Draft

LAKE ELSINORE WALMART SUPERCENTER PROJECT

Environmental Impact Report
SCH# 2014051093

Prepared for
City of Lake Elsinore

August 2015

ESA

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CHAPTER 1
Executive Summary

1.1 Project Location

The proposed project is located in the central portion of the City of Lake Elsinore, in western Riverside County. The project site is generally located at the southwest corner of Central Avenue (SR 74) and Cambern Avenue. The project site is bound by Cambern Avenue to the northeast, Third Street to the southwest, and Central Avenue to the northwest. Adjacent to and southeast of the project site is a Mobil gas station with inline retail shops, vacant commercial land, the rear side of LA Fitness and single-family residences. The project site consists of seven coterminous vacant parcels that total 17.66 acres. The project site corresponds to the following Assessor's Parcel Numbers (APNs): 377-030-015, 377-030-076, 377-090-009, 377-090-029, 377-090-030, 377-090-031, and 377-090-032.

1.2 Project Description

The proposed project involves the constructions and operation of a retail center including a Walmart Supercenter and three freestanding retail/restaurant buildings on an undeveloped 17.66-acre site that is zoned for C-2 (General Commercial) and CMU (Commercial Mixed Use). The proposed retail Walmart Supercenter would be approximately 154,487 square feet (SF). The outlot development planned for the parcels fronting Central Avenue would consist of one of two site configurations. Option A would consist of a gas station with 16 fueling stations, an approximately 3,100 SF convenience store, and a drive-through car wash and two other buildings which would be developed as separate drive-thru restaurants (3,700 SF and 3,100 SF). The total building area for Option A is 164,387 square feet. Option B consists of one outlot being developed with approximately 9,200 SF of retail and/or restaurant space situated within two buildings while the other two outlots will be developed with drive-thru restaurant uses similar to the proposed development under Option A. The total building area for Option B is 170,487 square feet.

1.3 Project Objectives

The California Environmental Quality Act (CEQA) Guidelines Section 15124 requires an EIR to include a statement of objectives sought by the proposed project. The objectives assist in developing the range of proposed project alternatives to be evaluated in the EIR. The objectives of the proposed project include the following:

- Develop a new major retail and commercial center along major roadways and within close proximity to the Interstate 15 (I-15)/State Route 74 interchange in order to facilitate regional public access and take advantage of the high visibility site to regional travelers.
- Develop the vacant unused parcels comprising the project site for retail-commercial uses, consistent with the existing General Plan land use and zoning designations, in a manner that fully utilizes their development potential.
- Develop a new major retail and commercial center which takes advantage of existing infrastructure.
- Develop a project that will provide local employment opportunities and that will provide economic benefits to the community and the City.
- Develop a new retail center with sustainable project features that reduces project impacts on the environment.
- Develop full-scale grocery use to serve the needs of the local residents.
- Develop a cohesive shopping center that allows shoppers to complete multiple shopping opportunities in one stop thereby reducing the number of traffic trips.

1.4 Summary of Project Alternatives

Pursuant to Section 15126.6(e)(2) of the State CEQA Guidelines, the EIR is required to:

> […] discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time the environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.

Therefore, the no-project alternative has been included for evaluation along with two other alternatives to the proposed project. These alternatives have been selected because they would either reduce project-related impacts or describe what would be reasonably expected to occur in the foreseeable future on the project site, and were selected for further analysis representing a reasonable range of alternatives that would be feasible from a development perspective. These alternatives include:

- **Alternative 1: No Project/No Build.** Under this alternative, no development would occur on the project site. Although the project site has General Plan Land Use designations of General Commercial and Commercial Mixed Use and zoning of General Commercial (C-2) and Commercial Mixed Use (CMU). Under Alternative 1, the project site would remain vacant and undeveloped.
- **Alternative 2: Walmart Supercenter with Gas Station.** Under this alternative the Supercenter Walmart would be developed, and an outlot (Pad 1) would be developed with a gas station and car wash. The total building area square footage would be reduced 157,587 SF or four percent of the total building area square footage. One outlot would include a gas station with 16 fueling stations, an approximately 3,100 SF convenience

store and a drive-through car wash. The two outlots that would not be developed under this alternative would remain in its existing unimproved condition.

- **Alternative 3: Walmart Supercenter Only.** Under this alternative, all of the outlot would be eliminated and only the Walmart Supercenter would be developed. The total square footage of the developed project site would be 154,487 SF. The three outlots that would not be developed under this alternative would remain in its existing unimproved condition.

TABLE 1-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE LAKE ELSINORE WALMART SUPERCENTER PROJECT

Impact	Mitigation Measure	Significance after Mitigation
Aesthetics		
Impact 4.1-1: Would the project damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	No mitigation measures are required.	Less-than-significant.
Impact 4.1-2: Would the project substantially degrade the existing visual character or quality of the site?	No mitigation measures are required.	Less-than-significant.
Impact 4.1-3: Would the proposed project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	No mitigation measures are required.	Less-than-significant.
Cumulative Impacts: Would the proposed project, when combined with the past, present, and reasonably foreseeable cumulative projects, result in a cumulatively considerable impact to scenic resources?	No mitigation measures are required.	Less-than-significant.
Air Quality		
Impact 4.2-1: Would the project conflict with or obstruct implementation of the applicable air quality plan?	**AQ-1:** Prior to the issuance of building permits, the Project applicant shall submit energy usage calculations to the Planning Division showing that the Project is designed to achieve 5% efficiency beyond the 2013 California Building Code Title 24 requirements. Example of measures that reduce energy consumption include, but are not limited to, the following (it being understood that the items listed below are not all required and merely present examples; the list is not all-inclusive and other features that reduce energy consumption also are acceptable): • Increase in insulation such that heat transfer and thermal bridging is minimized; • Limit air leakage through the structure and/or within the heating and cooling distribution system; • Use of energy-efficient space heating and cooling equipment; • Installation of electrical hook-ups at loading dock areas; • Installation of dual-paned or other energy efficient windows; • Use of interior and exterior energy efficient lighting that exceeds then incumbent California Title 24 Energy Efficiency performance standards; • Installation of automatic devices to turn off lights where they are not needed; • Application of a paint and surface color palette that emphasizes light and off-white colors that reflect heat away from buildings; • Design of buildings with “cool roofs” using products certified by	Significant and unavoidable.

TABLE 1-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE LAKE ELSINORE WALMART SUPERCENTER PROJECT

Impact	Mitigation Measure	Significance after Mitigation
	the Cool Roof Rating Council, and/or exposed roof surfaces using light and off-white colors; • Design of buildings to accommodate photo-voltaic solar electricity systems or the installation of photo-voltaic solar electricity systems; • Installation of ENERGY STAR-qualified energy-efficient appliances, heating and cooling systems, office equipment, and/or lighting products. **AQ-2:** Enhanced Water Conservation Required: Prior to the issuance of building permits, the Project applicant shall prepare a Water Conservation Strategy which demonstrates a minimum 30% reduction in outdoor water usage when compared to baseline water demand (baseline water demand is the total expected water demand without implementation of the Water Conservation Strategy) . The Project Water Conservation Strategy shall be subject to review and approval by the City and the Elsinore Valley Municipal Water District (EVMWD).	
Impact 4.2-2: Would the proposed project violate any air quality standard or contribute substantially to any existing or projected air quality violation?	Implement Mitigation Measures AQ-1 and AQ-2. **AQ-3:** During grading activity, the contractor shall ensure that all Rubber Tired Dozers and Scrapers shall be California Air Resources Board (CARB) Tier 3 Certified or better. Additionally, during grading activity, the contractor shall ensure the total horsepower-hours per day for all equipment shall not exceed 18,560 horsepower-hours pe r day and the maximum disturbance (actively graded) area shall not exceed five acres per day.	Less-than-significant for construction. Significant and unavoidable for operations.
Impact 4.2-3: Would CO emissions from the project expose sensitive receptors to substantial pollutant concentrations?	No mitigation measures are required.	Less-than-significant.
Impact 4.2-4: Would emissions of localized criteria pollutants from construction of the project expose sensitive receptors to substantial pollutant concentrations?	Implement Mitigation Measure AQ-3.	Less-than-significant.
Impact 4.2-5: Would emissions of localized TACs from construction of the project expose sensitive receptors to substantial pollutant concentrations?	No mitigation measures are required.	Less-than-significant.
Impact 4.2-6: Would emissions of localized criteria pollutants from the operation of the project expose sensitive receptors to substantial pollutant concentrations?	No mitigation measures are required.	Less-than-significant.
Impact 4.2-7: Would emissions of localized TACs from the operation of the project expose sensitive receptors to substantial pollutant concentrations?	No mitigation measures are required.	Less-than-significant.

TABLE 1-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE LAKE ELSINORE WALMART SUPERCENTER PROJECT

Impact	Mitigation Measure	Significance after Mitigation
Impact 4.2-8: Would construction and operation of the project create objectionable odors affecting a substantial number of people?	No mitigation measures are required.	Less-than-significant.
Impact 4.2-9: Would the project result in a cumulatively considerable net increase of criteria pollutants for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?	Implement Mitigation Measures AQ-1 through AQ-3.	Significant and unavoidable for cumulatively considerable criteria pollutants. Less than significant for cancer risk and chronic hazards.
Biological Resources		
Impact 4.3-1: Would implementation of the proposed project have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?	**BIO-1:** The following Best Management Practices (BMPs) are applicable measures from Appendix C of the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) and shall be implemented by the project proponent for construction activities: • Prior to the issuance of grading or building permits, a qualified biologist (approved by the City of Lake Elsinore) shall be retained to oversee compliance with protection measures for nesting birds and raptors and potentially jurisdictional resources. • The project biologist or designated representative shall be onsite during initial ground-disturbing activities, including vegetation removal, tree removal and grading to ensure that nesting birds and raptors and potentially jurisdictional resources identified during the biological survey are not impacted. • Trash and food items shall be contained in closed containers and removed daily to reduce the attractiveness to opportunistic predators such as common ravens, coyotes, and feral dogs. • Workers shall be prohibited from bringing pets and firearms to the project site and from feeding wildlife. • Intentional killing or collection of any plant or wildlife species shall be prohibited. **BIO-2:** Prior to the commencement of construction activities, the project proponent shall adhere to the following. • A qualified biologist (i.e., a biologist approved by the City of Lake Elsinore with previous burrowing owl survey experience) shall conduct a pre-construction clearance survey (regardless of the time of year) of the permanent and temporary impact areas to locate active breeding or wintering burrowing owl burrows no more than 14 days prior to ground-disturbing activities (i.e., vegetation clearance, tree removal, grading,	Less-than-significant.

TABLE 1-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE LAKE ELSINORE WALMART SUPERCENTER PROJECT

Impact	Mitigation Measure	Significance after Mitigation
	tilling). The survey methodology shall be consistent with the methods outlined in the MSHCP and shall consist of walking parallel transects 7 to 20 meters apart, adjusting for vegetation height and density as needed, and noting any potential burrows with fresh burrowing owl sign or presence of burrowing owls. In the event that a burrowing owl is detected or observed during the preconstruction clearance survey, all measures shall be implemented as described in Appendix E of the MSHCP to ensure impacts are avoided or reduced to less-than-significant levels. **BIO-3:** If removal of the on-site trees and grading occurs during the non-nesting season (September 1 – January 31), and if tree removal and grading occurs during the nesting season and construction is scheduled to commence during the avian non-nesting season (September 1 to January 31), no preconstruction surveys or additional measures are required for nesting birds (other than burrowing owl – see BIO-2). Should construction activities occur within the avian nesting season (February 1 – August 31) the following measures shall be implemented: • To avoid impacts to nesting birds in the project area for construction activities that are initiated during the breeding season (February 1 to August 31), a qualified wildlife biologist shall conduct preconstruction surveys of all potential nesting habitat within the project site plus a 500-foot buffer. Potential nesting habitat includes shrubs, trees, and structures as well as open areas suitable for ground nesting species. Surveys shall be conducted no more than 14 days prior to construction activities. Surveys need not be conducted for the entire project site at one time; they may be phased so that surveys occur shortly before a portion of the site is disturbed. The surveying biologist must be qualified to determine the status and stage of nesting by migratory birds and all locally breeding raptor species without causing intrusive disturbance. If active nests are found, a suitable buffer (e.g. 200-300 feet for common raptors and 30-50 feet for passerines) shall be established around active nests and no construction within the buffer shall be allowed until a qualified biologist has determined that the nest is no longer active (e.g. the nestlings have fledged and are no longer reliant on the nest). Encroachment into the buffer may occur at the discretion of a qualified biologist.	
Impact 4.3-2: Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations, or by the CDFW or USFWS?	No mitigation measures are required.	Less-than-significant.

TABLE 1-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE LAKE ELSINORE WALMART SUPERCENTER PROJECT

Impact	Mitigation Measure	Significance after Mitigation
Impact 4.3-3: Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.	No mitigation measures are required.	Less-than-significant
Impact 4.3-4: Would the project conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan?	Implement Mitigation Measure BIO-1.	Less-than-significant.
Cumulative Impacts: Would the proposed project result in a cumulatively considerable contribution to biological resource impacts?	Implement Mitigation Measures BIO-1 through BIO-3.	Less-than-significant.
Cultural Resources		
Impact 4.4-1: Would the project cause a substantial adverse change in the significance of a historical resource or archaeological resource, as defined in CEQA Guidelines Section 15064.5?	**CULT-1:** Prior to earth moving activities, a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (U.S. Department of the Interior 2008) or a County of Riverside qualified archaeologist shall conduct cultural resources sensitivity training for all construction personnel. Construction personnel shall be informed of the types of archaeological resources that may be encountered, and of the proper procedures to be enacted in the event of an inadvertent discovery of archaeological resources or human remains. The City shall ensure that construction personnel are made available for and attend the training and retain documentation demonstrating attendance. **CULT-2:** If unknown prehistoric/historic archaeological resources are encountered during grading and excavation activities, no further excavation or disturbance of the area where the resources were found shall occur within 100 feet of the find until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (U.S. Department of the Interior 2008) or a County of Riverside qualified archaeologist, is retained by the developer and examines the find. The archaeologist shall determine the significance of the find. If the find is determined not significant then grading and excavation activities can continue, and the archaeologist would determine the need for archaeological monitoring. If the find is determined to be significant or potentially significant, the archaeologist shall prepare a Treatment Plan and shall contact the appropriate Native American tribal representatives, as identified by the Native American Heritage Commission. If requested by the Tribe(s), the City, the developer, or the Project archaeologist, the City shall, in good faith, consult on the discovery and its disposition (e.g., avoidance, preservation, return of artifacts to tribe, etc.). If the Developer and the Tribe cannot agree on the significance or the mitigation for such resources, these issues will be presented to the Community	Less-than-significant.

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Impact	Mitigation Measure	Significance after Mitigation
	Development Director (CDD) for decision. The CDD shall make the determination based on the provisions of the California Environmental Quality Act with respect to archaeological resources and shall take into account the religious beliefs, customs, and practices of the appropriate tribe. Notwithstanding any other rights available under the law, the decision of the CDD shall be appealable to the City of Lake Elsinore City Council. A report of findings shall also be prepared by a qualified archaeologist, and shall include an itemized inventory of any specimens recovered. The report and confirmation of curation of any recovered resources from an accredited museum repository shall signify completion of the program to mitigate impacts to archaeological/historic resources. If disturbed resources are required to be collected and preserved, the Applicant shall be required to participate financially up to the limits imposed by Public Resources Code Section 21083.2. After the find is determined to be significant, the project archaeologist shall determine the need for archaeological monitoring for the remainder of the excavation activities.	
Impact 4.4-2: Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	**CULT-3:** Prior to earth moving activities, a qualified paleontologist shall be retained to conduct pre-construction worker paleontological resources sensitivity training. This training shall include information on what to do in case an unanticipated discovery is made by a worker. All construction personnel shall be informed of the possibility of encountering fossils, and instructed to immediately inform the construction foreman if any bones or other potential fossils are unexpectedly unearthed in an area where paleontological monitoring is not required. The project proponent shall ensure that construction personnel are made available for and attend the training and retain documentation demonstrating attendance. **CULT-4:** Excavations exceeding five feet below the current grade within the surfaces areas containing the younger Quaternary Alluvium as well as any excavation into areas of the site that contains the Silverado Formation shall be monitored by a qualified paleontologist. A qualified paleontologist is defined as an individual on the County of Riverside list of qualified paleontologists or an individual with an M.S. or a Ph.D. in paleontology or geology who is familiar with paleontological procedures and techniques. A qualified paleontologist shall perform periodic spot check monitoring during excavation activities within the areas containing Quaternary Alluvium on the surface until excavations reach five feet below current grade. However, if paleontological resources are found prior to five feet below current grade within the areas containing Quaternary Alluvium on the surface, the qualified paleontologist shall determine the need for	Less-than-significant.

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SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE LAKE ELSINORE WALMART SUPERCENTER PROJECT

Impact	Mitigation Measure	Significance after Mitigation
	more frequent paleontological monitoring for the remainder of the excavation activities. If paleontological resources are discovered, the qualified paleontologist shall inform the contractor to cease ground disturbing activities within 50 feet of the find until it can be assessed by the qualified paleontologist. If the find is determine to be not significant, excavation activities can continue. If the find is determined to be significant or potentially significant, the ground disturbing activities within 50 feet of the find shall continue to cease until the sampling and data recovery of resource is completed. After recovering the resource, the paleontologist shall follow the Society of Vertebrate Paleontology standard guidelines for analyzing the fossil specimens, store the specimens at a museum depository that is capable to provide access for future research, prepare a final report documenting the find(s), and submit the document to the City of Lake Elsinore and other interested parties.	
Impact 4.4-3: Would the project disturb human remains, including those interred outside of formal cemeteries?	**CULT-5:** If human remains are encountered, California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Riverside County Coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code Section 5097.98(b) remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the Riverside County Coroner determines the remains to be Native American, the coroner shall contact the Native American Heritage Commission within 24 hours. Subsequently, the Native American Heritage Commission shall identify the person or persons it believes to be the "most likely descendant." The most likely descendant may then make recommendations, and engage in consultations concerning the treatment of the remains as provided in Public Resources Code 5097.98.	Less-than-significant.
Cumulative Impacts: Would the proposed project result in a cumulatively considerable contribution to cultural resource impacts?	Implement Mitigation Measures CULT-1 through CULT-5.	Less-than-significant.
Geology, Soils, and Seismicity		
Impact 4.5-1: Would the project result in exposure people or structure to potential substantial adverse effects, including the risk of loss, injury or death involving strong seismic ground shaking?	No mitigation measures are required.	Less-than-significant.
Impact 4.5-2: Would the project result in exposure people or structure to potential substantial adverse effects, including the risk of loss, injury or death involving seismic-related ground failure, including liquefaction?	No mitigation measures are required.	Less-than-significant.
Impact 4.5-3: Would the project result in substantial soil erosion or the loss of topsoil?	No mitigation measures are required.	Less-than-significant.

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SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE LAKE ELSINORE WALMART SUPERCENTER PROJECT

Impact	Mitigation Measure	Significance after Mitigation
Impact 4.5-4: Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site lateral spreading, subsidence, liquefaction, or collapse?	No mitigation measures are required.	Less-than-significant.
Cumulative Impacts: Would the project result in impacts on site that could affect off-site properties and generate a cumulative geology, soils, and seismicity impact.	No mitigation measures are required.	Less-than-significant.
Greenhouse Gas Emissions		
Impact 4.6-1: Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?	Implement Mitigation Measures AQ-1 and AQ-2.	Less-than-significant.
Impact 4.6-2: Would the project conflict with applicable plans, policies, or regulations adopted for the purpose of reducing the emissions of GHGs?	No mitigation measures are required.	Less-than-significant.
Cumulative Impacts: Would the increase in GHG emissions resulting from project implementation be cumulatively considerable?	Implement Mitigation Measures AQ-1and AQ-2.	Less-than-significant.
Hydrology and Water Quality		
Impact 4.7-1: Would the project would violate any water quality standards or waste discharge requirements?	No mitigation measures required.	Less-than-significant.
Impact 4.7-2: Would the 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?	No mitigation measures are required.	Less-than-significant.
Impact 4.7-3: Would the project substantially alter the existing drainage pattern of a site or area through the alteration of the course of a stream or river, or by other means, in a manner that would result in substantial erosion, siltation or flooding on- or off-site?	No mitigation measures are required.	Less-than-significant.
Impact 4.7-4: Would the project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	No mitigation measures are required.	Less-than-significant.
Impact 4.7-5: Would the project otherwise substantially degrade water quality?	No mitigation measures are required.	Less-than-significant.
Cumulative Impacts: Would the project result in cumulative impacts to hydrology and water quality?	No mitigation measures are required.	Less-than-significant.

