that the long-term emergency access features required for the project site and the City in general will be installed and appropriately maintained. Therefore, potential impacts are less than significant and no mitigation is required.

4.16.5.4 Alternative Transportation

Threshold	Would the proposed project conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities?

The RTA, a public transit agency serving Riverside County, provides the project area bus service. There are two bus routes that could potentially serve the project, RTA Routes 23 and 7. Route 7 runs along Clinton Keith Road and turns onto Inland Valley Drive, which runs parallel to the future extension of Yamas Drive; the Route 7 stop nearest to the site is approximately 0.15 mile from the project site. Route 23 runs along Prielipp Road south of the project, and turns north onto Inland Valley Drive with a stop approximately 0.18 mile from the project site. Transit service is reviewed and updated by RTA periodically to address ridership, budget and community demand needs. Changes in land use can affect these periodic adjustments, which may lead to either enhanced or reduced service where appropriate. The project will not alter the location or frequency of bus transportation in the study area.

The project will install sidewalk improvements along Clinton Keith Road and the future extension of Yamas Drive to facilitate pedestrian access. In addition, the

commercial component will be required to provide bicycle parking facilities pursuant to Section 17.188.060 of the Municipal Code.[1]

The project would be required to adhere to applicable City standards that support and/or facilitate alternative modes of transportation. Through the City's project review process, policies, plans, and/or programs, supporting alternative transportation would be reviewed and incorporated as applicable. Consequently, project impacts related to non-vehicular traffic or alternative modes of transportation are less than significant and no mitigation is warranted.

4.16.6 Significant Impacts

4.16.6.1 Conflict with Applicable Circulation Plan and Traffic and Level of Service Impacts – Existing plus Project

Impact 4.12.6.1: *Intersection Level of Service impacts would exceed City standards at intersections under the Existing plus Project condition.*

Threshold:

For intersections under the jurisdiction of the City:

> A significant project-related impact occurs at a study intersection if the addition of project generated trips reduces the peak hour level of service of the study intersection to change from acceptable "pre-project" operation (LOS A, B, C or D) to deficient operation (LOS E or F); or
>
> At intersections with a pre-project LOS of E or F, a significant project-related impact occurs at a study intersection if the addition of project generated trips changes the pre-project delay by more than 5.0 seconds.

Impacts to State Highway System facilities will be considered significant if:

> The traffic study finds that the LOS of a facility will degrade from D or better to E or F; or
>
> The traffic study finds that the project will exacerbate an already deficient condition.

As previously detailed in Figure 3.8 (and Section 3.4.5), as part of the proposed project, the following roadway improvements will be installed:

- *Clinton Keith Road: Clinton Keith Road is an east-west oriented roadway located along the project's northern boundary.* Construct Clinton Keith Road at its ultimate half-section width as an Urban Arterial Highway (152-foot right-of-way) between the project's western boundary and Salida Del Sol/Yamas Drive.

[1] One bicycle parking space per 25 required employee parking spaces and one bicycle parking space per 33 patron parking spaces.

Improvements along the project's frontage (south side of Clinton Keith Road) would be those required by final conditions of approval for the proposed project and applicable City standards.

- *Yamas Drive: Yamas Drive is a future north-south oriented roadway located along the project's eastern boundary.* Construct Yamas Drive at its ultimate half-section width as a Collector (74-foot right-of-way) from Clinton Keith Road to the project's southern boundary. Improvements along the project's frontage (west side of Yamas Drive) would be those required by final conditions of approval for the proposed project and applicable City standards.

Wherever necessary, roadways adjacent to the project, site access points, and site-adjacent intersections will be constructed to be consistent with or within the recommended roadway classifications and respective cross-sections in the City's General Plan Circulation Element.

The recommended site access driveway improvements for the project are identified below.

- *Driveway 1/Clinton Keith Road:* Install a stop control on the northbound approach and construct the intersection with the following geometrics:
  - Northbound Approach: One right-turn lane.
  - Southbound Approach: N/A.
  - Eastbound Approach: One through lane and one shared through/right-turn lane.
  - Westbound Approach: One left-turn lane and one through lane.
- Yamas Drive/Driveway 2: Install a stop control on the eastbound approach and construct the intersection with the following geometrics:
  - Northbound Approach: One shared left-turn/through lane.
  - Southbound Approach: One shared through/right-turn lane.
  - Eastbound Approach: One shared left-turn/right-turn lane.
  - Westbound Approach: N/A.
- Yamas Drive/Driveway 3: Install a stop control on the eastbound approach and construct the intersection with the following geometrics:
  - Northbound Approach: One shared left-turn/through lane.
  - Southbound Approach: One shared through/right-turn lane.
  - Eastbound Approach: One shared left-turn/right-turn lane.
  - Westbound Approach: N/A.
- Yamas Drive/Driveway 4: Install a stop control on the eastbound approach and construct the intersection with the following geometrics:

- Northbound Approach: One shared left-turn/through lane.
- Southbound Approach: One shared through/right-turn lane.
- Eastbound Approach: One shared left-turn/right-turn lane.
- Westbound Approach: N/A.

Improvements occurring in conjunction with adjacent project development activity or as needed for project access include:

- Clinton Keith Road/Salida Del Sol/Yamas Drive: Install a traffic signal with protected left-turn phasing on the eastbound and westbound approaches of Clinton Keith Road and construct the intersection with the following geometrics:
  - Northbound Approach: One left-turn lane, one shared through/right-turn lane.
  - Southbound Approach: One left-turn lane, one shared through/right-turn lane.
  - Eastbound Approach: One left-turn lane, one through lane, and one right-turn lane.
  - Westbound Approach: One left-turn lane, one shared through/right-turn lane.

Transportation improvements throughout Riverside County, including within the City, are funded through a combination of direct project mitigation, fair-share contributions, or development impact fee (DIF) programs, such as the County's Transportation Uniform Mitigation Fee (TUMF) program and the City's DIF program. Identification and timing of needed improvements is generally determined through local jurisdictions based upon a variety of factors. Table 4.16.H lists improvements that are required by General Plan Buildout (Post-2035) traffic conditions to mitigate the long-range cumulative traffic impacts.

The "Existing plus Project" analysis anticipates the roadway and site access improvements identified above have been installed. Table 4.16.I summarizes the LOS for the study area intersections under the "Existing plus Project" condition and shows that one intersection is forecast to operate at an unsatisfactory level of service:

- Salida Del Sol/Yamas Drive/Clinton Keith Road (a.m. and p.m.).

Under existing conditions (previously referenced Table 4.16.B), this intersection is operating at an acceptable LOS (LOS D) during the p.m. peak hour. The addition of project traffic would increase peak hour trips such that the intersection would operate at an unacceptable LOS during both a.m. (LOS D) and p.m. (LOS E) peak hours. Consistent with City significant criteria, this is a potentially significant impact and mitigation is required. As detailed in Table 4.16.J, the addition of a traffic signal and implementation of controlled turning movements would improve the LOS at this intersection.

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Table 4.16.H: Summary of Traffic Impact Fee Program Improvements

Intersection ID	Intersection Location	Jurisdiction	Required Improvement (2018)	Required Improvements (2035)	Project Improvements	Program Improvements	Non-Program Improvements	Fair-Share
2	1-15 NB Ramps/ Clinton Keith Road	Caltrans	None	Restripe one WBTR	None	None	Restripe one WBTR	n/a
3	George Avenue/ Clinton Keith Road	Wildomar	1 EBT, 1 WBT	1 SBT, 1 EBL, 2 EBT, 2 WBT, 1 WBR	None	TUMF: 1 EBT, 1 WBT DIF: 1 SBT, 1 SBL, 1 SBT, 1 SBR, 2 EBL, 1 WBL, 1 WBR	None	n/a
4	Inland Valley Drive/Clinton Keith Road	Wildomar	1 EBT, 1 WBT	2 NBT, 1 SBL, 2 SBT, 1 SBR, 2 EBL, 2 EBT, 1 WBL, 2 WBT, 1 WBR	None	TUMF: 2 EBT, 2 WBT DIF: 2 NBT, 1 SBL, 2 SBT, 1 SBR, 2 EBL, 1 WBL, 1 WBR	None	n/a
6	Salida del Sol/Yamas Drive/Clinton Keith Road	Wildomar	Install traffic signal, 1 NBL, 1 NBRT, 1 SBL, 1 EBT, 1 WBL	Install traffic signal, 1 NBL, 1 SBL, 1 EBT, 1 WBL, 1 WBT	Install traffic signal, 1 NBL, 1 NBTR, 1 SBL, 1 WBL	TUMF: 1 EBT, 1 WBT DIF: INSTALL NEW 4-WAY (SIGNAL)1	None	6.9%
10	Yamas Drive/Prielipp Road	Wildomar	None	Install traffic signal, 1 EBT, 1 WBT	None	DIF: 1 EBT, 1 WBT, INSTALL NEW 3-WAY (SIGNAL)[1]	Install traffic signal	2.7%
11	Elizabeth Lane/Prielipp Road	Wildomar	1 SBLTR	Install traffic signal, 1 NBL, 1 SBL, 1 SBTR, 1 EBT, 1 WBT	None	DIF: 1 EBT, 1 WBT, INSTALL NEW 4-WAY SIGNAL[1]	Install traffic signal, 1 NBL, 1 SBl, 1 SBTR	2.2%

1 Page 4-3, *City of Wildomar 2015 Impact Fee Study Report*, April 23, 2015.

Table 4.16.I: "Existing plus Project" Condition LOS

Intersection ID[1]	Traffic Control	Intersection Location	Level of Service	
			A.M.	P.M.
1	Signal	I-15 Southbound Ramps/Clinton Keith Road	B	B
2	Signal	I-15 Northbound Ramps/Clinton Keith Road	B	B
3	Signal	George Avenue/Clinton Keith Road	C	D
4	Signal	Inland Valley Drive/Clinton Keith Road	C	C
5	Cross-Street Stop	Driveway 1/Clinton Keith Road	B	C
6	Cross-Street Stop	Salida Del Sol/Yamas Drive/Clinton Keith Road	**D**	**E**
7	Cross-Street Stop	Yamas Drive/Driveway 2	A	A
8	Cross-Street Stop	Yamas Drive/Driveway 3	A	A
9	Cross-Street Stop	Yamas Drive/Driveway 4	A	A
10	Cross-Street Stop	Yamas Drive/Prielipp Road	B	B
11	Cross-Street Stop	Elizabeth Lane/Prielipp Road	B	B

Source: Table 5-1, Clinton Keith Road (APN: 380-250-003) "Grove Park," Traffic Impact Analysis, City of Wildomar, California, Urban Crossroads, (revised) March 5, 2015.

Table 4.16.J: "Existing plus Project" Condition LOS with Mitigation

Intersection ID[1]	Traffic Control	Intersection Location	Level of Service	
			A.M.	P.M.
6	Cross-Street Stop	Salida Del Sol/Yamas Drive/Clinton Keith Road	**D**	**E**
	Traffic Signal	With Mitigation Measure 4.16.6.1A	B	C

Source: Table 5-1, Clinton Keith Road (APN: 380-250-003) "Grove Park," Traffic Impact Analysis, City of Wildomar, California, Urban Crossroads, (revised) March 5, 2015.

As established in *City of Wildomar 2015 Impact Fee Study Report* (April 23, 2015), the improvements at the intersection of Clinton Keith Road and Salida del Sol are included in the City's DIF program (e.g., Install new 4-way signal). The installation of intersection improvements consistent with **Mitigation Measure 4.16.6.1A**, as detailed in previously referenced Table 4.16.J, would reduce the LOS at the Salida Del Sol/Yamas Drive/Clinton Keith Road intersection[1] to an acceptable level.

Mitigation Measure. The following measure will reduce the LOS impact at the affected intersection:

4.16.6.1A ***Salida del Sol/Yamas Drive/Clinton Keith Road:***

Install a traffic signal with protected left-turn phasing on the eastbound and westbound approaches of Clinton Keith Road and construct the intersection with the following geometrics:

- Northbound Approach: One left-turn lane, one shared through/right-turn lane.
- Southbound Approach: One left-turn lane, one shared through/right-turn lane.
- Eastbound Approach: One left-turn lane, one shared through/right-turn lane.
- Westbound Approach: One left-turn lane, one shared through/right-turn lane.

The scope of required improvements at this location shall be reviewed and approved by the City Engineer and be consistent with all applicable City standards.

4.16.6.1B Prior to the issuance of building permits, the project applicant shall submit evidence to the City that the Transportation Uniform Mitigation Fee (TUMF), Development Impact Fee (DIF), and/or fair-share contribution for the required improvements has been paid. As permitted by the City, payment of required fees may be offset by in-lieu fee credit derived by the applicant's installation of the improvement identified in **Mitigation Measure 4.16.6.1A**.

Level of Significance after Mitigation. The impact at this existing intersection occurs under the "Existing plus Project" condition. While the improvements at the intersection of Clinton Keith Road and Salida del Sol are included in the City's DIF program (e.g., install new 4-way signal), it is uncertain if the timing of the improvement cited in the DIF program will occur prior to the project opening. **Mitigation Measure 4.16.6.1A** has been identified to ensure the required

[1] This intersection improvement is detailed in the April 23, 2015 *Development Impact Fee Study Update*.

improvement is in place to accommodate "Existing plus Project" impacts. Recognizing the improvement's inclusion in the City's DIF program, as permitted by the City, required fees may be offset in-part (as determined by the City) by in-lieu fee credit derived from the applicant's installation of the improvements.

Adherence to the stated measures will ensure the required improvement is in place to accommodate project traffic and will reduce LOS impacts under the "Existing plus Project" condition to a less than significant level.

4.16.6.2 Conflict with Applicable Circulation Plan and Traffic and Level of Service Impacts – Construction Traffic

Impact 4.12.6.2: *Project-related construction traffic may potentially affect study area intersections during site preparation, grading, or building phase of development.*

Threshold:

For intersections under the jurisdiction of the City:

> A significant project-related impact occurs at a study intersection if the addition of project generated trips reduces the peak hour level of service of the study intersection to change from acceptable "pre-project" operation (LOS A, B, C, or D) to deficient operation (LOS E or F); or
>
> At intersections with a pre-project LOS of E or F, a significant project-related impact occurs at a study intersection if the addition of project generated trips changes the pre-project delay by more than 5.0 seconds.

Impacts to State Highway System facilities will be considered significant if:

> The traffic study finds that the LOS of a facility will degrade from D or better to E or F; or
>
> The traffic study finds that the project will exacerbate an already deficient condition.

Traffic operations during the proposed construction phase of the project may potentially result in traffic impacts related to the following construction-related activities:

- Employee trips;
- Import of materials;
- Import of construction materials; and
- Use of heavy equipment.

It has been assumed that construction activity will occur during the hours of 7:30 a.m. and 4:00 p.m. To minimize the impact of construction truck traffic to the surrounding roadway network, trucks will (to the extent feasible) utilize a direct route from I-15 to the site (via Clinton Keith Road). Soil import hauling activities would occur during off-peak hours (between 9:00 a.m. and 4:00 p.m.) in order to have minimal impact to the surrounding roadway network. Other construction traffic (e.g., equipment and building material delivery) may occur subject to the provisions of the Construction Management Plan (**Mitigation Measure 4.16.2.2A**) prepared for the project. Employee trips are estimated based on the number of employees estimated to be on-site throughout the various stages of construction. Each employee is assumed to drive and from the construction site each day. It has been assumed that employees will arrive up to 30 minutes prior to the workday and will leave up to 30 minutes after the workday ends. Parking for employees and non-employee vehicles can be accommodated through the construction of a portion of the proposed parking lot for the project. It is anticipated that the majority of employees would arrive and depart from the site adjacent to the peak commute traffic periods (i.e., weekday 7:00 a.m.–9:00 a.m. and 4:00 p.m.–6:00 p.m.) with a period of overlap. Employee trips are based on the number of employees estimated to be on site during different points throughout the project. Each employee is assumed to drive to and from the site alone each day. The impacts of construction-related parking and employee traffic are considered less than significant.

Construction of the project will require the import of construction materials to and from the site. The imported materials will be transported via dump trucks. Each truck will generate one inbound and one outbound trip, accounting for a total of two truck trips per load of material imported. Import of construction materials is anticipated to consist of the import of “fill” soil to the site (approximately 78,300 cubic yards) and the importation of raw building materials, concrete, asphalt, etc. The import of fill soil is anticipated to last for approximately 75 working days (four months) concurrent with project grading. In order to minimize the impact of construction truck traffic to the surrounding roadway network, a construction management plan will be required as detailed in **Mitigation Measure 4.16.6.2A.**

Heavy equipment to be utilized on site during construction includes, but is not limited to, flatbeds, dozers, scrapers, graders, track hoes, dump trucks, forklifts, cranes, cement trucks, pavers, rollers, water trucks, rolling container trucks, and bobcats. Heavy equipment will be delivered and removed from the site throughout the construction phase. As most heavy equipment is typically not authorized to be driven on public roadways, most of the equipment will be delivered and removed from the site via large flatbed trucks. It is anticipated that delivery of heavy equipment would not occur on a daily basis, but rather periodically throughout the construction phase based on need. The delivery and removal of heavy equipment will occur outside of the morning and evening peak hours in order to have nominal impacts to traffic and circulation near the vicinity of the project. If the following measure is applied, it is anticipated that traffic impacts associated with the delivery and removal of heavy equipment are less than significant.

Mitigation Measure. The following measure will reduce the project-related construction traffic impacts:

4.16.6.2A Construction activity associated with soil import activities shall occur outside of the typical morning and evening peak commute hours (i.e., 7:00–9:00 a.m. and 4:00–6:00 p.m.).

Prior to the issuance of grading permits, the project applicant shall submit to the City for review and approval, a Construction Traffic Management plan. Construction-related traffic (including soil import activity) shall operate on the routes and/or during the hours of operation defined in the Construction Traffic Management Plan.

Level of Significance after Mitigation. Adherence to the measures detailed in the construction traffic management plan required under **Mitigation Measure 4.16.6.2A** will ensure potential traffic impacts resulting from construction activity are reduced to a less than significant level.

4.16.6.3 Conflict with Applicable Circulation Plan and Traffic and Level of Service Impacts – Opening Year (2018)

Impact 4.12.6.3: *Intersection Level of Service impacts would exceed City standards at intersections under the Opening Year (2018) condition.*

Threshold:

For intersections under the jurisdiction of the City:

A significant project-related impact occurs at a study intersection if the addition of project generated trips reduces the peak hour level of service of the study intersection to change from acceptable "pre-project" operation (LOS A, B, C or D) to deficient operation (LOS E or F); or

At intersections with a pre-project LOS of E or F, a significant project-related impact occurs at a study intersection if the addition of project generated trips changes the pre-project delay by more than 5.0 seconds.

Impacts to State Highway System facilities will be considered significant if:

The traffic study finds that the LOS of a facility will degrade from D or better to E or F; or

The traffic study finds that the project will exacerbate an already deficient condition.

The "Opening Year (2018)" condition identifies impacts on study area intersections with and without the project. This analysis includes the traffic generated and an

ambient grown factor that addresses traffic from pending and approved projects in the area. The LOS impacts for the study area intersections under this condition are summarized in Table 4.16.K.

Table 4.16.K: "Opening Year (2018)" Condition LOS

Intersection ID[1]	Traffic Control	Intersection Location	Level of Service			
			Without Project		With Project	
			A.M.	P.M.	A.M.	P.M.
1	Signal	I-15 Southbound Ramps/ Clinton Keith Road	C	C	C	C
2	Signal	I-15 Northbound Ramps/ Clinton Keith Road	B	C	B	C
3	Signal	George Avenue/Clinton Keith Road	**F**	**F**	**F**	**F**
4	Signal	Inland Valley Drive/Clinton Keith Road	**D**	**F**	**F**	**F**
5	Cross-Street Stop	Driveway 1/Clinton Keith Road	—	—	C	D
6	Cross-Street Stop	Salida Del Sol/Yamas Drive/ Clinton Keith Road	**F**	**F**	**F**	**F**
7	Cross-Street Stop	Yamas Drive/Driveway 2	—	—	A	A
8	Cross-Street Stop	Yamas Drive/Driveway 3	—	—	A	A
9	Cross-Street Stop	Yamas Drive/Driveway 4	—	—	A	A
10	Cross-Street Stop	Yamas Drive/Prielipp Road	B	C	B	C
11	Cross-Street Stop	Elizabeth Lane/Prielipp Road	C	C	C	C

Source: Table 6-1, Clinton Keith Road (APN: 380-250-003) "Grove Park," Traffic Impact Analysis, City of Wildomar, California, Urban Crossroads, (revised) March 5, 2015.

As detailed in Table 4.16.K, the following intersections would operate at unsatisfactory LOS under the "Opening Year (2018)" condition:

- George Avenue/Clinton Keith Road (LOS F during a.m. and p.m. peak hours);
- Inland Valley Drive/Clinton Keith Road (LOS F during p.m. peak hour); and
- Salida Del Sol/Yamas Drive/Clinton Keith Road (LOS F during a.m. and p.m. peak hours).

The stated intersections operate at a deficient level both with and without the project. While the project would not result in an increase in the number of LOS-affected intersections, it will increase delay at these intersections by more than 5.0 seconds; therefore, the impacts at these intersections are significant. Impacts to the Salida Del Sol/Yamas Drive/Clinton Keith Road intersection are addressed by previously discussed **Mitigation Measure 4.16.6.1A**, which includes installation of a traffic signal by the project. Impacts to the other two intersections are reduced through implementation of **Mitigation Measure 4.16.6.3A**, in which the project participates in the funding of intersection improvements.

Mitigation Measure 4.16.6.3A addresses the traffic impact under the "Opening Year (2018)" condition. The installation of the stated improvements will reduce the LOS at the affected intersections to below significant levels.

Mitigation Measure. The following measure has been identified to reduce the LOS impact at the affected intersections:

4.16.6.3A Prior to the issuance of first occupancy permit, the project applicant shall submit evidence to the City that the Transportation Uniform Mitigation Fee (TUMF), and Development Impact Fee (DIF) payment for the following improvements have been made:

- George Avenue/Clinton Keith Road:
  - Restripe the eastbound right-turn lane as a shared through/right-turn lane (TUMF/DIF); and
  - Construct a westbound shared through/right-turn lane (DIF).
- Inland Valley Drive/Clinton Keith Road:
  - Construct an eastbound through lane (TUMF); and
  - Construct a westbound through lane (TUMF).
- *As required by the City's Public Works Director:*
  - Provide traffic signal interconnection.

Level of Significance after Mitigation. The improvements identified in **Mitigation Measure 4.16.6.3A** are either included in the TUMF and DIF programs or will be installed as part of the project (Table 4.16.L). As the project is conditioned to install improvements and because other improvements are included in the approved TUMF program, it is reasonably certain the required improvements will be in place to offset any identified LOS impact at the stated intersections. Therefore, impacts related to LOS impacts under the "Opening Year (2018)" condition are reduced to a less than significant level.

Table 4.16.L: "Opening Year (2018)" with Project Condition LOS with Improvements

Intersection ID/Intersection		Traffic Control	Delay (secs)		Level of Service	
			A.M.	P.M.	A.M.	P.M.
3 George Avenue/ Clinton Keith Road	Without Improvements	Traffic Signal	**>80.00**	**>80.00**	**F**	**F**
	With Improvements	Traffic Signal	29.3	31.5	C	C
4 Inland Valley Drive/ Clinton Keith Road	Without Improvements	Traffic Signal	**44.8**	**65.0**	**F**	**F**
	With Improvements	Traffic Signal	23.4	26.8	C	C

Table 4.16.L: "Opening Year (2018)" with Project Condition LOS with Improvements

Intersection ID/Intersection		Traffic Control	Delay (secs)		Level of Service	
			A.M.	P.M.	A.M.	P.M.
6 Salida del Sol/ Yamas Drive/ Clinton Keith Road	Without Improvements	Cross-Street Stop	**>55.0**	**>50.0**	**F**	**F**
	With Improvements	Traffic Signal	23.7	34.2	C	C

Source: Table 6-2, Clinton Keith Road (APN: 380-250-003) "Grove Park," Traffic Impact Analysis, City of Wildomar, California, Urban Crossroads, (revised) March 5, 2015.