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SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE LAKE ELSINORE WALMART SUPERCENTER PROJECT

Impact	Mitigation Measure	Significance after Mitigation
Land Use and Planning		
Impact 4.8-1: Would the project 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?	No mitigation measures are required.	Less-than-significant.
Impact 4.8-2: Would the project conflict with any applicable conservation plan or natural community conservation plan?	No mitigation measures are required.	Less-than-significant
Cumulative Impacts: Would the proposed project contribute to land use impacts that would be cumulatively considerable?	No mitigation measures are required.	Less-than-significant.
Noise		
Impact 4.9-1: 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?	**NOI-1:** The following practices shall be implemented by the project applicant during construction activities: • Prior to approval of grading plans and/or issuance of building permits, plans shall include a note indicating that noise-generating project construction activities shall only occur between the hours of 7:00 A.M. and 7:00 P.M. on weekdays. Construction is prohibited on weekends and holidays. The project construction supervisor shall ensure compliance with the note and the City shall conduct periodic inspection at its discretion. • Prior to the start of construction, install temporary noise control barriers that provide a minimum noise level attenuation of 10.0 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 designed to block the view of the noise source. • Any damage to the noise barriers must be repaired within 48 hours. Gaps or holes in the barrier or openings between the barrier and the ground shall be repaired within 48 hours. • The noise control barriers and associated elements shall be completely removed and the site 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 mufflers operated and maintained 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 and unavoidable during construction.

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SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE LAKE ELSINORE WALMART SUPERCENTER PROJECT

Impact	Mitigation Measure	Significance after Mitigation
	nearest the project site. • The construction contractor shall locate equipment staging in areas that will create a minimum distance of 100 feet between construction-related noise sources and noise-sensitive receivers nearest the project site (i.e., the center of the site) during all project construction. • The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment (between the hours of 7:00 A.M. and 7:00 P.M. on weekdays. Construction is prohibited on weekends and holidays). The haul route exhibit shall design delivery routes to minimize the exposure of sensitive land uses or residential dwellings to delivery truck-related noise. **NOI-2:** The following practices shall be adopted as Conditions of Approval prior to the issuance of a building permit for the proposed project: • All trucks, tractors, and forklifts shall be operated with proper operating and well maintained mufflers. • Maintain pavement conditions that are free of bumps to minimize truck noise. • The truck access gates and loading docks within the truck court on the project site shall be posted with signs which state: o Truck drivers shall turn off engines when not in use; o Diesel trucks servicing the Project shall not idle for more than five (5) minutes; and o Post telephone numbers of the building facilities manager to report violations.	
Impact 4.9-2: Would the project result in exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?	No mitigation measures are required.	Less-than-significant.
Impact 4.9-3: The project would result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.	No mitigation measures are required.	Less-than-significant.
Cumulative Impacts: Would the project contribute to a noise impacts that would be cumulatively considerable?	No mitigation measures are required.	Less-than-significant.
Public Services		
Impact 4.10-1: Would the project result in substantial adverse physical	No mitigation measures are required.	Less-than-significant.

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SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE LAKE ELSINORE WALMART SUPERCENTER PROJECT

Impact	Mitigation Measure	Significance after Mitigation
impacts associated with the provision of, or the need for, new or physically altered fire protection facilities?		
Impact 4.10-2: Would the project result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered police protection facilities?.	No mitigation measures are required.	Less-than-significant.
Cumulative Impacts: Would the project result in impacts to public services that would be cumulatively considerable?	No mitigation measures are required.	Less-than-significant.
Transportation and Traffic		
Impact 4.11-1: Would the project's construction-related traffic impacts conflict with a plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system?	No mitigation measures are required.	Less-than-significant.
Impact 4.11-2: Would development of the project conflict with a plan, ordinance or policy establishing measures of effectiveness (level of service standards) for the performance of the circulation system, or conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	**Mitigation Measure TRA-1:** The applicant for the proposed project shall contribute its fair share towards the modification of the traffic signal including permissive left-turn phasing at the intersection of East Lakeshore Drive / Diamond Drive. **Mitigation Measure TRA-2:** The applicant for the proposed project shall contribute its fair share towards the installation of a traffic signal at the intersection of Gunnerson Street / Riverside Drive, and to implement permissive left-turn phasing on all approaches. **Mitigation Measure TRA-3:** The applicant for the proposed project shall pay for the restriping the existing eastbound right turn lane as a third shared through-right turn lane at the intersection of I-15 Southbound Ramps/Railroad Canyon Road. **Mitigation Measure TRA-4:** The applicant for the proposed project shall contribute its fair share towards the installation of a traffic signal at the intersection of I-15 Northbound Ramps / Nichols Road. **Mitigation Measure TRA-5:** The applicant for the proposed project shall contribute its fair share towards the installation of a traffic signal at the intersection of I-15 Northbound Ramps / North Main Street. **Mitigation Measure TRA-6:** The applicant for the proposed project shall pay its required Traffic Impact Fee ("TIF"), which fee program includes funding for improvements to the Summerhill Drive / Railroad Canyon Road intersection. One alternative for improving the operation of this intersection is to restripe the northbound approach at the intersection of Summerhill Drive / Railroad Canyon Road to provide a separate right turn lane, and modify the traffic signal and implement overlap phasing for the northbound and eastbound right turn lanes. The City is currently studying additional alternatives for improving the function of this intersection as part of the interchange improvements due to the close	Significant until roadway improvements beyond the control of the City of Lake Elsinore are completed.

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SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE LAKE ELSINORE WALMART SUPERCENTER PROJECT

Impact	Mitigation Measure	Significance after Mitigation
	proximity. **Mitigation Measure TRA-7:** The applicant for the proposed project shall pay its required TIF, as well as the required Western Riverside County Transportation Uniform Mitigation Fee ("TUMF"), which fee programs include funding for the construction of a 2nd westbound through lane at the intersection of Lakeshore Drive / Riverside Drive (SR 74). **Mitigation Measure TRA-8:** The applicant for the proposed project shall contribute its fair share towards the construction of a second southbound left turn lane at intersection of East Lakeshore Drive / Diamond Drive and associated signal modifications. **Mitigation Measure TRA-9:** The applicant for the proposed project shall contribute its fair share to the construction of a left turn lane and a second through lane on the eastbound approach, at the intersection of Gunnerson Street / Riverside Drive, construction of a left turn lane and a second through lane on the westbound approach, and modification of the traffic signal to provide protected left-turn phasing for the eastbound and westbound approaches. **Mitigation Measure TRA-10**: The applicant for the proposed project shall contribute its fair share towards the construction of a left turn lane on the northbound approach at the intersection of I 15 Northbound Ramps and Railroad Canyon Road.	
Impact 4.11-3: Would development of the project, in combination with other reasonably foreseeable development, conflict with a plan, ordinance or policy establishing measures of effectiveness (level of service standards) for the performance of the circulation system, or conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	**Mitigation Measure TRA-11:** The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of Lakeshore Drive/Riverside Drive (SR 74) are as follows: • A 3rd and 4th westbound through lanes, and modify the traffic signal to implement overlap phasing on the right turn lane. • A 2nd northbound left turn lane and a right turn lane. • A 2nd southbound left turn lane and a 3rd through lane. Modify the traffic signal to implement overlap phasing on the right turn lane. • A 2nd eastbound left turn lane and a 3rd through lane. Modify the traffic signal to implement overlap phasing on the right turn lane. Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. **Mitigation Measure TRA-12:** The roadway improvements necessary to	Significant until roadway improvements beyond the control of the City of Lake Elsinore are completed.

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SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE LAKE ELSINORE WALMART SUPERCENTER PROJECT

Impact	Mitigation Measure	Significance after Mitigation
	address the 2035 cumulative traffic conditions at the intersection of W. Graham Avenue/North Main Street (SR 74) are as follows: • Install Traffic Signal • Construct an eastbound left turn lane. • Construct a westbound left turn lane. Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. **Mitigation Measure TRA-13:** The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of East Lakeshore Drive/Diamond Drive are as follows: • A 3rd westbound through lanes, two right-turn lanes, and modify the traffic signal to implement overlap phasing on the right turn lanes. • A 2nd northbound left turn lane, 3rd through lane and 2nd right turn lane, and modify the traffic signal to implement overlap phasing on the right turn lanes. • A 3rd southbound through lane and a right turn lane, and modify the traffic signal to implement overlap phasing on the right turn lane. • A 2nd eastbound left turn lane and a right turn lane. Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. **Mitigation Measure TRA-14:** The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of Collier Avenue / Riverside Drive (SR 74) are as follows: • Two westbound left turn lanes, a 2nd and 3rd through lanes and a right turn lane. • A 2nd northbound left turn lane, 2nd through lane and a right turn lane, and modify the traffic signal to implement overlap phasing on the right turn lane.	

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Impact	Mitigation Measure	Significance after Mitigation
	• A 2nd southbound left turn lane and a 2nd through lane, and modify the traffic signal to implement overlap phasing on the right turn lane. • Two eastbound left turn lanes, a 2nd and 3rd through lanes and a free-right turn lane. Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. **Mitigation Measure TRA-15:** The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of Collier Avenue / Central Avenue (SR 74) are as follows: • A 2nd westbound through lane and a free-right turn lane. • A 2nd northbound through lane and a 2nd right turn lane with overlap signal phasing. • A 3rd southbound left turn lane. • A 3rd eastbound through lane and a right turn lane, and modify the traffic signal to implement overlap phasing on the right turn lane. Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. **Mitigation Measure TRA-16:** The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of Auto Center Drive / Diamond Drive are as follows: • A 3rd westbound through lane and a right turn lane, and modify the traffic signal to implement overlap phasing on the right turn lane. • A 2nd northbound left turn lane and two northbound right turn lanes, and modify the traffic signal to implement overlap phasing on the right turn lanes. • A 2nd southbound left turn lane and two right turn lanes, and modify the traffic signal to implement overlap phasing on the	

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Impact	Mitigation Measure	Significance after Mitigation
	right turn lanes. • A 2nd eastbound left turn lane and a right turn lane, and modify the traffic signal to implement overlap phasing on the right turn lane. Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. **Mitigation Measure TRA-17:** The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of I-15 Southbound Ramps/Nichols Road are as follows: • A 2nd westbound left turn lane and the 2nd and 3rd through lanes. • Two southbound left turn lanes and a right turn lane and restripe the southbound left-through-right turn lane as a 2nd right turn lane. • A 2nd and 3rd eastbound through lanes. Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. **Mitigation Measure TRA-18:** The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of I-15 Southbound Ramps / Central Avenue (SR 74) are as follows: • New Interchange Design (loop on-ramp at I-15 Southbound Ramps). • A 2nd southbound left turn lane, and restripe the shared left-through-right turn lane as a left turn lane, and 1st and 2nd right turn lane. • A 3rd eastbound through lane and 2nd right turn lane. Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward	

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Impact	Mitigation Measure	Significance after Mitigation
	installation of these improvements prior to the issuance of building permits. **Mitigation Measure TRA-19:** The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of I-15 Southbound Ramps / North Main Street are as follows: • Construct a 2nd westbound left turn lane and a 2nd through lane. • Construct a southbound left turn lane. • Construct a 2nd eastbound through lane and a right turn lane. Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. **Mitigation Measure TRA-20:** The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of I-15 Southbound Ramps / Railroad Canyon Road are as follows: • New Interchange Design (ramps on frontage road). • Install a traffic signal. • Construct a northbound right turn lane. • Construct 2 southbound left turn lanes and a 2nd through lane. • Construct a westbound left turn lane and 2 right turn lanes. The City and/or Caltrans may ultimately design alternative improvements at this intersection that would mitigate the impacts to the same or to a greater degree than the improvements outlined above (“alternative improvements”). Prior to the issuance of a building permit, if the above improvements or the alternative improvements or alternative improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. **Mitigation Measure TRA-21:** The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of I-15 Northbound Ramps/Nichols Road are as follows: • A 2nd and 3rd westbound through lanes and a right turn lane.	

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Impact	Mitigation Measure	Significance after Mitigation
	• A northbound left turn lane and a right turn lane and restripe the shared left-through-right turn lane as a 2nd right turn lane. • A 2nd eastbound left turn lane and the 2nd and 3rd through lanes. The City and/or Caltrans may ultimately design alternative improvements at this intersection that would mitigate the impacts to the same or to a greater degree than the improvements outlined above ("alternative improvements"). Prior to the issuance of a building permit, if the above improvements or the alternative improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements or the alternative improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. **Mitigation Measure TRA-22:** The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of I-15 Northbound Ramps / Central Avenue (SR 74): • New Interchange Design (loop on-ramp at I-15 Northbound Ramps). • A northbound left turn lane and restripe the left-through-right turn lane as a 2nd right turn lane. • An eastbound right turn lane. The City and/or Caltrans may ultimately design alternative improvements at this intersection that would mitigate the impacts to the same or to a greater degree than the improvements outlined above ("alternative improvements"). Prior to the issuance of a building permit, if the above improvements or the alternative improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements or alternative improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. **Mitigation Measure TRA-23:** The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of I-15 Northbound Ramps/North Main Street are as follows: • A 2nd westbound through lane and a right turn lane. • A northbound left turn lane and a right turn lane. • A 2nd eastbound left turn lane and a 2nd through lane. The City and/or Caltrans may ultimately design alternative	

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Impact	Mitigation Measure	Significance after Mitigation
	improvements at this intersection that would mitigate the impacts to the same or to a greater degree than the improvements outlined above ("alternative improvements"). Prior to the issuance of a building permit, if the above improvements or alternative improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements or alternative improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. **Mitigation Measure TRA-24:** The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of I-15 Northbound Ramps / Railroad Canyon Road (Grape Street) if the existing diamond interchange remains are as follows: • New Interchange Design (ramps on frontage roads). • Install a traffic signal. • Construct a northbound left turn lane. • Construct a southbound free-right turn lane. • Construct two eastbound left turn lanes and a right turn lane. The City and/or Caltrans may ultimately design alternative improvements at this intersection that would mitigate the impacts to the same or to a greater degree than the improvements outlined above ("alternative improvements"). Prior to the issuance of a building permit, if the above improvements or alternative improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements or alternative improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. **Mitigation Measure TRA-25:** The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of Dexter Avenue / 11th Street are as follows • Install a traffic signal. • Construct a westbound left turn lane and a 2nd through lane. • Construct a northbound left turn lane. • Construct a southbound left turn lane. • Construct an eastbound left turn lane, 2nd through lane and a right turn lane with overlap signal phasing. Prior to the issuance of a building permit, if the above improvements are	

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SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE LAKE ELSINORE WALMART SUPERCENTER PROJECT

Impact	Mitigation Measure	Significance after Mitigation
	covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. **Mitigation Measure TRA-26:** If the Central Avenue (SR 74)/Dexter Avenue intersection has remained a full access intersection, the roadway improvements necessary to address the 2035 cumulative traffic conditions at that intersection are as follows: • Redesign the intersection to include a raised median to prohibit left terms onto Dexter Avenue. The City and/or Caltrans may ultimately design alternative improvements at this intersection that would mitigate the impacts to the same or to a greater degree than the improvements outlined above (“alternative improvements”). Prior to the issuance of a building permit, if the above improvements or the alternative improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that the above improvements or the alternative improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. **Mitigation Measure TRA-27:** The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of Dexter Avenue/Allan Street are as follows: • The installation of a traffic signal at this location is not feasible do to the close proximity of intersection of Dexter Avenue and Central Avenue (SR-74.) Therefore the applicant shall be responsible for geometric improvement at this intersection, including a raised median or its equivalent, which will ensure that the intersection remains limited to a right-in, right out intersection. The timing of this improvement shall be determined by the City Engineer. To the extent there are future projects along Allen Street that will add traffic to this intersection, the City will require those projects to contribute proportionally to the cost of the improvements. **Mitigation Measure TRA-28:** The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of Dexter Avenue/Crane Street are as follows: • The recommended installation of a traffic signal at this location is not a preferred measure for the City due to the location of	

TABLE 1-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE LAKE ELSINORE WALMART SUPERCENTER PROJECT

Impact	Mitigation Measure	Significance after Mitigation
	the intersection and the City's desire to maintain future traffic flows on Dexter Avenue. However, such installation may be necessary in the future, based upon traffic levels and turn movement. In the interim, the applicant shall be responsible for the installation of stop control measures deemed appropriate by the City Engineer. These measures may include a 4-way stop, if requested by the City Engineer. In addition, prior to the issuance of a building permit, the applicant shall pay its fair share cost of the installation of a traffic signal. The fair share shall be based on the project's highest number of peak hour left turns at the intersection, compared to those associated with the existing and future development along both sides of the portion of Crane Street east of Dexter Avenue. **Mitigation Measure TRA-29:** The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of Dexter Avenue/3rd Street include the following: • Install a traffic signal • Construct a westbound left turn lane. • Construct a northbound left turn lane. • Construct a southbound left turn lane. • Construct an eastbound left turn lane. The City may ultimately design alternative improvements at this intersection that would mitigate the impacts to the same or to a greater degree than the improvements outlined above ("alternative improvements"). Prior to the issuance of a building permit, if the above improvements or the alternative improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements or the alternative improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. **Mitigation Measure TRA-30:** The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of Dexter Avenue / 2nd Street are as follows: • Install a traffic signal. • Construct a westbound left turn lane. • Construct a northbound left turn lane and a right turn lane with overlap signal phasing.	

TABLE 1-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE LAKE ELSINORE WALMART SUPERCENTER PROJECT

Impact	Mitigation Measure	Significance after Mitigation
	• Construct a southbound left turn lane. • Construct an eastbound left turn lane, 2nd through lane and a right turn lane with overlap signal phasing. Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. **Mitigation Measure TRA-31:** The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of Camino del Norte / North Main Street are as follows: • Install a traffic signal. • Construct two northbound left turn lanes. • Construct a southbound right turn lane with overlap signal phasing. • Implement overlap signal phasing on the eastbound right turn lane. Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. **Mitigation Measure TRA-32:** The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of Summerhill Drive/Railroad Canyon Road are as follows: • Two westbound right turn lanes, and modify the traffic signal to implement overlap signal phasing on the right turn lanes. • A 2nd northbound right turn lane. • A 2nd southbound left turn lane and a 2nd right turn lane with overlap signal phasing. Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building	

TABLE 1-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE LAKE ELSINORE WALMART SUPERCENTER PROJECT

Impact	Mitigation Measure	Significance after Mitigation
	permits. **Mitigation Measure TRA-33:** The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of Cambern Avenue / Central Avenue (SR 74) are as follows: • A 2nd westbound left turn lane and 3rd through lane, and modify the traffic signal to implement overlap phasing on the right turn lane. • A 2nd northbound left turn lane and right turn lane, and modify the traffic signal to implement overlap phasing on the right turn lane. • Two southbound left turn lanes and a 2nd through lane, and modify the traffic signal to implement overlap phasing on the right turn lane. • A 3rd eastbound through lane and a right turn lane, and modify the traffic signal to implement overlap phasing on the right turn lane. Prior to the issuance of a building permit, the applicant shall be required to dedicate the right-of-way necessary for the above improvements. In addition, prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. **Mitigation Measure TRA-34:** The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of Cambern Avenue / 3rd Street are as follows: • Install a traffic signal. • Construct a westbound left turn lane and right turn lane. • Construct a northbound left turn lane and a 2nd through lane. • Construct a southbound left turn lane, a 2nd through lane, and a right turn lane. • Construct a 2nd eastbound left turn lane. Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of	

TABLE 1-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE LAKE ELSINORE WALMART SUPERCENTER PROJECT

Impact	Mitigation Measure	Significance after Mitigation
	building permits. **Mitigation Measure TRA-35:** The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of Conard Avenue / Central Avenue (SR 74) are as follows: • A 3rd and 4th westbound through lanes and a right turn lane. • A southbound left turn lane and a right turn lane, and modify the traffic signal to implement overlap phasing on the right turn lane. • A 2nd eastbound left turn lane, a 3rd and 4th through lanes and a right turn lane. Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. **Mitigation Measure TRA-36:** The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of Rosetta Canyon Drive / Central Avenue (SR 74) are as follows: • A 2nd westbound left turn lane and the 3rd and 4th through lanes. • A 2nd northbound left turn lane, and modify the traffic signal to implement overlap phasing on the right turn lane. • A 4th eastbound through lane and a right turn lane, and modify the traffic signal to implement overlap phasing on the right turn lane. Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. **Mitigation Measure TRA-37:** The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of Riverside Street / Central Avenue (SR 74) are as follows: • A 2nd westbound left turn lane, a 3rd and 4th through lanes and a right turn lane, and modify the traffic signal to implement overlap phasing on the right turn lane.	

TABLE 1-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE LAKE ELSINORE WALMART SUPERCENTER PROJECT

Impact	Mitigation Measure	Significance after Mitigation
	• Two northbound through lanes. • Two southbound left turn lanes, two through lanes and a right turn lane. • Two eastbound left turn lanes, a 3rd and 4th through lanes and a right turn lane, and modify the traffic signal to implement overlap phasing on the right turn lane. Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. **Mitigation Measure TRA-38:** The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of Greenwald Avenue / Central Avenue (SR 74) area as follows: • A 2nd westbound left turn lane, a 3rd through lane and a right turn lane. • A northbound right turn lane, and modify the traffic signal to implement overlap phasing on the right turn lane. • A southbound right turn lane. • A 2nd eastbound left turn lane and a 3rd through lane, and modify the traffic signal to implement overlap phasing on the right turn lane. Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits.	
Impact 4.11-4: Would the project conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?	Implement Mitigation Measures TRA-1 through TRA-38.	Significant until roadway improvements beyond the control of the City of Lake Elsinore are completed.
Urban Decay		
Impact 4.12-1: Would the project create a diversion of sales from existing retail facilities severe enough to result in business closings?	No mitigation measures are required.	Less-than-significant.

TABLE 1-1
SUMMARY OF IMPACTS AND MITIGATION MEASURES FOR THE LAKE ELSINORE WALMART SUPERCENTER PROJECT

Impact	Mitigation Measure	Significance after Mitigation
Cumulative Impacts: Would the project in cumulatively considerable impacts to urban decay?	No mitigation measures are required.	Less-than-significant.
Utilities and Service Systems		
Impact 4.13-1: Would the project require or result in the construction of new stormwater drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects?	No mitigation measures are required.	Less-than-significant.
Impact 4.13-2: Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	No mitigation measures are required.	Less-than-significant.
Cumulative Impacts: Would the proposed project result in cumulatively considerable impacts to utilities and service systems?	No mitigation measures are required.	Less-than-significant.

CHAPTER 2
Introduction

This Draft Environmental Impact Report (EIR) evaluates the environmental effects that may result from the construction and operation of the proposed Lake Elsinore Walmart Supercenter Project. This Draft EIR has been prepared in conformance with the California Environmental Quality Act (CEQA) and State of California policy guidelines for implementation of the California Environmental Quality Act (State CEQA Guidelines).

2.1 Project Location

The proposed project is located in the central portion of the City of Lake Elsinore (City), in western Riverside County. The project site is located at the southwest corner of Central Avenue (State Route 74) and Cambern Avenue. Surrounding roadways include Cambern Avenue to the northeast, 3rd Street to the southeast, and Central Avenue to the northwest. Adjacent to and south of the project site is a Mobil gas station with inline retail shops, vacant commercial land, LA Fitness and single-family residences. The project site consists of seven coterminous vacant parcels, Assessor's Parcel Numbers (APNs): 377-030-015, 377-030-076, 377-090-009, 377-090-029, 377-090-030, 377-090-031, and 377-090-032 totaling 17.66 acres.

2.2 Project Summary

The proposed project would consist of a retail center anchored by a Walmart Supercenter and including an additional three freestanding retail/restaurant tenants (outlots) on the undeveloped 17.66-acre site that is zoned for C-2 (General Commercial) and CMU (Commercial Mixed Use). The proposed retail anchor Walmart Supercenter would be approximately 154,487 square feet (SF), including a 3,090-SF seasonal outdoor garden center.

Development of the outlots along Central Avenue will consist of two alternative develop scenarios, with individual land use configurations. Option A would be developed as a gas station with 16 fueling stations, an approximately 3,100 SF convenience store, and a drive-through car wash and two other buildings which would be developed as separate drive-thru restaurants (3,700 SF and 3,100 SF). The total building area for Options A is 164,387 square feet. Option B would consist of one outlot being developed with approximately 9,310 SF of retail and/or restaurant space situated within two buildings, while the other two outlots will be developed with drive-thru restaurant uses similar to the proposed development under Option A. The total building area for Options B is 170,487 square feet. Each of these outlot options are evaluated in this Draft EIR as part of the proposed project, and the worst case development intensity for the outlots has been incorporated into the impact assessment.

2.3 Alternatives

Pursuant to CEQA and the State CEQA Guidelines, an EIR must describe a reasonable range of alternatives to a proposed project that could feasibly attain most of the basic project objectives, and would avoid or substantially lessen the proposed project's significant environmental effects. This alternatives analysis summarizes the alternatives screening process conducted to identify feasible alternatives that meet project objectives. As required by CEQA, this analysis first considers which alternatives can meet most of the basic project objectives, and then to what extent those remaining alternatives can avoid or reduce the environmental impacts associated with the proposed project. Information used to select an "environmentally superior alternative," is also provided in this document.

2.4 Environmental Procedures

Purpose of an EIR

In accordance with State CEQA Guidelines Section 15121(a), the purpose of an EIR is to serve as an informational document that will inform public agency decision makers and the public of the significant environmental effects of a project, identify possible ways to minimize the significant effects, and describe reasonable alternatives to the project. State CEQA Guidelines Section 15151 contains the following standards for EIR adequacy:

> An EIR should be prepared with a sufficient degree of analysis to provide decision makers with information which enables them to make a decision which intelligently takes account of environmental consequences. An evaluation of the environmental effects of a proposed project need not be exhaustive, but the sufficiency of an EIR is to be reviewed in the light of what is reasonably feasible. Disagreement among experts does not make an EIR inadequate, but the EIR should summarize the main points of disagreement among the experts. The courts have looked not for perfection but for adequacy, completeness, and a good faith effort at full disclosure.

In accordance with the requirements of CEQA, this document includes a full discussion of the project description, the existing environmental setting, environmental impacts, mitigation measures and residual impacts that may exist after mitigation has been implemented, and project alternatives that could alleviate potential impacts.

As the public agency with the authority to approve or deny the project, the City will consider the information in the EIR along with other information before taking any action on the project. The conclusions of the EIR regarding environmental impacts do not control the City's discretion to approve, deny or modify the proposed project, but instead are presented as information intended to aid the decision-making process.

The purpose of this EIR is to provide an objective, full-disclosure document to inform agency decision makers and the general public of the direct and indirect environmental impacts of the proposed project and related actions. This is a "Project" EIR in conformance with Section 15161 of the State CEQA Guidelines, in that is examines the environmental impacts associated with a specific project. The primary purpose of this EIR is to:

- Identify and evaluate potential environmental consequences of the proposed project.
- Assess cumulative impacts of the project in conjunction with related past, present, and reasonably foreseeable future projects within the area.
- Indicate the manner in which those environmental consequences can be mitigated or avoided.
- Define and analyze alternatives that have the potential to reduce or eliminate potentially significant impacts associated with the proposed project.
- Identify impacts, if any, which even with the implementation of mitigation measures would be unavoidable and adverse.
- Provide documentation supporting these determinations.

Environmental Process

Initial Study/Notice of Preparation

The environmental analysis of the proposed project was initiated by the City with the preparation of an Initial Study. Through the preparation of the Initial Study, the City determined that the project may have a significant impact on the environment, and that an EIR was necessary to analyze potentially significant impacts associated with the proposed project. A Notice of Preparation (NOP) was prepared and distributed with the Initial Study for a 30-day public review period, which commenced on May 27, 2014 and ended on June 27, 2014. Copies of the Initial Study, NOP and distribution list, and comments received in response to the NOP/Initial Study are included as Appendix A of this Draft EIR.

Section 15123(b)(2) of the State CEQA Guidelines requires that an EIR summary identify areas of controversy known to the lead agency, including issues raised by other agencies and the public. **Table 2-1** identifies persons who submitted written comments on the NOP/Initial Study, as well as the topics raised by the comment, and provides a reference to the section of the EIR in which these issues are evaluated.

TABLE 2-1
NOP TOPICS RAISED

Comment Date	Commenter	Summary of Comment	EIR Section
5.28.2014	California State Clearinghouse	Cover letter from State Clearing House	N/A
5.28.2015	Johnson, Barnhouse and Keegan	Removal from mailing list	N/A
5.29.2014	Riverside County Transit Authority	Bus turn out and design	4.11
6.3.2014	South Coast Air Quality Management District	Air quality impacts from the project	4.2
6.4.2014	Native American Heritage Commission	Issues addressing archaeological, paleontological and Native American resources	4.4
6.10.2014	Riverside County Flood Control and Water Conservation District	The project would not be impacted by District Master Drainage Plan facilities nor are other facilities of regional interest proposed	4.7
6.16.2014	Level 3 Communications	No need to relocate facilities	N/A
6.18.2014	Ms. Angela Dutchen	Concerns regarding noise impacts and air quality	4.2, 4.9
6.18.2014	City of Menifee	The project should include a market analysis to ensure the community can support the stores and impacts to other commercial uses	4.12
6.23.2014	Riverside County Transportation and Land Management Agency	The project's traffic report should analyze impacts to Riverside County roadways. The cumulative analysis shall include all approved and pending Riverside County development projects located within one mile of the project	4.11, 4.1- through 4.13
6.25.2014	Ms. Miller	Air quality, traffic impacts	4.2, 4.11
7.8.2014	Pechanga Band of Luiseno Mission Indians	Please include in the public participation process	N/A
7.8.2014	Southern California Edison	Circulation improvements may require relocation of Southern California Edison facilities	4.13

In addition to distribution of the NOP/Initial Study, a public scoping meeting was held at the City of Lake Elsinore Cultural Center located at 183 N. Main Street on Wednesday, June 18, 2014 from 6:00 p.m. to 7:00 p.m. to introduce the proposed Project to the community, and to provide an opportunity for the public to submit verbal and written comments and recommendations regarding the issues to be addressed in the EIR. Notification of the meeting included a direct mailing of the notice to public agencies and the surrounding community. A list of comments (both verbal and written) raised at the scoping meeting is included in **Table 2-2**.

TABLE 2-2
SCOPING MEETING COMMENTS RAISED

Summary of Comment	EIR Section
The speaker stated that they did not receive any notification of the scoping meeting and did not receive the NOP.	2.4 Environmental Procedures
The City never provided public notices to the public.	2.4 Environmental Procedures
How long has Walmart owned the property?	Not a CEQA-related comment
How did the last speaker who said he was not noticed about the scoping meeting find out about it and be in attendance?	Not a CEQA-related comment
Will on-site wastewater be recycled? What about the cost of upgrades to utilities that will be caused by Walmart? The taxpayers will have to foot the bill for that and shouldn't have to.	4.13 Utilities and Service Systems
The project will cause flooding near our house (3rd Street and EVMWD pump station) Who will review the drainage studies?	4.7 Hydrology and Water Quality
Flooding will be exasperated at Allen Street and Connard Street.	4.7 Hydrology and Water Quality
Will the EIR include an analysis of the effect of air pollution on human health? Children in the area have asthma.	4.2 Air Quality
Every landowner in a large radius should be notified.	2.4 Environmental Procedures
Was Caltrans and RCFCWCD notified of the scoping meeting and EIR?	Not a CEQA-related comment on the content of the EIR
Will the EIR include a discussion of recycled materials that Walmart will use in construction of the project? Construction and waste recycling? Will asphalt be used for the project be recycled asphalt?	4.13 Utilities and Service Systems

The NOP/Initial Study and comments received are included in Appendix A of this Draft EIR, along with the Summary of Proceedings from the Scoping Meeting.

Draft EIR

Based on the Initial Study and the scoping meeting, the following environmental issues were identified for evaluation in the Draft EIR:

- Aesthetics (Section 4.1)
- Air Quality (Section 4.2)
- Biological Resources (Section 4.3)
- Cultural Resources (Section 4.4)
- Geology, Soils, and Seismicity (Section 4.5)
- Greenhouse Gas Emissions (Section 4.6)
- Hydrology and Water Quality (Section 4.7)

- Land Use and Planning (Section 4.8)
- Noise (Section 4.9)
- Public Services (Section 4.10)
- Transportation and Traffic (Section 4.11)
- Urban Decay (Section 4.12)
- Utilities and Service Systems (Section 4.13)

This Draft EIR has been distributed to affected agencies, adjacent cities and counties, and interested parties for a 45-day review period in accordance with Section 15087 of the State CEQA Guidelines. During the review period, which commences on August 28, 2015 and ends on October 13, 2015, the Draft EIR is available for general public review at the following locations:

- Altha Merrifield Memorial Library, 600 West Graham Avenue, Lake Elsinore, CA 92530
- Vick Knight Community Library, 32593 Riverside Drive, Lake Elsinore, CA 92530

Additionally, the Draft EIR can be downloaded or reviewed on the City of Lake Elsinore's website http://www.lake-elsinore.org/index.aspx?page=246.

Interested parties may provide written comments on the Draft EIR. Written comments on the Draft EIR must be postmarked by October 12, 2015 and should be addressed to:

Richard J. MacHott, Planning Manager
City of Lake Elsinore
130 South Main Street
Lake Elsinore, CA 92530
(951) 674-3124 extension 209

Final EIR

Upon completion of the 45-day public review period, written responses to comments on environmental issues discussed in the Draft EIR will be prepared and incorporated into the Final EIR. These comments, and their responses, will be included in the Final EIR for consideration by the City of Lake Elsinore.

2.5 Draft EIR Organization

As illustrated in **Table 2-3**, this Draft EIR is organized into seven chapters each dealing with a separate aspect of the required content of an EIR as described in the State CEQA Guidelines; it is intended for use and reference. To help the reader locate information of particular interest, a brief summary of the contents of each chapter of the EIR is provided. Acronyms and abbreviations are included directly after the Table of Contents and provide a description of abbreviations and acronyms used throughout the document. The chapters listed in the table are contained within the EIR.

TABLE 2-3
REQUIRED DRAFT EIR CONTENTS

Requirement (State CEQA Guidelines Section)	Location in Draft EIR
Table of contents (Section 15122)	Table of Contents
Summary (Section 15123)	Chapter 1
Project description (Section 15124) and environmental setting (Section 15125)	Chapter 3 and Chapter 4 (Sections 4.1 – 4.13)
Significant environmental impacts (Section 15126.2(a))	Chapter 4 (Sections 4.1 – 4.14); Chapter 5
Unavoidable significant environmental impacts (Section 15126.2(b))	Chapter 4 (Sections 4.1, 4.10, 4.12) and Chapter 5
Mitigation measures (Section 15126.4)	Chapter 1; Chapter 4 (Sections 4.1 – 4-14)
Cumulative impacts (Section 15130)	Chapter 4 (Sections 4.1 – 4.14)
Growth-inducing impacts (Section 15126.2(d))	Chapter 5
Effects found not to be significant (Section 15128)	Chapter 5
Alternatives to the proposed project (Section 15126.6)	Chapter 6
List of preparers (Section 15129)	Chapter 7
Acronyms (Section 15129)	Chapter 8

2.6 Incorporation by Reference

In accordance with Section 15150 of the State CEQA Guidelines, the following documents are hereby incorporated by reference into this Draft EIR. These documents are referenced within this EIR, and information from these documents has been briefly summarized in the appropriate sections. A list and brief synopsis of the scope and content of these documents is provided below.

City of Lake Elsinore General Plan: On December 13, 2011, the Lake Elsinore City Council adopted a new General Plan with a planning horizon year of 2030. The General Plan consists of an introduction, three topical chapters and 16 District Plans that cover specific, defined geographic areas within the City and its sphere of influence. The General Plan establishes a framework for future development and actions that may be taken in furtherance of the general plan's goals and policies.

City of Lake Elsinore General Plan EIR: The City certified the General Plan EIR, which evaluated the potential environmental impacts of the City of Lake Elsinore's General Plan, in 2011. The General Plan EIR also provided the City with a policy-level CEQA evaluation of three related projects: the Downtown Master Plan, Annexation No. 81(referred to herein as the "3rd Street Annexation" within which the project is partially located), and the City's Climate Action Plan (CAP).

City of Lake Elsinore Municipal Code: The Lake Elsinore Municipal Code is provided to implement the land use and noise policies of the City's General Plan.

City of Lake Elsinore Plan of Services for Annexation 81 (3rd Street Annexation): The Plan of Services (dated February 2012) provides information about service provision in the 320-acre annexation area, identified as the 3rd Street Annexation area, which includes a portion of and is adjacent to the proposed Walmart Supercenter site. The Plan of Service provides information regarding existing service facilities and level of services and the ability of services to be provided to the annexation area.

These documents are identified in Section 9.0, *References* and are available for public review on the City's website (www.lake-elsinore.org) and at:

City of Lake Elsinore
Planning Division
130 South Main Street
Lake Elsinore, CA 92530

2.7 Documents Prepared for the Project

The stand-alone technical studies prepared for the project are listed below:

- Air Quality Impact Analysis, 2015. Urban Crossroads. (Appendix B.)
- Air Toxics Health Risk Assessment, 2015. Urban Crossroads. (Appendix B.)
- Biological Resources Technical Report, March 2014. ESA. (Appendix C)
- Phase I Cultural Resources Study, May 2014. (Appendix D.)
- Initial Geotechnical Engineering Investigation Report, July 2011. Moore Twining Associates, Inc. (Appendix E.)
- Greenhouse Gas Analysis, 2015. Urban Crossroads. (Appendix F.)
- Phase I Environmental Site Assessment, December 2011. Cornerstone Earth Group. (Appendix G.)
- Preliminary Project Specific Water Quality Management Plan, 2015. Greenberg Farrow. (Appendix H.)
- Preliminary Hydrology Report, 2015. Greenberg Farrow. (Appendix H.)
- Lake Elsinore Master Plan of Drainage May 2015. Albert A Webb Associates. (Appendix H.)
- Noise Impact Analysis, 2015. Urban Crossroads. (Appendix I.)
- Traffic Impact Analysis 2015. Urban Crossroads. (Appendix J.)
- Urban Decay Study, 2015. The Natelson Dale Group, Inc. (Appendix K.)
- Water Supply Assessment (Appendix L.)

2.8 Review of the Draft EIR

Upon completion of the Draft EIR, the City will file a Notice of Completion (NOC) with the State Office of Planning and Research (OPR) to begin the public review (Public Resources, §21161). Concurrent with the NOC, this Draft EIR will be distributed to responsible and trustee agencies, other affected agencies, adjacent cities, and interested parties, as well as all parties requesting a copy of the Draft EIR in accordance with Public Resources Code 21092(b)(3). During the 45-day public review period, the Draft EIR, including the technical appendices, will be available for review at the City of Lake Elsinore, Planning Division, located at 130 South Main Street, Lake Elsinore, California, 92530.

Agencies, organizations, and interested parties have the opportunity to comment on the Draft EIR during the 45-day public review period. Written comments on this Draft EIR should be addressed to the City of Lake Elsinore, Planning Division, 130 South Main Street, Lake Elsinore, California, 92530. Attention: Richard J. MacHott, Planning Manager.

Submittal of electronic comments in Microsoft Word or Adobe PDF format is encouraged but not required. Upon completion of the public review period, written responses to all environmental issues will be prepared. Written responses to comments made by public agencies during the official 45-day public review period will be provided those commenting agencies at least 10 days prior to any certification of the Final EIR. Comments received and the responses to comments will be included as part of the record for consideration by the decision-makers for the project.

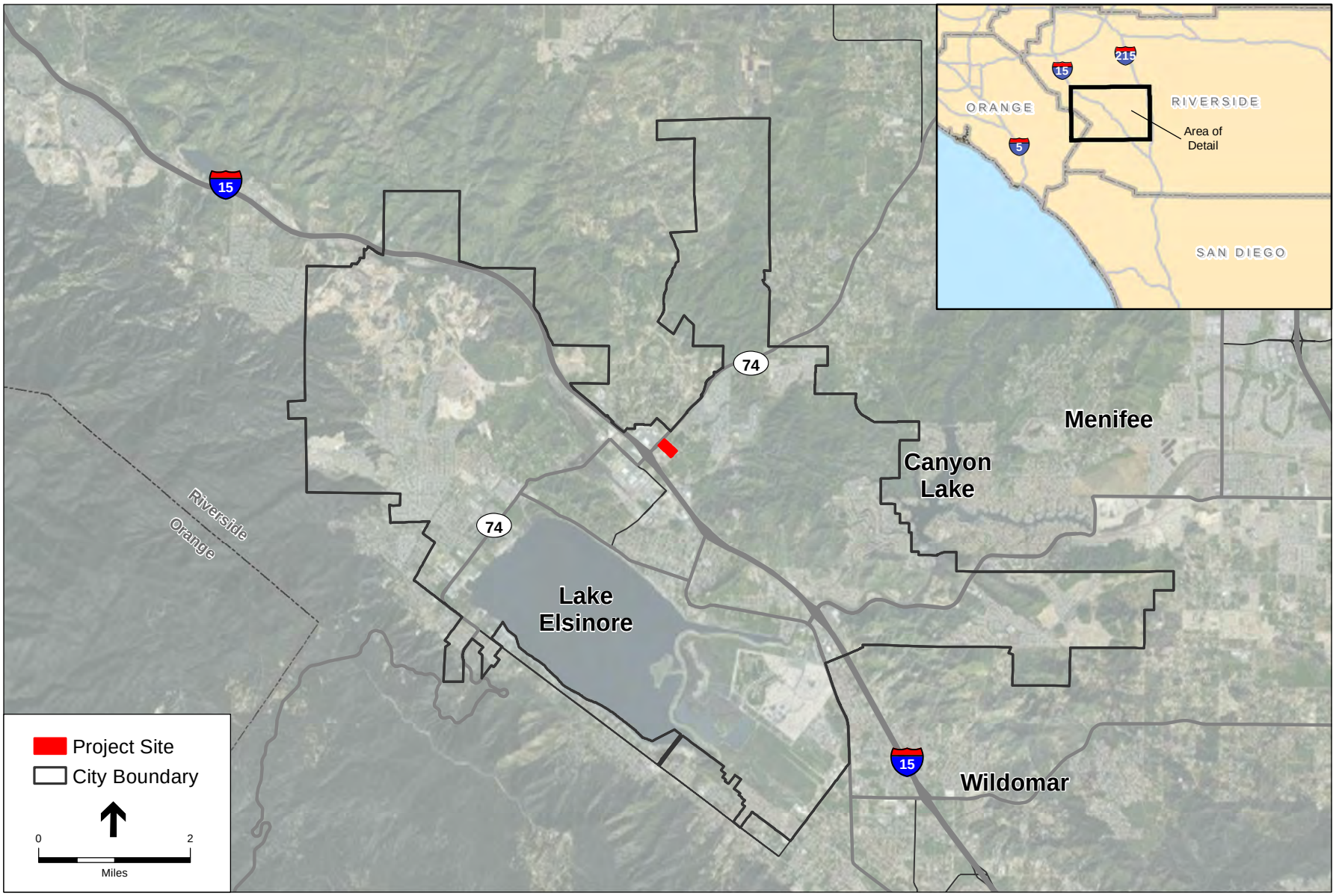
CHAPTER 3
Project Description

3.1 Project Overview

The proposed project involves the construction and operation of a retail center including a Walmart Supercenter store and three freestanding retail/restaurant mix-use buildings on an undeveloped 17.66-acre site that is zoned C-2 (General Commercial) and CMU (Commercial Mixed Use). The proposed Walmart Supercenter would be approximately 154,487 square feet (SF), including a 3,090 SF seasonal outdoor garden center. The outlot development planned for the parcels fronting Central Avenue would consist of one of two site configurations. Option A would consist of a gas station with 16 fueling stations, an approximately 3,100 SF convenience store, and a drive-through car wash and two other buildings, which would be developed as separate drive-thru restaurants (3,700 SF and 3,100 SF). The total building area for Option A is 164,387 square feet. Option B consists of one outlot being developed with approximately 9,200 SF of retail/restaurant mix-used space situated within two buildings while the other two outlots would be developed with drive-thru restaurant uses similar to the proposed development under Option A. The total building area for Option B is 170,487 square feet. Each of these outlot options are evaluated in this Draft Environmental Impact Report (EIR) as part of the proposed project, and the worst case development intensity for the outlots has been incorporated into the impact assessment.