4.16.6.4 Conflict with Applicable Circulation Plan and Traffic and Level of Service Impacts – General Plan Buildout (post-2035)

Impact 4.12.6.4: *Intersection Level of Service impacts would exceed City standards at intersections under the General Plan Buildout (post-2035).*

Threshold:

For intersections under the jurisdiction of the City:

> A significant project-related impact occurs at a study intersection if the addition of project generated trips reduces the peak hour level of service of the study intersection to change from acceptable "pre-project" operation (LOS A, B, C or D) to deficient operation (LOS E or F); or
>
> At intersections with a pre-project LOS of E or F, a significant project-related impact occurs at a study intersection if the addition of project generated trips changes the pre-project delay by more than 5.0 seconds.

Impacts to State Highway System facilities will be considered significant if:

> The traffic study finds that the LOS of a facility will degrade from D or better to E or F; or
>
> The traffic study finds that the project will exacerbate an already deficient condition.

The lane configurations and traffic controls assumed to be in place for the General Plan Buildout (Post-2035) condition are consistent with those shown in previously referenced Figure 4.16.2 and the following:

- General Plan Circulation improvements such as the Inland Valley Drive overpass at I-15 south of Prielipp Road and the Inland Valley Drive extension north of Clinton Keith Road.

- Funded roadway improvements listed in the Western Riverside Council of Governments' (WRCOG) 5-year Transportation Improvement Plan (TIP) such as the Clinton Keith Road widening from 2 to 4 lanes from I-15 to Copper Craft Drive.
- Improvements at study area intersections and roadways identified in the City of Wildomar 2012 Impact Free Study such as the Prielipp Road widening from 2 to 4 lanes from Inland Valley Drive to the city border.
- At project driveways and those facilities assumed to be constructed by the project or cumulative developments to provide site access are also assumed to be in place for General Plan Buildout (post-2035) conditions (e.g., intersection turn lane improvements at project and cumulative development driveways).

LOS calculations were conducted for the study intersections to evaluate their operations under "General Plan Buildout (post-2035)" without and with project conditions. The results of the intersection analysis results for these conditions are provided in Table 4.16.M.

Table 4.16.M: "General Plan Buildout (post-2035)" Condition LOS

Intersection ID[1]	Traffic Control	Intersection Location	Level of Service			
			Without Project		With Project	
			A.M.	P.M.	A.M.	P.M.
1	Signal	I-15 Southbound Ramps/ Clinton Keith Road	C	C	C	D
2	Signal	I-15 Northbound Ramps/ Clinton Keith Road	C	**F**	C	**F**
3	Signal	George Avenue/Clinton Keith Road	D	D	D	D
4	Signal	Inland Valley Drive/Clinton Keith Road	D	D	D	D
5	Cross-Street Stop	Driveway 1/Clinton Keith Road	—	—	B	C
6	Cross-Street Stop	Salida Del Sol/Yamas Drive/Clinton Keith Road	**F**	**F**	**F**	**F**
7	Cross-Street Stop	Yamas Drive/Driveway 2	—	—	C	B
8	Cross-Street Stop	Yamas Drive/Driveway 3	—	—	A	A
9	Cross-Street Stop	Yamas Drive/Driveway 4	—	—	C	B
10	Cross-Street Stop	Yamas Drive/Prielipp Road	**E**	**F**	**E**	**F**
11	Cross-Street Stop	Elizabeth Lane/Prielipp Road	**F**	**F**	**F**	**F**

Source: Table 7-1, Clinton Keith Road (APN: 380-250-003) "Grove Park," Traffic Impact Analysis, City of Wildomar, California, Urban Crossroads, (revised) March 5, 2015.

The following intersections would operate at unsatisfactory LOS under the "General Plan Buildout (post-2035)" condition:

- I-15 Northbound Ramps/Clinton Keith Road (LOS F during p.m. peak hours);
- Salida del Sol/Yamas Drive/Clinton Keith Road (LOS F during a.m. and p.m. peak hours);
- Yamas Drive/Prielipp Road (LOS E a.m. peak hour and LOS F p.m. peak hour); and
- Elizabeth Lane/Prielipp Road (LOS F a.m. and p.m. peak house).

Compared to the "Without Project" condition, the project is not anticipated to cause any additional study area intersections to operate at an unacceptable LOS. Improvements have been required at intersections that have been identified as cumulatively affected to reduce each location's peak hour delay and improve the associated LOS to D or better. These improvements are consistent with or less than the geometrics noted in the City's General Plan Circulation Element. The effectiveness of the required intersection improvements to address "General Plan Buildout (post-2035)" with project conditions cumulative traffic impacts is presented in Table 4.16.N.

Table 4.16.N: "General Plan Buildout (post-2035)" with Project Condition LOS, with Improvements

Intersection ID/Intersection		Traffic Control	Delay (secs)		Level of Service	
			A.M.	P.M.	A.M.	P.M.
1 I-15 Southbound Ramps/ Clinton Keith Road	Without Improvements	Traffic Signal	29.0	35.2	C	D
	With Improvements	Traffic Signal	28.7	34.5	C	C
2 I-15 Northbound Ramps/ Clinton Keith Road	Without Improvements	Traffic Signal	24.0	57.0	C	**F**
	With Improvements	Traffic Signal	26.8	42.0	C	D
6 Salida del Sol/Clinton Keith Road	Without Improvements	Cross-Street Stop	>50.0	>50.0	**F**	**F**
	With Improvements	Traffic Signal	31.3	27.8	C	C
10 Yamas Drive/Prielipp Road	Without Improvements	Cross-Street Stop	46.2	>50.0	**E**	**F**
	With Improvements	Traffic Signal	17.7	16.2	B	B
11 Elizabeth Lane/Prielipp Road	Without Improvements	Cross-Street Stop	>50.0	>50.0	**F**	**F**
	With Improvements	Traffic Signal	2039	22.2	C	C

Source: Table 7-2, Clinton Keith Road (APN: 380-250-003) "Grove Park," Traffic Impact Analysis, City of Wildomar, California, Urban Crossroads, (revised) March 5, 2015.

Recommended improvements for impacted intersections under this condition are:

- *I-15 Northbound Ramps/Clinton Keith Road:* Required improvement is the restriping of one westbound through lane as a shared westbound through/right-turn lane.
- *Salida del Sol/Yamas Drive/Clinton Keith Road:* The DIF Program[1] identifies the following improvement at this location: "Install new 4-way" (signal). The TUMF program improvements include one eastbound through lane and one westbound through lane. The project's fair-share contribution for improvements at this intersection is 6.9 percent.
- *Yamas Drive/Prielipp Road.* The DIF Program identifies the following improvement at this location: "Install new 3-way" (signal) (Prielipp Road/Salida del Sol).[2]
- *Elizabeth Lane/Prielipp Road.* The DIF Program identifies the following improvement at this location: "Install new 4-way" (signal).

The funding of off-site improvements to serve cumulative traffic conditions is collected through the payment of TUMF, DIF, and required fair-share payments. These fees are collected as part of a funding mechanism aimed at ensuring that regional highways and arterial expansions keep pace with the projected population increases. Each of the improvements discussed above has been identified as being included as part of the TUMF funding program or City DIF funding program. However, the following mitigation measure is required to address the project's cumulative impact.

Mitigation Measure. The following measure has been identified to reduce the project's contribution to cumulative LOS impacts at the affected intersections:

4.16.6.4A Prior to the issuance of first occupancy permit, the project applicant shall submit evidence to the City that required Transportation Uniform Mitigation Fee (TUMF), Development Impact Fee (DIF), and/or fair-share contribution for cumulative project impacts have been made.

Level of Significance after Mitigation. There are no identified improvements solely funded by the project's fair-share contributions. As the project is conditioned to install improvements and because other improvements are included in the approved TUMF and DIF programs, it is reasonably certain the required improvements will be in place to offset any identified LOS impact at the stated intersections. Therefore, impacts occurring under the "General Plan Buildout (post-2035)" condition are reduced to a less than significant level.

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1 Page 4-3, *City of Wildomar 2015 Impact Fee Study Report*, April 23, 2015.

2 The TIA (March 2015) (Table 9-1) prepared for the project identifies a required fair-share contribution of 2.7 and 2.2 percent for improvements at the intersection of Yamas Drive (Salida del Sol)/Prielipp Drive and Elizabeth Lane/Prielipp Drive, respectively. The City's *2015 Impact Fee Study Report*, prepared subsequent to completion of the TIA, includes the installation of traffic signals at these locations.

4.16.6.5 Conflict with Applicable Circulation Plan and Traffic and Level of Service Impacts – Freeway Impacts

Impact 4.16.6.5: *Intersection Level of Service impacts would exceed Caltrans standards on freeway mainline segments or at freeway ramps.*

Threshold:
Impacts to State Highway System facilities will be considered significant if:
The traffic study finds that the LOS of a facility will degrade from D or better to E or F; or
The traffic study finds that the project will exacerbate an already deficient condition

Interstate 15 is a north-south oriented highway that connects Southern California to Nevada. There are currently three lanes in each direction of travel along I-15 near Clinton Keith Road. The number of lanes for existing baseline conditions has been obtained from field or through aerial imagery.

An analysis of I-15 was conducted pursuant to discussions with the City. The evaluation of freeway mainline operations includes an assessment of basic freeway segments and the freeway on- and off-ramp junctions (i.e., merge/diverge junctions) during the a.m. and p.m. peak hours for each of the analysis scenarios evaluated in the TIA.

Project only, cumulative only, and General Plan Buildout (Post-2035) volumes on the freeway mainline and on- and off-ramps have been obtained from the Traffic Study. The methodology in which the volumes were developed for the "Opening Year (2018)" and "General Plan Buildout (post-2035)" traffic conditions are also consistent with that utilized in the TIA for the project.

As provided in Table 4.16.O, the freeway segments analyzed operate at an acceptable LOS (i.e., D or better) during the peak hours for Existing (2013) and Existing Plus Project" conditions.

Table 4.16.O: Basic I-15 Segment Analysis for "Existing plus Project" Condition

Direction	Mainline Segment	Lanes	Existing LOS		Existing plus Project LOS	
			A.M.	P.M.	A.M.	P.M.
Southbound	North of Clinton Keith Road	3	D	D	D	D
	South of Clinton Keith Road	3	D	D	D	D
Northbound	North of Clinton Keith Road	3	C	C	C	C
	South of Clinton Keith Road	3	B	D	B	D

Source: Table 1, *Grove Park Supplemental Freeway Segment and Ramp Section Operations Analysis*, Urban Crossroads, March 6, 2015.

Under the Opening Year Cumulative (without and with the Project) condition, southbound I-15 segments, north and south of Clinton Keith Road, would operate at unacceptable LOS during the a.m. and p.m. peak hours (Table 4.16.P). Under the "General Plan Buildout (post-2035) condition (without and with the project), all freeway segments would operate at an unacceptable LOS during peak hours (Table 4.16.Q).

Table 4.16.P: Basic I-15 Segment Analysis for "Cumulative (2018)" Condition

Direction	Mainline Segment	Lanes	Existing LOS		Existing plus Project LOS	
			A.M.	P.M.	A.M.	P.M.
Southbound	North of Clinton Keith Road	3	**E**	**E**	**E**	**E**
	South of Clinton Keith Road	3	**E**	**E**	**E**	**E**
Northbound	North of Clinton Keith Road	3	C	D	C	D
	South of Clinton Keith Road	3	C	D	C	D

Source: Table 2, *Grove Park Supplemental Freeway Segment and Ramp Section Operations Analysis*, Urban Crossroads, March 6, 2015.

Table 4.16.Q: Basic I-15 Segment Analysis for "General Plan Buildout (post-2035)" Condition

Direction	Mainline Segment	Lanes	Existing LOS		Existing plus Project LOS	
			A.M.	P.M.	A.M.	P.M.
Southbound	North of Clinton Keith Road	3	**E**	**F**	**E**	**F**
	South of Clinton Keith Road	3	D	**E**	D	**F**
Northbound	North of Clinton Keith Road	3	**F**	**F**	**F**	**F**
	South of Clinton Keith Road	3	**F**	**E**	**F**	**E**

Source: Table 3, *Grove Park Supplemental Freeway Segment and Ramp Section Operations Analysis*, Urban Crossroads, March 6, 2015.

The Riverside County Transportation Commission (RCTC) has developed long-range plans to construct a carpool lane (high-occupancy vehicle [HOV] lane) for both northbound and southbound directions on I-15. The HOV lanes would extend from the I-15/I-215 interchange to Central Avenue (State Route 74) in the City of Lake Elsinore. These improvements have been assumed and evaluated for General Plan Buildout (Post-2035) traffic conditions only.

As detailed in Table 4.16.R, while the LOS is anticipated to improve with the carpool lane in each direction, the freeway segments evaluated are all anticipated to continue to operate at unacceptable LOS (i.e., E or worse) during the a.m. or p.m. peak hours for "General Plan Buildout (post-2035)" conditions, both without and with the project.

Table 4.16.R: Basic I-15 Segment Analysis for "General Plan Buildout (post-2035)" Condition with Improvements

Direction	Mainline Segment	General Plan Buildout without Project with Improvements LOS		General Plan Buildout with Project with Improvements LOS	
		A.M.	P.M.	A.M.	P.M.
Southbound	North of Clinton Keith Road	**D**	**F**	D	**F**
	South of Clinton Keith Road	D	**F**	D	**F**
Northbound	North of Clinton Keith Road	**F**	**E**	**F**	**E**
	South of Clinton Keith Road	**F**	D	**F**	D

Source: Table 4 *Grove Park Supplemental Freeway Segment and Ramp Section Operations Analysis*, Urban Crossroads, March 6, 2015.

With the exception of the I-15 southbound off-ramp at Clinton Keith Road during the p.m. peak hour, the freeway ramp merge/diverge junctions in the study area operate at an acceptable LOS under the "Existing plus Project" condition (Table 4.16.S).

Table 4.16.S: I-15 Ramp Junction Merge/Diverge Analysis – Existing plus Project Condition

Direction	Ramp	Lanes on Freeway	Existing LOS		Existing plus Project LOS	
			A.M.	P.M.	A.M.	P.M.
Southbound	Off-ramp at Clinton Keith Road	3	D	**E**	D	**E**
	On-ramp at Clinton Keith Road	3	D	D	D	D
Northbound	Off-ramp at Clinton Keith Road	3	D	C	C	D
	On-ramp at Clinton Keith Road	3	C	D	C	D

Source: Table 5, *Grove Park Supplemental Freeway Segment and Ramp Section Operations Analysis*, Urban Crossroads, March 6, 2015.

As identified in Tables 4.16.T and 4.16.U, all 1-15 merge/diverge junctions are projected to operate at unacceptable LOS during peak hours under the "Opening Year (2018)" and "General Plan Buildout (post-2035)" conditions, without or with the Project.

The same improvements assumed for the freeway segment analysis have been assumed for the freeway ramp merge/diverge junction analysis.[1] As detailed in Table 4.16.V, while the LOS is anticipated to improve with the addition of a carpool lane in each direction, all freeway ramp merge/diverge junctions operate at unacceptable LOS during the a.m. or p.m. peak hours under the "General Plan Buildout (post-2035)" condition, either with or without the project.

Table 4.16.T: I-15 Ramp Junction Merge/Diverge Analysis – Opening Year (2018) Condition

Direction	Ramp	Lanes on Freeway	Existing LOS		Existing plus Project LOS	
			A.M.	P.M.	A.M.	P.M.
Southbound	Off-ramp at Clinton Keith Road	3	**E**	**E**	**E**	**E**
	On-ramp at Clinton Keith Road	3	**E**	**E**	**E**	**E**
Northbound	Off-ramp at Clinton Keith Road	3	C	**E**	C	**E**
	On-ramp at Clinton Keith Road	3	C	**E**	C	**E**

Source: Table 6, *Grove Park Supplemental Freeway Segment and Ramp Section Operations Analysis*, Urban Crossroads, March 6, 2015.

Table 4.16.U: I-15 Ramp Junction Merge/Diverge Analysis – General Plan Buildout (post-2035) Condition

Direction	Ramp	Lanes on Freeway	Existing LOS		Existing plus Project LOS	
			A.M.	P.M.	A.M.	P.M.
Southbound	Off-ramp at Clinton Keith Road	3	**E**	**F**	**E**	**F**
	On-ramp at Clinton Keith Road	3	**E**	**F**	**E**	**F**
Northbound	Off-ramp at Clinton Keith Road	3	**F**	**F**	**F**	**F**
	On-ramp at Clinton Keith Road	3	**F**	**F**	**F**	**F**

Source: Table 7, *Grove Park Supplemental Freeway Segment and Ramp Section Operations Analysis*, Urban Crossroads, March 6, 2015.

Table 4.16.V: I-15 Ramp Junction Merge/Diverge Analysis – General Plan Buildout (post-2035) Condition with Improvements

Direction	Ramp	Existing LOS		Existing plus Project LOS	
		A.M.	P.M.	A.M.	P.M.
Southbound	Off-ramp at Clinton Keith Road	**E**	**F**	**E**	**F**
	On-ramp at Clinton Keith Road	D	**F**	D	**F**
Northbound	Off-ramp at Clinton Keith Road	**F**	**E**	**F**	**E**
	On-ramp at Clinton Keith Road	**F**	**E**	**F**	**E**

Source: Table 8, *Grove Park Supplemental Freeway Segment and Ramp Section Operations Analysis*, Urban Crossroads, March 6, 2015.

[1] Although the reduction to I-15 mainline volumes has been applied to account for the proposed carpool lanes, the analysis has been performed assuming the same number of mixed-flow lanes and the on- and off-ramp configurations as existing baseline conditions.

State highway facilities are anticipated to operate at unacceptable LOS without the project. Caltrans has exclusive control over State highway improvements and State highway improvements are, by and large, a matter of State-wide control. Although the project is not anticipated to directly result in an impact on the State facilities and these facilities would not meet Caltrans LOS standards even without development of the project, the addition of project traffic would constitute a considerable contribution to this cumulative impact.

Mitigation Measures. Because the City has no control over State facilities, and because the State facilities funded and planned to be developed under future traffic conditions are already anticipated to operate at LOS F even without the proposed project, there are no further improvements that can be imposed upon the project to mitigate its cumulative contribution to significant impacts to the identified mainline segments and ramp junctions of I-15.

Level of Significance after Mitigation. Because there is no feasible method to mitigate, the project will have a cumulatively considerable impact on freeway facilities.

4.16.7 Cumulative Impacts

Cumulative impacts refer to incremental effects of an individual project when viewed in connection with the effects of past projects, current projects, and probable future projects. Cumulative projects are identified in the previously referenced Table 2.A and Figure 2.1. Cumulative impacts associated with traffic volumes are determined based on the addition of traffic volumes from approved and pending projects in the area and projected traffic growth to existing traffic volumes. With the project-specific mitigation previously identified, project-related short-term and long-term impacts to intersections will be reduced to less than significant levels for “Existing with Project,” “Opening Year (2018),” and “General Plan Buildout (post-2035)” conditions. As stated in Section 4.16.6.5, cumulative impacts related to State highway facilities are cumulatively significant.

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4.17 UTILITIES AND SERVICE SYSTEMS

This section analyzes the existing and planned water supply, wastewater, solid waste, natural gas, and electrical system for the project site and the surrounding area, and evaluates the impacts to utility providers that could result from the construction and operation of the proposed on-site uses.

- *City of Wildomar General Plan,* July 2008.
- *Elsinore Valley Municipal Water District Urban Water Management Plan,* July 2011.
- *Elsinore Valley Municipal Water District Sewer System Management Plan,* October 2013.
- *City of Wildomar General Plan DEIR,* January 2015.

A discussion of each utility system is provided separately. This section differs slightly from other sections in that it is organized to address each utility system separately.

4.17.1 Water Supply

4.17.1.1 Existing Setting

Elsinore Valley Municipal Water District. Water service to the project site is provided by the Elsinore Valley Municipal Water District (EVMWD), which provides public water service, water supply development, water planning, wastewater treatment and disposal, and water recycling capacity. EVMWD is a Metropolitan Water District of Southern California (MWD) member agency and Western Municipal Water District sub-agency. EVMWD's service area encompasses approximately 96 square miles in Elsinore Valley area. EVMWD provides water to the Cities of Lake Elsinore, Canyon Lake, and Wildomar, as well as the unincorporated communities of Lakeland Village, Cleveland Ridge, Rancho Capistrano-El Cariso Village, Horsethief Canyon, Sedco, and Temescal Canyon, and the Farm Mutual Water Company.

EVMWD obtains approximately 70 percent of its potable water supplies from MWD, 20 percent from local groundwater, and 10 percent from the Canyon Lake Reservoir. EWMWD's imported water is delivered by MWD from the Colorado River (via the Colorado River Aqueduct [CRA]) and Northern California (via State Water Project [SWP] facilities.) Local groundwater is pumped from Elsinore and Temescal Valley area groundwater basins, with most (99 percent) withdrawn from the Elsinore Basin.

Population within the EVMWD service area is projected to increase from 123,375 in 2010 to 185,102 in 2035 at a rate of 2.0 percent annually. Employment is projected to increase from 19,411 in 2010 to 41,900 in 2035 at a rate of 4.6 percent annually. The number of housing units is to increase from 41,757 in 2010 to 63,888 in 2035 at a rate of 2.1 percent annually. Currently, the EVMWD maintains approximately 35,000 water, wastewater, and agricultural service connections.

The EVMWD's Urban Water Management Plan (UWMP)[1] identifies current and future water supplies within the EVMWD service area. The UWMP states with its existing and planned supplies, the EVMWD can meet 100 percent of projected demand through 2035, even with a repeat of a severe drought. Additionally, the UWMP addresses conservation, local supplies, and reliability of imported supplies. Table 4.17.A identifies the EVMWD's past, present, and projected water supplies and demand.

Table 4.17.A: EVWMD Water Supplies and Demand for Average Year Hydrology

	2015	2020	2025	2030	2035
EVMWD Supplies (Current and Projected)					
Supply Source	**acre-feet[1] per year**				
Metropolitan Water District	48,100	48,100	48,100	48,100	48,100
Supplier-produced groundwater	6,750	6,750	6,750	6,750	6,750
Supplier-produced surface water	4,900	4,900	4,900	4,900	4,900
Recycled Water	1,014	1,905	2,430	2,430	2,430
Lake Replenishment and Discharge to Temescal Wash	8,401	8,401	8,401	8,401	8,401
Total	**69,165**	**70,056**	**70,581**	**70,581**	**70,581**
EVWMD Water Demands					
Demand Source	**acre-feet per year**				
Total Water Deliveries	36,791	39,796	43,189	46,363	49,158
Sales to other water agencies	501	542	588	631	669
Additional water uses and losses	14,015	14,906	15,431	15,431	15,431
Demand Totals	**51,306**	**55,244**	**59,208**	**62,426**	**65,258**

Source: Tables ES-2 and ES-4, EVMWD UWMP, adopted July 2011.
1. An acre-foot is defined as the volume of one acre of surface area to a depth of one foot or approximately 325,853 gallons.

Metropolitan Water District. The MWD is a consortium of 26 cities and water districts that provides drinking water to nearly 19 million people in parts of Los Angeles, Orange, San Diego, Riverside, San Bernardino, and Ventura Counties.

The MWD currently delivers an average of 1.7 billion gallons of water per day to a 5,200-square mile service area. In fiscal year 2013/14, the MWD sold 2.06 million acre-feet (AF) of water, with daily system deliveries as high as 7,400 AF per day. Treated water sales were 1.03 million AF and untreated water sales were also 1.03 million AF. Drought conditions that began in January 2013, and continued into this fiscal year, led to water sales approximately 200,000 AF higher than the previous fiscal year.

1 *Urban Water Management Plan*, Elsinore Valley Municipal Water District, adopted July 2011.

The SWP typically provides about a third of Southern California's water. Storage in the MWD's other supply source, the Colorado River, stands at less than 50 percent of capacity after 15 drought years in the Southwest.[1] Current drought conditions and the maintenance of water sufficient to sustain endangered/threatened habitats in the Sacramento Bay Delta continue to affect the volume of water delivered via the SWP. The MWD's supplies from the Colorado River were limited to its 550,000 acre-foot basic apportionment plus water management programs developed to augment that amount. In calendar year 2013, a total of about 1.013 million AF of water was delivered to the MWD's service area from the Colorado River. Of that amount, a total of 180,000 AF was exchanged with San Diego County Water Authority. In 2014, for the twelfth consecutive year, no surplus of Colorado River water beyond the basic apportionment was available to the MWD.

The MWD's dry-year storage reserves ended 2014 at approximately 1.2 million AF. Hydrologic conditions in 2015 have continued this severe dry trend. The MWD was able to meet demands in 2014 by relying heavily on storage reserves to make up for the historically low allocation from the SWP.

Hydrologic conditions in 2015 have continued this severe dry trend. The 2015 water year started with improved conditions, but the latter half of the winter has produced little additional snowpack. The California Department of Water Resources (DWR) announced an initial 2015 SWP allocation of 10 percent in December 2014. Since then, the 2015 SWP allocation has increased to 20 percent. In addition to reserves, and its 20 percent SWP allotment, the MWD is expecting full deliveries from the Colorado River in 2015. The MWD is initiating a long-term program under which growers in the Palo Verde Irrigation District in southeast California idle land and sell the conserved water to the MWD.

Under drought conditions, withdrawals from the MWD's dry-year storage reserves will be necessary in order to meet demands. Although water demands in Southern California have been reduced through ongoing conservation efforts and outreach, the MWD has implemented additional measures to reduce water demand, conserve water, and reduce withdrawals from the MWD's dry-year storage reserves.

The MWD's most recent Regional Urban Water Management Plan (RUWMP) indicates under normal, dry, and even multiple dry-year conditions, SWP supplies in combination with other water supplies (e.g., conservation, local and regional supplies, and Colorado River) would be adequate to meet the MWD water demands despite periodic restrictions during dry years.[2]

In evaluating the supply reliability for the 2010 RUWMP, the MWD assumed a new Sacramento Bay Delta (Delta) conveyance would be fully operational by 2022, bringing supply reliability close to 2005 levels prior to supply restrictions. In response

[1] Press Release, April 14, 2015. Metropolitan Water District, http://bewaterwise.com/pdf/Allocation_Press_Releas.pdf, site accessed May 1, 2015.

[2] Regional Urban Water Management Plan, Metropolitan Water District, November 2010.

to the recent developments in the Delta, the MWD is engaged in planning processes that will identify solutions that, when combined with the rest of its supply portfolio, will ensure a reliable long-term water supply for its member agencies. In the near term, the MWD will continue to rely on the plans and policies outlined in its RUWMP and Integrated Water Resources Plan (IWRP) to address water supply shortages and interruptions (including potential shutdowns of SWP pumps) to meet water demands. An aggressive campaign for voluntary conservation, recycled water usage, and curtailment of groundwater replenishment water and agricultural water delivery are some of the actions outlined in the RUWMP. The MWD is maximizing supplies from existing agreements for water supply from its Palo Verde Crop Management and Water Supply Program and working with the State of Arizona in withdrawing water previously stored in that state's groundwater basin.

The MWD's IWRP represents a diversified 25-year strategy to balance locally developed resources with imported supplies. Adopted by the MWD's board in 1996 and updated in 2004 and 2010, the IWRP has fostered supply diversity and stability through investments in water conservation, recycling, groundwater treatment, storage and transfers.

Imported sources of water will be supplemented by an increase in desalination of brackish groundwater, recycled water use, and water use efficiency. The MWD has analyzed the reliability of water delivery through the SWP and the CRA. The MWD's IWRP and 2010 RUWMP conclude that, with the storage and transfer programs developed by the MWD, there will be a reliable source of water to serve its member agencies' needs through 2035.[1]

Sacramento Bay-Delta. Under a Coordinated Operations Agreement (COA), the DWR and Bureau of Reclamation (Reclamation) operate the SWP and Central Valley Project (CVP) in a balanced manner to coordinate releases from upstream reservoirs and unregulated flows to meet Sacramento Valley in-basin and in-Delta uses, including water quality standards established by the State Water Resources Control Board (SWRCB).

Biological opinions related to long-term operations of the SWP and CVP were issued in 1993 by National Marine Fisheries Service (NMFS) for protection of the winter-run Chinook salmon and by the United States Fish and Wildlife Service (USFWS) for protection of delta smelt. The NMFS has redesignated the Sacramento River winter-run Chinook salmon as "endangered" and designated Central Valley spring-run Chinook salmon and Central Valley steelhead as "threatened." The designation of fish species in the Delta as endangered or threatened (under the Federal Endangered Species Act) has and continues to require modifications in the how the SWP and CVP are operated, including:

[1] MWD website, accessed February 12, 2015.

- Increased storage volumes of water in upstream reservoirs to provide adequate flows with appropriate temperatures for the winter-run Chinook salmon and adequate flows in the Delta for both species;
- Flows released from upstream reservoirs to provide adequate in-Delta flows and Delta outflows for these species; and
- Modification of periods of time when water can be diverted at the SWP and CVP south Delta intakes to reduce the potential for reverse flows, reduce the potential for high salinity in the south Delta, and reduce the potential for entrainment and entrapment of fish in the SWP and CVP south Delta intake facilities.

California Drought. Drought conditions continued in the Colorado River Basin in 2013/14, with 12 of the previous 15 years experiencing below normal snowfall and snowmelt runoff in the Basin. Due to drought conditions, releases downstream from Lake Powell were the lowest since the reservoir was initially filled, resulting in Lake Mead dropping 23.3 feet during the fiscal year. On June 30, 2014, Lake Mead reached 1,082.7 feet above sea level or 39 percent of capacity; the lowest year-end level since the reservoir was initially filled in the 1930s. Lake Mead ended the 2014 fiscal year just 7.7 feet above the level that would trigger a first-ever shortage declaration on the Colorado River. California has a basic apportionment of 4.4 million AF, most of which is used by MWD and the higher-priority agricultural users (Palo Verde Irrigation District, Yuma Project Reservation Division, Imperial Irrigation District, and Coachella Valley Water District).

According to the U.S. Drought Monitor, in 2014 an estimated 58 percent of California was in "Exceptional Drought Conditions," the worst category possible, with over 80 percent of California in "Extreme Drought Conditions." Governor Brown proclaimed a State of Emergency in January 2014 to address the record dry conditions around the state. In response to this proclamation, the SWRCB issued a statewide notice of water shortages and potential for future curtailment of water right diversions.

NOP/Scoping Comments. The EVMWD and the Riverside County Flood Control and Water Conservation District's (RCFCWCD) provided comment on requirements for the installation of water supply and storm water drainage facilities, respectively.

4.17.1.2 Existing Policies and Regulations

Federal Water Pollution Control Act. The Federal Water Pollution Control Act requires discharges (from point and non-point sources) into navigable water to meet stringent National Pollutant Discharge Elimination System (NPDES) permit standards. The U.S. Environmental Protection Agency (EPA) has published regulations establishing requirements for application of storm water permits for specified categories of industries, municipalities, and certain construction activities. The regulations require that discharges of storm water from construction activity of

1.0 acre or more must be regulated and covered by an NPDES permit. When a construction area exceeds 1.0 acre in size, the applicant must develop and implement a Storm Water Pollution Prevention Plan (SWPPP). Additional analysis and information regarding NPDES requirements and regulations is provided in Section 4.9 of this EIR, *Hydrology and Water Quality*.

Water Conservation in Landscaping Act. To ensure adequate supplies are available for future uses and to promote the conservation and efficient use of water, local agencies are required to adopt water-efficient landscape ordinances. When such an ordinance has not been adopted, a finding as to why such an ordinance is not necessary (based on the climatic, geologic, or topographical conditions) must be adopted. In the absence of a local ordinance, an ordinance drafted by the State of California applies within the affected jurisdiction. The City Municipal Code (Chapter 17.276) implements landscaping and irrigation standards to promote water-efficient landscapes.

Water Recycling in Landscaping Act. The Water Recycling in Landscaping Act requires that a water producer capable of providing recycled water that meets certain conditions notify local agencies eligible to receive the recycled water. It also requires necessary infrastructure be provided to support the delivery of recycled water.

As of June 2014, EVMWD extended its non-potable, recycled, water supplies to the Wildomar area.[1] Tertiary treated reclaimed water was initially transported to 17 sites in the City, including schools, parks, and churches, where it would be used for the irrigation of landscaping. EVMWD has implemented a mandatory use ordinance, which requires all new customers to use recycled water for areas where reclaimed water facilities exist. In order to encourage the use of reclaimed water, EVMWD offers recycled water at rates lower than potable water to customers willing to convert from potable water to recycled water for use in landscaping. The future average recycled water demand in the EVMWD service area is projected to increase to approximately 2,430 AF per year (AFY) by 2025.

Sections 13550–13556 of the State Water Code. These sections of the State Water Code state that local, regional, or State agencies shall not use water from any quality source of potable water for non-potable uses if suitable recycled water is available as provided in Section 13550 of the Water Code.

Urban Water Management Planning Act (Cal. Water Code Section 10631). Since 1984, the Urban Water Management Planning Act, has required "urban water

[1] "Wildomar: Recycled water starts to flow" Williams, Michael J. *The Press Enterprise*. June 30, 2014. http://www.pe.com/articles/water-696977-recycled-elsinore.html.

suppliers" to develop written "urban water management plans." While generally aimed at encouraging water suppliers to implement water conservation measures, it also created long-term planning obligations. In preparing urban water management plans, urban water suppliers must describe the following: (a) existing and planned water supply and demand; (b) water conservation measures and a schedule for implementing and evaluating such measures; and (c) water shortage contingency measures. The Urban Water Management Planning Act requires that urban water suppliers use a 20-year planning horizon and update the data in the urban water plans every five years.

In preparing their 20-year management plans, water suppliers must address the subject of future population growth directly. The suppliers must also identify sources of supply to meet demand. The plan must "identify and quantify, to the extent practicable, the existing and planned sources of water available to the supplier." In identifying these future water sources, the suppliers need not conduct environmental review.

Water Supply and Demand Reliability Assessment (Cal. Water Code Section 10910) (Senate Bill 901). Changes in the California Water Code require a city or county to request each public water system serving a project to assess the projected water demand associated with said project and an assessment of whether the projected water demand associated with selected projects was included as part of the most recent UWMP. As part of this assessment, the public water system is required to indicate whether its total projected water supplies available during normal, single-dry, and multiple-dry water years will meet the project demand associated with the proposed project, in addition to the public water system's existing and planned uses.

Pursuant to Section 10912 of the State Water Code, a "project" is specifically defined as development meeting any of the following criteria:

- 500 or more dwelling units;
- Commercial center employing more than 1,000 persons or having more than 500,000 square feet;
- Office building employing more than 1,000 persons or having more than 250,000 square feet;
- A hotel/motel with 500 or more rooms;
- An industrial, manufacturing, processing plant, or industrial park employing more than 1,000 persons or occupying more than 40 acres, or having more than 650,000 square feet of floor area;
- A mixed-use project that would demand an amount of water equal to the amount of water required by a 500-dwelling unit project; or

- In areas where the public water system has fewer than 5,000 service connections, any development that would increase water demand by 10 percent or greater in the number of existing service connections, or in the case of a mixed-use development, an increase in water required by residential development representing a 10 percent or greater increase in the number of existing service connections.

The project does not exceed any of the established thresholds set forth in the California Water Code requiring preparation of a Water Supply Assessment (WSA).

Water Supply Planning (Cal. Water Code Section Sections 10910 through 10915) (Senate Bill 610). Signed into law October 9, 2001, Senate Bill 610 (SB 610) requires that any city or county having determined that a project is subject to CEQA identify any public water systems that may supply water for the project and to request those public water systems to prepare a specified WSA. As the project did not exceed the thresholds established pursuant to the California Water Code, a WSA was not prepared for the proposed project.

Groundwater Management Act (AB 3030) (Sections 10750–10756 of the California Water Code). The availability of groundwater and issues involving the adequacy of recharge capability are regional in nature. The Groundwater Management Act[1] (AB 3030) provides a systematic procedure for an existing local agency to develop a groundwater management plan. AB 3030 allows a local agency whose service includes a groundwater basin that is not already subject to groundwater management pursuant to law or court order to adopt and implement a groundwater management plan and includes plans to mitigate overdraft conditions, control brackish water, and to monitor and replenish groundwater.

Executive Order B-29-15. On April 1, 2015, due to continuing drought conditions in California, Governor Brown issued Executive Order B-29-15 calling for a 25 percent reduction in consumer water use in response to the historically dry conditions throughout California. The Governor's Order also includes mandatory actions aimed at reducing water demands, with a particular focus on outdoor water use.[2]

City General Plan. The City's General Plan Land Use and Open Space Elements contain policies regarding water that are applicable to the proposed project.

[1] Sections 10750–10756 of the California Water Code.
[2] http://bewaterwise.com/pdf/Allocation_board_letter.pdf, site accessed May 1, 2015.

Land Use

LU 22.3 Require that adequate and available circulation facilities, water resources, and sewer facilities exist to meet the demands of the proposed residential land use.

LU 23.7 Require that adequate and available circulation facilities, water resources, and sewer facilities exist to meet the demands of the proposed land use.

Administration

LU 1.6 Coordinate with local agencies, such as LAFCO, service providers and utilities, to ensure adequate service provision for new development.

Infrastructure, Public Facilities & Service Provision

LU 5.2 Monitor the capacities of infrastructure and services in coordination with service providers, utilities, and outside agencies and jurisdictions to ensure that growth does not exceed acceptable levels of service.

Open Space

OS 2.1 Encourage the installation of water-conserving systems such as dry wells and graywater systems, where feasible, especially in new developments. The installation of cisterns or infiltrators shall also be encouraged to capture rainwater from roofs for irrigation in the dry season and flood control during heavy storms.

OS 3.1 Encourage innovative and creative techniques for wastewater treatment, including the use of local water treatment plants.

OS 4.5 Retain storm water at or near the site of generation for percolation into the groundwater to conserve it for future uses and to mitigate adjacent flooding.

OS 20.2 Prevent unnecessary extension of public facilities, services, and utilities, for urban uses, into Open Space-Conservation designated areas.

Community Design

LU 25.4 Require that adequate and available circulation facilities, water resources, and sewer facilities exist to meet the demands of the proposed land use.

Table 4.17.B identifies relevant policies from the City's General Plan and consistency of the project with those policies.

Table 4.17.B: General Plan Consistency Analysis

General Plan Goals and Targets	General Plan Consistency Analysis
Land Use	
LU 1.6. Coordinate with local agencies, such as LAFCO, service providers and utilities, to ensure adequate service provision for new development.	**Consistent.** The project will be designed to incorporate required utility improvements per the requirements identified by respective providers, pay required fees, and submit project plans for appropriate review and approval.
LU 5.2. Monitor the capacities of infrastructure and services in coordination with service providers, utilities, and outside agencies and jurisdictions to ensure that growth does not exceed acceptable levels of service.	
LU 22.3. Require that adequate and available circulation facilities, water resources, and sewer facilities exist to meet the demands of the proposed residential land use.	
LU 23.7. Require that adequate and available circulation facilities, water resources, and sewer facilities exist to meet the demands of the proposed land use.	
Open Space	
OS 2.1. Encourage the installation of water-conserving systems such as dry wells and graywater systems, where feasible, especially in new developments. The installation of cisterns or infiltrators shall also be encouraged to capture rainwater from roofs for irrigation in the dry season and flood control during heavy storms.	**Consistent.** The project will comply with the water efficient landscape ordinances established by the City and/or the EVMWD.
OS 4.5. Retain storm water at or near the site of generation for percolation into the groundwater to conserve it for future uses and to mitigate adjacent flooding.	**Consistent.** The project's storm water drainage facilities incorporate features that maximize the on-site infiltration of storm flows.
OS 20.2. Prevent unnecessary extension of public facilities, services, and utilities, for urban uses, into Open Space-Conservation designated areas.	**Consistent.** The project does not include the extension of utility facilities into or through an area identified for Open Space-Conservation uses.

Source: City of Wildomar General Plan, July 2008.

As detailed in Table 4.17.B, the project is consistent with the stated General Plan policies.

4.17.1.3 Methodology

This section estimates the project's anticipated water demand and evaluates it against available supplies based on data included in the UWMPs prepared by the EVMWD and MWD.

4.17.1.4 Water Supply Thresholds of Significance

The following thresholds of significance regarding impacts related to water supply are based on the recommended questions contained in Appendix G of the State *CEQA Guidelines*. A project would have a significant impact on the provision of

utilities or service systems related to water supply if it would result in any of the following:

- Require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; and/or
- Have insufficient water supplies available to serve the project from existing entitlements and resources, or need new or expanded entitlements.

For the purpose of this EIR, significant and unavoidable impacts would occur if the aforementioned conditions cannot be overcome by reasonable design, construction, and maintenance practices.

4.17.1.5 Less than Significant Impacts

4.17.1.5.1 Water Supply and Water Treatment Facilities

Threshold	Would the proposed project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?
Threshold	Would the proposed project require the construction of new water treatment facilities or expansion of existing facilities, the construction of which would cause significant environmental effects?

According to its UWMP, the EVMWD assumes a baseline water demand rate of 248 gallons per capita per day (gpcd). Using this baseline rate, the residential portion of the project would demand approximately 88,288 gallons per day (gpd). The northern portion of the site will host approximately 157 employees. Assuming water usage factors of 127 gpd per office employee and 152 gpd per retail employee,[1] the water demand for the northern portion of the site would be approximately 20,939 gpd.[2] Combined, the proposed uses would increase water demand by approximately 109,238 gpd (122.36 AFY).

The EVMWD has identified a future target demand of 240 gpcd. Pursuant to Section 17.276.070 of the City's Municipal Code, future development allowed by the

[1] Pacific Institute. Waste Not, Want Not: The Potential for Water Conservation in California, 2003. Appendix E. Accessed online: http://pacinst.org/publication/waste-not-want-not/.

[2] 1 employee per 500 square feet of Commercial Retail space and 1 employee per 300 square feet of Commercial Office space).
248 gpdc × 356 residents = 88,299 gpd
127 gpd/employee × 117 office employees = 14,859 gpd
152 gpd × 40 commercial/retail employees) = 6,080gpd
Total: 109, 238 gpd.

proposed General Plan is subject to the requirements of the EVMWD's Ordinance 185, which prohibits the waste or unreasonable use of water and encourages water conservation practices. Compliance with this ordinance is expected to reduce overall water demand. At the projected demand rate of 240 gpcd, the project would increase water demand within the EVMWD by 106,379 gpd or approximately 119.1 AFY.

Water supplies include surface water from Canyon Lake, groundwater pumping and imported water from MWD. As previously identified in Table 4.17.A, water supplies are anticipated to total approximately 70,581 AFY by 2035. Table 4.17.C details that a sufficient supply of water exists to provide water to meet EVMWD demands during normal year, single dry year, and multiple dry year conditions.

Table 4.17.C: Water Supply Sufficiency (Demand vs Supply Comparison)[1]

	2015	2020	2025	2030	2035
Normal Year					
Supply Totals	69,165	70,056	70,581	70,581	70,581
Demand Totals	51,306	55,244	59,208	64,426	65,258
Difference	17,858	14,812	11,373	8,155	5,323
Difference as % of Supply	25.8	21.1	16.1	11.6	7.5
Difference as % of Demand	34.8	26.8	19.2	13.1	8.2
Single Dry Year					
Supply Totals	77,765	78,656	79,181	79,181	79,181
Demand Totals	56,027	60,326	64,655	68,169	71,262
Difference	21,738	18,329	14,526	11,012	7,919
Difference as % of Supply	28.0	23.3	18.3	13.9	10.0
Difference as % of Demand	38.8	30.4	22.5	16.2	11.1
Multiple-Dry Year Events					
Supply Totals	76,765	77,656	78,181	78,181	78,181
Demand Totals	56,027	60,326	64,655	68,169	71,262
Difference	20,738	17,329	13,526	10,012	6,919
Difference as % of Supply	27.0	22.3	17.3	12.8	8.9
Difference as % of Demand	37.0	28.7	20.9	14.7	9.7

Source: Tables E-9 through ES-11, EVMWD UWMP, July 2011.
[1] Acre-Foot. One acre-foot/year or approximately 325,853 gallons.

As stated in its UWMP, with all existing and planned water supplies, the EVMWD would have the ability to meet its future demand through 2035. The EVMWD's UWMP projects a 2035 water demand of 65,258 AFY, with a projected supply of 70,581 AFY. The project's anticipated water demand represents approximately 2.3, 1.5, and 1.8 percent of the projected 2035 water surplus in normal, single year dry, and multiple year dry conditions, respectively.

On April 1, 2015, Governor Brown issued Executive Order B-29-15 calling for a 25 percent reduction in consumer water use in response to the historically dry

conditions throughout California. The Governor's Order also includes mandatory actions aimed at reducing water demands, with a particular focus on outdoor water use. With the recent adoption of the State's mandatory water use restrictions, the EVMWD is required to cut water use by 25 percent. In May 2015 the EVMWD declared a Stage 4a Drought Alert, which further establishes restrictions on outdoor water usage, requires use within assigned water budgets, and establishes penalties for non-compliance with the adopted conservation strategies.[1] As a condition of service, on-site water usage would be required to adhere to all EVMWD water conservation requirements and emergency drought regulations. Additionally, as reductions in per capita water usage through implementation Municipal Code Section 17.276.070 are achieved, the project will have a correspondingly reduced effect on total water demand.

Future demand for the UWMP is based on projected growth within EVMWD's service area. The anticipated population growth resulting from project development is consistent with the land use assumptions outlined in the General Plan.[2] Therefore, sufficient water supplies are available to the project and impacts are less than significant.

Based on its UWMP, the EVMWD's total potable water production capacity is currently 66,500 AFY, while the average production is 43,800 AFY. Since the project would use approximately 122.36 AFY, this would only incrementally increase demand and not require the construction of new water treatment facilities or expansion of existing facilities, which could cause significant environmental effects. The EVMWD has commented that the project would be required to connect to the existing 16-inch water line in Clinton Keith Road, install a 12-inch water line in Yamas Drive and pay applicable fees to the EVMWD. Per the EVMWD's development review process, the project applicant will be required to submit plans to for review and approval. No significant impacts associated with the delivery of water to the project site are anticipated; therefore, no mitigation is warranted.

4.17.1.5.2 Storm Water Drainage Requirements

Threshold	Would the proposed project result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

(See Section 4.9 for a more detailed accounting of the project's drainage plan.)

1 http://www.evmwd.com/depts/admin/public_affairs/drought.asp, site accessed, June 8, 2015.

2 The southern portion of the site was rezoned to a higher density residential land use during the most recent update of the City's Housing Element (2013). Based on the previous designation, on-site water demand used in the UWMP would have been less than that identified for the project (approximately 32.7 AFY). The net change in water demand between the previous R-R (Rural Residential) designation and the current proposal is approximately 126.6 AFY and remains well within the surplus identified under the normal, single year dry, and multiple dry year conditions.

The project site is located within the limits of the RCFCWCD's Murrieta Creek/ Murrieta Valley Area Drainage Plan. As part of the development process, the applicant will be required to submit required fees to the RCFCWCD or City prior to the issuance of grading permits.[1]

The project site is currently undeveloped. On-site terrain consists of rolling terrain with four ephemeral stream drainages (previously referenced Figure 4.4.2 in Section 4.4, *Biological Resources*). There are no current impervious surfaces on site so runoff can infiltrate into existing on-site soils. The site's runoff is also diverted to a man-made earthen detention area in the southwest corner of the site.

Off-site flows will be collected and conveyed through the project site. Untreated on-site flows will not co-mingle with off-site flows. Development of the project would result in the construction of impervious surfaces, increasing the amount of runoff on the site. Development of the project would extend off-site storm drain systems throughout the site. While the installation of impervious surfaces will increase the volume of storm water drainage, the on-site storm drain system has been designed to accommodate the post-development storm water flows.

The project hydrology study demonstrated that increases in storm water runoff would be captured and treated by on-site drainage features (refer to Section 4.9, *Hydrology*). Additionally, the site's design will maintain the general pattern of existing flow. With development of the facilities and implementation of the practices detailed in the Final Water Quality Management Plan (WQMP) prepared for the project, no significant drainage or drainage capacity impact would result from the development of the project. The construction of the drainage features detailed in the Final WQMP and Section 4.9 are considered part of the proposed project and the environmental effect of the installation of these features is addressed in previous sections of the EIR. Therefore, development of the project would not result in a significant impact relative to the extension or expansion of storm water drainage facilities. No mitigation is required.

Project Design Features. The project will capture and treat storm water runoff on site as described in Section 4.9 of this EIR, thus ensuring no significant impact on storm water drainage facilities would occur.

4.17.1.6 Significant Impacts

No significant impact relative to impacts related to water supply or water treatment/ conveyance facilities have been identified.

[1] NOP Comment letter, Riverside County Flood Control and Water Conservation District, January 8, 2015.