3.2 Project Location

The proposed project is located in the central portion of the City of Lake Elsinore, in western Riverside County. The project site is generally located at the southwest corner of Central Avenue [or State Route 74 (SR-74)] and Cambern Avenue. The project site is bound by Cambern Avenue to the northeast, 3rd Street to the southeast, and Central Avenue to the southwest (see **Figures 3-1** and **3-2**). Adjacent to and west from the project site is a Mobil gas station with inline retail shops, vacant commercial land, the back side of LA Fitness and to the south are single-family residences. The project site consists of seven coterminous vacant parcels that total 17.66 acres. The project site corresponds to the following Assessor's Parcel Numbers (APNs): 377-030-015, 377-030-076, 377-090-009, 377-090-029, 377-090-030, 377-090-031, and 377-090-032.



SOURCE: ESRI

Lake Elsinore Walmart Supercenter Project EIR. 130767

Figure 3-1

Regional Location Map

SOURCE: ESRI

Lake Elsinore Walmart Supercenter Project EIR . 130767

Figure 3-2

Project Vicinity Map

3.3 Existing Setting

Existing Land Use

The project site is currently vacant undeveloped land that is covered by grasses, weeds, brush, barren areas with exposed gravelly soils, and a row of mature eucalyptus trees. The project site has General Plan Land Use designations of General Commercial and Commercial Mixed Use, as shown on **Figure 3-3**. The zoning is also General Commercial (C-2) and Commercial Mixed Use (**Figure 3-4**). The bulk of the property along Central Avenue and Cambern Avenue are zoned General Commercial. The four parcels fronting Third Street are zoned Commercial Mixed Use. **Table 3-1** depicts the zoning and land use designations by parcel within the project site.

TABLE 3-1
EXISTING LAND USE AND ZONING

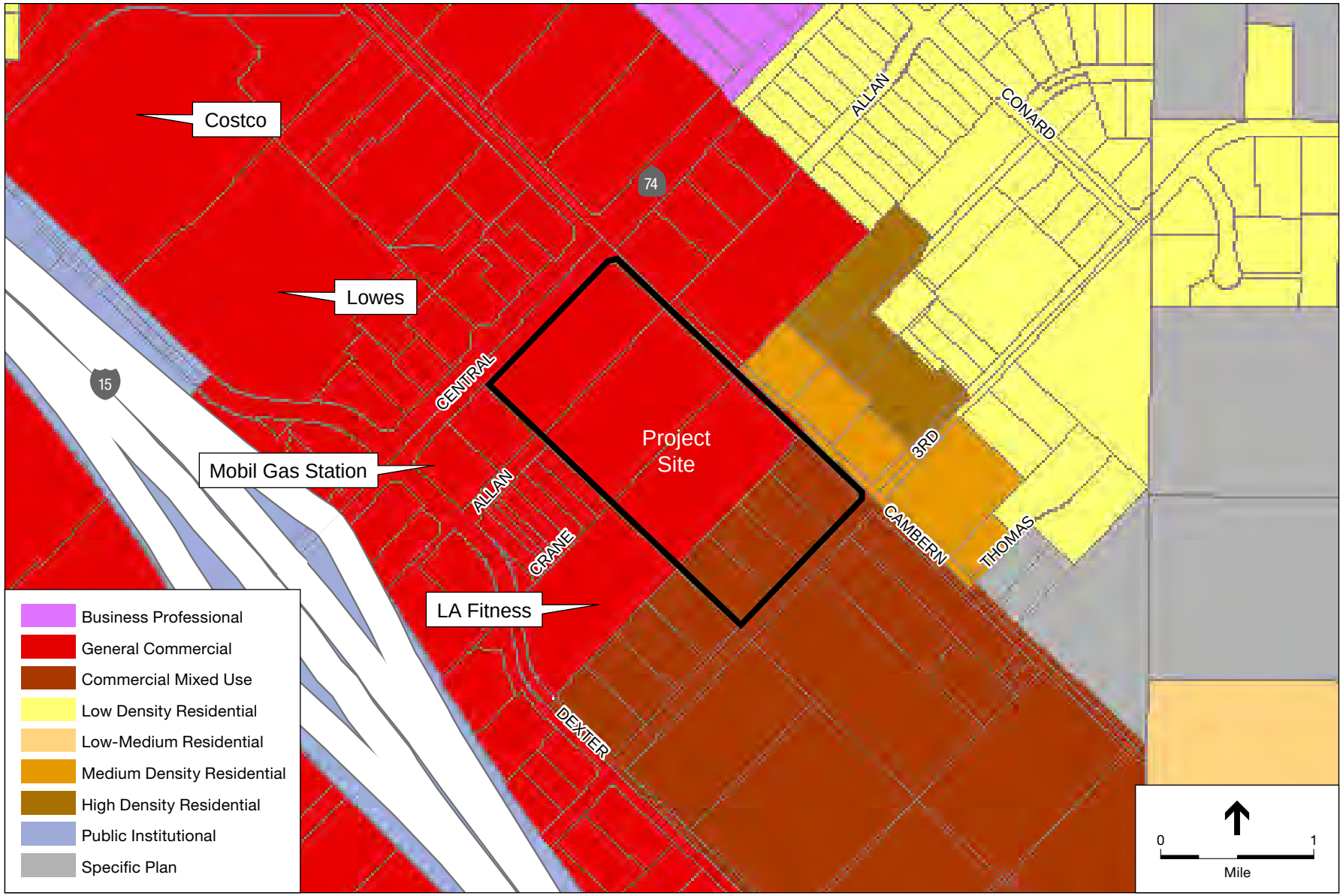
APN	Acres (approx)	Zoning	General Plan
377-030-015	4.75	General Commercial	General Commercial
377-030-076	3.90	General Commercial	General Commercial
377-090-009	4.96	General Commercial	General Commercial
377-090-029	1.06	Commercial Mixed Use	Commercial Mixed Use
377-090-030	1.06	Commercial Mixed Use	Commercial Mixed Use
377-090-031	1.06	Commercial Mixed Use	Commercial Mixed Use
377-090-032	1.33	Commercial Mixed Use	Commercial Mixed Use

The project site is currently undeveloped, but has been previously disturbed with mobile homes installed between 1978 and 1989 along 3rd Street. The project site is approximately 1,300 feet above mean sea level and the topography in the vicinity of the proposed project slopes gently to the southwest at an approximate 2.0 % average gradient.

Surrounding Land Uses

Land uses surrounding the project site include the following:

- **West:** Directly adjacent to and west of the project site is a Mobil gas station with inline retail shops and vacant land that has zoning and land use designations for General Commercial land uses.
- **Southwest:** The rear of an LA Fitness and single-family residences exist to the southwest of the project site. The areas to the southwest of the LA Fitness have zoning and land use designations for Commercial Mixed land uses.

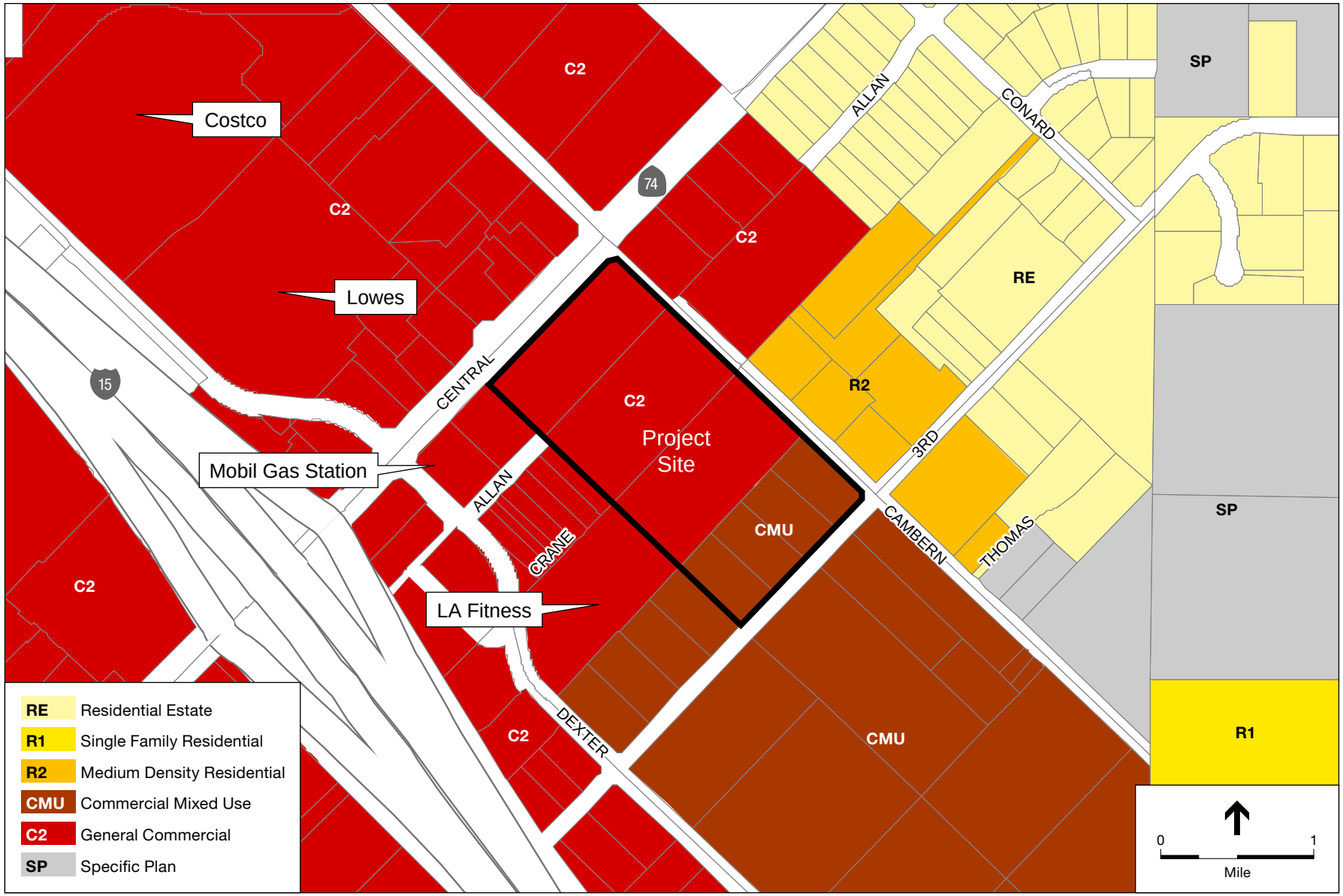


SOURCE: City of Lake Elsinore

Lake Elsinore Walmart Supercenter Project EIR . 130767

Figure 3-3

Existing General Plan Land Uses



SOURCE: City of Lake Elsinore

Lake Elsinore Walmart Supercenter Project EIR . 130767

Figure 3-4

Existing Zoning Designations

- **Northwest:** To the northwest of the project site, across Central Avenue (Highway 74) is a developed retail shopping center (Lake Elsinore Marketplace) that is anchored by Costco and Lowe's. The area to the northwest of the project site has zoning and land use designations for General Commercial land uses.
- **North:** Land uses to the north of the project site include both vacant and residential land uses. This area site has zoning and land use designations for General Commercial land uses.
- **Northeast:** Land uses to the northeast of the project site include both vacant and residential land uses. The northern portion of area has zoning and land use designations for General Commercial land uses and the southern area on the northeast side of the project site is designated and zoned for High-Density Residential uses.
- **South:** Land uses to the south of the project site include both vacant and residential land uses that have zoning and General Plan land use designations for Commercial Mixed land uses.
- **East:** Land to the east and northeast of the project site include both vacant and residential land uses that have zoning and land use designations for Medium and High Density Residential uses.

3.4 Project Objectives

CEQA Guidelines Section 15124 requires an EIR to include a statement of objectives sought by the proposed project. The objectives assist in developing the range of proposed project alternatives to be evaluated in the EIR. The objectives of the proposed project include the following:

- Develop a new major retail and commercial center along major roadways and within close proximity to the Interstate 15 (I-15)/SR-74 interchange in order to facilitate regional public access and take advantage of the high visibility site to regional travelers.
- Develop the vacant unused parcels comprising the project site for retail-commercial uses, consistent with the existing General Plan land use and zoning designations, in a manner that fully utilizes their development potential.
- Develop a new major retail and commercial center which takes advantage of existing infrastructure.
- Develop a project that will provide local employment opportunities and that will provide economic benefits to the community and the City.
- Develop a new retail center with sustainable project features that reduces project impacts on the environment.
- Develop full scale grocery use to serve the needs of the local residents.

- Develop a cohesive shopping center that allows shoppers to complete multiple shopping opportunities in one stop thereby reducing the number of traffic trips.

3.5 Project Characteristics

The proposed project includes a lot line adjustment and lot merger to consolidate the lots into four separate parcels. The 17.66-acre site is proposed to include a 14.35-acre parcel that would be developed with the Walmart Supercenter, three outlots totaling approximately 2.0 acres would be improved with the retail/restaurant uses and the remaining 0.89 acre would be used for street dedication. **Table 3-2**, depicts the proposed project development by acreage. **Figure 3-5a** depicts the proposed project's site plan with Option A and **Figure 3-5b** depicts the proposed project's site plan with Option B.

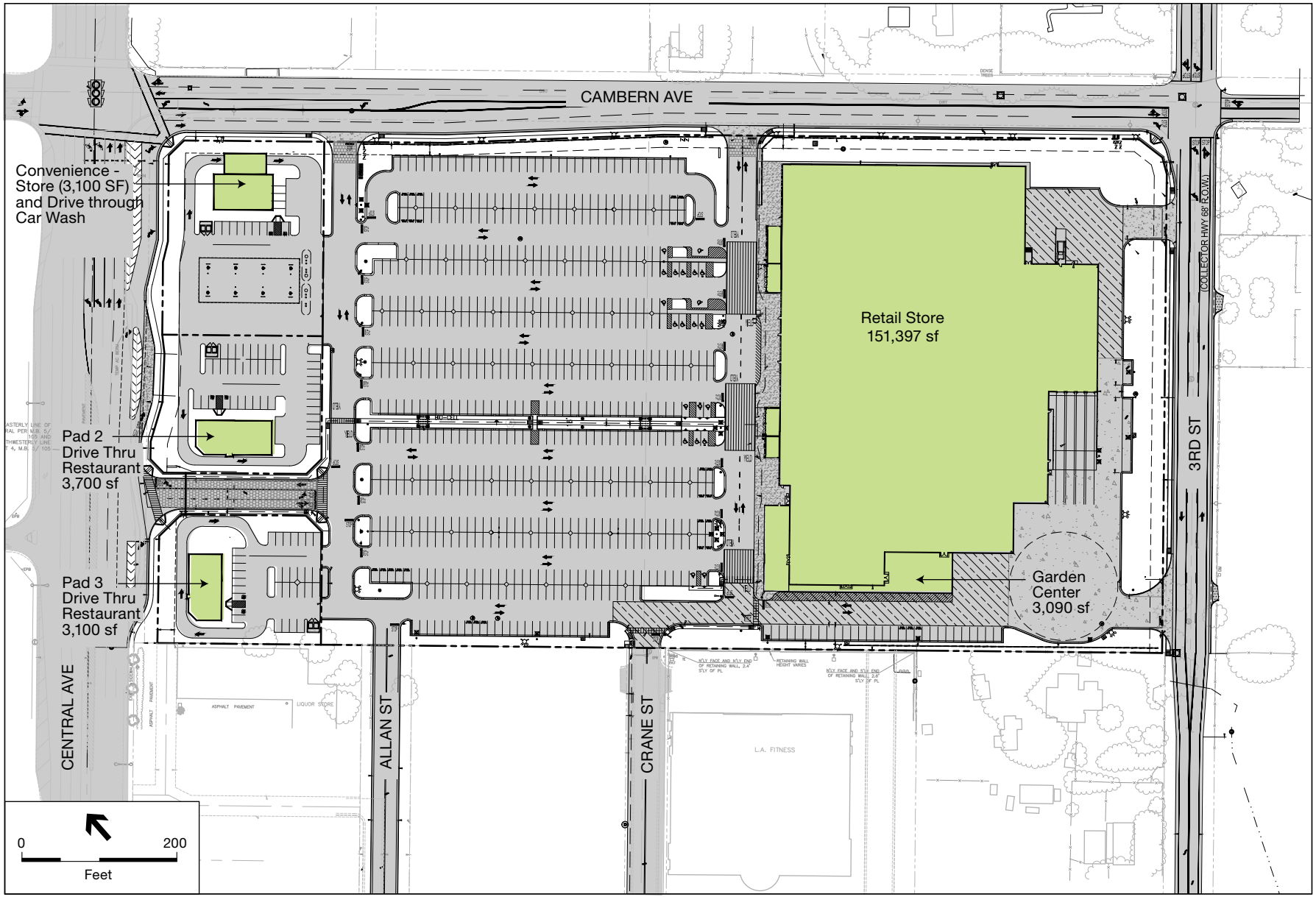
TABLE 3-2
PROPOSED PROJECT DEVELOPMENT

Proposed Development	Acreage
Walmart Supercenter Lot	14.35 acres
Outlot 1	1.07 acres
Outlot 2	0.67 acres
Outlot 3	1.68 acres
State Highway 74 Dedication	<0.29 acres>
Cambern Avenue Dedication	<0.54 acres>
3rd Street Dedication	<0.60 acres>

The Walmart Supercenter would encompass a maximum of 154,487 SF, including the seasonal outdoor garden center, and provide for the sale of general merchandise, groceries and alcoholic beverages for off-site consumption as well as pool chemicals, petroleum products, pesticides and paint products. It may operate up to 24 hours per day. The store may contain a drive-thru pharmacy, a medical clinic, a vision and hearing care center, a food service center, a photo studio, a photo finishing center, a banking center, and other similar accessory uses. The store would include an approximately 3,090-SF outdoor seasonal garden center. It may have outdoor seasonal parking lot sales and sidewalk sales along the front of the store.

Truck doors, loading facilities, and areas dedicated for trash compaction, organic waste recycling, and bale and pallet storage would be located at the back of the store, appropriately screened from public view.