4.17.1.7 Cumulative Impacts to Water Supply and Storm Drain Facilities

The cumulative area for water supply-related issues is the EVMWD service area. Existing and future development within the EVMWD's service area would demand additional quantities of water. The adopted UWMP projects population within the service area to increase to 185,102 persons by the year 2035. Increases in population, development, and intensity of uses would contribute to increases in the overall regional water demand. Water conservation and recycling measures would reduce the need for increased water supply. Overall, however, total demand is expected to increase from 51,306 AFY in the year 2015 to 65,258 AFY in the year 2035.

As previously identified, MWD will continue to rely on the plans and policies outlined in its RUWMP and IRWP to address water supply shortages and interruptions (including potential shutdowns of SWP pumps) to meet water demands. An aggressive campaign for voluntary conservation and recycled water usage, curtailment of groundwater replenishment water and agricultural water delivery are some of the actions outlined in the RUWMP. The MWD has analyzed the reliability of water delivery through the SWP and the CRA. The MWD's IRWP and RUWMP have concluded that, with the storage and transfer programs developed by the MWD, there will be a reliable source of water to serve its member agencies' needs through 2035. The EVMWD would have water supplies for projected growth through 2035 in wet, dry, and multiple-dry years.

As development occurs, each project will be required to assess its separate and cumulative effect on water supply and water treatment/delivery systems. The existing and future land use patterns/designations and demographic projects for the EVMWD service area are taken into consideration during the development of local and regional water planning documents. As EVMWD and the MWD has established that current and future water supplies are sufficient to address normal, single dry year, and multiple dry year conditions, no cumulatively significant water supply or delivery impact would occur. No mitigation is warranted.

4.17.2 Wastewater Services

4.17.2.1 Existing Setting

The site is currently undeveloped and does not generate any wastewater flow.

Wastewater flow generated by the project would discharge to an existing 18 to 24-inch sewer line on Clinton Keith Road. The project site is within EVWMD's Regional Collection System,[1] which contains approximately 277 miles of sewer mains up to 54 inches in diameter (approximately 54 miles of which are 10 inches in diameter and larger) and 28 lift stations and associated force mains. Wastewater flows within this collection system are conveyed to the EVMWD-operated Regional Water

[1] One of four collection systems within the EVMWD service area.

Reclamation Facility (WRF) located at 14980 Strickland Avenue in Lake Elsinore. The WRF uses an ultraviolet disinfection system designed to treat 8.0 million gallons per day (mgd) average flow and a 16.0 mgd peak flow.[1] The facility currently processes 5.3 mgd.[2] Currently, surplus capacity at the Regional WRF is approximately 2.7 mgd.

NOP/Scoping Comments. The EVMWD comments on the NOP provided requirements for the installation of wastewater lines within roadways fronting the project site.

4.17.2.2 Existing Policies and Regulations for Wastewater Services

Federal Water Pollution Control Act The major piece of Federal legislation dealing with wastewater is the Federal Water Pollution Control Act, which is designed to restore and preserve the integrity of the nation's waters. In addition to the Federal Water Pollution Control Act, other Federal environmental laws have a bearing on the location, type, planning, and funding of wastewater treatment facilities.

Regional Water Quality Control Board. Operation of the Regional WRF is subject to regulations set forth by the California Department of Health Services (DHS) and the Regional Water Quality Control Board (RWQCB). NPDES permits are required for operators of publically owned treatment works, municipal separate storm sewer systems (MS4s), construction, projects, and industrial facilities who discharge to surface waters within the City.

City General Plan. City General Plan policies related to wastewater services include:

Land Use

LU 22.3 Require that adequate and available circulation facilities, water resources, and sewer facilities exist to meet the demands of the proposed residential land use.

LU 23.7 Require that adequate and available circulation facilities, water resources, and sewer facilities exist to meet the demands of the proposed land use.

Administration

LU 1.6 Coordinate with local agencies, such as LAFCO, service providers and utilities, to ensure adequate service provision for new development.

[1] EVMWD Sewer System Management Plan, October 2013.
[2] Waste Discharge Requirements for the EVMWD Regional Water Reclamation Facility.

Infrastructure, Public Facilities & Service Provision

LU 5.2 Monitor the capacities of infrastructure and services in coordination with service providers, utilities, and outside agencies and jurisdictions to ensure that growth does not exceed acceptable levels of service.

Open Space

OS 2.1 Encourage the installation of water-conserving systems such as dry wells and graywater systems, where feasible, especially in new developments. The installation of cisterns or infiltrators shall also be encouraged to capture rainwater from roofs for irrigation in the dry season and flood control during heavy storms.

OS 3.1 Encourage innovative and creative techniques for wastewater treatment, including the use of local water treatment plants.

OS 3.2 Encourage wastewater treatment innovations in rural areas.

OS 4.5 Retain storm water at or near the site of generation for percolation into the groundwater to conserve it for future uses and to mitigate adjacent flooding.

OS 20.2 Prevent unnecessary extension of public facilities, services, and utilities, for urban uses, into Open Space-Conservation designated areas.

Community Design

LU 25.4 Require that adequate and available circulation facilities, water resources, and sewer facilities exist to meet the demands of the proposed land use.

Table 4.17.D addresses the project's consistency with relevant General Plan policies.

Table 4.17.D: General Plan Consistency Analysis

General Plan Goals and Targets	General Plan Consistency Analysis
Land Use	
LU 1.6. Coordinate with local agencies, such as LAFCO, service providers and utilities, to ensure adequate service provision for new development.	**Consistent.** The project will be designed to incorporate required utility improvements per the requirements identified by respective providers, pay required fees, and submit project plans for appropriate review and approval.
LU 5.2. Monitor the capacities of infrastructure and services in coordination with service providers, utilities, and outside agencies and jurisdictions to ensure that growth does not exceed acceptable levels of service.	
LU 22.3. Require that adequate and available circulation facilities, water resources, and sewer facilities exist to meet the demands of the proposed residential land use.	
LU 23.7. Require that adequate and available circulation facilities, water resources, and sewer facilities exist to meet the demands of the proposed land use.	

Table 4.17.D: General Plan Consistency Analysis

General Plan Goals and Targets	General Plan Consistency Analysis
LU 25.4. Require that adequate and available circulation facilities, water resources, and sewer facilities exist to meet the demands of the proposed land use.	
Open Space	
OS 2.1. Encourage the installation of water-conserving systems such as dry wells and graywater systems, where feasible, especially in new developments. The installation of cisterns or infiltrators shall also be encouraged to capture rainwater from roofs for irrigation in the dry season and flood control during heavy storms.	**Consistent.** The project's storm water drainage facilities incorporate features that maximize the on-site infiltration of storm flows.
OS 3.1. Encourage innovative and creative techniques for wastewater treatment, including the use of local water treatment plants.	**Consistent.** The project's storm water drainage facilities incorporate features that maximize the on-site infiltration of storm flows.
OS 4.5. Retain storm water at or near the site of generation for percolation into the groundwater to conserve it for future uses and to mitigate adjacent flooding.	**Consistent.** The project's storm water drainage facilities incorporate features that maximize the on-site infiltration of storm flows.
OS 20.2. Prevent unnecessary extension of public facilities, services, and utilities, for urban uses, into Open Space-Conservation designated areas.	**Consistent.** The project does not include the extension of utility facilities into or through an area identified for Open Space-Conservation uses.

Source: City of Wildomar General Plan, July 2008.

As detailed in Table 4.17.D, the project is consistent with the cited General Plan policies.

4.17.2.3 Wastewater Services Thresholds of Significance

The proposed project is considered to have a significant impact on wastewater services if any of the following occurs:

- The project would exceed wastewater treatment requirements of the Santa Ana Regional Water Quality Control Board;
- The project would result in a determination by the wastewater treatment provider, which serves or may serve the project, that it lacks adequate capacity to serve the project's projected demand in addition to the provider's existing commitments; and/or
- The project would require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

4.17.2.4 Less than Significant Impacts

4.17.2.4.1 Wastewater Treatment Requirements

Threshold	Would the proposed project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?

Local governments and water districts are responsible for complying with Federal regulations, both for wastewater plant operation and the collection systems (e.g., sanitary sewers) that convey wastewater to the wastewater treatment facility. Proper operation and maintenance is critical for sewage collection and treatment as impacts from these processes can degrade water resources and affect human health. For these reasons, publicly owned treatment works (POTWs) receive Waste Discharge Requirements (WDRs) to ensure that such wastewater facilities operate in compliance with water quality regulations set forth by the State. WDRs, issued by the State, establish effluent limits on the kinds and quantities of pollutants that POTWs can discharge. These permits also contain pollutant monitoring, recordkeeping, and reporting requirements. POTWs that intend to discharge into the nation's waters must obtain a WDR prior to initiating discharge.

It is anticipated that all wastewater generated by the proposed project would be routed to and treated by the Regional WRF, which is considered to be a POTW, so operational discharge flows treated at the WRF would be required to comply with WDRs for that facility. Compliance with condition or permit requirements established by the City and WDRs at the WRF would ensure that discharges into the wastewater treatment facility system from the operation of the proposed project would not exceed applicable San Diego RWQCB wastewater treatment requirements. Expected wastewater flows from the proposed project will not exceed the capabilities of the serving treatment plant, so no significant impact related to this issue would occur and no mitigation would be required.

4.17.2.4.2 Wastewater Treatment Capacity and/or New or Expanded Wastewater Treatment Facilities

Thresholds	Would the proposed project result in a determination by the wastewater treatment provider, which serves or may serve the project, that it lacks adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?
Threshold	Would the proposed project require the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?

The EVMWD, in its Design Standards and Standard Drawings (2013), estimates a baseline wastewater flow rate of 100 gpcd. Based on this rate, the project would generate approximately 53,300 gallons of wastewater per day (0.053 mgd). This increase is well within the current treatment capacity of the Regional WRF, which is

8.0 mgd. The increase in wastewater flow associated with the project represents 1.97 percent of the WRF's existing surplus capacity, which is 2.7 mgd. Relative to the total surplus capacity, this increase is insignificant and would not require the construction of new or expansion of existing wastewater treatment facilities. Therefore, impacts to wastewater treatment capacity are less than significant and no mitigation is required.

No wastewater conveyance facilities that would serve the project currently operate near or over capacity. The northern portion of the site will be required to connect to the existing 18-inch sewer line within Clinton Keith Road. The applicant will be responsible to install a new sewer line (10 to 12-inch diameter) from the middle property line on Yamas Drive to Prielipp Drive. Per the EVMWD's development review process, the project applicant will be required to submit plans for review and approval. No significant impacts associated with wastewater conveyance facilities are anticipated; therefore, no mitigation is warranted.

4.17.2.5 Significant Impacts

No significant impacts relative to wastewater treatment or conveyance facilities would result from development of the project.

4.17.2.6 Cumulative Impacts to Wastewater Facilities

The cumulative area for wastewater-related issues is the EVMWD service area. Cumulative population increases and development within the service area would increase the overall regional demand for wastewater treatment service. On average, the Regional WRF is designed to treat 8.0 mgd of flow and has a peak capacity to treat 16 mgd. The WRF is expected to have adequate capacity to service the Regional Collection System's needs through 2030.

The project would not have a cumulatively significant impact on wastewater infrastructure because it would not require the expansion of existing infrastructure; only connections to existing infrastructure would be required by the project. By adhering to the wastewater treatment requirements, wastewater from the project site that is processed through the Regional Collection System would meet established standards. As the wastewater from all development within EVMWD's service area would be similarly treated, no cumulatively significant wastewater treatment impact would occur.

4.17.3 Solid Waste Services

4.17.3.1 Existing Setting for Solid Waste Services

Solid waste disposal and recycling services for the project site are provided by Waste Management. Solid waste collected by Waste Management is trucked to the Moreno Valley Transfer Station, located approximately 23 miles from Wildomar in

the City of Moreno Valley. After processing, non-recyclable solid waste is transported for disposal at the El Sobrante Landfill. El Sobrante has a processing capacity of 16,054 tons per day, accepting on average 6,391 tons of waste per working day (2013).[1] Total remaining capacity at this landfill is approximately of 145.5 million tons. This landfill has an expected closure date of January 2045.

NOP/Scoping Comments. No comments were received during the NOP scoping period specifically regarding solid waste service.

4.17.3.2 Existing Policies and Regulations

Assembly Bill 341 (Chapter 476, Statutes of 2011). AB 341 was signed into law in 2011 and established a goal of processing 75 percent of generated waste through source reduction, recycling, or composting activities by the year 2020. The bill also instituted a commercial recycling mandate. In the mandate, businesses that generate four or more cubic yards of waste per week and multifamily developments of five or units are required to arrange for recycling services.

Solid Waste Reuse and Recycling Access Act of 1991. Assembly Bill 1327 (AB 1327) California. Signed into law in 1991, AB 1327 added Chapter 18 to Part 3 of Division 30 of the Public Resources Code. Chapter 18 required the California Integrated Waste Management Board (CIWMB) to develop a model ordinance for adoption of recyclable materials in development projects. Local agencies were then required to adopt the model, or ordinances of their own, in order to govern adequate areas for collection and loading of recyclable materials in development projects by September 1, 1993. If a local agency had not adopted a model ordinance by that date, the CIWMB model would be adopted and enforced by the local agency.

Senate Bill 1016 (SB 1016). The California Integrated Waste Management Act of 1989 (AB 939) requires each jurisdiction to divert 50 percent of its solid waste from being disposed in landfills. The new per capita disposal measurement system (SB 1016, Wiggins, Chapter 343, Statutes of 2008) became effective January 1, 2009. It builds on AB 939 compliance requirements by implementing a simplified measure of local jurisdictions' performance. SB 1016 accomplishes this by changing to a disposal-based indicator: the per capita disposal rate, which uses only two factors: a jurisdiction's population and its disposal as reported by disposal facilities. SB 1016 changes how each jurisdiction's progress is measured to reach the 50 percent goal for diverting waste from landfills. This measurement is no longer determinative of compliance. In order for the CIWMB and jurisdictions to more properly focus on successful program implementation, SB 1016 shifts from the historical emphasis on

[1] El Sobrante Landfill 2013 Annual Report. Riverside County Waste Management Department, December 2014.

using calculated generation and estimated diversion to using annual disposal as a factor when evaluating jurisdictions' program implementation.

Riverside Countywide Integrated Waste Management Plan. The Riverside Countywide Integrated Waste Management Plan (RCIWMP) was approved by the CIWMB in 1996. The Plan outlines the goals, policies, and programs the County and its cities, and would implement to create an integrated and cost-effective waste management system that complies with the provisions of AB 939 and its diversion mandates. The RCIWMP is composed of the Riverside Countywide Summary Plan, the Source Reduction and Recycling Element (SRRE) for the County and each of its cities, the Nondisposal Facility Element (NDFE) for the County and each of its cities, the Household Hazardous Waste Element (HHWE) for the County and each of its cities, and the Riverside Countywide Siting Element.

City General Plan. City General Plan policies related to the solid waste include:

Administration

LU 1.6 Coordinate with local agencies, such as LAFCO, service providers and utilities, to ensure adequate service provision for new development.

Infrastructure, Public Facilities & Service Provision

LU 5.2 Monitor the capacities of infrastructure and services in coordination with service providers, utilities, and outside agencies and jurisdictions to ensure that growth does not exceed acceptable levels of service.

Open Space

OS 20.2 Prevent unnecessary extension of public facilities, services, and utilities, for urban uses, into Open Space-Conservation designated areas.

Air Quality

AQ 5.1 Utilize source reduction, recycling and other appropriate measures to reduce the amount of solid waste disposed of in landfills.

Table 4.17.E addresses the project's consistency with relevant General Plan policies.

Table 4.17.E: General Plan Consistency Analysis

General Plan Goals and Targets	General Plan Consistency Analysis
Land Use	
LU 1.6. Coordinate with local agencies, such as LAFCO, service providers and utilities, to ensure adequate service provision for new development.	**Consistent.** Based on a review of anticipated solid waste generation and existing/future landfill capacity, there is sufficient capacity at receiving

Table 4.17.E: General Plan Consistency Analysis

General Plan Goals and Targets	General Plan Consistency Analysis
LU 5.2. Monitor the capacities of infrastructure and services in coordination with service providers, utilities, and outside agencies and jurisdictions to ensure that growth does not exceed acceptable levels of service.	landfills to accept project-related solid waste.
Open Space	
OS 20.2. Prevent unnecessary extension of public facilities, services, and utilities, for urban uses, into Open Space-Conservation designated areas.	**Consistent.** The project does not include the extension of public facilities or service features into or through an area identified for Open Space-Conservation uses.
Air Quality	
AQ 5.1. Utilize source reduction, recycling and other appropriate measures to reduce the amount of solid waste disposed of in landfills.	**Consistent.** As with all projects, the project will be required to comply with applicable local and State solid waste reduction and recycling guidelines to reduce the amount of solid waste entering receiving landfills.

Source: City of Wildomar General Plan, July 2008.

Table 4.17.E concludes the proposed project is consistent with the City's General Plan.

4.17.3.3 Methodology

The solid waste analysis is based on evaluating the existing capacity of nearby landfills that serve the City, future solid waste capacity that would be available to the City, and the identification of existing solid waste demand and future solid waste demand associated with the development of the proposed project. The analysis also identifies existing City goals, policies, and programs that the City implements to reduce generated waste (refer to Table 4.17.E).

4.17.3.4 Solid Waste Services Thresholds of Significance

Based on Appendix G of the *CEQA Guidelines,* a project is considered to have a significant impact on solid waste services if it results in either of the following:

- The project would be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs; and/or
- The project would fail to comply with applicable Federal, State, and local statutes and regulations related to solid waste.

4.17.3.5 Less than Significant Impacts

The following solid waste impacts were determined to be less than significant. Adherence to established regulations, standards, and policies would reduce potential solid waste impacts to a less than significant level.

4.17.3.5.1 Solid Waste Facilities

Threshold	Would the proposed project be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs?

No structures are located on the project site; therefore no demolition activities (or resulting demolition waste) would occur during development. Based on typical construction waste generation factors,[1] site development would generate approximately 461.3 tons of solid waste during construction.[2] On-site construction is anticipated to last approximately one year; therefore, on average, approximately 1.77 tons[3] per day of construction waste may be generated during the course of construction.

Solid waste generated by the proposed on-site uses would be collected and transported to the Moreno Valley Transfer Station, after which non-recyclable material would be sent to El Sobrante Landfill. Based on a solid waste generation of 0.41 ton per person per year, approximately 145.96 tons of solid waste per year would be generated from the residential portion of the project.[4] The retail and office portions of the project would generate 34.40 and 32.73 tons annually, respectively.[5,6] Combined, the project would generate approximately 213.09 tons of solid waste annually (0.58 ton daily).

The existing daily surplus capacity of El Sobrante Landfill is 9,663 tons. Project-generated waste would make up 0.018 and 0.0060 percent of daily surplus capacity at this landfill during the construction and operation of the project, respectively. As adequate daily surplus capacity exists at the receiving landfill, development of the project would not significantly affect current operations or the expected lifetime of the landfill serving the project area. No significant solid waste disposal impact would occur and no mitigation is required.

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1 Tables 3 and 4, Characterization of Building-Related Construction and Demolition Debris in the United States, Franklin Associates, June 1998. http://www.epa.gov/wastes/hazard/generation/sqg/cd-rpt.pdf, site accessed, May 5, 2015.

2 161,783 square feet residential (total) × 4.38 pounds/square foot = 708,613 pounds; 55,000 commercial/office × 3.89 pounds/square foot = 213,950 pounds. Total = 922,563 pounds (461.3 tons).

3 461.3 tons/260 days (52 × 5 work days/week) = 1.77 tons/day.

4 City of Wildomar General Plan Update Draft EIR (2015) (0.41 tons/year/resident × 356 residents = 145.96 tons/year)

5 Table 21, Waste Disposal and Diversion Findings for Selected Industry Groups, Cascadia Consulting, June 2006. Accessed online: http://www.calrecycle.ca.gov/Publications/Documents/Disposal/34106006.pdf.

6 0.86 ton/retail employee/year × 40 employees = 34.40 tons/year; 1.87 pounds/office square foot/year × 35,000 office square feet = 65,450 pounds/year = 32.73 tons/year.

4.17.3.5.2 Solid Waste Reduction

Threshold	Would the proposed project fail to comply with applicable Federal, State, and local statutes and regulations related to solid waste?

The California Integrated Waste Management Act requires each city and county to prepare, adopt, and submit to CalRecycle a source reduction and recycling element that demonstrates how the jurisdiction will meet the Integrated Waste Management Act's mandated waste diversion goals, including a 50 percent or better rate of diversion for solid waste. Each jurisdiction's SRRE must include specific components, as defined in Public Resources Code Sections 41003 and 41303.

The City contracts with franchise solid waste haulers, who offer recycling services to meet the requirements of the City SRRE. The project would be required to coordinate with Waste Management to enact a program for the collection of recyclable materials as established by applicable local, regional, and State programs. Recyclable materials that may be included in such a recycling program include paper products, glass, aluminum, and plastic.

As of July 1, 2012, Assembly Bill 341 (AB 341) requires all businesses in California that generate four or more cubic yards of waste per week to recycle. Waste Management offers a wide variety of recycling services that the project would have access to in order to recycle waste from businesses subject to AB 341.

Additionally, the proposed project would be required to comply with applicable elements of AB 1327, Chapter 18 (California Solid Waste Reuse and Recycling Access Act of 1991) and other applicable local, State, and Federal solid waste disposal standards, thereby ensuring that the solid waste stream to regional landfills are reduced in accordance with existing regulations. Impacts are considered less than significant and require no mitigation.

4.17.3.6 Significant Impacts

No significant impacts related to solid waste services or facilities have been identified; therefore, no mitigation is required.

4.17.3.7 Cumulative Impacts to Solid Waste Services

The project and other projects within the City would increase demand for solid waste services. Cumulative projects would result in increased generation of solid waste that would need to be processed at the Moreno Valley Materials Recovery Facility and El Sobrante Landfill. The landfill has an anticipated closure date of January 2045. In addition to the El Sobrante Landfill, five additional regional landfills are available to supplement disposal capacity. With planned expansion activities of landfills in the project vicinity and projected growth rates contained in the City's General Plan EIR, sufficient landfill capacity exists to accommodate future disposal

needs through 2030. Therefore, development according to the City General Plan would not create demands for solid waste services that would exceed the capabilities of the County's waste management system. Consequently, cumulative impacts associated with solid waste within the City would be considered less than significant.

5.0 ADDITIONAL TOPICS REQUIRED BY CEQA

Section 15126 of the *CEQA Guidelines* requires that all aspects of a project must be considered when evaluating its impacts on the environment, including planning, acquisition, development, and operation. As part of this analysis, the EIR must also identify (1) significant environmental effects of the proposed project; (2) significant environmental effects that cannot be avoided if the proposed project is implemented; and (3) growth-inducing impacts.

5.1 SIGNIFICANT ENVIRONMENTAL EFFECTS WHICH CANNOT BE AVOIDED IF THE PROPOSED PROJECT IS IMPLEMENTED

Table 5.A identifies the significant unavoidable impacts anticipated to result from the proposed project, even with implementation of the project-specific mitigation measures identified in the Chapter 4.0 analysis.

Table 5.A: Significant Environmental Effects That Cannot Be Avoided

Topic	Type of Impact	Impact
Transportation and Traffic	Conflict with Applicable Circulation Plan and Traffic and Level of Service Impacts – Freeway Impacts	Intersection Level of Service impacts would exceed Caltrans standards on freeway mainline segments or at freeway ramps.

In concept, CEQA requires the analysis of impacts of a proposed project on the natural and man-made environment (e.g., new traffic, or loss of on-site habitat) and not impacts of the existing environment on a proposed project. In practice however, CEQA documents examine a number of topics where impacts to projects are examined relative to existing environmental hazards (e.g., earthquake faults and flooding).

In this case, the only significant impact of the proposed project that cannot be mitigated to less than significant levels is its contribution to freeway traffic. The addition of project traffic would contribute to future deficiencies to I-15 freeway facilities. Because the City has no control over State facilities and because the State facilities funded and planned to be developed under future traffic conditions are already anticipated to operate at LOS F even without the proposed project, there are no further improvements that can be imposed upon the project to mitigate its small cumulative contribution to significant impacts to the identified mainline segments and ramp junctions of I-15. While the cumulative effect of the project is small, because there is no feasible method to mitigate, the project will have a significant and unavoidable impact on freeway facilities.

5.2 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

Section 15126(c) of the *CEQA Guidelines* mandates that the EIR address any significant irreversible environmental changes that would occur should the project be implemented. An impact would fall into this category if it resulted in any of the following:

- The project would involve a large commitment of non-renewable resources;
- The primary and secondary impacts of the project would generally commit future generations of people to similar uses;
- The project involves uses in which irreversible damage could result from any potential environmental incidents associated with the project; and/or
- The proposed consumption of resources is not justified (i.e., the project could waste energy).

Project construction and operation would utilize non-renewable resources. Construction of the project would include the use of non-renewable fossil fuels, mineral aggregates, and other construction materials. Project operation would include the use of non-renewable resources such as natural gas and electricity.[1]

Per the City's General Plan, the project site is designated for the development of urban uses. Whether the project is developed or not, it is likely the project site would be developed sometime in the future with a mix of uses similar to those proposed. For this reason, the project does not rely on adjacent or off-site improvements that would be required in the future. Therefore, approval of this project would not require that any other properties be developed.

As described in Section 4.8, Hazards, the project does not propose any hazardous use that could cause irreversible damage to the environment. In addition, the proposed General Plan Amendment and Zone Change are a response to the City's desire to establish a pattern of development and provide additional employment opportunities. The redesignation of the southern portion of the project site to multiple-family residential was a result of the City's Housing Element update, which in turn responded to the Regional Housing Needs Assessment (RHNA) that required the City have a greater number of multifamily units than were currently zoned for. Resources used and consumed by this project are appropriate and justified because the project accommodates the growth planned for in the City as described in the City General Plan and Housing Element.

[1] Approximately 73.47 percent of electricity used in California is from non-renewable sources such as coal, natural gas, nuclear, and oil. Total Electricity System Power, California Energy Commission, http://energyalmanac.ca.gov/electricity/total_system_power.html, website accessed March 19, 2015.

5.3 GROWTH-INDUCING IMPACTS

Section 15126.2(d) of the *CEQA Guidelines* mandates that the EIR must address whether the proposed project could cause growth-inducing impacts. An impact would fall into this category if it resulted in any of the following:

- The project would cause economic or population growth or construct new housing;
- The project would remove obstacles to population growth;
- The project would tax existing community service facilities; and/or
- The project would encourage or facilitate other activities that could significantly affect the environment.

The proposed project would incrementally induce direct growth in the City by providing new housing and economic opportunities. As identified in Section 4.13 (*Population and Housing*) of the EIR, the 162 multifamily apartment units proposed could directly increase the City's population by approximately 356 people. The proposed office and commercial/retail space could contribute to economic growth in the City by increasing the "value" of the site through the creation of jobs and increased tax revenues. The southern portion of the project is currently zoned for the proposed multifamily apartments. Although the northern portion of the project site requires a General Plan Amendment and a Zone Change, both the existing and proposed land uses would induce growth in the City. Therefore, the proposed growth from the project is anticipated in City and regional plans.

The project does not include expansion of a utility facility or major roadway into undeveloped land that would provide an impetus for population growth in the City. Based on the General Plan land use designations and zoning, the project provides the intended and planned for use of the project site. Although the project includes a General Plan Amendment and Zone Change, it is not a substantial change in land use or land use patterns in the area.

As described in Sections 4.14 and 4.17 (*Public Services* and *Utilities and Service Systems*, respectively,) the project will not significantly increase the need for public services such as police, fire, and schools or require new or expanded water, wastewater, or solid waste facilities. The payment of required development impact fees, assessments, taxes, and other fees will appropriately fund required public services and contribute to the maintenance of public infrastructure serving the project.

The impact analyses included in Section 4.0 of the EIR include discussions of the project's potential cumulative environmental impacts. These analyses have determined that the project would not encourage or facilitate any activities that would result in significant cumulative impacts to the environment. The proposed project causes economic or population growth by the construction new housing and the

change in General Plan land use designation and zoning in the northern portion of the site will remove obstacles to growth by allowing commercial development. However, this growth is planned for in City and in regional planning documents because the southern portion of the project site is currently zoned for the proposed multifamily apartments. The change to the General Plan designation and zoning of the northern portion would not result in development substantially different from what would be built under the existing General Plan designation and zoning.

5.4 ENERGY CONSUMPTION

Appendix F of the *CEQA Guidelines* requires that, to the extent relevant and applicable to a project, an EIR address the potentially significant energy implications of a project. The following discussion provides an inventory of the project's potential energy consumption and details the design features and mitigation measures that have been identified to reduce the consumption of energy.

5.4.1 Project Energy Consumption

5.4.1.1 Short-Term Construction

Construction of the proposed project would consist of grading, building construction, paving, and architectural coatings. Tables 5.B estimates fuel consumption for the equipment anticipated to be used during construction activities.

Table 5.B: Construction Fuel Consumption, Off-Road Equipment

Phase	Equipment	Quantity	Fuel Use (gal/hour)[2]	Duration (total hours)[1]	Total Fuel Consumption (gallons)[3]
Grading	Excavators	2	2.4	600	2,880
Grading	Graders	1	3.1	600	1,860
Grading	Off-Highway Trucks	1	2.0	600	1,200
Grading	Rubber Tired Dozers	1	3.1	600	1,860
Grading	Scrapers	2	14.0	600	16,800
Grading	Tractors/Loaders/ Backhoes	2	1.0	600	16,800
Building Construction	Cranes	1	6.0	2,400	14,400
Building Construction	Forklifts	3	1.1	2,400	7,920
Building Construction	Generator Sets	1	1.2	2,400	2,880
Building Construction	Tractors/Loaders/ Backhoes	3	1.0	2,400	7,200
Building Construction	Welders	1	1.5	2,400	3,600
Paving	Pavers	2	3.3[4]	160	1,056
Paving	Paving Equipment	2	3.3[4]	160	1,056

Table 5.B: Construction Fuel Consumption, Off-Road Equipment

Phase	Equipment	Quantity	Fuel Use (gal/hour)[2]	Duration (total hours)[1]	Total Fuel Consumption (gallons)[3]
Paving	Rollers	2	3.3[4]	160	1,056
Architectural Coating	Air Compressor	1	3.3[4]	360	1,188
Total					**81,756**

1 Duration data obtained from CalEEMod model, Air Quality Impact Analysis (EIR Appendix B) and Greenhouse Gas Analysis (EIR Appendix F.)

2 *Transportation Research Record*, Results of Comprehensive Field Study of Fuel Use and Emissions of Nonroad Diesel Construction Equipment, Table 2, H. Christopher Frey, Ph.D., et al. Lewis, February 17, 2010, http://etd.lib.ncsu.edu/publications/bitstream/1840.2/2322/1/214+Comprehensive+Field+Study+of+Fuel+Use+and+Emission+of+Nonroad+Diesel+Construction+Equipment.pdf, website accessed March 27, 2015. And, Transportation Research Board, NCHRP Report 744: Fuel Usage Factors in Highway and Bridge Construction, 2013, https://books.google.com/books?id=YUApIoUEFVcC&pg=PA61&lpg=PA61&dq=general+gallons+per+hour+for+typical+construction+equipment&source=bl&ots=AqDlNyg9_E&sig=mIvrihWivP0glFy4BvInssfi1r0&hl=en&sa=X&ei=G58VVYCjG9esyATk34KQCA&sqi=2&ved=0CD4Q6AEwBQ#v=onepage&q=general%20gallons%20per%20hour%20for%20typical%20construction%20equipment&f=false, website accessed March 27, 2015.

3 Total Fuel Consumption calculated by multiplying Quantity × Fuel Use × Duration. For example Rubber Tired Dozers Total Fuel Consumption of all vehicles of that type is: 2 × 2.4 × 600 = 2,880 gallons of fuel.

4 Based on the average fuel consumption of typical construction equipment.

As detailed in Table 5.B, construction equipment would consume approximately 81,756 gallons of fuel. As described in Section 4.3 (*Air Quality*), **Mitigation Measure 4.3.6.1B** requires that all rubber tired dozers and scrapers used during grading operations be California Air Resource Board (CARB) Tier 3 certified or better. The use of Tier-3 off-road engines would not only reduce exhaust emissions, but would also improve the fuel economy of the equipment fleet. **Mitigation Measure 4.3.6.1D** ensures construction equipment idling is minimized. These two mitigation measures would improve the fuel efficiency of construction equipment and minimize waste. There are no unusual project characteristics requiring the use of less fuel-efficient construction equipment; therefore, it is expected that construction fuel consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than similarly sized development projects.

5.4.1.2 Long Term Operations

Transportation Energy Demand. The number of annual vehicle miles traveled (VMT) provided in the Air Quality Analysis (Appendix B) and the average fuel economy provided by the U.S. Energy Information Administration, were used to estimate vehicular fuel during occupation/operation of the project. An estimate of the annual fuel consumed by vehicles traveling to and from the project is provided in Table 5.C.

Table 5.C: Vehicular Fuel Consumption (Operations)

Land Uses	Annual Vehicle Miles Traveled (VMT)[1]	Fuel Consumption (gallons)[2]
Apartments	2,455,146	140,294.1

Table 5.C: Vehicular Fuel Consumption (Operations)

Land Uses	Annual Vehicle Miles Traveled (VMT)[1]	Fuel Consumption (gallons)[2]
City Park	6,188	353.6
Office Building	1,800,168	102,866.7
Shopping Center	1,224,401	69,965.77
Total		**313,480.2**

1. *Clinton Keith Road (APN: 380-250-003) "Grove Park" Air Quality Impact Analysis, City of Wildomar,* Urban Crossroads, March 2, 2015. (Appendix B)
2. Calculated by dividing the VMT by 17.5 miles/gallon based on Annual Energy Review, Table 2.8 Motor Vehicle Mileage, Fuel Consumption, and Fuel Economy, 1949–2010. U.S. Energy Information Administration, http://www.eia.gov/totalenergy/data/annual/showtext.cfm?t=ptb0208, website accessed March 27, 2015.

Approximately 313,480.2 gallons of fuel a year are anticipated to be consumed during the occupation/operation of the project. Riverside Transit Authority could potentially serve the project: RTA Route 23 runs along Prielipp Road south of the project site, and turns onto Inland Valley Drive as well, with a stop approximately 0.18 mile from the project site, while RTA 7 runs along Clinton Keith Road and turns onto Inland Valley Drive, which runs parallel to the future extension of Yamas Drive. The Route 7 stop nearest to the site is approximately 0.15 mile west of the site. Both transit stops are well within walking distance for those residing and working on the project site.

The Wildomar area is jobs poor and housing rich and it can be reasonably assumed residents of the multifamily dwelling units would commute to jobs outside of the City. According to SCAG, 97.07 percent of City residents commute outside the City for work. Top work destinations include Temecula, Murrieta, and Lake Elsinore.[1] The proximity of the project site to existing transit could reduce the number of trips to and from the project site. The amount of any such reduction would be dependent on usage and cannot be accurately predicted at this time. Fuel consumption associated with vehicle trips generated by the project would not be considered inefficient, wasteful, or unnecessary in comparison to other similar developments in the region.

Building Energy Demand. The proposed project would be expected to demand approximately 2.3 billion British Thermal Units (BTUs)[2] of natural gas per year and 1.5 million kilowatt hours (kWh) of electricity per year (*Greenhouse Gas Analysis* Appendix F). The project would involve operations typical of multifamily residential and office/commercial uses, requiring electricity and natural gas for typical lighting, climate control, and day-to-day activities. The proposed project would incorporate several water, energy, solid waste, and land use efficiency measures through compliance with California's Title 24 Green Building Code.

[1] *Profile of the City of Wildomar*, Southern California Association of Governments, May 2013, http://www.scag.ca.gov/Documents/Wildomar.pdf (accessed April 8, 2015).

[2] 1 BTU equals the approximate energy needed to heat one pound of water. 1 BTU/hour = 0.293 watt.

Energy Efficiency Measures. The Green Building Code requires a variety of measures that will reduce the consumption of energy by the proposed project. Examples of mandatory measures that will be applied to the project include restricted faucet flows, restricted irrigation flows, construction waste management plans, best management practices during construction, and architectural paint and coating VOC limits. The Green Building Code also requires compliance with all applicable Building Energy Efficiency Standards such as air conditioning efficiency requirements, lighting control, and installation requirements. Therefore, the project would not be considered inefficient, wasteful, or unnecessary in comparison to other similar residential/commercial subdivisions within the region.

The project would adhere to all Federal, State, and local requirements for energy efficiency, including the Title 24 standards, as well as the project's design features. The proposed project would not result in the inefficient, wasteful, or unnecessary consumption of building energy. This analysis is consistent with and meets the requirements of Appendix F of the State CEQA Guidelines regarding energy conservation.

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6.0 ALTERNATIVES

6.1 INTRODUCTION

An EIR must identify ways to mitigate or avoid a project's significant effects on the environment. In compliance with *CEQA Guidelines* Section 15126.6(a), the EIR must describe " ... a range of reasonable alternatives to the project, or to the location of the project which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project." The EIR need not consider every conceivable alternative; rather it must consider a reasonable range of potentially feasible alternatives to the project, or to the location of the project, which would avoid or substantially lessen significant effects of the project, even if "… these alternatives would impede to some degree the attainment of the project objectives, or would be more costly" (*CEQA Guidelines* Section 15126.6(b)). The discussion of project alternatives must "… include sufficient information about each (to) allow meaningful evaluation, analysis, and comparison with the proposed project." An EIR must evaluate a "No Project" alternative in order to allow decision-makers to compare the effect of approving the project to the effect of not approving the project.

The City, acting as the CEQA Lead Agency, is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. The range of alternatives addressed in an EIR is governed by a "rule of reason," which requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. Of the alternatives considered, the EIR need examine in detail only those the Lead Agency determines could feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project. Per *CEQA Guidelines* Section 15364, "feasible" has been defined as "capable of being accomplished in a successful manner within a reasonable period of time, taking into account economic, and environmental, legal, social, and technological factors."

6.1.1 Summary of the Proposed Project

The proposed project envisions the construction and occupation of a mixed-use (horizontal) development. The approximately 19.4-acre property is divided into north and south sites, with proposed on-site development of approximately 55,000 square feet of commercial/retail uses adjacent to Clinton Keith Road and construction of eight three-story multiple-family apartment buildings (162 units) on the southern portion of the site. The project includes an approximately 1.8-acre passive public park and trailhead proposed directly south of the commercial development and preserves an approximately 1.3-acre natural open space area including an on-site grove of coastal live oaks. The project includes a proposal to change the current

General Plan Land Use designation on the northern portion of the site from Business Park (BP) to Commercial Retail (CR).

The project proposes to change the current zoning for the northern portion of the site from R-R (Rural Residential) to C-P-S (Scenic Highway Commercial) to accommodate the project's proposed commercial/retail uses.

6.1.2 Project Objectives

The primary project objective is the development of the site with uses that are consistent with the policies and development guidelines established by the City, specifically to:

- Establish a mixed-use community for Wildomar with a balance of land uses including commercial, multifamily housing, and recreation.
- Deliver an appropriately sized commercial center that provides a mix of retail and office uses with opportunities for employment growth and increased sales tax for Wildomar.
- Provide rental housing opportunities in a quality multifamily setting at a scale and character appropriate to the site and adjacent existing and future developments.
- Utilize architectural styles and design elements that reflect Wildomar's heritage, namely through the use of Ranch, Farmhouse, and Craftsman styles.
- Incorporate a public park within the project site for the overall Wildomar community.
- Preserve the existing on-site oak grove to the maximum extent feasible.
- Create a walkable community that provides convenient non-vehicular access from the residential area to the public park and commercial center.
- Implement a trail system for the project consistent with the Wildomar Multi-Use Trails Master Plan.

6.1.3 Summary of the Proposed Project's Significant Impacts

The analysis provided in Section 4.0 determined that, despite the implementation of mitigation measures, significant environmental impacts would result from the construction and operation of the proposed project. To satisfactorily provide the CEQA-mandated alternatives analysis, the alternatives considered must reduce or eliminate the following significant impact:

- Traffic: Cumulative Freeway Level of Service impacts.

6.2 ALTERNATIVES CONSIDERED BUT NOT ANALYZED FURTHER

In determining an appropriate range of alternatives to be evaluated in the EIR, several possible alternatives were considered by the lead agency and eventually rejected because they could not accomplish the basic objectives of the project as listed above or they were considered infeasible. Per the *CEQA Guidelines* (Section 15126.6(c)), factors that may be considered when addressing the feasibility of alternatives include failure to meet most of the stated project objectives, infeasibility, or inability to avoid environmental effects. As outlined in the Project Objectives, the proposed project would provide additional medium to high density housing and limited commercial uses in the southwestern portion of the City.

Clinton Keith Road provides an important connection between the Cities of Wildomar and Murrieta and between I-15 and I-215. In the City, Clinton Keith Road is anchored by a large retail development at the I-15 interchange. Multiple-family residential development fronts Clinton Keith Road west of Inland Valley Drive. Single-family residential uses are located on both sides of the Clinton Keith Road in the eastern portion of the City. This development pattern continues along Clinton Keith Road through the City of Murrieta to I-215.

6.2.1 No Project (Build) Alternative

CEQA states that the “No Project” alternative usually proceeds along one of two lines: either the continuation of the existing plan, policy, or operation, or the circumstance(s) in which the project does not proceed. In the latter case, if a project is disapproved, the “No Project” discussion can include predictable actions by others. Because of the site’s existing land use designations, location along Clinton Keith Road, and proximity to similar development, it is highly reasonable that in the event this specific project is disapproved, some form of on-site development will be subsequently approved. The current Business Park (BP) designation on the northern portion of the site allows employee-intensive uses, including research and development, technology centers, corporate offices, ‘clean’ industry, and supporting retail uses. The current Highest Density Residential (HHDR) designation on the southern portion of the site anticipates the development of multi-storied, multiple-family residential development (apartments and/or condominiums) at a density of 20 or more units per acre.

Under this alternative, the current General Plan designations would be retained. Given the existing HHDR land use designation on the southern portion of the site and the adjacency of similar residential uses, it is anticipated that residential development at the same scale as proposed by the project would occur on the southern portion of the site under this alternative. Utilizing a minimum FAR of 0.25, the developable area on the northern portion of the site would be approximately 52,270 square feet of “Business Park” uses, or approximately 95 percent of the

amount proposed by the proposed project (55,000 square feet). It is reasonable any "Business Park" uses under this alternative would be substantially similar to the mix of uses envisioned under the proposed project; therefore, a generally similar level of traffic would be anticipated. As this alternative would not reduce the identified significant project-related impacts, it was removed from further consideration.

6.2.2 Alternate Site

The predominant question in the selection of an alternate site is whether any of the significant effects of the project would be avoided or substantially lessened by developing the project at another location. Development of an alternate site with the same amount and intensity of uses would likely result in the similar levels of traffic, produce the same level of air pollutant and greenhouse gas emissions, generate the same increased demand for public services, parks, and public utilities, and allow similar increases in local population as the proposed project; therefore, it is reasonable the impacts associated with the development of the project at any alternate location would be correspondingly similar. The only significant and unavoidable impact identified in the Draft EIR was impacts to I-15 facilities. These impacts would result, with or without development of the proposed project. The development of the proposed project at any alternate location in the City would not alter this condition.

Only locations that would avoid or substantially lessen the significant effects of a project need be considered in the EIR. Because the development of similar uses at an alternate site would be expected to result in impacts equal to and similar to the proposed project, consideration of an alternate site alternative was rejected from further consideration.

6.2.3 Business Park Alternative

This alternative envisions approval of a General Plan Amendment on the southern portion of the site from Highest Density Residential (HHDR) to Business Park (BP). To account for required slopes and preservation of the on-site oak grove, this alternative assumes development within the same general footprint as the proposed project.[1] Assuming a minimum FAR of 0.25, this alternative could accommodate up to 130,680 square feet of office, commercial, and related business park uses. This alternative assumes development of 55,0000 square feet of commercial and office uses along Clinton Keith Road and 78,400 square feet of additional "Business Park" uses on the southern portion of the site.[2] The a.m., p.m., and daily trip generation rates associated with business park, office, and commercial uses are substantially more than that of residential uses;[3] therefore, it is reasonable to expect that overall

[1] Includes 4.8 and 7.2 developable acres on the north and south portions of the site, respectively.
[2] 7.8 acres × 0.25 FAR = 78,408 square feet.
[3] Multifamily: a.m. peak, 0.51 trip/unit; p.m. peak, 0.62 trip/unit; daily, 6.5 trips/unit.
Office: a.m. peak, 2.39 trips/1,000 sf; p.m. peak, 3.57 trips/1,000 sf; daily, 36.13 trips/1,000 sf.
Commercial: a.m. peak, 0.96 trip/1,000 sf; p.m. peak, 3.71 trips/1,000 sf; daily, 42.70 trips/1,000 sf.

traffic generated with Business Park development of the entire site would exceed the traffic identified with the proposed project. Under this alternative, development of the entire project site with a mix of uses allowed under the Business Park designation would not reduce traffic volumes in the project area or impacts to I-15. Additionally, replacing the Highest Density Residential designation on the southern portion of the site with a non-residential designation would be inconsistent with the City's adopted Housing Element and would not meet the primary project objectives; therefore, this alternative was removed from further consideration.

6.3 DEVELOPMENT OF ALTERNATIVES

No project alternatives were specifically identified during the project's NOP comment period or the Public Scoping Meeting. The following alternatives have been identified and evaluated to provide decision-makers with a reasonable range of alternatives that would eliminate or reduce the impacts of the project. Factors considered in selecting the alternatives include site suitability, availability of infrastructure, other plans or regulatory limitations, economic viability, and whether the project proponent can reasonably acquire, control, or otherwise have access to an alternative site. An EIR need not consider an alternative whose impact cannot be reasonably ascertained and whose implementation is remote or speculative. In accordance with *CEQA Guidelines*, the alternatives considered in this EIR include those that (1) could accomplish most of the basic objectives of the project, (2) are reasonably feasible given the nature of the project and surrounding land uses, and (3) could avoid or mitigate the significant impacts of the proposed project.

Table 6.A summarizes the characteristics of the project alternatives.

Table 6.A: Description of Analyzed Alternatives

Project Alternative	Alternative Description
Proposed Project	Development of 55,000 square feet of office/commercial space, 162 multiple-family units, passive park, on-site oak grove, and ancillary features.
Alternative 1 No Project	No General Plan Amendment or zone change would occur. No development would occur on site.
Alternative 2 Multifamily Alternative	This alternative assumes development of up to 96 multiple-family dwellings on the northern portion of the site. Overall residential development would total 258 multifamily dwellings. A General Plan Amendment (B-P to HHDR) and Zone Change (R-R to R-4) on the northern portion of the site would be required. The on-site oak grove, passive park, and retention basin would be retained.
Alternative 3 Reduced Density Residential Alternative	Assumes development of 55,000 square feet of commercial/office uses on the northern portion of the site and 90 single-family small lot residential units on the southern portion of the site. On the northern portion of the site, the proposed General Plan Amendment and Zone Change would remain in effect under this alternative. On the southern portion of the site, this alternative envisions a General Plan Amendment from Highest Density Residential (HHDR) to High Density Residential (HDR) and a

Business Park: a.m. peak 1.40 trips/1,000 sf; p.m. peak, 1.26 trips/1,000 sf; daily, 12.44 trips/1,000 sf.

Table 6.A: Description of Analyzed Alternatives

Project Alternative	Alternative Description
	Zone Change from R-R (Rural Residential) to R-4 (Planned Residential). This alternative would reduce overall residential density of the project and retain the on-site oak grove, passive public park, and retention basin.
Alternative 4 Reduced Density Office/ Commercial Alternative	The southern portion of the project site would be retained as proposed by the project and a General Plan Amendment and Zone Change similar to the proposed project would remain in place on the northern portion of the site. The amount of development on the northern portion of the site would be reduced to 25,000 square feet of office space and 16,000 square feet of commercial uses. This alternative would retain the on-site oak grove, passive public park, and retention basin.

Source: LSA Associates, Inc. 2015

6.3.1 Alternative 1: No Project (No Build) Alternative

The No Project Alternative provides a comparison between the environmental impacts of the project in contrast to the environmental impacts that could result from not approving, or denying, the project. Under the No Project Alternative, the site would remain in its existing condition and no development would occur. Under this alternative, the project site would retain its existing General Plan and zoning designation and would remain undeveloped.