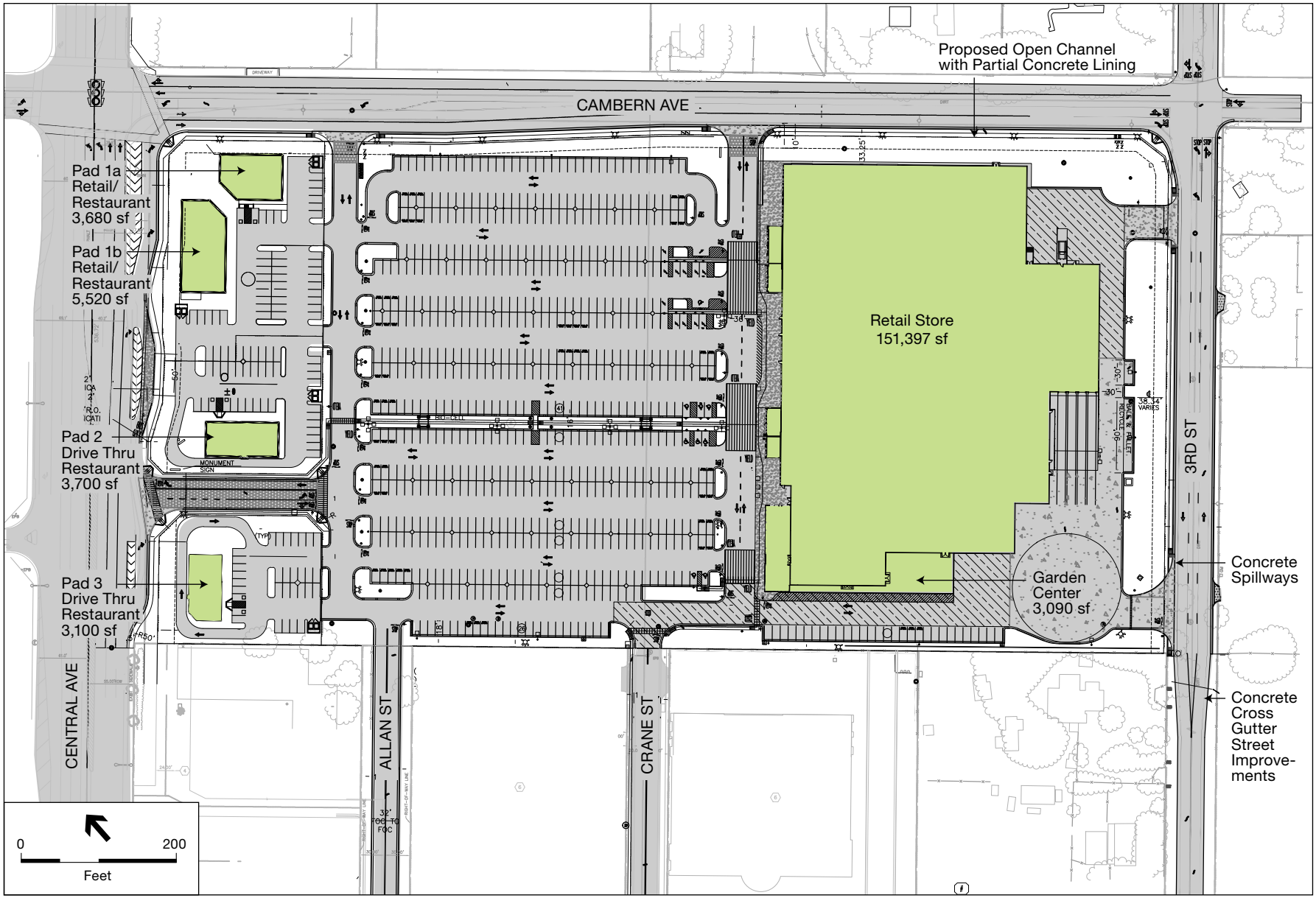
All proposed structures on the project site would be developed to a maximum building height of 32 feet. Project architectural renderings for the Walmart Supercenter depict the proposed maximum building height of 28 feet. However, the Supercenter building elevations would vary up to 32 feet in height, and the final building elevations would be subject to the approval of the City of Lake Elsinore as part of the entitlement process. The buildings located on the outlots would also be limited to approximately 32 feet in height.



SOURCE: GreenbergFarrow

Lake Elsinore Walmart Supercenter Project EIR . 130767

Figure 3-5a
Option A Site Plan



SOURCE: GreenbergFarrow

Lake Elsinore Walmart Supercenter Project EIR . 130767

Figure 3-5b
Option B Site Plan

The Supercenter building would be of contemporary commercial architectural style with articulated surfaces and roof lines. The exterior finish materials would vary and include smooth and split face concrete masonry block with varied neutral colors of tans and browns. The proposed project buildings would incorporate compatible architectural styles and elements as the Supercenter. The design concepts for the proposed project are shown in **Figures 3-6** and **3-7.**

The proposed project would require that all landscaping planters be planted with 24 inch box trees. The Walmart Supercenter parking lot would include low-impact development (LID) design features such as stormwater retention bio cells in the northern area of the parking lot.

The store operations, delivery, and loading would occur 24 hours a day, seven days a week. Primary access to the project site would be provided via SR-74. Additionally, the building would have four delivery bays and a dedicated service door for independent vendors. Inbound and outbound truck access would be via SR-74 to Cambern Avenue and then to a rear driveway on 3rd Street. Truck doors, loading facilities, and areas dedicated to trash compaction, organic waste, recycling, and bale and pallet storage would also be provided at the rear of the building, along 3rd Street.

The proposed project would also develop the northwestern portion of the site with one of two options for the outlots. For Option A, the site would be developed with a gas station and two separate drive-thru restaurants. For Option B, the site would be developed with two buildings developed as retail or sit-down restaurants and the two other buildings would be developed as the separate drive-thru restaurants.

Site Preparation. Grading activities are proposed to be completed in one phase and require the import of approximately 35,000 cubic yards of material to construct finished pads. Site grading is anticipated to take 2 months. In addition, over-excavation and compaction of on-site material is expected to be required.

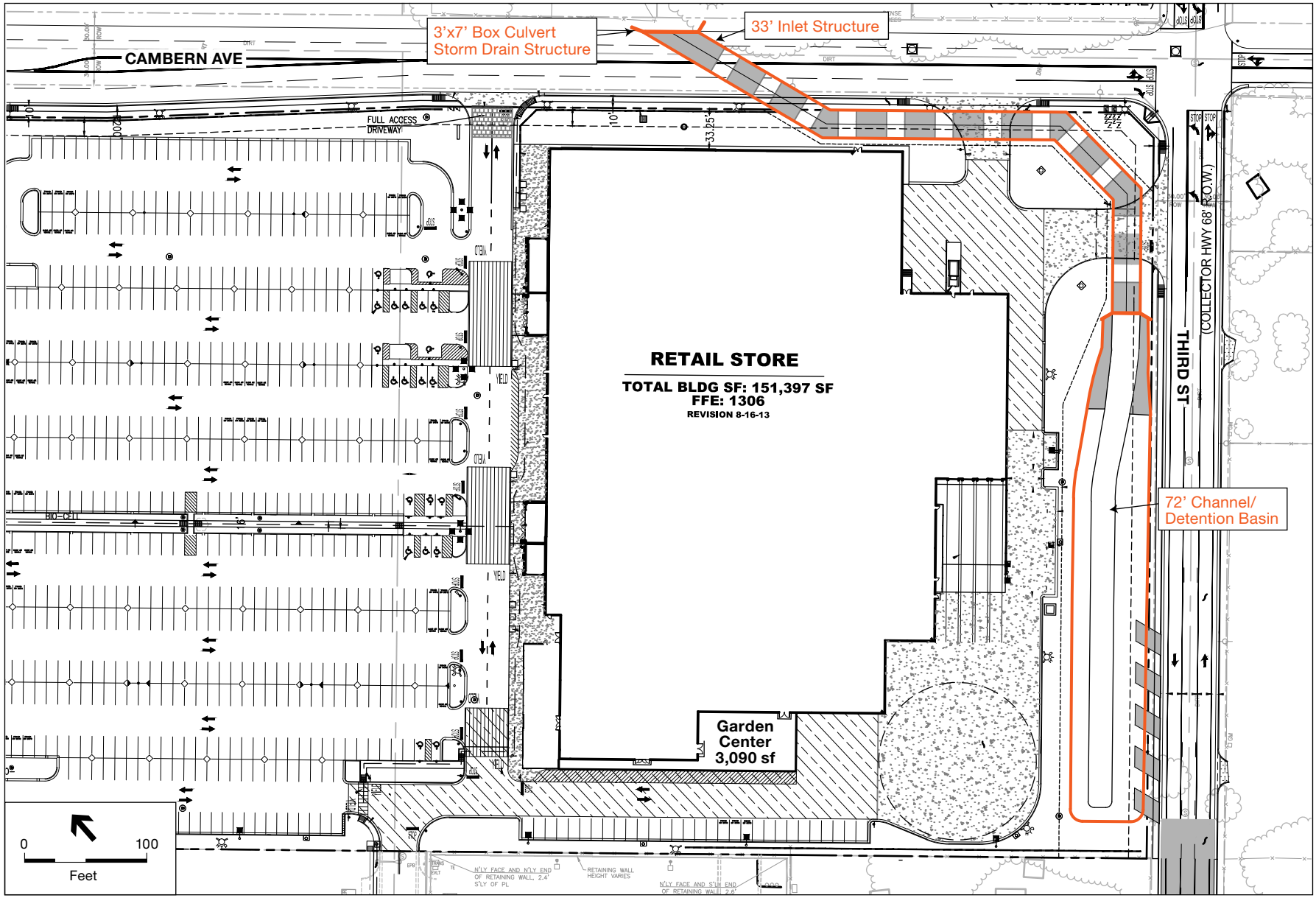
Access/Circulation/Parking. Regional access to the project site would be provided by I-15 via SR-74. The proposed project would provide vehicle access from Central Avenue, Cambern Avenue and truck access from 3rd Street. All project access points are proposed to be full-access, with the exception of the driveway on Central Avenue, which is proposed for right-in/right-out access only. The proposed project would also have access available from Dexter Avenue via Allan Street or Crane Street.

Additionally, the proposed project would include relocation of the existing bus stop along Central Avenue, approximately 200 feet to the east from its current location. The proposed project would provide for use of this existing route by providing a bus turnout on SR-74. The proposed project would construct roadway improvements on Central Avenue, Cambern Avenue, 3rd Street, Crane Street and Allan Street, which are necessary to provide adequate site access and on-site circulation. The project would improve Central Avenue from the centerline to the project area, as an Augmented Urban Arterial Highway (134-foot right-of-way), between the project's western boundary and Cambern Avenue.

SOURCE: Shade L. O'Quinn Architect

Lake Elsinore Walmart Supercenter Project EIR . 130767

Figure 3-6
Architectural Perspectives



SOURCE: GreenbergFarrow

Lake Elsinore Walmart Supercenter Project EIR . 130767

Figure 3-7
Alternative Drainage Plan

The proposed project would construct roadway improvements on Cambern Avenue, from the centerline to the project area, as a Secondary Highway (90-foot right-of-way) from Central Avenue to 3rd Street. The proposed project would construct roadway improvements on 3rd Street, from the centerline to the project area, as a Collector (68-foot right-of-way) between the project's western boundary and Cambern Avenue. Surrounding roadway improvements are shown in Figures 3-5a and 3-5b.

The proposed project would include parking that either meets or exceeds the parking requirements contained within the Lake Elsinore Municipal Code, including parking for clean air vehicles and bicycles. Parking and loading areas would have typical night lighting that would operate during the nighttime hours.

Landscaping. The project site is proposed to be landscaped in compliance with City of Lake Elsinore requirements and the conceptual landscape plan. Landscape materials are proposed to be drought tolerant.

Storm Drainage. The proposed project is located within an area designated as Flood Zone X. The City is in the process of preparing an area hydrology plan (Area Hydrology Plan) for the 3rd Street area in consultation with the Riverside County Flood Control and Water Conservation District (RCFCWCD) and Caltrans. The City has identified a preferred storm drain alignment for the Area Hydrology Plan (Figure 4.7.4). Under this plan, stormwater would be conveyed from the existing earthen channel located at Cambern Avenue and directed into a series of storm drains south on Cambern Avenue, and then west on 3rd Street, under Interstate 15 (I-15), and into an earthen/rip-rap channel, which would connect to the existing 3rd Street channel and discharge into Temescal Wash. The proposed Area Hydrology Plan would include installation of a permanent drainage system (including an inlet structure, storm drains, curbs and gutters, catch basins, and an open channel) to capture and direct run-off from the project area. Storm drains composed of reinforced concrete pipe (RCP) would range in size from 84 inches in Cambern Avenue and 72 inches and 48 inches in 3rd Street. A steel-jacketed 36-inch RCP will be jack and bored under I-15 and connect the proposed 378-foot-long, 70-foot-wide earthen trapezoidal channel. The proposed regional drainage plan will also capture off-site drainage that currently flows onto the project site and convey it into the proposed area-wide drainage system. The environmental impacts associated with the City's Area Hydrology Plan will be evaluated in a separate CEQA document.

If the Area Hydrology Plan is not adopted and installed by the City prior to construction, , then the proposed project design would be implemented to accommodate flows on the southern boundary of the Walmart Supercenter site in accordance with Figure 3-7. The alternative storm drainage project design would include conveyance of stormwater flows from Cambern Avenue through a storm drain structure with varying widths into an on-site approximately 72 foot-wide stormwater detention basin/open channel, which would be located along the southern boundary of the project site adjacent to 3rd Street.

Utilities. Water and wastewater service would be provided by the Elsinore Valley Municipal Water District (EVMWD). Although some design details will not be finalized until the

construction utility development phase of the proposed project, it is expected that the existing water main on Cambern Avenue would be modified or relocated in the same general area in coordination with EVMWD in order to install the drainage improvements. An adequate number of fire hydrants are proposed to serve the proposed project and adequate fire flow and pressure is available to serve the proposed project. Existing overhead electric lines and poles along Cambern Avenue would be relocated underground through coordination with Southern California Edison. The proposed project would connect to existing gas mains in 3rd Street, the telephone utility in 3rd Street, and the sanitary sewer system in Crane Street and 3rd Street.

Project Sustainability Features

The proposed Walmart Supercenter store proposes to include various sustainability features, which are described in the following paragraphs.

Construction and Demolition Recycling. Walmart would develop and employ a Construction and Demolition (C&D) program to capture and recycle construction waste materials; including: metals, woods, tiles, concretes, asphalts, and other materials generated. Walmart would work with a waste management company to fully research all available C&D recycling facilities in the area, and its C&D program would seek to include the widest possible range of materials recovery options.

Grading and Construction. As described previously, the site is relatively flat and generally slopes from Cambern Avenue southerly at an approximate 2.0 percent gradient. The proposed project would be required to import approximately 35,000 cubic yards of material to create finished pads for building construction, on-site excavation of existing soils and over-excavation is also anticipated. Complete project construction is anticipated to take approximately 12 months including roadway improvements, with grading operations taking approximately 2 months. The timing of construction of outlot structures is dependent on market conditions. The design and construction of the proposed project has been developed to adhere to City Municipal Code.

Lighting. The entire Walmart Supercenter store would include occupancy sensors in most non-sales areas, including restrooms, break rooms and offices. The sensors automatically turn the lights off when the space is unoccupied. All lighting in the store would consist of T-8 fluorescent lamps and electronic ballasts and all exterior building signage and many refrigerated food cases would be illuminated with light-emitting diodes (LEDs).

The Walmart Supercenter store would include a daylight harvesting system, which provides electronic continuous dimming ballasts, skylights and computer controlled daylight sensors that monitor the amount of natural light available. During periods of higher natural daylight, the system dims or turns off the store lights if they are not needed, thereby reducing energy use. Dimming and turning off building lights also helps eliminate unnecessary heat in the building.

Given the project site's proximity to the Mount Palomar Observatory, site parking lot lighting would be low pressure sodium vapor lighting as encouraged by Section 17.112.040 of the Lake Elsinore Municipal Code.

Heating Ventilation and Air Conditioning (HVAC) Systems. The Walmart Supercenter store would employ an HVAC system that would exceed the industry baseline standards and California Title 24 requirements.

Dehumidifcation. The Walmart Supercenter store would include a dehumidifying system that allows the store to be operated at a higher temperature, use less energy, and allow the air conditioning and refrigeration systems to operate at maximum efficiency.

White Roof. The Walmart Supercenter store would utilize a white membrane roof instead of the typical darker-colored roof materials employed in commercial construction. The white membrane roof would reduce building energy consumption by reducing the heat island effect, as compared to buildings using darker roofing colors.

Refrigeration. The Walmart Supercenter store would use non-ozone-depleting refrigerants for the refrigerated cases. This limits the amount of copper refrigerant piping, insulation, potential for leaks, and refrigerant charge needed.

Heat Reclamation. The Walmart Supercenter store would reclaim waste heat from on-site refrigeration equipment to supply approximately 70 percent of the hot water needs for the store.

Central Energy Management System. Walmart employs a centralized energy management system (EMS) to monitor and control the heating, air conditioning, refrigeration and lighting systems for all stores from Walmart's corporate headquarters in Bentonville, Arkansas. The EMS enables Walmart to constantly monitor and control the store's energy use, analyze refrigeration temperatures, observe HVAC and lighting performance, and adjust system levels from a central location 24 hours per day, 7 days per week. Energy use for the entire store would be monitored and controlled in this manner.

Water Conservation. The Walmart Supercenter store would install high-efficiency urinals that use only one-eighth (1/8) gallon of water per flush. This fixture reduces water use by 87 percent compared to the conventional one gallon per flush urinal. The 1/8 gallon urinal also requires less maintenance than waterless urinals. All restroom sinks would use sensor-activated one-half (1/2) gallon per minute high-efficiency faucets. During use, water flows through turbines built into the faucets to generate the electricity needed to operate the motion sensors. Water efficient restroom toilets would be employed in the Walmart Supercenter restrooms. The fixture uses 20 percent less water compared to mandated U.S. Environmental Protection Agency (EPA) Standards of 1.6 gallon per flush fixtures. The toilets use built-in water turbines to generate the power required to activate the flush mechanism, which is energy efficient because it saves energy and material by eliminating electrical conduits required to power automatic flush valve sensors. Additionally, the proposed project would incorporate BMPs that would be designed in accordance with LID procedures for minimizing effects on stormwater and stormwater quality.

Material and Finishes. The Walmart Supercenter store would be built using cement mixes that include 15–20 percent fly ash, a waste product of coal-fired electrical generation, or 25–30 percent slag, a by-product of the steel manufacturing process. By incorporating these waste product materials into its cement mixes, Walmart offsets the greenhouse gases emitted in the cement manufacturing process.

The Walmart Supercenter store would use Non-Reinforced Thermoplastic Panel (NRP) in lieu of Fiber Reinforced Plastic (FRP) sheets on the walls in areas where plastic sheeting is appropriate, including food preparation areas, utility and janitorial areas, and employee break rooms. NRP can be recycled, has better impact resistance, and, like FRP, is easy to keep clean.

The Walmart Supercenter store's exterior and interior field paint coatings would be low volatile organic compound (VOC) paint that would be provided in 55 gallon drums and 275 gallon totes that are returned to the paint supplier for cleaning and reuse. The store would have exposed concrete floors that would not need chemical cleaners, wax strippers or propane-powered buffing.

Recycled Building Materials. Construction of the Walmart Supercenter store would use steel containing approximately 90-98 percent recycled structural steel, which utilizes less energy in the mining and manufacturing process than does new steel. All of the plastic baseboards and much of the plastic shelving included in the expansion area would be composed of recycled plastic.

Project Construction

Construction is expected to commence in Spring 2016 through Fall 2017. The project site preparation work and undergrounding of utilities (including implementation of the specific drainage solution) would take approximately two to three months. Store construction and development of the outlots, parking lot, landscaping, lighting, off-site improvements would take approximately nine months.

3.6 Project Approvals and Intended Uses of the EIR

The proposed project would require approval of the following discretionary and other implementing approvals:

- Environmental Impact Report (EIR) certification
- Site Plan Approval through Commercial Design Review of the Walmart Supercenter
- Conditional Use Permits
- Lot Merger

Other permits and approvals that may be required include the following:

- Permitting may be required by/through the South Coast Air Quality Management District (SCAQMD) for certain aspects of the Project operations and its associated equipment.
- Permitting may be required by/through the Santa Ana Regional Water Quality Control Board (RWQCB), subject to future agency jurisdictional review.
- Streambed Alteration Agreement may be required from the California Department of Fish and Wildlife (CDFW), subject to future agency jurisdictional review.
- Encroachment permits would be required from the California Department of Transportation (Caltrans) and from the City of Lake Elsinore for roadway improvements.
- EVMWD coordination for will serve letter and water line relocation.
- Southern California Edison underground utilities lines along Cambern Avenue.
- Permitting (i.e., utility connection permits) may be required from utility providers.
- Other ministerial permits necessary to realize all on- and off-site improvements related to the development of the site.

3.7 Cumulative Projects

Cumulative impacts refer to the combined effect of Project impacts with the impacts of other past, present, and reasonably foreseeable probable future projects. Both CEQA and the State CEQA Guidelines require that cumulative impacts be analyzed in an EIR. As set forth in the State CEQA Guidelines Section 15130(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 for the effects attributable to the project alone*."

According to Section 15355 of the State CEQA Guidelines:

> "Cumulative impacts" refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.
>
> a) The individual effects may be changes resulting from a single project or a number of separate projects.
>
> b) The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time.

Therefore, the cumulative discussion in this EIR focuses on whether the impacts of the proposed Project are cumulatively considerable within the context of impacts caused by other past, present, and reasonably foreseeable future projects.

State CEQA Guidelines Section 15130(b)(1) states that the information utilized in an analysis of cumulative impacts should come from one of the following:

- A list of past, present, and probable future projects producing related or cumulative impacts, including those projects outside the control of the lead agency.
- A summary of projections contained in an adopted local, regional or statewide plan or related planning document that describes or evaluates conditions contributing to the cumulative effect.

Cumulative impact discussions for each issue area are provided in the technical analysis contained within Chapter 4 and use the methods described above. **Table 3-3** provides a list of the projects that are considered in this cumulative environmental analysis, and **Figure 3-8** provides the location of these projects.