6.3.2 Alternative 2: Multifamily Residential Alternative

Under this alternative, the northern portion of the site's General Plan designation would be changed from Business Park (BP) to Highest Density Residential (HHDR.) This area's zoning would be changed from R-R (Rural Residential) to R-4 (Planned Residential). This alternative would allow the development of up to 96 multiple-family units on 4.8 acres along Clinton Keith Road. The proposed 162 multiple-family residential units on the southern portion of the site, retention basin, passive park, oak grove, manufactured slopes, and related features would be retained. Overall site development would total 258 multifamily dwellings, ancillary features, and site improvements.

6.3.3 Alternative 3: Reduced Density Residential Alternative

The development plan for the northern portion of the site including a proposed General Plan Amendment and Zone Change would remain in effect under this alternative. The development of 55,000 square feet of office and commercial use would still take place. On the southern portion of the site, this alternative envisions a General Plan Amendment from Highest Density Residential (HHDR) to High Density Residential (HDR). This designation allows detached, small lot single-family and attached single-family homes, patio homes, zero lot line homes, multifamily apartments, duplexes, and townhouses and would reduce the overall residential density of the site. The potential for clustered development is provided for in this

land use category. The density range is 8.0 to 14.0 dwelling units per acre. The retention basin, passive park, oak grove, manufactured slopes, and related features would be retained. Under this alternative, 90 single-family residences (3,500-square foot minimum lots, 12.5 dwelling units per acre) and 55,000 square feet of commercial/office uses would be developed on site.

6.3.4 Alternative 4: Reduced Density Office/Commercial Alternative

The southern portion of the project site would be retained as proposed by the project. A General Plan Amendment and Zone Change on the northern portion of the site similar to the proposed project would occur. Using a minimal FAR of 0.2, the amount of development on the northern portion of the site would be approximately 41,000 square feet. For this alternative, this development potential is divided into 25,000 square feet of office space and 16,000 square feet commercial uses. This alternative would retain the on-site oak grove, passive public park and trailhead, and retention basin.

6.4 ANALYSIS OF ALTERNATIVES

The following sections evaluate and compare the impacts of the alternatives to the proposed project, by each environmental topic presented in Section 4.0 of this EIR. After that, Section 6.5 examines potential alternative sites for the project, while Section 6.6 summarizes the impacts of each alternative and determines if or to what degree each alternative achieves the objectives of the project.

The only significant and unavoidable impact associated with the proposed project is impacts to I-15 facilities. The anticipated daily vehicular trips associated with the project alternatives are identified in Table 6.B.

Table 6.B: Comparison of Daily Trips under the Project Alternatives

Alternative	Single-Family	Multifamily	Office	Commercial	Park	Daily Trips
Proposed Project[1]	0	979	1,222	488	3	2,691
1: No Project Alternative	0	0	0	0	0	0
2: Multifamily Residential Alternative	0	1,716[2]	0	0	3	1,716
3: Reduced Density Residential Alternative	769[3]	0	1,222	488	3	2,482
4: Reduced Office/Commercial Density Alternative	0	979	860[4]	375[4]	3	2,217

1. Table 4-1 and 4-1, Clinton Keith Road (APN: 380-250-003) "Grove Park" Traffic Impact Analysis, City of Wildomar, Urban Crossroads, (revised) March 5, 2015.
2. Due to absence of office/commercial uses under this alternative, the internal capture identified under the proposed project is not assumed.
3. ITE Land Use Code: 210, 9.52 Daily/Trips per unit. Internal capture with office/commercial uses assumed.
4. Internal capture with office/commercial uses and pass-by trips assumed.

Utilizing the demand rates identified in Section 4.17, the estimated utility demands of each project alternative have been identified (Table 6.C).

Table 6.C: Utility Service Demand under the Project Alternatives

Alternative	Single-Family	Multifamily	Office	Commercial	Total
Water Demand (gpd)					
Proposed Project	0	88,288	14,859	6,080	109,277
1: No Project Alternative	0	0	0	0	0
2: Multifamily Residential Alternative	0	140,764	0	0	140,764
3: Reduced Density Residential Alternative	69,192[1]	0	14,859	6,080	90,130
4: Reduced Office/Commercial Density Alternative	0	88,288	10,541	4,864	103,704
Wastewater Flow (gpd)					
Proposed Project	53,300 (0.0533 mgd)				
1: No Project Alternative	0				
2: Multifamily Residential Alternative	56,800 (0.0568 mgd)				
3: Reduced Density Residential Alternative	27,900 (0.0279 mgd)				
4: Reduced Density Office/ Commercial Alternative	49,100 (0.0490 mgd)				
Solid Waste (ton/day)					
Proposed Project	0.580				
1: No Project Alternative	0				
2: Multifamily Residential Alternative	0.638				
3: Reduced Density Residential Alternative	0.497				
4: Reduced Density Office/ Commercial Alternative	0.558				

[1] Based on a population assumption of 3.1 persons/unit.

6.4.1 Alternative 1: No Project Alternative

The No Project Alternative provides a comparison between the environmental impacts of the project in contrast to the environmental impacts that could result from not approving, or denying, the project. Under the No Project Alternative, the site would remain in its existing condition and no development would occur. Under this alternative, the project site would retain its existing General Plan and zoning designations and would remain undeveloped.

Table 6.D addresses how the No Project alternative meets the stated project objectives.

Table 6.D: Comparison of No Project Alternative to the Project Objectives

Project Objectives	Does the Alternative Meet the Project Objectives?
Establish a mixed-use community for Wildomar with a balance of land uses including commercial, multifamily housing, and recreation.	No
Deliver an appropriately sized commercial center that provides a mix of retail and office uses with opportunities for employment growth and increased sales tax for Wildomar.	No
Provide rental housing opportunities in a quality multifamily setting at a scale and character appropriate to the site and adjacent existing and future developments.	No
Utilize architectural styles and design elements that reflect Wildomar's heritage, namely through the use of Ranch, Farmhouse, and Craftsman styles.	No
Incorporate a public park within the project site for the overall Wildomar community.	No
Preserve the existing on-site oak grove to the maximum extent feasible.	Yes
Create a walkable community that provides convenient non-vehicular access from the residential area to the public park and commercial center.	No
Implement a trail system for the project consistent with the Wildomar Multi-Use Trails Master Plan.	No

Aesthetics: No significant aesthetic or visual resource impact was identified in the EIR for the proposed project. Under this alternative, the site would remain in its current condition and would not alter the existing views or the existing visual character of the site or area. No change in the significance of the impact identified in the EIR would occur.

Agriculture and Forestry Resources: The project site is not designated for agricultural uses, nor are agricultural or forestry resources located on site. Similar to the proposed project, development of this alternative would have no impact on these resources.

Air Quality: As no development would occur on site, this alternative would not generate additional vehicle trips on area roadways or contain any on-site stationary sources of air emissions. The absence of project construction or additional vehicle trips would result in a reduction in the volume site-generated air pollutants compared to the proposed project. The mitigated air quality impacts under the proposed project would not occur and the air quality impacts under this alternative would be reduced.

Biological Resources: The site would be retained in its current condition. No disturbance of on-site riparian areas or habitat would occur. Although impacts under the proposed project would also be less than significant with mitigation, compared to the proposed project, impacts on biological resources would be reduced.

Cultural Resources: Under this alternative, the large-scale mass grading of the project site would not occur. Although impacts under the proposed project would also be less than significant with mitigation, compared to the proposed project, impacts on cultural resources would be reduced since there would be no ground disturbance.

Geology and Soils: No significant impacts related to geology and soils were identified for the proposed project. As the site would remain in its present condition, similar to the proposed project, there would be no potential impacts to future structures from geotechnical hazards.

Greenhouse Gas/Global Climate Change: As no development would occur on site, this alternative would not generate additional vehicle trips on area roadways or contain any on-site stationary sources of greenhouse gas emissions. The absence of project construction, additional vehicle trips, or stationary emission sources would eliminate site-generated greenhouse gas emissions. The mitigated greenhouse gas/ global climate change impacts under the proposed project would not occur. Compared to the proposed project, the impacts under this alternative would be reduced.

Hazards and Hazardous Materials: No evidence of recognized hazardous environmental conditions was detected within the project site. In the absence of any on-site uses, there would be no increased impacts from hazards or hazardous materials associated with construction or new land uses. Potential impacts under this alternative would be similar to that associated with the proposed project and would be less than significant.

Hydrology and Water Quality: Currently, drainage flows are transported via four ephemeral streams toward two downstream locations: a drainage feature at the westerly project boundary and a man-made detention basin in the southwest corner of the site. This pattern of drainage would be retained under this alternative. The mitigated impacts associated with the proposed project would not occur under this alternative. Compared to the proposed project, the impacts under this alternative would be reduced.

Land Use: The site would retain its current General Plan and zoning designations. The Draft EIR concluded that the project would not result in significant land use and planning impacts. Compared to the proposed project, no more significant impact land use impact under this alternative would occur.

Mineral Resources: The project site is designated as an area with mineral resources of undetermined value and is not considered a locally important mineral resource recovery site. Neither the General Plan nor the zoning ordinance designate the site for mining or mineral extraction uses. Because no development would occur on site under this alternative, the impact would be similar as the proposed project.

Noise: Compared to the proposed project, this alternative would eliminate on-site construction noise, reduce traffic-related noise on local roadways, and remove stationary noise sources from the site. The mitigated noise impacts under proposed project would not occur. Compared to the proposed project, the noise impacts under this alternative would be reduced.

Population and Housing: Under this alternative, the development of housing or corresponding increase in population would not occur. While the overall population of the City could be reduced under this alternative, like the proposed project, no significant impact would occur.

Public Services: This alternative would not necessitate the construction of new or expansion of existing public service (e.g., police, fire, school, and library) facilities; therefore, no significant impact would occur. With the elimination of the proposed housing and potential new residents under this alternative, compared to the proposed project, a reduction in the demand for public services would occur. The public service impact associated with this alternative would be reduced and less than significant.

Recreation: This alternative retains the on-site oak grove but would not provide the proposed park or improved trail. With no change in the local population, no increase in the demand park and recreation services/facilities would occur. The less than significant park impact under this alternative is similar to that resulting from development of the proposed project.

Traffic: The daily vehicle trips associated with the proposed project would be eliminated under this alternative. The elimination of vehicle trips would proportionally reduce the level of significance of traffic impacts on local roadways and intersections. I-15 does not meet Caltrans LOS standards even without development of the project. Even without the direct contribution of site-specific traffic, the cumulative impact on I-15 facilities associated with this alternative would be similar to the proposed project's.

Utilities: Because no on-site development would occur, this alternative would not necessitate the construction of new or expansion of existing public utility facilities. With the elimination of the proposed commercial/office and housing and potential new residents under this alternative, compared to the proposed project, a reduction in the demand for public utilities would occur. The public utility impact associated with this alternative would be reduced and still less than significant.

6.4.2 Alternative 2: Multifamily Residential Alternative

Under this alternative, the General Plan designation of the northern portion of the site would change from Business Park (BP) to Highest Density Residential (HHDR.) and the zoning would be changed from R-R (Rural Residential) to R-4 (Planned Residential). This alternative would allow the development of up to 96 multiple-family

units on 4.8 acres along Clinton Keith Road. The proposed 162 multiple-family residential units on the southern portion of the site, retention basin, passive public park and trailhead, preserved oak grove, manufactured slopes and related features would be retained. Overall site development would total 258 multifamily dwellings, ancillary features, and site improvements.

Table 6.E identifies how this alternative satisfies the stated project objectives.

Table 6.E: Comparison of Multifamily Residential Alternative to the Project Objectives

Project Objectives	Does the Alternative Meet the Project Objectives?
Establish a mixed-use community for Wildomar with a balance of land uses including commercial, multifamily housing, and recreation.	No
Deliver an appropriately sized commercial center that provides a mix of retail and office uses with opportunities for employment growth and increased sales tax for Wildomar.	No
Provide rental housing opportunities in a quality multifamily setting at a scale and character appropriate to the site and adjacent existing and future developments.	Yes
Utilize architectural styles and design elements that reflect Wildomar's heritage, namely through the use of Ranch, Farmhouse and Craftsman styles.	Yes
Incorporate a public park within the project site for the overall Wildomar community.	Yes
Preserve the existing on-site oak grove to the maximum extent feasible.	Yes
Create a walkable community that provides convenient non-vehicular access from the residential area to the public park and commercial center.	No
Implement a trail system for the project consistent with the Wildomar Multi-Use Trails Master Plan.	Yes

Aesthetics: Under this alternative, the entire site would still be developed. Like the proposed project, views to and from the site would be of buildings, landscaping, access roads, lighting, and other site features typically associated with the construction and operation of urban uses. The extent and scale of on-site development would be substantially similar to that associated with the proposed project. As with the proposed project, any new use would be subject to City design review, which would ensure the development remains consistent with established City guidelines or requirements. Compared to the proposed project, impacts related to project aesthetics would be similar and less than significant.

Agriculture and Forestry Resources: The project site is not designated for agricultural uses, nor are agricultural or forestry resources located on site. Similar to the proposed project, development of this alternative would have no impact on these resources.

Air Quality: Daily vehicle trips associated with this alternative are approximately 64 percent of that associated with the proposed project. It is reasonable to conclude the reduction in vehicle trips would proportionally reduce the volume of operational air pollutants generated under this alternative. Because this alternative would still require the mass grading of the project site, construction-related emissions would likely be similar those associated with the proposed project. Similar to the proposed project, adherence to measures to control or limit the emission of construction equipment exhaust and fugitive dust would reduce the significance of construction-related air quality impacts. With the incorporation of similar mitigation, no greater impact from that identified with the propose project would occur.

Biological Resources: This alternative would require a similar amount of site modification as the proposed project. Similar to the proposed project, biological resource impacts would be mitigated through the conduct of pre-construction surveys, restoration/replacement of riparian areas and adherence to applicable provisions of the MSHCP and SKR HCP; therefore, impacts to biological resources under this alternative and the proposed project would be similar to the proposed project and less than significant.

Cultural Resources: Under this alternative, a similar potential for the inadvertent discovery of archaeological or paleontological resources would occur. It is reasonable to conclude that the measures identified to mitigate potential project-related cultural resources impacts would similarly apply to any project alternative; therefore, the cultural resources impacts under this alternative and the proposed project would be equal and less than significant.

Geology and Soils: No significant impacted related to this issue was identified. Development under this alternative would increase the number of residential structures that could be constructed on-site. The development of multifamily structures and related features would be subject to applicable City and other standards; therefore, similar to the proposed project, impacts under this alternative would be less than significant.

Greenhouse Gas/Global Climate Change: Under the proposed project, impacts related to this issue were mitigated by applying **Mitigation Measures 4.3.6.1A** through **4.3.6.1D**, which resulted in a 40.03 percent reduction in GHG emissions from the Business As Usual (BAU) model. The 36 percent reduction in vehicle trips associated with this alternative would result in a corresponding reduction in greenhouse gas emissions. It is anticipated that the application of these measures to this alternative would similarly reduce GHG emissions. Similar to the proposed project, no significant impact related to this issue would occur.

Hazards and Hazardous Materials: No evidence of recognized hazardous environmental conditions was detected within the project site. Typical hazardous materials that may be used on site under this alternative include paints (and related substances), motor fuel and lubricants, and household hazardous materials (e.g.,

cleaners and pesticides). This use is similar to what would occur under the proposed project. Potential impacts under this alternative would be similar to those associated with the proposed project and would be less than significant.

Hydrology and Water Quality: Compared to the proposed project, development of the uses under this alternative would require similar changes to the site's existing drainage pattern. It is reasonable to conclude that an equal level of site development would require the installation of drainage and water quality features similar to that required for the proposed project. As the drainage and water quality impacts of the proposed project would be sufficiently mitigated through design, installation, and maintenance of comprehensive drainage and water quality features, it is anticipated that the same impacts associated with this alternative would be similarly mitigated. The drainage and water quality impacts resulting from the development of this alternative would be less than significant and equal to those identified with the proposed project.

Land Use: This alternative would require a General Plan Amendment and Zone Change on the northern portion of the site. Instead of commercial and office uses, this alternative would result in the development of multifamily uses along Clinton Keith Road. The multifamily development proposed in this alternative is consistent with other existing and planned multifamily residential uses along Clinton Keith Road and in the project area. As the future development of the entire site with urban uses has already been anticipated in the General Plan, the development of multifamily uses on the northern portion of the site would not result in land use impacts more significant than those of the proposed project.

Mineral Resources: The project site is designated as an area with mineral resources of undetermined value and is not considered a locally important mineral resource recovery site. Neither the General Plan nor the Zoning ordinance designate the site for mining or mineral extraction uses. Due to the adjacency of developed uses and the unknown nature of potential on-site mineral resources, the project site is unsuitable for mining. Compared to the proposed project, any development on site would have a similar and less than significant impact.

Noise: Compared to the proposed project, a similar amount of grading and construction would be required. The amount and duration of construction and the presence of perceptible construction noise at adjacent properties would be correspondingly similar. As necessary, measures would be required to offset noise impact to adjacent uses; therefore, similar to the proposed project, any noise impact during construction would be less than significant.

Owing to the similar nature of uses under this alternative, noise impacts from stationary noise sources associated with this alternative (e.g., air conditioners and landscape equipment) would not generate noise levels in excess of City standards and would be less than significant.

In regard to traffic-related noise, the City's General Plan identifies a noise standard for residential uses of 65 dBA CNEL (exterior) and 45 dBA CNEL (interior). The 65 dBA CNEL contour extends 129 feet and 167 feet under the year 2018 (with project) and year 2035 (with project) condition, respectively. While the reduction of traffic (and traffic noise) on local roadways would be proportionally reduced under this alternative, the placement of residential buildings along Clinton Keith Road could expose these uses to existing and future traffic noise. While the project layout of this alternative could be designed to locate residential buildings outside the future 65 dBA CNEL contour on Clinton Keith Road, in the absence of any assurance this would actually occur, the level of traffic-related noise would likely be greater under this alternative than the proposed project.

Population and Housing: The potential population of the site under this alternative is 568 persons, an approximately 60 percent increase over the population resulting from the proposed project. The City's population has grown steadily with projects of a future population of approximately 42,474 persons by the year 2020. The increase in population under this alternative is consistent with these projections. This alternative would increase multifamily residential options in the City which, in part, would enhance housing opportunities for all segments of the community. No project-related significant population or housing impact was identified. While this alternative would increase the population over that estimated for the proposed project, any such increase is consistent with existing population projections; therefore, the level of impact would be similar to the proposed project.

Public Services: Under this alternative, 258 multifamily residences would be developed resulting in a potential on-site population of 568 persons or approximately 60 percent more than the proposed project. As detailed in Section 4.14, the proposed project would not necessitate the construction of new or expansion of existing public services (e.g., police, fire, school, or library) facilities. Impacts to public service providers are offset by the payment of development impact fees. It is expected that the similar payment of fees under this alternative would sufficiently offset any public service impact. The increase in residential uses under this alternative could increase the local school population by 59 students (22 more than the proposed project). Based on information detailed in Table 4.14.D, there is sufficient surplus capacity at local schools to accommodate any increase in students that may result from this alternative. As with the proposed project, the payment of school fees levied by Lake Elsinore Unified School District sufficiently offsets any impacts to school facilities. No significant public service impact would occur under this alternative.

Recreation: This alternative retains the passive public park, oak grove, and on-site trail. Compared to the proposed project, the increase in population projected under this alternative would slightly increase potential demand for park and recreation services/facilities. Combined, the on-site park features total 3.2 acres of public passive park/open space, which would be accessible for public use. This would sufficiently offset this alternative's park requirement (1.7 acres). As with the

proposed project, the applicant would be required to pay the Quimby Act fee and the City's park Development Impact Fee (DIF). Similar to the proposed project, payment of these fees will result in a less than significant impact.

Traffic: As detailed in Table 6.B, daily vehicle trips associated with this alternative are approximately 36 percent less than that associated with the proposed project. The reduction in trips would proportionally reduce the level of significance of traffic impacts on local roadways and intersections. Similar to the proposed project, it is anticipated that development under this alternative would be required to install improvements and pay required Traffic Uniform Mitigation Fees (TUMF), DIF, and/or fair-share contribution to offset traffic impacts. Compared to the proposed project, with the installation of required improvements and/or payment of fees, no greater level of impact would occur.

I-15 does not meet Caltrans LOS standards even without development of the project. While this alternative is not anticipated to directly result in an impact to I-15, the addition of any traffic under this alternative would cumulatively contribute to deficient LOS conditions on I-15. This traffic impact is similar to that resulting from the development of the proposed project.

Utilities: Compared to the proposed project, this alternative would increase water demand by approximately 28 percent (refer to Table 6.C). The water demand for this alternative represents approximately 2.9, 1.9, and 2.3 percent of the projected 2035 water surplus in normal, single year dry, and multiple year dry conditions, respectively. The EVMWD recently declared a Stage 4a Drought Alert, which further establishes restrictions on outdoor water usage, requires use within assigned water budgets, and establishes penalties for non-compliance with the adopted conservation strategies. As a condition of service, on-site water usage would be required to adhere to all EVMWD water conservation requirements and emergency drought regulations. Additionally, as reductions in per capita water usage through implementation Municipal Code Section 17.276.070 are achieved. It is reasonable that the surplus supply projections detailed in the Urban Water Management Plan (UWMP), in tandem with recent water conservation procedures implemented by the EVMWD would ensure sufficient water supplies are maintained in the EVMWD service area. While the water demand associated with this alternative is slightly increased, like the proposed project, no significant impact would occur.

As detailed in Table 6.C, the wastewater treatment demand is approximately 0.7 percent greater than that associated with the proposed project. As such, no greater impact to wastewater treatment services or facilities would occur. The increase in wastewater flow associated with this alternative represents 2.1 percent of the existing surplus wastewater treatment capacity at the receiving WRF. This capacity is sufficient to accommodate this alternative's wastewater flows. Similar to the proposed project, no significant impact would occur.

The existing daily surplus capacity of El Sobrante Landfill is 9,663 tons. As detailed in Table 6.C, solid waste generated under this alternative would make up 0.006 percent of daily surplus capacity at this landfill. While the landfill demand under this proposed is increased from that of the proposed project, sufficient capacity exists to accommodate this volume of waste. As with the proposed project, no significant impact would occur.

6.4.3 Alternative 3: Reduced Density Residential Alternative

The development plan for the northern portion of the site, including a proposed General Plan Amendment and Zone Change, would remain in effect under this alternative. The development of 55,000 square feet of office and commercial uses would still take place. On the southern portion of the site, this alternative envisions a General Plan Amendment from Highest Density Residential (HHDR) to High Density Residential (HDR). This designation allows detached, small lot single-family and attached single-family homes, patio homes, zero lot line homes, multifamily apartments, duplexes, and townhouses and would reduce the overall residential density of the site. The potential for clustered development is provided for in this land use category. The density range is 8.0 to 14.0 dwelling units per acre. A zone change to would not be required under this alternative. The retention basin, passive public park and trailhead, preserved oak grove, manufactured slopes, and related features would be retained. Under this alternative, 90 single-family residences (3,500-square foot minimum lots, 12.5 dwelling units per acre) and 55,000 square feet of commercial/office uses would be developed on site.

Table 6.F provides addresses how the Reduced Density Residential Alternative meets the stated project objectives.

Table 6.F: Comparison of Reduced Residential Density Alternative to the Project Objectives

Project Objectives	Does the Alternative Meet the Project Objectives?
Establish a mixed-use community for Wildomar with a balance of land uses including commercial, multifamily housing, and recreation.	Yes
Deliver an appropriately sized commercial center that provides a mix of retail and office uses with opportunities for employment growth and increased sales tax for Wildomar.	Yes
Provide rental housing opportunities in a quality multifamily setting at a scale and character appropriate to the site and adjacent existing and future developments.	No
Utilize architectural styles and design elements that reflect Wildomar's heritage, namely through the use of Ranch, Farmhouse, and Craftsman styles.	Yes
Incorporate a public park within the project site for the overall Wildomar community.	Yes

Table 6.F: Comparison of Reduced Residential Density Alternative to the Project Objectives

Project Objectives	Does the Alternative Meet the Project Objectives?
Preserve the existing on-site oak grove to the maximum extent feasible.	Yes
Create a walkable community that provides convenient non-vehicular access from the residential area to the public park and commercial center.	Yes
Implement a trail system for the project consistent with the Wildomar Multi-Use Trails Master Plan.	Yes

Aesthetics: Under this alternative, the entire site would be developed. Like the proposed project, views to and from the site would be of buildings, landscaping, access roads, lighting, and other site features typically associated with the construction and operation of urban uses. The extent and scale of on-site development would be substantially similar to that associated with the proposed project. As with the proposed project, any new use would be subject to City design review which would ensure the development remains consistent with established City guidelines or requirements. Compared to the proposed project, impacts related to project aesthetics would be similar to the proposed project and are less than significant.

Agriculture and Forestry Resources: The project site is not designated for agricultural uses, nor are agricultural or forestry resources located on site. Similar to the proposed project, development of this alternative would have no impact on these resources.

Air Quality: Daily vehicle trips associated with this alternative are approximately 8 percent less (2,482 trips versus the proposed project's 2,691 trips) than that associated with the proposed project. It is reasonable to conclude the reduction in vehicle trips would proportionally reduce the volume of operational air pollutants generated under this alternative. Because this alternative would still require the mass grading of the project site, construction-related emissions would likely be similar those associated with the proposed project. Similar to the proposed project, adherence to measures to control or limit the emission of construction equipment exhaust and fugitive dust would reduce the significance of construction-related air quality impacts. With the incorporation of similar mitigation, no greater impact from that identified with the proposed project would occur.

Biological Resources: This alternative would require a similar amount of site modification as the proposed project. Similar to the proposed project, biological resource impacts would be mitigated through the conduct of pre-construction surveys, restoration/replacement of riparian areas, and adherence to applicable provisions of the MSHCP and SKR HCP; therefore, impacts to biological resources

under this alternative and the proposed project would be similar and less than significant.

Cultural Resources: Under this alternative, a similar potential for the inadvertent discovery of archaeological or paleontological resources would occur. It is reasonable to conclude that the measures identified to mitigate potential project-related cultural resource impacts would similarly apply to any project alternative; therefore, the cultural resource impacts under this alternative and the proposed project would be equal and less than significant.

Geology and Soils: No significant impact related to this issue was identified. Under this alternative, fewer residential structures would be constructed on site. The development of single-family residential uses and related features would be subject to applicable City and other standards; therefore, similar to the proposed project, impacts under this alternative would be less than significant.

Greenhouse Gas/Global Climate Change: Under the proposed project, impacts related to this issue were mitigated by applying **Mitigation Measures 4.3.6.1A** through **4.3.6.1D**, which resulted in a 40.03 percent reduction in GHG emissions from the BAU model. The 8 percent reduction in vehicle trips associated with this alternative would result in a corresponding reduction in greenhouse gas emissions. It is anticipated that the application of these measures to this alternative would similarly reduce GHG emissions. Similar to the proposed project, no significant impact related to this issue would occur.

Hazards and Hazardous Materials: No evidence of recognized hazardous environmental conditions was detected within the project site. Typical hazardous materials that may be used on site under this alternative include paints (and related substances), motor fuel and lubricants, and household hazardous materials (e.g., cleaners and pesticides). This use is similar to what would occur under the proposed project. Potential impacts under this alternative would be similar to that associated with the proposed project and would be less than significant.

Hydrology and Water Quality: Compared to the proposed project, development of the uses under this alternative would require similar changes to the site's existing drainage pattern. It is reasonable to conclude that an equal level of site development would require the installation of drainage and water quality features similar to that required for the proposed project. As the drainage and water quality impacts of the proposed project would be sufficiently mitigated through design, installation, and maintenance of comprehensive drainage and water features, it is anticipated that the same impacts associated with this alternative would be similarly mitigated. The drainage and water quality impacts resulting from the development of this alternative would be less than significant and equal to those identified with the proposed project.

Land Use: The future development of the entire site has already been anticipated in the General Plan and the development of less dense residential uses has been anticipated. This alternative would apply the High Density Residential designation to the southern portion of the site. This land use designation allows detached, small lot single-family and attached single-family homes, patio homes, zero lot line homes, multifamily apartments, duplexes, and townhouses. No significant land use impact is associated with the proposed project. While less densely developed under this alternative, the southern portion of the site would still be developed with residential uses. The development of less dense residential uses on the southern portion of the site would be generally compatible with existing residential uses in the project area.

During the update of the Housing Element, the General Plan and zoning designation of the southern portion of the site was changed to HHDR/R-4 to ensure there is enough land available in the City for the development of housing affordable to lower income households. The designation of the southern portion of the site for less dense residential uses would be inconsistent with the City's adopted Housing Element and, therefore, would be similarly inconsistent with the City's General Plan. Because this alternative would create an inconsistent use with the City's Housing Element and General Plan, a more significant land use impact would occur than that of the proposed project.

Mineral Resources: The project site is designated as an area with mineral resources of undetermined value and is not considered a locally important mineral resource recovery site. Neither the General Plan nor the zoning ordinance designate the site for mining or mineral extraction uses. Due to the adjacency of developed uses and the unknown nature of potential on-site mineral resources, the project site is unsuitable for mining. Compared to the proposed project, any development on site would have a similar less than significant impact.

Noise: Compared to the proposed project, a similar amount of grading and construction would be required. The amount and duration of construction and the presence of perceptible construction noise at adjacent properties would be correspondingly similar. As with the proposed project, construction noise is exempt from the City's Noise Ordinance. As necessary measures would be required to offset noise impacts to adjacent uses, similar to the proposed project, any noise impact during construction would be less than significant. With the reduction in traffic on local roadways, the level of traffic noise would be proportionally reduced. Owing to the similar nature of uses under this alternative, noise impacts from stationary noise sources associated with this alternative (e.g., air conditioners and landscape equipment) would not generate noise levels in excess of City standards and would be less than significant.

Population and Housing: One of the project objectives is to provide multifamily uses similar to adjacent existing and future developments. Nearby existing and future developments do not include townhomes, cluster housing, or similar residential styles. The minimum lot size in the R-4 zone is 3,500 square feet, making

the development of multifamily uses similar to nearby developments unlikely. Utilizing a factor of 3.1 persons per single-family residence, a maximum population increase of 279 persons could occur under this alternative or approximately 78 percent of the population predicted for the proposed project. The City's Housing Element establishes the goals, policies, and actions the City will implement to address identified housing issues. State Housing Element law requires the Housing Element to be consistent and compatible with other General Plan elements. During the update of the Housing Element, the General Plan and zoning designation of the southern portion of the site was changed to HHDR/R-4 to ensure there is enough land available in the City for the development of housing affordable to lower income households. The designation of the southern portion of the site for less dense residential uses would be inconsistent with the City's adopted Housing Element. The residential uses developed under this alternative are not at the density required by the Department of Housing and Community Development to satisfy the City's RHNA for low income households. As a result, under this alternative, the City would have to redesignate and rezone additional land elsewhere to meet its RHNA obligations. Thus, population and housing impacts would be significant under this alternative.

Public Services: Under this alternative, 90 single-family residences would be developed resulting in a potential on-site population of 279 persons, or approximately 78 percent of the population estimated for the proposed project. As detailed in Section 4.14, the proposed project would not necessitate the construction of new or expansion of existing public services (e.g., police, fire, school, and library) facilities. Impacts to public service providers are offset by the payment of development impact fees. It is expected that the similar payment of fees under this alternative would sufficiently offset any public services impact. Single-family residential uses generally have a greater student generation rate than multifamily uses; therefore, the potential student increase associated with this alternative is 52 students (13 students more than the proposed project). As with the proposed project, the payment of school fees levied by Lake Elsinore Unified School District sufficiently offsets any impacts to school facilities. Compared to the proposed project, no greater level of impact would occur.

Recreation: This alternative retains the passive public park, oak grove, and on-site trail. Compared to the proposed project, the reduction in population projected under this alternative would slightly decrease potential demand for park and recreation services/facilities. Combined, the on-site park features total 3.2 acres of passive park/open space, which would be accessible for public use. This would sufficiently offset this alternative's park requirement (0.78 acre). In the event the project's park/ open space is not dedicated to the City as parkland, as with the proposed project, the applicant would be required to pay the Quimby Act fee and the City's park DIF. Similar to the proposed project, payment of these fees will result in a less than significant impact.

Traffic: As detailed in Table 6.B, daily vehicle trips associated with this alternative are approximately 8 percent less than those associated with the proposed project.

The reduction in trips would proportionally reduce the level of significance of traffic impacts on local roadways and intersections. Similar to the proposed project, it is anticipated that development under this alternative would be required to install improvements and pay required TUMF, DIF, and/or fair-share contribution to offset traffic impacts. Compared to the proposed project, with the installation of required improvements and/or payment of fees, no greater level of impact would occur.

I-15 does not meet Caltrans LOS standards even without development of the project. While this alternative is not anticipated to directly result in an impact to I-15, the addition of any traffic under this alternative would cumulatively contribute to deficient LOS conditions on I-15. This traffic impact is similar to that resulting from the development of the proposed project.

Utilities: Compared to the proposed project, this alternative would reduce water demand by approximately 18 percent (refer to Table 6.C). The EVMWD recently declared a Stage 4a Drought Alert, which further establishes restrictions on outdoor water usage, requires use within assigned water budgets, and establishes penalties for non-compliance with the adopted conservation strategies. As a condition of service, on-site water usage would be required to adhere to all EVMWD water conservation requirements and emergency drought regulations. Additionally, as reductions in per capita water usage through implementation Municipal Code Section 17.276.070 are achieved. As the proposed project would not result in a significant impact on water supply, it is reasonable to conclude the reduction in water demand achieved under this alternative would not result in a water supply impact. No greater impact than the proposed project would occur.

As Table 6.C shows, the increase in wastewater flow associated with this alternative represents 0.10 percent of the existing surplus wastewater treatment capacity at the receiving WRF. This treatment demand is approximately 48 percent less than that associated with the proposed project. As such, no greater impact to wastewater treatment services or facilities would occur.

The existing daily surplus capacity of El Sobrante Landfill is 9,663 tons. Solid waste generated under this alternative would make up approximately 0.005 percent of daily surplus capacity at this landfill (refer to Table 6.C). This landfill demand is approximately 77 percent less than that associated with the proposed project. As such no greater impact to wastewater treatment services or facilities would occur.

6.4.4 Alternative 4: Reduced Density Office/Commercial Alternative

The southern portion of the project site would be retained as proposed by the project. A General Plan Amendment and Zone Change on the northern potions of the site similar to the proposed project would occur under this alternative. Using a minimal FAR of 0.2, the amount of development on the northern portion of the site would be approximately 41,000 square feet. For this alternative, this development potential is divided into 25,000 square feet of office space and 16,000 square feet

commercial uses. The office/commercial uses proposed under this alternative represent approximately 75 percent of that planned for the project. This alternative would retain the on-site oak grove, passive public park, and trailhead and retention basin.

Table 6.G details how this alternative satisfies the stated project objectives.

Table 6.G: Comparison of Reduced Density Office/Commercial Alternative to the Project Objectives

Project Objectives	Does the Alternative Meet the Project Objectives?
Establish a mixed-use community for Wildomar with a balance of land uses including commercial, multifamily housing, and recreation.	Yes
Deliver an appropriately sized commercial center that provides a mix of retail and office uses with opportunities for employment growth and increased sales tax for Wildomar.	Yes
Provide rental housing opportunities in a quality multifamily setting at a scale and character appropriate to the site and adjacent existing and future developments.	Yes
Utilize architectural styles and design elements that reflect Wildomar's heritage, namely through the use of Ranch, Farmhouse and Craftsman styles.	Yes
Incorporate a public park within the project site for the overall Wildomar community.	Yes
Preserve the existing on-site oak grove to the maximum extent feasible.	Yes
Create a walkable community that provides convenient non-vehicular access from the residential area to the public park and commercial center.	Yes
Implement a trail system for the project consistent with the Wildomar Multi-Use Trails Master Plan.	Yes

Aesthetics: Under this alternative, the entire site would still be developed. Like the proposed project, views to and from the site would be of buildings, landscaping, access roads, lighting, and other site features typically associated with the construction and operation of urban uses. The extent and scale of on-site development would be substantially similar to that associated with the proposed project. As with the proposed project, any new use would be subject to City design review, which would ensure the development remains consistent with established City guidelines or requirements. Compared to the proposed project, impacts related to project aesthetics would be similar and less than significant.

Agriculture and Forestry Resources: The project site is not designated for agricultural uses, nor are agricultural or forestry resources located on site. Similar to the proposed project, development of this alternative would have no impact on these resources.

Air Quality: Daily vehicle trips associated with this alternative are approximately 82 percent of that associated with the proposed project. It is reasonable to conclude the reduction in vehicle trips would proportionally reduce the volume of operational air pollutants generated under this alternative. Because this alternative would still require the mass grading of the project site, construction-related emissions would likely be similar those associated with the proposed project. Similar to the proposed project, adherence to measures to control or limit the emission of construction equipment exhaust and fugitive dust would reduce the significance of construction-related air quality impacts. With the incorporation of similar mitigation, no greater impact from that identified with the proposed project would occur.

Biological Resources: This alternative would require a similar amount of site modification as the proposed project. Similar to the proposed project, biological resource impacts would be mitigated through the conduct of pre-construction surveys, restoration/replacement of riparian areas and adherence to applicable provisions of the MSHCP and SKR HCP; therefore, impacts to biological resources under this alternative and the proposed project would be similar and less than significant.

Cultural Resources: Under this alternative, a similar potential for the inadvertent discovery of archaeological or paleontological resources would occur. It is reasonable to conclude that the measures identified to mitigate potential project-related cultural resource impacts would similarly apply to any project alternative; therefore, the cultural resource impacts under this alternative and the proposed project would be equal and less than significant.

Geology and Soils: No significant impacted related to this issue was identified. Development under this alternative would decrease the amount of commercial and office use constructed on site. The development of multifamily structures and related features would be subject to applicable City and other standards; therefore, similar to the proposed project, impacts under this alternative would be less than significant.

Greenhouse Gas/Global Climate Change: The reduction in vehicle trips associated with this alternative would result in a corresponding reduction in greenhouse gas emissions. Under the proposed project, impacts related to this issue were mitigated by applying **Mitigation Measures 4.3.6.1A** through **4.3.6.1D**, which resulted in a 40.03 percent reduction in GHG emissions from the BAU model. The reduction in vehicle trips associated with this alternative would result in a corresponding reduction in greenhouse gas emissions. It is anticipated that the application of similar mitigation to this alternative would result in a similar reduction of GHG emissions. Similar to the proposed project, no significant impact related to this issue would occur.

Hazards and Hazardous Materials: No evidence of recognized hazardous environmental conditions was detected within the project site. Typical hazardous materials that may be used on site under this alternative include paints (and related

substances), motor fuel and lubricants, and household hazardous materials (e.g., cleaners and pesticides). This use is similar to what would occur under the proposed project. Potential impacts under this alternative would be similar to that associated with the proposed project and would be less than significant.

Hydrology and Water Quality: Compared to the proposed project, development of the uses under this alternative would require similar changes to the site's existing drainage pattern. It is reasonable to conclude that an equal level of site development would require the installation of drainage and water quality features similar to that required for the proposed project. As the drainage and water quality impacts of the proposed project would be sufficiently mitigated through design, installation and maintenance of comprehensive drainage and water quality management features, it is anticipated that the same impacts associated with this alternative would be similarly mitigated. The drainage and water quality impacts resulting from the development of this alternative would be less than significant and equal to those identified with the proposed project.

Land Use: Like the proposed project, this alternative includes a General Plan Amendment and Zone Change on the northern portion of the site. No significant land use impact would result from the proposed project. This alternative would reduce the amount of office and commercial development that would occur along Clinton Keith Road. As the future development of the entire site has already been anticipated in the General Plan, as with the proposed project, the development of office and commercial uses on the northern portion of the site would not result in a significant land use impact.

Mineral Resources: The project site is designated as an area with mineral resources of undetermined value and is not considered a locally important mineral resource recovery site. Neither the General Plan nor the zoning ordinance designate the site for mining or mineral extraction uses. Due to the adjacency of developed uses and the unknown nature of potential on-site mineral resources, the project site is unsuitable for mining. Compared to the proposed project, any development on site would have a similar less than significant impact.

Noise: Compared to the proposed project, a similar amount of grading and construction would be required. The amount and duration of construction and the presence of perceptible construction noise at adjacent properties would be correspondingly similar. Owing to the similar nature of uses under this alternative, traffic-related and stationary noise impacts associated with this alternative (e.g., air conditioner and landscape equipment) would not generate noise levels in excess of City standards and would be less than significant.

Population and Housing: No change in the residential component of the project would occur under this alternative; therefore, this alternative would result in a similar level of residential development as the proposed project. As with the proposed project, impacts under this alternative would be less than significant.

Public Services: As detailed in Section 4.14, the proposed project would not necessitate the construction of new or expansion of existing public services (e.g., police, fire, school, or library) facilities. Impacts to public service providers are offset by the payment of development impact fees. It is expected that the similar payment of fees under this alternative would sufficiently offset any public services impact. With no change in the projected student population compared to the proposed project, school impacts would be the similar under this alternative. As with the proposed project, the payment of school fees levied by Lake Elsinore Unified School District sufficiently offsets any impacts to school facilities. No significant public service impact would occur under this alternative.

Recreation: This alternative retains the passive public park, oak grove, and on-site trail. Compared to the proposed project, the increase in population projected under this alternative would slightly increase potential demand for park and recreation services/facilities. Combined, the on-site park features total 3.2 acres of passive park/open space, which would be accessible for public use. This would sufficiently offset this alternative's park requirement (1.70 acres). As with the proposed project, the applicant would be required to pay the Quimby Act fee and the City's park DIF. Similar to the proposed project, payment of these fees will result in a less than significant impact.

Traffic: As detailed in Table 6.B, daily vehicle trips associated with this alternative are approximately 18 percent less than those associated with the proposed project. The reduction in trips would proportionally reduce the level of significance of traffic impacts on local roadways and intersections. Similar to the proposed project, it is anticipated that development under this alternative would be required to install improvements and pay required TUMF, DIF, and/or fair-share contribution to offset traffic impacts. Compared to the proposed project, with the installation of required improvements and/or payment of fees, no greater level of impact would occur.

I-15 does not meet Caltrans LOS standards even without development of the project. While this alternative is not anticipated to directly result in an impact to I-15, the addition of any traffic under this alternative would cumulatively contribute to deficient LOS conditions on I-15. This traffic impact is similar to that resulting from the development of the proposed project.

Utilities: Compared to the proposed project, this alternative would decrease water demand by approximately 5 percent (refer to Table 6.C). The water demand for this alternative represents approximately 2.2, 1.5, and 1.7 percent of the projected 2035 water surplus in normal, single year dry, and multiple year dry conditions, respectively. The EVMWD recently declared a Stage 4a Drought Alert, which further establishes restrictions on outdoor water usage, requires use within assigned water budgets, and establishes penalties for non-compliance with the adopted conservation strategies. As a condition of service, on-site water usage would be required to adhere to all EVMWD water conservation requirements and emergency drought regulations. Additionally, as reductions in per capita water usage through

implementation Municipal Code Section 17.276.070 are achieved. It is reasonable that the surplus supply projections detailed in the UWMP, in tandem with recent water conservation procedures implemented by the EVMWD would ensure sufficient water supplies are maintained in the EVMWD service area. Compared to the proposed project, the water demand associated with this alternative is slightly decreased. Similar to the proposed project, no significant water supply impact would occur.

As detailed in Table 6.C, the wastewater treatment demand of this alternative is reduced by approximately 8 percent compared to the proposed project. As such, no greater impact to wastewater treatment services or facilities would occur. The increase in wastewater flow associated with this alternative represents 1.8 percent of the existing surplus wastewater treatment capacity at the receiving WRF. This capacity is sufficient to accommodate this alternative's wastewater flows. Similar to the proposed project, no significant impact would occur.

The existing daily surplus capacity of El Sobrante Landfill is 9,663 tons. As detailed in Table 6.C, solid waste generated under this alternative would make up 0.006 percent of daily surplus capacity at this landfill. Because the landfill demand under this alternative is reduced compared to that of the proposed project, like the proposed project, sufficient capacity exists to accommodate this alternative's anticipated volumes of solid waste. As with the proposed project, no significant impact would occur.

6.5 COMPARISON OF PROJECT ALTERNATIVES

The following discussion compares the impacts of each alternative with the impacts of the proposed project, as detailed in Chapter 4.0 of this EIR. Table 6.H compares the impacts of the alternatives with those of the proposed project and identifies whether the alternative results in (1) a reduction of the impact; (2) a greater impact than the project; or (3) the same impact as the project.

Table 6.H: Comparison of Alternatives to the Proposed Project

Environmental Issue	Proposed Project	Alternative 1: No Project	Alternative 2: Multifamily Alternative	Alternative 3: Reduced Density Residential Alternative	Alternative 4: Reduced Density Office/ Commercial Alternative
Aesthetics	LTS/mit	←LTS	=	=	=
Agriculture& Forestry Resources	NI	=	=	=	=
Air Quality	LTS/mit	← LTS	←LTS/mit	←LTS/mit	←LTS/mit
Biological Resources	LTS/mit	=	=	=	=

Table 6.H: Comparison of Alternatives to the Proposed Project

Environmental Issue	Proposed Project	Alternative 1: No Project	Alternative 2: Multifamily Alternative	Alternative 3: Reduced Density Residential Alternative	Alternative 4: Reduced Density Office/ Commercial Alternative
Cultural Resources	LTS/mit	=	=	=	=
Geology and Soils	LTS	=	=	=	=
Greenhouse Gas Emissions	LTS/mit	← LTS	← LTS	← LTS	←LTS/mit
Hazards and Hazardous Materials	LTS	=	=	=	=
Hydrology and Water Quality	LTS/mit	=	=	=	=
Land Use	LTS/mit	=	=	LTS →	=
Mineral Resources	LTS	=	=	=	=
Noise	LTS/mit	← LTS	→ LTS/mit	← LTS/mit	=
Population and Housing	LTS	=	LTS →	→ LTS/mit=	=
Public Services	LTS	=	LTS →	=	← LTS
Recreation	LTS	=	=	=	=
Traffic	**SIG**	← SIG	← SIG	← SIG	← SIG
Utilities	LTS	← LTS	LTS→	← LTS	← LTS

Impact Abbreviations
NI: No Impact
LTS: Less than Significant Impact
LTS/mit: Less than Significant Impact with Mitigation
SIG: Significant Impact with or without Mitigation

Project Alternatives
= Compared with the proposed project, no change in the significance of impact will occur.
→ Compared with the proposed project, the significance of the impact is increased.
← Compared with the proposed project, the significance of the impact is reduced.
←SIG Compared with the proposed project, the volume or extent of the impact is reduced, yet still significant.
→SIG Compared with the proposed project, the volume or extent of the impact is increased and still significant.

6.6 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

When an alternatives analysis is prepared consistent with C*EQA Guidelines Section 15126.6 (e[2]),* an environmentally superior alternative must be identified in the EIR.

The only significant and unavoidable impact associated with the proposed project was impacts to I-15 facilities. All other project-related impacts were either identified as less than significant or were mitigated to a less than significant level with the incorporation of mitigation. Caltrans has exclusive control over State highway improvements and State highway improvements are, by and large, a matter of State-wide control. It should be noted that the impact to I-15 facilities would occur both with and without development of the proposed project. The project or any of the identified alternatives are not anticipated to directly result in an impact on the State facilities and these facilities would not meet Caltrans LOS standards even without development of the project. It is reasonable to conclude that development of the site under any alternative would cumulatively contribute to this condition.

The Environmentally Superior Alternative is the one that would result in the fewest or least significant impacts. If the Environmentally Superior Alternative is the No Project Alternative, as in this case, then an Environmentally Superior Alternative must be selected from the remaining alternatives. While the No Project Alternative (No Build) would avoid all environmental impacts without any requirement for mitigation, it would not meet any of the stated project objectives.

The Alternative 4, the Reduced Density Office/Commercial Alternative, would reduce the overall number of daily vehicle trips, which in turn would proportionally reduce the amount of air pollutant, greenhouse gas emissions, and noise generated during the operation of on-site uses. This alternative would not result in any impact greater than identified with the project and would reduce vehicle trips (although the impact would remain significant and unavoidable) and public service/utility demand.