TABLE 3-3
CUMULATIVE PROJECT LIST

Map No.	Project Name	Location	Land Use	Quantity	
1	Greenwald		Shopping Center	104.450	TSF
2	Ramsgate	Lake Elsinore	Single Family Residential	1,012	DU
			Condo/Townhomes	120	DU
3	Trieste Residential (Tract 36624)	Lake Elsinore	Single Family Residential	75	DU
4	Lennar (Tract 31792)	County of Riverside	Single Family Residential	191	DU
5	1400 Minthorn Street	Lake Elsinore	Single Family Residential	84	DU
6	Spyglass Ranch	Lake Elsinore	Single Family Residential	523	DU
			Condo/Townhomes	171	DU
			Shopping Center	145.000	TSF
7	South Shore I (Tract 31593)	Lake Elsinore	Single Family Residential	521	DU
	South Shore II (Tract 32013)		Single Family Residential	400	DU
8	La Strada (Tract 32077)	Lake Elsinore	Single Family Residential	134	DU
9	Tuscany West (Tract 25473)	Lake Elsinore	Single Family Residential	164	DU
10	Marina Village Condos (Tract 33820)	Lake Elsinore	Condo/Townhomes	94	DU
11	Watersedge	Lake Elsinore	Single Family Residential	170	DU
			Condo/Townhomes	250	DU
			Apartments	110	DU
			Office	54.600	TSF
			Hotel	150	RM
			Boat/Watercraft Dealers & Service	50.000	TSF
			Mini-Warehouse (Boat & Watercraft Storage)	76.000	TSF
			Shopping Center	86.600	TSF
	Cottages by the Lake		Condo/Townhomes	169	DU
12	Tessera	Lake Elsinore	Single Family Residential	90	DU
13	TAG Property	Lake Elsinore	New Car Sales	50.000	TSF
14	City Center Condos	Lake Elsinore	Condo/Townhomes	144	DU
15	Lake View Villas	Lake Elsinore	Condo/Townhomes	155	DU

TSF = Thousand Square Feet; DU = DU, AC = Acres, STU = Students; VFP = Vehicle Fueling Positions

TABLE 3-3
CUMULATIVE PROJECT LIST

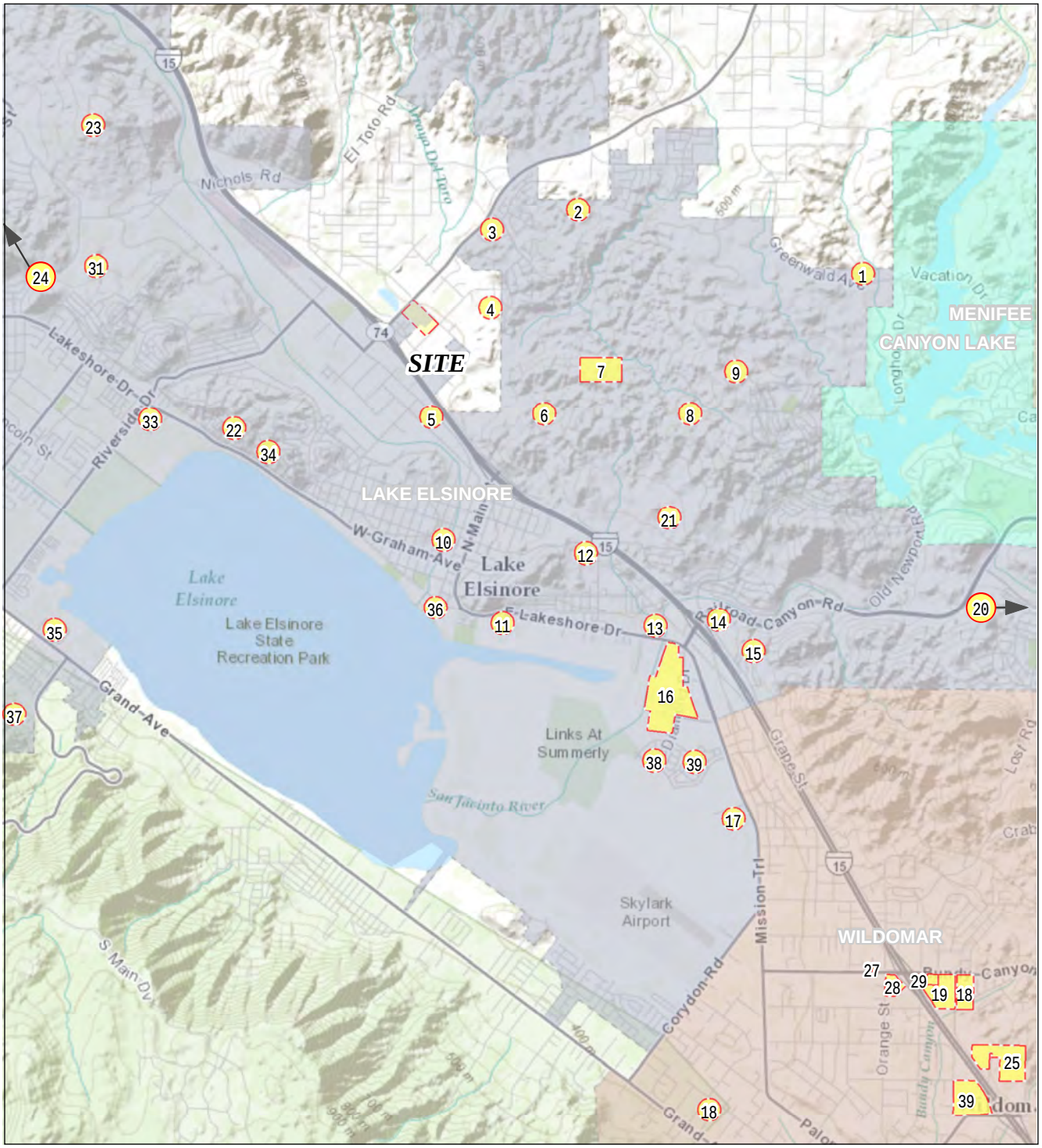
Map No.	Project Name	Location	Land Use	Quantity	
16	Diamond Specific Plan	Lake Elsinore	Condo/Townhomes	600	DU
			Hotel	150	RM
			General Office	425.000	TSF
			Shopping Center	472.000	TSF
17	The Colony	Lake Elsinore	Apartments	211	DU
	Back Basin Specific Plan & East Lake Specific Plan	Lake Elsinore	Single Family Residential	2,407	DU
			Condo/Townhomes	324	DU
	John Laing Homes (Phase 2)	Lake Elsinore	Single Family Residential	506	DU
			Condo/Townhomes	1,141	DU
			Apartments	308	DU
			Shopping Center	117.000	TSF
18	Rancon Monte Vista Residential (TTM No. 31409, APN: 367-110-007, 367-110-008)	Wildomar	SFDR	126	DU
19	Wildomar Walmart	Wildomar	Free-Standing Discount Superstore	200.000	TSF
			Specialty Retail	3.900	TSF
			Fast-Food with Drive-Thru	126.000	TSF
20	Canyon Hills Estates (Tract 34249)	Lake Elsinore	Single-Family Residential	302	DU
	Canyon Hills (Multiple Tracts)		Single-Family Residential	2,700	DU
			Apartments	1,575	DU
	Audie Murphy (Tract 36484)		Single-Family Residential	109	DU
	Audie Murphy (Tract 36485)		Single-Family Residential	1,003	DU
21	Gruneto Hills	Lake Elsinore	Single-Family Residential	191	DU
22	Hotel at 17584 Lawrence Way	Lake Elsinore	Hotel	57	RM
23	Alberhill Ridge (Tract 35001)	Lake Elsinore	Single-Family Residential	1,056	DU
			Apartments	345	DU
			Shopping Center	679,000	TSF
			General Office	679,000	TSF

TSF = Thousand Square Feet; DU = DU, AC = Acres, STU = Students; VFP = Vehicle Fueling Positions

TABLE 3-3
CUMULATIVE PROJECT LIST

Map No.	Project Name	Location	Land Use	Quantity	
24	Aberhill Ranch	Lake Elsinore	Single-Family Residential	1,986	DU
25	Cornerstone Church Pre-School Expansion	Wildomar	Pre-School/Day Care	180	STU
26	Sehremelis PAR	Lake Elsinore	Single-Family Residential	80	DU
27	Subway	Wildomar	Specialty Retail	10,500	TSF
28	Orange Bundy	Wildomar	Retail	79.	TSF
			Fast-Food w/Drive-Thru	1,500	TSF
			Gas Station w/ Market	6	VFP
29	Bundy Canyon Plaza	Wildomar	Retail	33,800	TSF
			Fast-Food w/Drive-Thru	6,200	TSF
			Gas Station w/Market	12	VFP
30	Alberhilll Villages		Single-Family Residential	9,536	DU
31	Terracina	Lake Elsinore	Single-Family Residential	365	DU
32	Encore at Cambria Hills	Lake Elsinore	Single-Family Residential	214	DU
33	Family Dollar Store	Lake Elsinore	Single-Family Residential	8,320	TSF
34	Fisherman's Warf	Lake Elsinore	Fisherman's Warf	12,748	TSF
35	Wake Rider Beach Resort	Lake Elsinore	Beach Resort	11,350	TSF
36	Lakeshore Town Center	Lake Elsinore	Town Center	237,400	TSF
37	Ortega	Lake Elsinore	Single-Family Residential	105	DU
38	Summerly	Lake Elsinore	Single-Family Residential	142	DU
39	Beazer, KB Homes, McMillan Homes, Richmond American	Lake Elsinore	Single-Family Residential	395	DU
40	Village at Lake Elsinore Specific Plan Amendment #1	Lake Elsinore	Single-Family Residential	163	DU
41	Lake Shore Pointe Phase I	Lake Elsinore	Single-Family Residential	43	DU
			Apartments	161	DU
42	Golden Corral Restaurant	Lake Elsinore	Restaurant	7,798	TSF
43	Circle K	Lake Elsinore	Gas Station	4,500	TSF

TSF = Thousand Square Feet; DU = DU, AC = Acres, STU = Students; VFP = Vehicle Fueling Positions



Cumulative Development

N

SOURCE: Urban Crossroads; City of Lake Elsinore

Lake Elsinore Walmart Supercenter Project EIR . 130767

Figure 3-8
Cumulative Development Projects
Location Map

CHAPTER 4
Environmental Setting, Impacts, and Mitigation Measures

4.1 Aesthetics

This section of the Draft Environmental Impact Report (EIR) analyzes the aesthetics impacts that could occur with implementation of the proposed project. This analysis identifies the existing visual character of the project vicinity and determines the degree of visual impacts that could occur from the proposed project implementation using site photographs, and various illustrations of the proposed project provided by the applicant, including the project site plan (Figures 3-5a and 3-5b), and proposed building elevations.

4.1.1 Environmental Setting

Surrounding Area

The project site is located in the central portion of the City of Lake Elsinore in Western Riverside County. The City is located in a valley with panoramic views of the Santa Ana Mountains that extend from the southwestern edge of the lake and rolling hills along the northeastern borders of the City. The project site is located approximately 1.5 miles north of Lake Elsinore with no views of the Lake. The area surrounding the project site is mostly developed or vacant and has an urban character with a mixture of undeveloped land, office, commercial and residential uses. The mixed development results in a varied visual environment surrounding the project site.

There are several major roadways in the project vicinity, including Interstate 15 (I-15) and State Route 74 (Central Avenue). The intersection of Central Avenue (or State Route 74 [SR-74]) and Cambern Avenue is located to the north of the project site. The properties north and east of the intersection are currently undeveloped. Cambern Avenue runs along the northeastern boundary of the project site. Single-family residences are scattered along Cambern Avenue. The properties north and east of the intersection are currently undeveloped. The area south of the intersection of Central Avenue/SR-74 and Cambern Avenue is developed with office and commercial buildings within a shopping center including big box retail stores, restaurants, and gas stations. The structures vary in shape, but are modern, box-shaped buildings. There is minor ornamental landscaping within the shopping centers. Third Street runs along the northern boundary of the project site and is characterized by scattered single-family residences, undeveloped plowed land, and rolling hills.

Project Site

The project site is comprised of vacant undeveloped land that contains non-native grasses, brush, and gravel. On the southern portion of the site is a grove of eucalyptus trees with heights estimated to be 100 feet. The grove bisects the southeastern one-third of the project site. **Figures 4.1-1a** through **4.1-1c** contain photos depicting the project site. **Figure 4.1-1,** *Photo Map*, illustrates the locations from which each photograph was taken.

Views

Viewshed

A viewshed is an area composed of land, water, and cultural elements that may be wholly viewed and mapped from one or more viewpoints and has inherent scenic qualities and/or aesthetic values as determined by those who view it. The City's General Plan identifies viewsheds or landscaped viewshed units of scenic vistas, which include the lake, urban areas around the lake, and the rugged vacant hills in the northern and eastern portion of the City. There are fifteen landscape viewshed units in the Lake Elsinore area; the project site is located in Viewshed 11 which consists mainly of residential and commercial land uses (City of Lake Elsinore, 2011). The General Plan identifies vantage points, generally around the lake. Because of the distance of the lake from the site, is not visible from the project site or surrounding roadways. The Santa Ana Mountains and Cleveland National Forest are located approximately four miles northwest, west, and southwest of the project site and are visible from the project site and surrounding areas.

North

The northern portion of the project site is adjacent to Cambern Avenue and a dirt road, and the same grade as the project site. Views of the site at Cambern Avenue are unobstructed. Views toward the site include the site, commercial buildings to the southwest. The Santa Ana Mountains are visible from Cambern Avenue.

East

The eastern portion of the project site is adjacent to 3rd Street. Scattered single-family residences are located east of 3rd Street. The row of eucalyptus trees in the project site is visible to residences, beyond which the area is characterized by rolling hills and undeveloped land.

South and West

Commercial/retail uses are located southwest of the project site. The project site is visible from the commercial uses. Residential uses are located to the south of the project site. Currently, the view of the entire project site is partially obstructed by existing trees.

SOURCE: ESRI

Lake Elsinore Walmart Supercenter Project EIR . 130767

Figure 4.1-1
Photo Location Map

Photo 1 - View of project site from retail center to the east

Photo 2 - Southwest view of project site from Cambern Avenue

SOURCE: ESA

Lake Elsinore Walmart Supercenter Project EIR . 130767

Figure 4.1-1a
Site Photographs

Photo 3 - West view of the project site from Cambern Avenue

Photo 4 - Northwest view of project site from 3rd St

SOURCE: ESA

Lake Elsinore Walmart Supercenter Project EIR . 130767

Figure 4.1-1b
Site Photographs

Photo 5 - Northeast view of the project site from Crane St

Photo 6 - North view of the project site from Crane St

SOURCE: ESA

Lake Elsinore Walmart Supercenter Project EIR . 130767

Figure 4.1-1c
Site Photographs

Scenic Highways

There are no officially designated scenic highways in the vicinity of the project site (Caltrans, 2015). However, SR 74 (Central Avenue), directly adjacent to the project site, is eligible for designation as a State Scenic Highway but is not officially designated. Additionally, the project site does not include any General Plan identified scenic resources such as Lake Elsinore, the Santa Ana Mountains, or the Cleveland National Forest.

Light and Glare

The project site is located in an urban setting, however, the project site itself is currently undeveloped and does not contain light sources. Lighting is currently emitted in the surrounding area, including Cambern Avenue and Central Avenue. Additional nighttime lighting includes vehicle headlights, street lighting at intersections and along the streets, parking lot lighting, and building lighting as well as other sources of light from surrounding residential uses. Sources of glare in the project area result from reflections from vehicles and from windows or reflective building materials.

4.1.2 Regulatory Setting

State

California Scenic Highway Program

The California Department of Transportation (Caltrans) manages the State Scenic Highway Program, provides guidance, and assists local government agencies, community organizations, and citizens with the process to officially designate scenic highways. The Scenic Highway Program was created by the legislature in 1963 to protect and enhance the natural scenic beauty of California highways and adjacent corridors. The State Scenic Highway System includes a list of highways that are either eligible for designation as scenic highways or are currently designated. Caltrans evaluates the merits of a nominated highway on how much of the natural landscape a traveler sees and the extent to which visual intrusions impact the “scenic corridor.” Visual intrusions may be natural or constructed elements, viewed from the highway, that adversely affect the scenic quality of a corridor.

The California State Scenic Highway Program identifies SR-74 as eligible for listing as a state scenic highway, but it is not officially designated. The status of a state scenic highway changes from “eligible” to “officially designated” when the local jurisdiction adopts a scenic corridor protection program, applies to Caltrans for scenic highway approval, and receives notification from Caltrans that the highway has been designated as a scenic highway.

Local

City of Lake Elsinore General Plan

Aesthetics Element

The City of Lake Elsinore General Plan addresses aesthetics and scenic resources in Chapter 4.0 (*Resource Protection and Preservation*, Section 4.7 *Aesthetics*). The goals, policies and implementation programs listed below apply to the proposed project.

Goal 11: Provide and maintain a natural and built environment that is visually pleasing to City residents and visitors.

Policy 11.1: For new developments and redevelopment, encourage the maintenance and incorporation of existing mature trees and other substantial vegetation on the site, whether natural-occurring, or planted, into the landscape design.

Policy 11.3: Where appropriate, encourage new planting of native and/or non-invasive ornamental plants to enhance the scenic setting of public and private lands.

Implementation Program: The City shall consider the preparation and adoption of a City-Wide Design Guideline for architecture and landscape design, appropriate themes and design features, signage, outdoor furniture, bus shelters, gateway enhancements, and other distinctive improvements.

City of Lake Elsinore Municipal Code – Title 17 (Zoning Code)

The City of Lake Elsinore's Zoning Code (Title 17) regulates the character and use of property throughout the City.

Section 17.112.040 of the City's Zoning Code states that "[a]ll outdoor lighting fixtures in excess of 60 watts shall be oriented and shielded to prevent direct illumination above the horizontal plane passing through the luminaire and prevent any glare or direct illumination on adjacent properties or streets. Due to the City's proximity to the Mount Palomar Observatory, the use of low pressure sodium vapor lighting shall be encouraged."

Section 17.134.080 of the City's Zoning Code states that within commercial mixed-use district "[a]dequate internal and external lighting shall be provided for security purposes. Lighting shall be energy efficient, stationary, downcast, and deflected away from residential units, adjacent properties and public right-of-way. A lighting plan shall accompany the design review or conditional use permit application to ensure that no light conflicts with adjacent residential uses, and that safety is addressed in all areas of the project."

17.124.070 Building Height

Pursuant to the Lake Elsinore Municipal Code, the maximum building height shall be 45 feet, except as otherwise provided by Lake Elsinore Municipal Code 17.124.130, which allows a taller structure with approval of a Conditional Use Permit.

4.1.3 Thresholds of Significance

According to Appendix G of the State CEQA Guidelines, the proposed project could have a potentially significant impact with respect to aesthetics if it would:

- Have a substantial adverse effect on a scenic vista.
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway.
- Substantially degrade the existing visual character or quality of the site and its surroundings because of height, bulk, pattern, scale, character or other features.
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

The Initial Study for the proposed project (Appendix A) determined the project area is located in Viewshed 11 described in the General Plan as consisting mainly of residential and commercial land uses, in which the proposed project would be consistent. The General Plan identifies vantage points, generally around Lake Elsinore. Lake Elsinore is located 1.5 miles southwest of the project site and therefore, is not visible from the project site or roadways; thus, the project would not alter existing views of the Lake Elsinore. The Santa Ana Mountains and Cleveland National Forest are located roughly 4 miles northwest, west, and southwest of the project site; as a result, the proposed project would not affect off-site views of these areas. Therefore, implementation of the proposed project is not anticipated to result in a substantial adverse effect to viewsheds or landscaped viewshed units of scenic vistas, and this topic will not be further analyzed in the EIR.

4.1.4 Methodology

The assessment of aesthetic impacts is subjective by nature. Aesthetics generally refer to the identification of visual resources and the quality of what can be seen, as well as an overall visual perception of the environment. The significance determination for the aesthetics analysis is based on consideration of the following: (1) the extent of change related to project visibility from key public vantage points; (2) the degree of visual contrast and compatibility in scale and character between project elements and the existing surroundings; and (3) project conformance with public policies regarding visual and urban design quality.

4.1.5 Impact Analysis

Impact 4.1-1: Would the project damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

There are no officially designated state scenic highways in the vicinity of the project site (Caltrans, 2012). However, SR-74 (Central Avenue), directly adjacent to the project site, is

eligible for designation as a state scenic highway, but is not officially designated. The project site is not is not located within a scenic overlay district and the project site does not include the General Plan identified scenic resources such as the lake, the Cleveland National Forest, other natural landscapes and buildings of historical/cultural significance. In addition, the project site is not located on a segment on SR-74 considered a vantage point by the City of Lake Elsinore (City of Lake Elsinore, 2011).

Development of the proposed project would remove an existing eucalyptus grove within the view of SR-74. However, the eucalyptus grove is not considered sensitive or designated for protection under federal, state, local or regional plans. Moreover, under the General Plan and zoning ordinance, the site is designated for commercial uses, and consistent with the land use designation, the proposed project would include buildings, site screening and ornamental landscaping consistent with the design criteria. Based on the discussion above, the project's compliance with the existing City land use and zoning regulations would ensure on-site development would not impact nearby views of scenic resources or vistas. Therefore, the project's potential to result in impacts on scenic resources, including trees, is considered less-than-significant.

Mitigation Measures: None required.

Significance after Mitigation: Less-than-significant.

Impact 4.1-2: Would the project substantially degrade the existing visual character or quality of the site.