Table 6.I: Summary of Project Objectives per Alternative

	Does the Alternative Meet the Project Objectives?			
Project Objectives	**Alternative 1: No Project**	**Alternative 2: Multifamily Alternative**	**Alternative 3: Reduced Density Residential Alternative**	**Alternative 4: Reduced Density Office/Commercial Alternative**
Establish a mixed-use community for Wildomar with a balance of land uses including commercial, multifamily housing, and recreation.	No	No	Yes	Yes
Deliver an appropriately sized commercial center that provides a mix of retail and office uses with opportunities for employment growth and increased sales tax for Wildomar.	No	No	Yes	Yes

Table 6.I: Summary of Project Objectives per Alternative

Project Objectives	Does the Alternative Meet the Project Objectives?			
	Alternative 1: No Project	Alternative 2: Multifamily Alternative	Alternative 3: Reduced Density Residential Alternative	Alternative 4: Reduced Density Office/Commercial Alternative
Provide rental housing opportunities in a quality multifamily setting at a scale and character appropriate to the site and adjacent existing and future developments.	No	Yes	No	Yes
Utilize architectural styles and design elements that reflect Wildomar's heritage, namely through the use of Ranch, Farmhouse, and Craftsman styles.	No	Yes	Yes	Yes
Incorporate a public park within the project site for the overall Wildomar community.	No	Yes	Yes	Yes
Preserve the existing on-site oak grove to the maximum extent feasible.	Yes	Yes	Yes	Yes
Create a walkable community that provides convenient non-vehicular access from the residential area to the public park and commercial center.	No	No	Yes	Yes
Implement a trail system for the project consistent with the Wildomar Multi-Use Trails Master Plan.	No	Yes	Yes	Yes

While this alternative reduces the amount of office and commercial uses, it maintains the mixed-use concept of the project and the residential density of the southern portion of the site as established in the City's Housing Element. This alternative maintains the mixed-use concept for the site, and retains the passive public park and trailhead, oak grove, and other amenities. Due to the reduction in office and commercial uses, the potential employment opportunities available under this would be correspondingly reduced.

The Reduced Density Office/Commercial Alternative would result in the development of a mixed-use project, provide for a commercial/office center, increase employment opportunities in the City, would provide public amenities (park, trail, preserved open space), and would create a walkable project that provides an alternate residential option to local residents. As detailed in Table 6.I, the mixed-use project envisioned under this alternative would satisfy all of the primary project objectives (though not as fully as the proposed project), it has been selected as the Environmentally Superior Alternative.

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9.0 ACRONYMS, ABBREVIATIONS, AND TERMS

9.1 ACRONYMS AND ABBREVIATIONS

§	Section
§§	Subsection
°C	degrees Celsius
°F	degrees Fahrenheit
AAQS	Ambient Air Quality Standards
AB	Assembly Bill
ACGIH	American Conference of Governmental Industrial Hygienists
ADA	Americans with Disabilities Act
ADT	Average Daily Traffic
AF	acre-feet
AFV	alternative fuel vehicle
AFY	acre-feet per year
amsl	above mean sea level
ANSI	American National Standards Institute
A-P Act	*Alquist-Priolo Earthquake Fault Zoning Act*
APN	Assessor's Parcel Number
AQMP	Air Quality Management Plan
BACM	Best Available Control Measure
Basin	South Coast Air Basin
BAU	Business As Usual
BMP	Best Management Practice
BP	Business Park
BTU	British Thermal Unit
CAA	Federal Clean Air Act
CAAQS	California Ambient Air Quality Standards
CAFE	Corporate Average Fuel Economy
CAL Fire	California Department of Forestry and Fire Protection
CalEEMod	California Emissions Estimator Model
CalEPA	California Environmental Protection Agency
CALGreen Code	California Green Building Standards Code
California Register	California Register of Historical Resources
Caltrans	California Department of Transportation
CAP	Climate Action Plan

CARB	California Air Resources Board
CASQA	California Stormwater Quality Association
CAT	California Climate Action Team
CBC	California Building Code
CBSC	California Building Standards Commission
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife (formerly Fish and Game)
CEC	California Energy Commission
CEQA	California Environmental Quality Act
CERCLA	Comprehensive Environmental Response Compensation Liability Act
CESA	California Endangered Species Act
CFC	chlorofluorocarbon
CFR	Code of Federal Regulations
cfs	Cubic feet per second
CGP	Construction General Permit
CGS	California Geological Survey
CH_4	Methane
CHC	Combined Heating and Cooling
CIWMB	California Integrated Waste Management Board
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalent
COA	Coordinated Operations Agreement
C-P-S	Scenic Highway Commercial
CPUC	California Public Utilities Commission
CR	Commercial Retail
CRA	Colorado River Aqueduct
CUP	Conditional Use Permit
CVP	Central Valley Project
CWA	(Federal) Clean Water Act
cy	cubic yards
DAMP	Drainage Area Management Plan
dB	decibel

dBA	decibel on the A-weighted scale
DBESP	Determination of Biologically Equivalent or Superior Preservation
DBH	diameter at breast height
DCV	Design Capture Volume
DHS	(California) Department of Health Services
DIF	Development Impact Fee
DIF	(California) Department of Industrial Relations
DMA	Drainage Management Area
DOC	(California) Department of Conservation
DOF	(California) Department of Finance
DTSC	(California) Department of Toxic Substance Control
DWR	(California) Department of Water Resources
ECC	Emergency Command Center
EI	Expansion Index
EIR	Environmental Impact Report
EPA	U.S. Environmental Protection Agency
EPAct	Energy Policy Act
ESA	Environmental Site Assessment
EVMWD	Elsinore Valley Municipal Water District
FAR	Floor Area Ratio
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FMMP	Farmland Mapping and Monitoring Program
FRA	Federal Railroad Administration
FTA	Federal Transit Administration
GCC	Global Climate Change
GHG	Greenhouse gas
GPA	General Plan Amendment
gpcd	gallons per capita per day
gpd	gallons per day
GSA	Groundwater Sustainability Agency
GWP	Global Warming Potential
HANS	Habitat Evaluation and Acquisition Negotiation Strategy
HCM	*Highway Capacity Manual*
HCP	Habitat Conservation Plan
HFC	Hydrofluorocarbon
HHDR	Highest Density Residential

HHWE	Household Hazardous Waste Element
HNL	Hourly Noise Level
HOV	High-Occupancy Vehicle
HPLV	High Pressure Low Volume
HSC	Health and Safety Code
HUD	U.S. Department of Housing and Urban Development
Hz	hertz
I-15	Interstate 15
I-215	Interstate 215
I-P	Industrial Park
IPCC	United Nations Intergovernmental Panel on Climate Change
ISO	Insurance Services Office
ITE	Institute of Transportation Engineers
IWRP	Integrated Water Resources Plan
kWh	kilowatt hour
LAFCO	Local Agency Formation Commission
LCFS	Low Carbon Fuel Standard
L_{eq}	Equivalent continuous sound level (L_{eq}) adjusted for the A-weighted scale
LEUSD	Lake Elsinore Unified School District
LI	Light Industrial
LID	Low Impact Development
L_{max}	maximum noise level
LOS	Level of Service
LRA	Local Responsibility Area
LSA	LSA Associates, Inc.
LST	Local Significance Threshold
LUST	Leaking Underground Storage Tank
MBTA	Migratory Bird Treaty Act
MM	Mitigation Measure
MMRP	Mitigation Monitoring and Reporting Program
MMT	million metric tons
mgd	million gallons per day
mpg	miles per gallon
MPO	Metropolitan Planning Organization
MRZ	Mineral Resource Zone
MS4	Municipal Separate Storm Sewer System
MSHCP	Western Riverside County Multiple Species Habitat

	Conservation Plan
MT	metric ton
MWD	Metropolitan Water District of Southern California
N_2O	nitrous oxide
NAAQS	National Ambient Air Quality Standards
NAHC	Native American Heritage Commission
National Register	National Register of Historic Places
NCCP	Natural Community Conservation Plan
NDFE	Nondisposal Facility Element
NFIP	National Flood Insurance Program
NHPA	National Historic Preservation Act
NHTSA	National Highway Traffic and Safety Administration
NLR	Noise Level Reduction
NMFS	National Marine Fisheries Service
NO	Nitric Oxide
NO_2	Nitrogen Dioxide
NOA	Notice of Availability
NOC	Notice of Completion
NOP	Notice of Preparation
NO_X	Oxides of Nitrogen
NPDES	National Pollutant Discharge Elimination System
NPPA	Native Plant Protection Act
NPS	Nonpoint source
NRCS	Natural Resource Conservation Service
O_3	Ozone
OHWM	Ordinary High Water Mark
OMB	(White House) Office of Management and Budget
OPR	Office of Planning and Research
Pb	Lead
PDF	Project Design Features
PFC	Perfluorocarbon
PM_{10}	Particulate Matter with a Diameter of 10 Microns or Less
$PM_{2.5}$	Particulate Matter with a Diameter of 2.5 Microns or Less
POTWs	Publicly Owned Treatment Works
ppm	parts per million
PPP	Plans, Policies Programs
R-3	General Residential
R-4	Planned Residential

R-R	Rural Residential
RCFCWCD	Riverside County Flood Control and Water Conservation District
RCFD	Riverside County Fire Department
RCIWMP	Riverside Countywide Integrated Waste Management Plan
RCNM	Roadway Construction Noise Model
RCP	Regional Comprehensive Plan
RCRA	Resource Conservation and Recovery Act
RCRMC	Riverside County Regional Medical Center
RCSD	Riverside County Sheriff's Department
RCTC	Riverside County Transportation Commission
RCTLA	Riverside County Traffic and Land Agency
RHNA	Regional Housing Needs Assessment
ROG	Reactive Organic Gas
RPS	Renewables Portfolio Standard
R-4	Planned Residential
R-R	Rural Residential
RTA	Riverside Transit Authority
RTP	Regional Transportation Plan
RUWMP	Regional Urban Water Management Plan
RWQCB	Regional Water Quality Control Board
SANDAG	San Diego Association of Governments
SARA	Superfund Amendments and Reauthorization Act
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCS	Sustainable Communities Strategy
sf	square feet
SF_6	Sulfur Hexafluoride
SGMA	Sustainable Groundwater Management Act
SHMA	Seismic Hazards Mapping Act
SHPO	State Historic Preservation Office
SHS	State Highway System
SIP	State Implementation Plan
SKR	Stephens' Kangaroo Rat
SKR HCP	Stephens' Kangaroo Rat Habitat Conservation Plan
SMARA	Surface Mining and Reclamation Act of 1975
SO_2	Sulfur Dioxide

SO_4	Sulfates
SO_X	Sulfur Oxides
SP	service population
SRA	Source Receptor Area
SRRE	Source Reduction and Recycling Element
SSC	Species of Special Concern
SSURGO	*Soil Survey Geographic Database*
STC	sound transmission class
SVP	Society of Vertebrate Paleontology
SWP	State Water Project
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TCP	Traditional Cultural Place
TIA	Traffic Impact Analysis
TIP	Transportation Improvement Plan
TLV	Threshold Limit Value
TNW	Traditional Navigable Water
tpy	tons per year
TRI	Toxics Release Inventory
TUMF	Transportation Uniform Mitigation Fee
UBC	Uniform Building Code
UNEP	United Nations Environment Programme
UNFCCC	United Nations Framework Convention on Climate Change
USACE	United States Army Corps of Engineers
USDOT	United States Department of Transportation
USFWS	United States Fish and Wildlife Service
USGS	United States Geological Survey
UWMP	Urban Water Management Plan
VHDR	Very High Density Residential
VHFHS	Very High Fire Hazard Safety
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compound
WDR	Waste Discharge Requirement
WMWD	Western Municipal Water District
WQMP	Water Quality Management Plan
WRCOG	Western Riverside Council of Governments
WRF	Water Reclamation Facility
WSA	Water Supply Assessment

ZC Zone Change

9.2 GLOSSARY OF TERMS

Acre-Foot. An acre-foot is the quantity of volume of water that covers one acre to a depth of one foot; equal to 43,560 cubic feet or approximately 326,000 gallons.

Aesthetics. The perception of artistic elements, or elements in the natural or human-made environment that are pleasing to the eye.

Air Quality Criteria. Air quality criteria are the levels of pollution and length of exposure at which adverse effects on health and welfare occur.

Air Quality Standards. Air quality standards are the prescribed level of pollutants in the outside air that cannot be exceeded legally during a specified time in a specified geographical area.

Ambient Noise. Ambient noise is the composite of noise from all sources near and far. The ambient noise level constitutes the normal or existing level of environmental noise at a given location.

Applicant. An applicant is a person who proposes to carry out a project which needs a lease, permit, license, certificate, or other entitlement, for use or financial assistance from one or more public agencies.

Arterial. An arterial is a major street carrying the traffic of local and collector streets to and from freeways and other major streets, with controlled intersections and generally providing direct access to non-residential properties.

Attainment. Attainment means that there is compliance with State and Federal ambient air quality standards within an air basin.

A-Weighted Decibel (dBA). The dB on the A-weighted scale is the sound level obtained by use of A-weighting. The A-weighting filter de-emphasizes the very low and very high frequency components of the sound in a manner similar to the frequency response of the human ear and correlates well with subjective reactions to noise.

California Environmental Quality Act (CEQA). Enacted in 1970, CEQA requires State and local agencies to estimate and evaluate the environmental implications of their actions. It aims to prevent environmental effects of the agency actions by requiring agencies, when feasible, to avoid or reduce the significant environmental impacts of their decisions. If a proposed activity has the potential for a significant adverse environmental impact, an environmental impact report (EIR) must be prepared and certified as to its adequacy before taking action on the proposed project (California Public Resources Code §§21000 et seq.)

Capacity. The maximum rate of flow at which vehicles can be reasonably expected to traverse a point or uniform segment of a lane or roadway during a specified time period under prevailing roadway, traffic, and control conditions.

Collector. Relatively low-speed, low-volume street that provides circulation within and between neighborhoods. Collectors usually serve short trips and are intended for collecting trips from local streets and distributing them to the arterial network.

Community Noise Equivalent Level (CNEL). A 24- hour energy equivalent level derived from a variety of single-noise events, with weighting factors of 5 and 10 dBA applied to the evening (7 p.m. to 10 p.m.) and nighttime (10 p.m. to 7 a.m.) periods, respectively, to allow for greater sensitivity to noise during these hours.

Congestion Management Plan (CMP). A mechanism employing growth management techniques, including traffic level of service requirements, standards for public transit, trip reduction programs involving transportation systems management and jobs/housing balance strategies, and capital improvement programming, for the purpose of controlling and/or reducing the cumulative regional traffic impacts of development.

Cumulative Impact. As used in CEQA, the total impact resulting from the accumulated impacts of individual projects or programs over time.

Day-Night Average Level (L_{dn}). The average equivalent A-weighted sound level during a 24-hour day, obtained after the addition of 10 decibels to sound levels in the night after 10 p.m. and before 7 a.m. (Note: CNEL and L_{dn} represent daily levels of noise exposure averaged on an annual or daily basis, while L_{eq} represents the equivalent energy noise exposure for a shorter time period, typically one hour.)

Decibel (dB). The decibel (dB) is the unit of level that denotes the ratio between two quantities that are proportional to power; the number of decibels is 10 times the logarithm (to the base 10) of this ratio.

Emission Standard. The maximum amount of pollutant legally permitted to be discharged from a single source, either mobile or stationary.

Environment. In CEQA, the environment are “the physical conditions which exist within the area which will be affected by a proposed project, including land, air, water, mineral, flora, fauna, noise, and objects of historic or aesthetic significance.”

Environmental Impact Report (EIR). A report required pursuant to the California Environmental Quality Act that assesses all the environmental characteristics of an area, determines what effects or impacts will result if the area is altered or disturbed by a proposed action, and identifies alternatives or other measures to avoid or reduce those impacts.

Equivalent Energy Level (L_{eq}). L_{eq} is the sound level corresponding to a steady-state sound level containing the same total energy as a time-varying signal over a given sample period. L_{eq} is typically computed over 1-hour, 8-hour, and 24-hour sample periods.

Feasible. To be feasible, according to CEQA, means to be capable of being accomplished in a successful manner within a reasonable time taking into account economic, environmental, social, and technological factors.

Findings. Findings required by CEQA are the conclusions made regarding the significance of a project in light of its environmental impacts. A Statement of Overriding Considerations does not obviate the need to make other required CEQA findings.

Floor Area Ratio (FAR). The FAR is the gross floor area permitted on a site divided by the total net lot area.

Freeway. A freeway is a high-speed, high-capacity, limited-access road serving regional and countywide travel. Such roads are free of tolls, as contrasted with turnpikes or other toll roads. Freeways generally are used for long trips between major land use generators. Major streets cross at a different grade level.

Incorporation by Reference. "Incorporation by reference" is a CEQA term meaning reliance on a previous environmental document for some portion of the environmental analysis of a project. See *CEQA Guidelines* §15150.

Initial Study. An Initial Study is a preliminary CEQA analysis prepared by a Lead Agency determining whether an EIR or Negative Declaration must be prepared, and identifying the significant environmental effects to be analyzed in an EIR.

Land Use. Any land use is the determination by a governing authority of the use to which land within its jurisdiction may be put so as to promote the most advantageous development of the community.

Lead Agency. The lead agency is the public agency that has the principal responsibility for carrying out or approving a project. The Lead Agency decides whether an EIR or Negative Declaration is required for a project, and causes the appropriate document to be prepared.

Level of Service (LOS). LOS is a qualitative measure describing operational conditions within a traffic stream and how motorists and/or passengers perceive them.

Maximum Noise Level (L_{max}). The maximum A-weighted sound levels measured on a sound level meter, during a designated time interval, using fast time averaging.

Mitigation Measure. A mitigation measure is a change in a project designed to avoid, minimize, rectify, reduce, or compensate for a significant environmental impact.

Mitigation Monitoring and Reporting Program (MMRP). When a lead agency adopts a mitigated negative declaration or an EIR, it must adopt a program of monitoring or reporting which will ensure that mitigation measures are implemented. (See CEQA Statute §21081.6(a) and *CEQA Guidelines* §§15091(d) and 15097.)

Noise. Noise is any sound that is undesirable because it interferes with speech and hearing, or is intense enough to damage hearing, or is otherwise annoying (unwanted sound).

Noise Contours. Noise contours are lines drawn about a noise source indicating equal levels of noise exposure.

Notice of Determination (NOD). An NOD is a brief notice filed with the State Clearinghouse to document project approval. The filing of the NOD starts the statute of limitations period. (See *CEQA Guidelines* §15373.)

Notice of Preparation (NOP). An NOP is a brief notice to notify the public, Responsible and Trustee Agencies that an EIR is being prepared for a project. The notice serves to solicit guidance from those agencies and the public about the scope and content of the environmental information to be included in the EIR. (See *CEQA Guidelines* §15375.)

Peak Hour. The hour of highest traffic volume on a given section of roadway between 7:00 a.m. and 9:00 a.m. or between 4:00 p.m. and 6:00 p.m.

Project Description. A project description describes the basic characteristics of the project including location, need for the project, project objectives, technical and environmental characteristics, project size and design, project phasing and required permits. The level of detail provided in the project description varies according to the type of environmental document prepared.

Project EIR. A project EIR is an EIR that examines the impacts that would result from development of a specific project. (See C*EQA Guidelines* §15161.)

Project. According to CEQA, a project is the whole of an action that has the potential to result in significant environmental change in the environment, directly or ultimately. (See *CEQA Guidelines* §15378.)

Public Hearing. A public hearing is a mechanism for providing the public an opportunity to comment on and present evidence relating to a proposed project and its Draft EIR.

Responsible Agencies. According to CEQA, responsible agencies are all public agencies other than the Lead Agency that have discretionary approval power over the project. (See *CEQA Guidelines* §15381.)

Reviewing Agencies. Reviewing agencies are local, State and Federal agencies with jurisdiction over the project area or resources potentially affected by the project. Cities and counties are also considered reviewing agencies.

Scoping Meeting. A scoping meeting is an optional meeting pursuant to CEQA in which the lead agency meets with members of the public or agency representatives after the Notice of Preparation has been issued to discuss environmental issues related to a project. Scoping sessions provide the opportunity to discuss environmental issues, project alternatives and potential mitigation measures that may warrant in-depth analysis in the environmental review process.

Sensitive Receptors. Sensitive receptors are people or institutions with people that are particularly susceptible to illness from environmental pollution, such as the elderly, very young children, people already weakened by illness (e.g., asthmatics), and persons engaged in strenuous exercise.

Significant Effect on the Environment. A significant effect on the environment means a substantial, or potentially substantial, adverse change in any of the physical

conditions within the area affected by the project including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic or aesthetic significance (*CEQA Guidelines* §15382).

Thresholds of Significance. Thresholds of significance are criteria for each environmental issue area to assist with determinations of significance of project impacts. They are based on *CEQA Guidelines* Appendix G.

Trustee Agency. According to CEQA, a Trustee agency is a State agency that has jurisdiction by law over natural resources affected by a project which are held in trust for the people of the State of California. (See *CEQA Guidelines* §15386.)

Volume (Transportation). The volume of traffic is the total number of vehicles that pass over a given point or section of a roadway during a given time interval. Volumes may be expressed in terms of annual, daily, hourly, or sub-hourly periods.

Wastewater. Wastewater is water carrying dissolved or suspended solids from homes, farms, businesses, and industries. The wastewater treatment process includes any process that modifies characteristics of the wastewater, usually for the purpose of meeting effluent standards.

Zoning. Regulation by zone districts of the height, use, and area of structures, the use of land, and the density of population and intensity of allowable uses.

APPENDICES
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APPENDIX A:

NOTICE OF PREPARATIONS (NOPs), NOP COMMENT LETTERS AND NOP MAILING LISTS

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APPENDIX B:

CLINTON KEITH ROAD (APN: 390-250-003) "GROVE PARK" AIR QUALITY IMPACT ANALYSIS, CITY OF WILDOMAR, URBAN CROSSROADS, MARCH 2, 2015.

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APPENDIX C-1:

BIOLOGICAL RESOURCES ASSESSMENT AND WESTERN RIVERSIDE COUNTY MSHCP CONSISTENCY ANALYSIS, CLINTON KEITH ROAD APN 380-250-003, PCR, NOVEMBER 2013.

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APPENDIX C-2:

DETERMINATION OF BIOLOGICALLY EQUIVALENT OR SUPERIOR PRESERVATION, GROVE PARK APN 380-250-003, PCR, JANUARY 2015.

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APPENDIX D:

CULTURAL RESOURCES ASSESSMENT, CLINTON KEITH PROPERTY (GROVE PARK PROJECT), WILDOMAR, RIVERSIDE COUNTY, CALIFORNIA, BCR CONSULTING, LLC., MARCH 9, 2015.

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APPENDIX E:

PRELIMINARY GEOTECHNICAL AND FAULT RUPTURE HAZARD INVESTIGATION, GROVE PARK, APN 380-250-003 SW CORNER CLINTON KEITH ROAD & YAMAS DRIVE, WILDOMAR, CALIFORNIA, GEOGON WEST, INC., FEBRUARY 24, 2015.

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APPENDIX F:

CLINTON KEITH ROAD (APN: 380-250-003) "GROVE PARK" GREENHOUSE GAS ANALYSIS, CITY OF WILDOMAR, URBAN CROSSROADS, MARCH 2, 2015.

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APPENDIX G:

PHASE I ENVIRONMENTAL SITE ASSESSMENT, APN 380-250-003 AND 380-250-023, WILDOMAR, CA, HILLMANN CONSULTING, AUGUST 31, 2012.

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APPENDIX H-1:

PRELIMINARY HYDROLOGY AND HYDRAULICS STUDY FOR GROVE PARK, CITY OF WILDOMAR, CALIFORNIA, JLC ENGINEERING AND CONSULTING, INC., MARCH 16, 2015.

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APPENDIX H-2:

PROJECT SPECIFIC WATER QUALITY MANAGEMENT PLAN, GROVE PARK, JLC ENGINEERING AND CONSULTING, INC., FEBRUARY 27, 2015.

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APPENDIX I:

CLINTON KEITH ROAD (APN: 380-250-003) "GROVE PARK" NOISE IMPACT ANALYSIS, CITY OF WILDOMAR, URBAN CROSSROADS, MARCH 11, 2015.

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APPENDIX J-1:

CLINTON KEITH ROAD (APN: 380-250-003) "GROVE PARK" TRAFFIC IMPACT ANALYSIS, CITY OF WILDOMAR, URBAN CROSSROADS, (REVISED) MARCH 5, 2015.

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APPENDIX J-2:

GROVE PARK SUPPLEMENTAL FREEWAY SEGMENT AND RAMP SECTION OPERATIONS ANALYSIS, URBAN CROSSROADS, MARCH 6, 2015.

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