As described in Section 3.0, *Project Description*, construction of the proposed project is anticipated to last approximately one year. Construction–related activities include the following: site preparation, grading, paving, construction of structures and infrastructure, and architectural coating. Motorists traveling along Central Avenue/SR-74 and residents along Cambern Avenue and 3rd Street would have views of construction activities. During project construction, the construction activities would alter the character of the project site and its surroundings. Graded surfaces, construction materials, construction equipment and truck traffic would be visible. Soil would be stockpiled and equipment for grading activities would be staged on the project site. Construction-related visual impacts would not be constant over the 12-month construction period because construction phases would not occur at the same time. Short-term visual impacts would cease once construction is complete. Therefore, because of the temporary nature of construction-related activities, potential impacts to visual character would be less-than-significant.

Additionally, project implementation would convert undeveloped land to commercial/retail restaurant and possibly gas station uses, altering the aesthetic nature of the project site. The proposed project would result in a visual change from undeveloped land to a higher intensity development consisting of a Walmart Supercenter, outlot buildings, parking lots, and landscaping. Transition of the site from undeveloped to commercial/retail uses proposed under the project would change the visual character and quality of the site to be consistent with the nearby commercial/retail development as shown in Figures 4.1-1a through 4.1-2. Building design

and landscaping would be incorporated into the overall project design that would conform to the City's zoning and design standards, and are subject to City review and approval. The architectural features and landscaping design are intended to provide a visually appealing commercial retail development.

As described above, the development of the proposed project would be of similar land uses, height and scale as the local commercial retail centers located along Central Avenue/SR-74 to the west and commercial uses to the south (i.e. Lowes, Bed Bath and Beyond, Costco, and LA Fitness). The proposed project would be consistent with the existing General Plan land use and zoning designations for the project site. Given the existing nearby commercial and retail centers and buildings, and the project's consistency with General Plan and zoning design standards, the potential for the proposed project to substantially degrade the existing visual character and quality of the site and its surroundings is considered less-than-significant.

As discussed above, the surrounding land uses in the project vicinity that would have the greatest potential for impacts are the residential uses to the east and southeast.

The existing single-family residential uses are located directly east and southeast of the project site along Cambern Avenue and 3rd Street. A wind row of eucalyptus trees on the project site and other scattered trees partially block views of the project site from the residences located east of 3rd Street, as shown in Figure 4.1-1b, Photo 4. The residences to the north currently have an unobstructed view of the project site, as shown in Figure 4.1-1a, Photo 2, and Figure 4.1-1b, Photo 3.

The segment of the Interstate 15 (I-15) Freeway overlooking the project site is approximately 890 feet southwest of the project site. The I-15 freeway and off-ramp are located on a raised embankment. Views looking down on the project site are relatively unobstructed and consist of undeveloped land, commercial land uses and ornamental landscaping. Given the presence of the existing commercial and retail center, the proposed project would not be considered a substantial change in the visual character of the project area.

Overall, implementation of the proposed project would result in a visual contrast from existing conditions, but would not degrade the character or quality of the site, which is currently undeveloped and surrounded by a chain link fence. In addition, the proposed project would be visually compatible with the existing built environment to the south and west of the project site that includes various large commercial/retail buildings and ornamental landscaping.

Although implementation of the proposed project would alter the visual character of the site and surroundings, it is not anticipated that a substantial degradation of the visual character or quality would occur. The project would complement the existing character of the area by reinforcing the established urban, commercial/retail quality of Central Avenue (SR-74) corridor. As a result, the proposed project would not substantially degrade the existing visual character of the site or surrounding area, and impacts would be less-than-significant.

Mitigation Measures: None required.

Significance after Mitigation: Less-than-significant.

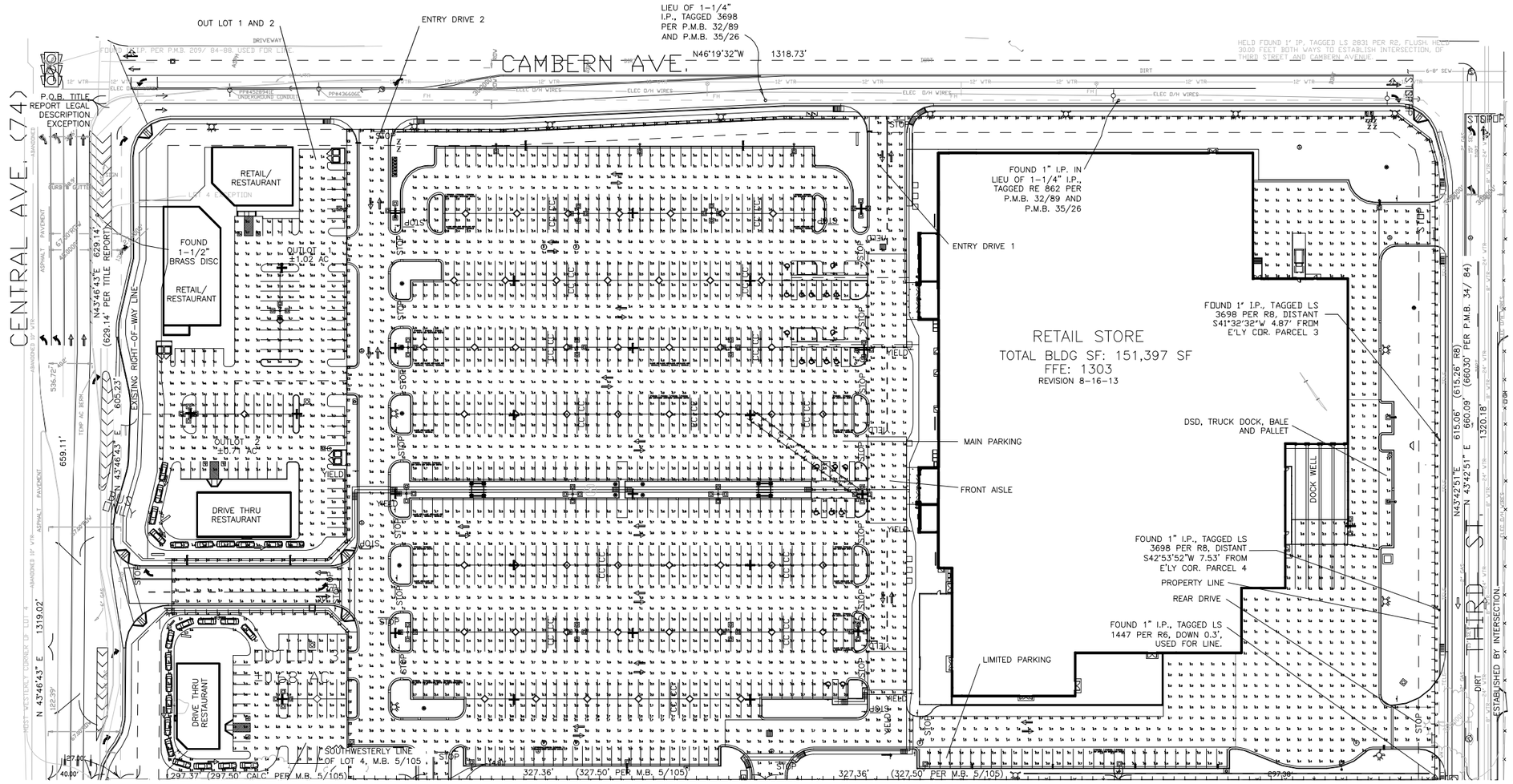
Impact 4.1-3: Would the proposed project create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

As described previously, the project site is currently undeveloped and does not contain lighting. However, the project is located within an urban area developed with commercial and residential uses.

Lighting effects are associated with the use of artificial light during the evening and nighttime hours. There are two primary sources of light: light emanating from building interiors passing through windows and light from exterior sources (i.e., street lighting, building illumination, security lighting, parking lot lighting, landscape lighting, and signage). Light introduction can be a nuisance to adjacent residential areas, diminish the view of the clear night sky, and if uncontrolled, can cause disturbances for motorists traveling in the area. Uses such as residences and hotels are considered light sensitive, since occupants have expectations of privacy during evening hours and may be subject to disturbance by bright light sources. Light spill is typically defined as the presence of unwanted light on properties adjacent to the property being illuminated.

Glare is caused by the reflection of sunlight or artificial light by highly polished surfaces such as window glass or reflective materials and, to a lesser degree, from broad expanses of light-colored surfaces or vehicle headlights. Perceived glare is the unwanted and potentially objectionable sensation as observed by a person as they look directly into the light source of a luminaire. Daytime glare generation in urban areas is typically associated with buildings with exterior facades largely or entirely comprised of highly reflective glass. Glare can also be produced during evening and nighttime hours by the reflection of artificial light sources, such as automobile headlights. Glare generation is typically related to either moving vehicles or sun angles, although glare resulting from reflected sunlight can occur regularly at certain times of the year. Glare-sensitive uses include residences, hotels, and transportation corridors.

Based on the Photometric Lighting Plan dated July 20, 2015, the proposed project would introduce new sources of lighting to the project area, which may include building-mounted, wall-mounted, and pole-mounted fixtures to illuminate entrances, walkways, loading docks and parking areas, please see **Figure 4.1-2** The proposed project would include entry and building sign illumination. Specifically, the proposed project would include eight 416-watt dual pole-mounted lights, 26 four-at-90 degrees 832-watt pole-mounted lights, and nine single 208-watt pole-mounted lights. All pole-mounted lights would be 27 feet above grade. The Walmart Supercenter and the outlots would be oriented toward Central Avenue; therefore, well-lit areas (parking lots, building entrances, etc.) and illuminated signs would face this roadway.



CALCULATION SUMMARY							
LABEL	CALC. TYPE	UNITS	AVG.	MAX	MIN	AVG/MIN	MAX/MIN
DSD, TRUCK DOCK, BALE AND PALLET	ILLUMINANCE	Fc	2.17	5.6	0.6	3.62	9.33
ENTRY DRIVE 1	ILLUMINANCE	Fc	4.18	9.3	1.4	2.99	6.64
ENTRY DRIVE 2	ILLUMINANCE	Fc	3.49	9.8	0.9	3.88	10.89
FRONT AISLE	ILLUMINANCE	Fc	3.73	11.2	1.4	2.66	8.00
LIMITED PARKING	ILLUMINANCE	Fc	2.43	3.6	1.6	1.52	2.25
MAIN PARKING	ILLUMINANCE	Fc	3.98	13.2	1.3	3.06	10.15
OUTLOT 1 AND 2	ILLUMINANCE	Fc	6.11	26.3	0.6	10.18	43.83
OUTLOT 3	ILLUMINANCE	Fc	3.14	11.2	0.0	N.A.	N.A.
PROPERTY LINE	ILLUMINANCE	Fc	1.41	4.9	0.0	N.A.	N.A.
REAR DRIVE	ILLUMINANCE	Fc	0.71	6.0	0.0	N.A.	N.A.
VERTICAL ILLUMINANCE IN	ILLUMINANCE	Fc	1.52	3.0	0.7	2.17	4.29
VERTICAL ILLUMINANCE OUT	ILLUMINANCE	Fc	1.40	3.4	0.7	2.00	4.86

LUMINAIRE SCHEDULE								
SYMBOL	QTY	LABEL	ARRANGEMENT	DESCRIPTION	LLF	LUMENS/ LAMP	ARR. LUM. LUMENS	ARR. WATTS
	8	D1-3-180-30	D180°	FIXTURE DISCONTINUED-CY2-3-180-LPS-FP 27' POLE 3' BASE	0.750	33000	38682	416
	26	Q-3-180-30	4 @ 90°	FIXTURE DISCONTINUED-CY2-3-180-LPS-FP 27' POLE 3' BASE	0.750	33000	77364	832
	9	S-3-180-30	SINGLE	FIXTURE DISCONTINUED-CY2-3-180-LPS-FP 27' POLE 3' BASE	0.750	33000	19341	208

BASED ON THE INFORMATION PROVIDED, ALL DIMENSIONS AND LUMINAIRE LOCATIONS SHOWN REPRESENT RECOMMENDED POSITIONS. THE ENGINEER AND/OR ARCHITECT MUST DETERMINE THE APPLICABILITY OF THE LAYOUT TO EXISTING OR FUTURE FIELD CONDITIONS.

THIS LIGHTING PLAN REPRESENTS ILLUMINATION LEVELS CALCULATED FROM LABORATORY DATA TAKEN UNDER CONTROLLED CONDITIONS IN ACCORDANCE WITH THE ILLUMINATING ENGINEERING SOCIETY (IES) APPROVED METHODS. ACTUAL PERFORMANCE IF ANY MANUFACTURER'S LUMINAIRES MAY VERY DUE TO CHANGES IN ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS/LED'S AND OTHER VARIABLE FIELD CONDITIONS. CALCULATIONS DO NOT INCLUDE OBSTRUCTIONS SUCH AS BUILDINGS, CURBS, LANDSCAPING, OR ANY OTHER ARCHITECTURAL ELEMENTS UNLESS NOTED.

Total Project Watts
Total Watts = 26832

0 100
Feet

SOURCE: LSI Industries

Figure 4.1-2
Photometric Plan

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Project architectural renderings for the Walmart Supercenter depict the proposed maximum building height of 28 feet. However, the Supercenter building elevations would vary up to 32 feet in height, and **t**he final building elevations would be subject to the approval of the City of Lake Elsinore as part of the entitlement process. The buildings located on the outlots would also be limited to approximately 32 feet in height. The buildings would largely screen the visibility of exterior lighting fixtures, illuminated signs, and vehicular lights from the residential uses north, east and south of the project site. Furthermore, lighting along the project property lines adjacent to the existing residences would not exceed one foot-candle.

New sources of lighting are of particular concern in southwestern Riverside County because of the proximity of the Mt. Palomar Observatory, located in northern San Diego County. Section 17.112.040 Lighting of the Lake Elsinore Municipal Code restricts the use of certain types of light fixtures which affect the night sky and may have a negative effect on astronomical observation and research.

The proposed project would include low pressure sodium vapor lighting as encouraged by Section 17.112.040 of the Lake Elsinore Municipal Code. In addition, the proposed project would not use highly reflective surfaces, and would not include large areas of glass on the buildings (**Figure 4.1-3)**. The proposed project will comply with the City requirements to illuminate the site without causing undue light or glare, compromising views, or affecting astronomical observation and research. Compliance with these standards would minimize any potential light and glare impacts from the project, and potential impacts would be less-than-significant.

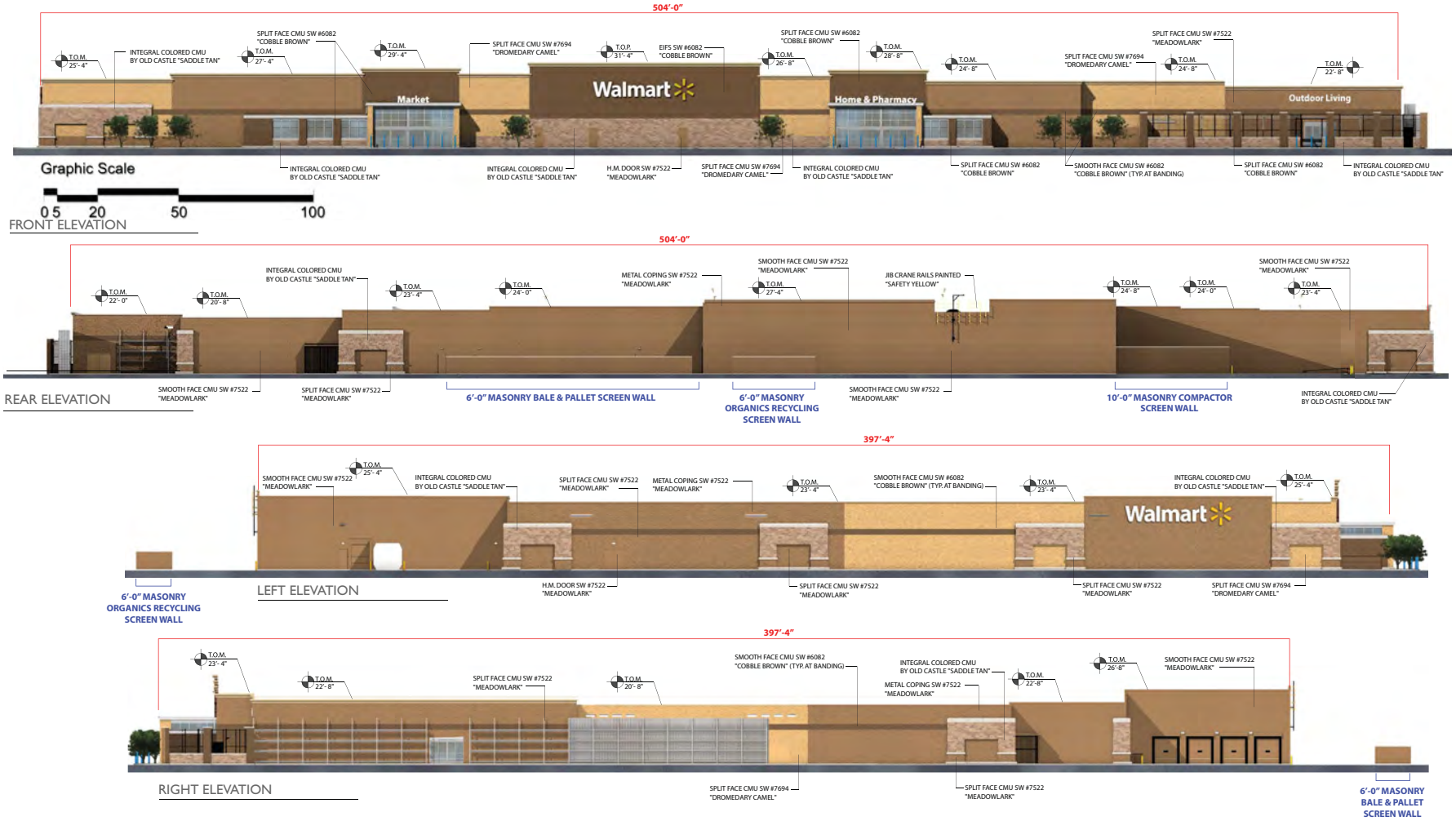
Mitigation Measures: None required.

Significance after Mitigation: Less–than-significant.

4.1.6 Cumulative Impacts

Scenic Resources

The project site is not located along a State Designated Scenic Highway or within a scenic overlay district in the City of Lake Elsinore. The proposed project site does not include any General Plan identified scenic resources such as Lake Elsinore, the Santa Ana Mountains, or Cleveland National Forest. Additionally, the project site is located within Viewshed 11, which consists mainly of residential and commercial land uses. Although implementation of the proposed project would remove a eucalyptus wind row, it is not considered sensitive or designated for protection under federal, state, local, or regional plans. Therefore, implementation of the proposed project, when combined with the past, present, and reasonably foreseeable cumulative projects, would not result in a cumulatively considerable impact to scenic resources.



SOURCE: Shade L. O'Quinn Architect

Lake Elsinore Walmart Supercenter Project EIR . 130767

Figure 4.1-3

Building Elevations

Visual Character and Site Quality

The cumulative aesthetics study area for the proposed project is the viewshed, which includes areas that can view the project site. Of the related projects provided in Table 3-3, *Cumulative Project List*, and shown in Figure 3-8, in Chapter 3, *Project Description*, one is within the viewshed of the project and involves a single-family residential development. The Lennar Project (Number 4) is located approximately one-third mile east of the project site and would develop 191 dwelling units. Additionally, the Ramsgate single-family and multi-family residential Project (Number 2) is located along SR-74, which is in the vicinity of the proposed project. There are a number of cumulative projects (as shown in Figure 3-8) within the vicinity of the proposed project of a similar nature (commercial retail centers) to the proposed project. Thus, cumulative projects are similar in character to the proposed project. These projects would be subject to design and landscaping requirements to ensure that they do not degrade visual character and that they comply with applicable General Plan and Zoning Ordinance regulations. Therefore, the governing land use regulations would ensure that the proposed project, combined with the past, present, and reasonably foreseeable cumulative projects, would not result in a cumulatively considerable degradation to the existing visual character or quality of the environment. As a result, cumulative impacts related to visual character and site quality would be less-than-significant.

Light and Glare

As described above, the proposed project has the potential to introduce new sources of light and glare to the project area; however, the City of Lake Elsinore Municipal Code Section 17.112.040 restricts the use of certain fixtures which affect the night sky and spillover onto adjacent residential properties. Similar to the proposed project, cumulative projects would be required to adhere to the Lake Elsinore Municipal Code that would mitigate excessive light skyward and within the vicinity. Because the proposed project would include low pressure sodium vapor lighting, would not use highly reflective surfaces, and would comply with the City requirements to illuminate the site without causing undue light or glare, the proposed project would limit its potential to introduce new sources of light to the cumulative project vicinity, and cumulative impacts from light and glare would be less-than-significant.

Mitigation Measures: None required.

Significance after Mitigation: Less-than-significant.

References

California Department of Transportation (Caltrans), California Scenic Highway Mapping System, www.dot.ca.gov/hq/LandArch/scenic_highways/index.htm, accessed April 18, 2015.

City of Lake Elsinore, City of Lake Elsinore Municipal Code, www.codepublishing.com/CA/lakeelsinore/, accessed April 19, 2015.

LSI Industries, Walmart Store #2077, Lake Elsinore, CA Photometric Lighting Plan, July 28, 2015.

4.2 Air Quality

This section of the Draft Environmental Impact Report (EIR) provides an overview of the existing air quality at the proposed project site and surrounding region, a summary of applicable air quality regulations, and analyses of potential short-term and long-term air quality impacts from implementation of the proposed project. Mitigation measures are recommended as necessary to reduce significant air quality impacts. The *Lake Elsinore Walmart Air Quality Impact Analysis City of Lake Elsinore* air Quality report was prepared by Urban Crossroads (Urban Crossroads, Inc., 2015a), and is included in Appendix B of this Draft EIR.

4.2.1 Environmental Setting

Climate and Meteorology

The project site is located in the City of Lake Elsinore in the portion of Riverside County that lies within the South Coast Air Basin (Basin). The project area is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The Basin is a 6,600-square-mile coastal plain bounded by the Pacific Ocean to the southwest and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The Basin includes the non-desert portions of Los Angeles, Riverside, and San Bernardino counties, and all of Orange County.

The ambient concentrations of air pollutants are determined by the amount of emissions released by sources and the atmosphere's ability to transport and dilute such emissions. Natural factors that affect transport and dilution include terrain, wind, atmospheric stability, and sunlight. Therefore, existing air quality conditions in the area are determined by such natural factors as topography, meteorology, and climate, in addition to the amount of emissions released by existing air pollutant sources.

Atmospheric conditions such as wind speed, wind direction, and air temperature gradients interact with the physical features of the landscape to determine the movement and dispersal of air pollutants. The topography and climate of southern California combine to make the Basin an area of high air pollution potential. The Basin is a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean to the west and high mountains around the rest of the perimeter. The general region lies in the semi-permanent high-pressure zone of the eastern Pacific, resulting in a mild climate tempered by cool sea breezes with light average wind speeds. The usually mild climatological pattern is disrupted occasionally by periods of extremely hot weather, winter storms, or Santa Ana winds. During the summer months, a warm air mass frequently descends over the cool, moist marine layer produced by the interaction between the ocean's surface and the lowest layer of the atmosphere. The warm upper layer forms a cap over the cool marine layer and inhibits the pollutants in the marine layer from dispersing upward. In addition, light winds during the summer further limit ventilation. Furthermore, sunlight triggers the photochemical reactions that produce ozone. The region experiences more days of sunlight than any other major urban area in the nation except Phoenix (SCAQMD, 2013a).

The Lake Elsinore area is an interior valley of the Basin. Clouds and fog that form along the coast infrequently extend as far inland as the Temecula Valley, and usually burn off quickly after sunrise. Precipitation is greatest during the winter season from December through February.

Criteria Air Pollutants

The California Air Resources Board (CARB) and the U.S. Environmental Protection Agency (EPA) currently focus on the following air pollutants as indicators of ambient air quality: ozone, carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), respirable particulate matter with an aerodynamic diameter of 10 micrometers or less (PM_{10}), fine particulate matter with an aerodynamic diameter of 2.5 micrometers or less ($PM_{2.5}$), and lead. The pollutants are referred to as "criteria air pollutants" since they are the most prevalent air pollutants known to be injurious to human health and extensive health-effects criteria documents are available about their effects on human health and welfare. A general description of these pollutants is provided below.

Federal standards have been established for each criteria pollutant to meet specific public health and welfare criteria set forth in the federal Clean Air Act (CAA). California has adopted more stringent ambient air quality standards for the criteria air pollutants (referred to as State Ambient Air Quality Standards, or state standards) and has adopted air quality standards for some pollutants for which there is no corresponding national standard. These standards are discussed in Section 3.2.2, *Regulatory Environment*.

Ozone

Ozone, the main component of photochemical smog, is primarily a summer and fall pollution problem. Ozone is not emitted directly into the air, but is formed through a complex series of chemical reactions involving other compounds that are directly emitted. These directly emitted pollutants (also known as ozone precursors) include reactive organic gases (ROGs) or volatile organic compounds (VOCs), and oxides of nitrogen (NO_X). While both ROGs and VOCs refer to compounds of carbon, ROG is a term used by CARB and is based on a list of exempted carbon compounds determined by CARB. VOC is a term used by the EPA and is based on EPA's own exempt list of pollutants. The time period required for ozone formation allows the reacting compounds to spread over a large area, producing regional pollution problems. Ozone concentrations are the cumulative result of regional development patterns rather than the result of a few significant emission sources.

Once ozone is formed, it remains in the atmosphere for one or two days. Ozone is then eliminated through reaction with chemicals on the leaves of plants, attachment to water droplets as they fall to earth ("rainout"), or absorption by water molecules in clouds that later fall to earth with rain ("washout").

Short-term exposure to ozone can irritate the eyes and cause constriction of the airways. In addition to causing shortness of breath, ozone can aggravate existing respiratory diseases such as asthma, bronchitis, and emphysema.

Carbon Monoxide

CO, a colorless and odorless gas, is a relatively non-reactive pollutant that is a product of incomplete combustion and is mostly associated with motor vehicles. When inhaled at high concentrations, CO combines with hemoglobin in the blood and reduces the oxygen-carrying capacity of the blood. This results in reduced oxygen reaching the brain, heart and other body tissues. This condition is especially critical for people with cardiovascular diseases, chronic lung disease, or anemia. CO measurements and modeling were important in the early 1980s when CO levels were regularly exceeded throughout California. In more recent years, CO measurements and modeling have not been a priority in most California air districts due to the retirement of older polluting vehicles, lower emissions from new vehicles, and improvements in fuels.

Nitrogen Dioxide

NO_2 is a reddish-brown gas that is a by-product of combustion processes. Automobiles and industrial operations are the main sources of NO_2. Combustion devices emit primarily nitric oxide (NO), which reacts through oxidation in the atmosphere to form NO_2. The combined emissions of NO and NO_2 are referred to as NOx, which are reported as equivalent NO_2. Aside from its contribution to ozone formation, NO_2 can increase the risk of acute and chronic respiratory disease and reduce visibility. NO_2 may be visible as a coloring component of a brown cloud on high pollution days, especially in conjunction with high ozone levels.

Sulfur Dioxide

SO_2 is a colorless, extremely irritating gas or liquid that 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 sulfur trioxide (SO_3). Collectively, these pollutants are referred to as sulfur oxides (SO_X).

Major sources of SO_2 include power plants, large industrial facilities, diesel vehicles, and oil-burning residential heaters. Emissions of SO_2 aggravate lung diseases, especially bronchitis. This compound also constricts the breathing passages, especially in people with asthma and people involved in moderate to heavy exercise. SO_2 potentially causes wheezing, shortness of breath, and coughing. Long-term SO_2 exposure has been associated with increased risk of mortality from respiratory or cardiovascular disease.

Particulate Matter

PM_{10} and $PM_{2.5}$ consist of particulate matter that is 10 microns or less in diameter and 2.5 microns or less in diameter, respectively (a micron is one-millionth of a meter). PM_{10} and $PM_{2.5}$ represent fractions of particulate matter that can be inhaled into the air passages and the lungs and can cause adverse health effects. Acute and chronic health effects associated with high particulate levels include the aggravation of chronic respiratory diseases, heart and lung disease, and coughing, bronchitis and respiratory illnesses in children. Recent mortality studies have shown an association between morbidity and mortality and daily concentrations of particulate matter in the air. CARB has estimated that achieving the ambient air quality standards for PM_{10} could reduce premature mortality rates by 6,500 cases per year (CARB, 2004a). Particulate matter

can also damage materials and reduce visibility. One common source of $PM_{2.5}$ is diesel exhaust emissions.

PM_{10} consists of particulate matter emitted directly into the air (e.g., fugitive dust, soot, and smoke from mobile and stationary sources, construction operations, fires, and natural windblown dust) and particulate matter formed in the atmosphere by condensation and/or transformation of SO_2 and ROG. Traffic generates particulate matter emissions through entrainment of dust and dirt particles that settle onto roadways and parking lots. PM_{10} and $PM_{2.5}$ are also emitted by burning wood in residential wood stoves and fireplaces and open agricultural burning. $PM_{2.5}$ can also be formed through secondary processes such as airborne reactions with certain pollutant precursors, including ROGs, ammonia (NH_3), NOx, and SOx.

Lead

Lead is a metal found naturally in the environment and present in some manufactured products. There are a variety of activities that can contribute to lead emissions, which are grouped into two general categories, stationary and mobile sources. On-road mobile sources include light-duty automobiles; light-, medium-, and heavy-duty trucks; and motorcycles.

Emissions of lead have dropped substantially over the past 40 years. The reduction before 1990 is largely due to the phase-out of lead as an anti-knock agent in gasoline for on-road automobiles. Substantial emission reductions have also been achieved due to enhanced controls in the metals processing industry. In the Basin, atmospheric lead is generated almost entirely by the combustion of leaded gasoline and contributes less than one percent of the material collected as total suspended particulates. As lead has been well below regulatory thresholds for decades and the proposed project is not a source of lead, lead is not included as part of this analysis.

Toxic Air Contaminants

Concentrations of toxic air contaminants (TACs), or in federal parlance, hazardous air pollutants (HAPs), are also used as indicators of ambient air quality conditions. A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or in serious illness, or that may pose a hazard to human health. TACs are usually present in minute quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations.

According to The California Almanac of Emissions and Air Quality (CARB, 2009), the majority of the estimated health risk from TACs can be attributed to relatively few compounds, the most important being particulate matter from diesel-fueled engines (diesel PM). Diesel PM differs from other TACs in that it is not a single substance, but rather a complex mixture of hundreds of substances. Although diesel PM is emitted by diesel-fueled internal combustion engines, the composition of the emissions varies depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emission control system is present.

Unlike the other TACs, no ambient monitoring data are available for diesel PM because no routine measurement method currently exists. However, CARB has made preliminary concentration estimates based on a particulate matter exposure method. This method uses the

CARB emissions inventory's PM_{10} database, ambient PM_{10} monitoring data, and the results from several studies to estimate concentrations of diesel PM. In addition to diesel PM, the TACs for which data are available that pose the greatest existing ambient risk in California are benzene, 1,3-butadiene, acetaldehyde, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, and perchloroethylene.

Odorous Emissions

Odors are generally regarded as an annoyance rather than a health hazard. However, manifestations of a person's reaction to foul odors can range from psychological (e.g., irritation, anger, or anxiety) to physiological (e.g., circulatory and respiratory effects, nausea, vomiting, and headache). Offensive odors are unpleasant and can lead to public distress generating citizen complaints to local governments. Although unpleasant, offensive odors rarely cause physical harm. The occurrence and severity of odor impacts depend on the nature, frequency, and intensity of the source, wind speed, direction, and the sensitivity of receptors.

Project Area Air Quality Setting

Existing Air Quality

SCAQMD maintains monitoring stations within district boundaries that monitor air quality and compliance with associated ambient standards. Currently, the nearest monitoring station to the project site is the Lake Elsinore monitoring Station (506 W. Flint St. Lake Elsinore), which is located approximately 2 miles south of the project site. This station monitors ambient concentrations of ozone, NO_2, and CO, but does not monitor PM_{10}, or $PM_{2.5}$. The nearest monitoring station that monitors ambient concentrations of PM_{10} is the Perris Station, located approximately 8.75 miles northeast of the project site. Data for $PM_{2.5}$ was obtained from the Metropolitan Riverside County 2 monitoring station, located approximately 17.75 miles north of the project site. The closest station that monitors SO_2 is the Metropolitan Riverside County 1 Station, located approximately 45 miles north of the project site. Concentrations from the monitoring stations for the three most recent three years for which data is available (2011 – 2013) are shown in **Table 4.2-1**.[1]

Both CARB and EPA use this type of monitoring data to designate areas according to their attainment status for criteria air pollutants. The purpose of these designations is to identify the areas with air quality problems and thereby initiate planning efforts for improvement. The three basic designation categories are nonattainment, attainment, and unclassified. Unclassified is used in an area that cannot be classified on the basis of available information as meeting or not meeting the standards. In addition, the California designations include a subcategory of nonattainment-transitional, which is given to nonattainment areas that are progressing and nearing attainment. The current attainment status for the Basin is provided in **Table 4.2-2.**

[1] As of the writing of this report, 2014 data has not been reviewed and finalized as of the date of this analysis.

TABLE 4.2-1
AIR QUALITY DATA SUMMARY (2011 – 2013)

		Monitoring Data by Year		
Pollutant	**Standard[a]**	**2011**	**2012**	**2013**
Ozone – Lake Elsinore Monitoring Station				
Highest 1 Hour Average (ppm)		0.133	0.111	0.102
Days over State Standard	0.09 ppm	19	10	6
Highest 8 Hour Average (ppm)		0.106	0.089	0.089
Days over National Standard	0.075 ppm	28	17	12
Days over State Standard	0.070 ppm	45	29	25
Carbon Monoxide – Lake Elsinore Monitoring Station				
Highest 8 Hour Average (ppm)		0.7	0.7	0.6
Days over National Standard	9 ppm	0	0	0
Days over State Standard	9.0 ppm	0	0	0
Nitrogen Dioxide – Lake Elsinore Monitoring Station				
Highest 1 Hour Average (ppm)		0.0503	0.0483	0.0466
Days over National Standard	0.100 ppm	0	0	0
Days over State Standard	0.18 ppm	0	0	0
Annual Average (ppm)		0.0096	0.0102	0.0084
Days over National Standard	0.053 ppm	0	0	0
Days over State Standard	0.030 ppm	0	0	0
Sulfur Dioxide – Metropolitan Riverside County 1 Monitoring Station				
Highest 1 Hour Average (ppm)		0.0513	0.0043	0.0081
Days over State Standard	0.25 ppm	0	0	0
Particulate Matter (PM_{10}) – Perris Monitoring Station				
Highest 24 Hour Average ($\mu g/m^3$)[b]		65	62	70
Days over National Standard (measured)[c]	150 $\mu g/m^3$	0	0	0
Days over State Standard (measured)[c]	50 $\mu g/m^3$	3	1	10
Annual Average ($\mu g/m^3$)[b]	20 $\mu g/m^3$	29.2	26.5	33.6
Particulate Matter ($PM_{2.5}$) – Metropolitan Riverside County 2 Station				
Highest 24 Hour Average ($\mu g/m^3$)[b]		51.6	30.2	53.7
Days over National Standard (measured)[c]	35 $\mu g/m^3$	2	0	1
Annual Average ($\mu g/m^3$)[b]	12 $\mu g/m^3$	11.8	11.4	11.28

NOTES:
ppm = parts per million; $\mu g/m^3$ = micrograms per cubic meter.
* = Insufficient data available to determine the value.
[a] Generally, state standards and national standards are not to be exceeded more than once per year.
[b] Concentrations and averages represent federal statistics. State and federal statistics may differ because of different sampling methods.
[c] Measurements are usually collected every six days. Days over the standard represent the measured number of days that the standard has been exceeded.

Urban Crossroads, 2015a, Appendix B1; SCAQMD, 2013b, 2012, 2011.

TABLE 4.2-2
SOUTH COAST AIR BASIN ATTAINMENT STATUS

	Attainment Status	
Pollutant	**California Standards**	**Federal Standards**
Ozone	Extreme Nonattainment	Severe Nonattainment
CO	Attainment	Unclassified/ Attainment
NO_2	Attainment	Unclassified/ Attainment
SO_2	Attainment	Attainment
PM_{10}	Nonattainment	Attainment
$PM_{2.5}$	Nonattainment	Nonattainment
Lead	Attainment	Nonattainment

SOURCE: Urban Crossroads, 2015a, Appendix B1

Sensitive Land Uses

Land uses such as schools, children's daycare centers, hospitals, and convalescent homes are considered to be more sensitive to poor air quality than the general public because the population groups associated with these uses have increased susceptibility to respiratory distress. In addition, residential uses are considered more sensitive to air quality conditions than commercial and industrial uses, because people generally spend longer periods of time at their residences, resulting in greater exposure to ambient air quality conditions. Recreational land uses are considered moderately sensitive to air pollution. Exercise places a high demand on respiratory functions, which can be impaired by air pollution, even though exposure periods during exercise are generally short. In addition, noticeable air pollution can detract from the enjoyment of recreation.

Sensitive land uses located in the vicinity of the project site include single-family residential uses. Specifically, the nearest residential development is located adjacent to the southwest border of the project site. Additional residential communities are located southwest and south of the project site across 3rd Street and to the northeast across Cambern Avenue. An LA Fitness is currently located adjacent to the project site to the southwest. The facility does not have outdoor activity areas. Additionally, because patrons of the facility would be there a minimum amount of time per day, the residential land uses would have a greater potential for impact from construction and operation of the proposed project. Therefore, discussion of sensitive receptors in this analysis focuses on the residential land uses.

4.2.2 Regulatory Setting

The project site is located in the western portion of Riverside County within the Basin. Air quality in the project area is regulated by EPA, CARB, and SCAQMD. The City of Lake Elsinore General Plan also establishes a policy foundation to implement local air quality related improvement measures and provides a framework for coordination of air quality planning efforts with surrounding jurisdictions.

Federal

United States Environmental Protection Agency

Criteria Air Pollutants

At the federal level, EPA has been charged with implementing national air quality programs. EPA's air quality mandates are drawn primarily from the federal Clean Air Act, which was enacted in 1970. The most recent major amendments to the CAA were made by Congress in 1990.

The CAA requires EPA to establish National Ambient Air Quality Standards (NAAQS). EPA has established primary and secondary NAAQS for the following "criteria air pollutants": ozone, CO, NO_2, SO_2, PM_{10}, $PM_{2.5}$, and lead. **Table 4.2-3** shows the NAAQS for these pollutants.

The CAA also requires each state to prepare an air quality control plan, referred to as a state implementation plan (SIP). The CAA Amendments of 1990 (CAAA) added requirements for states with nonattainment areas to revise their SIPs to incorporate additional control measures to reduce air pollution. The SIP is modified periodically to reflect the latest emissions inventories, planning documents, and rules and regulations of the air basins, as reported by their jurisdictional agencies. EPA is responsible for reviewing all SIPs to determine whether they conform to the mandates of the CAA and its amendments, and to determine whether implementing the SIPs will achieve air quality goals. If EPA determines a SIP to be inadequate, a federal implementation plan that imposes additional control measures may be prepared for the nonattainment area. If an approvable SIP is not submitted or implemented within the mandated time frame, sanctions may be applied to transportation funding and stationary sources of air pollution in the air basin.

EPA also has regulatory and enforcement jurisdiction over emission sources beyond state waters (outer continental shelf), and those that are under the exclusive authority of the federal government, such as aircraft, locomotives, and interstate trucking. EPA's primary role at the state level is to oversee state air quality programs. EPA sets federal vehicle and stationary source emissions standards and provides research and guidance in air pollution programs.

TABLE 4.2-3
AMBIENT AIR QUALITY STANDARDS FOR CRITERIA POLLUTANTS

Pollutant	Averaging Time	State Standard	National Standard	Pollutant Health and Atmospheric Effects	Major Pollutant Sources
Ozone	1 hour 8 hours	0.09 ppm 0.07 ppm	--- 0.075 ppm	High concentrations can directly affect lungs, causing irritation. Long-term exposure may cause damage to lung tissue.	Formed when ROG and NO_X react in the presence of sunlight. Major sources include on-road motor vehicles, solvent evaporation, and commercial/industrial mobile equipment.
Carbon Monoxide (CO)	1 hour 8 hours	20 ppm 9.0 ppm	35 ppm 9 ppm	Classified as a chemical asphyxiant, carbon monoxide interferes with the transfer of fresh oxygen to the blood and deprives sensitive tissues of oxygen.	Internal combustion engines, primarily gasoline-powered motor vehicles.
Nitrogen Dioxide (NO_2)	1 hour Annual Arithmetic Mean	0.18 ppm 0.030 ppm	0.100 ppm 0.053 ppm	Irritating to eyes and respiratory tract. Colors atmosphere reddish-brown.	Motor vehicles, petroleum refining operations, industrial sources, aircraft, ships, and railroads.
Sulfur Dioxide (SO_2)	1 hour 3 hours 24 hours Annual Arithmetic Mean	0.25 ppm --- 0.04 ppm ---	75 ppb 0.50 ppm 0.14 ppm 0.03 ppm	Irritates upper respiratory tract; injurious to lung tissue. Can yellow the leaves of plants, destructive to marble, iron, and steel. Limits visibility and reduces sunlight.	Fuel combustion, chemical plants, sulfur recovery plants, and metal processing.
Respirable Particulate Matter (PM_{10})	24 hours Annual Arithmetic Mean	50 µg/m^3 20 µg/m^3	150 µg/m^3 ---	May irritate eyes and respiratory tract, decreases in lung capacity, cancer and increased mortality. Produces haze and limits visibility.	Dust and fume-producing industrial and agricultural operations, combustion, atmospheric photochemical reactions, and natural activities (e.g., wind-raised dust and ocean sprays).
Fine Particulate Matter ($PM_{2.5}$)	24 hours Annual Arithmetic Mean	--- 12 µg/m^3	35 µg/m^3 15 µg/m^3	Increases respiratory disease, lung damage, cancer, and premature death. Reduces visibility and results in surface soiling.	Fuel combustion in motor vehicles, equipment, and industrial sources; residential and agricultural burning; Also, formed from photochemical reactions of other pollutants, including NO_X, sulfur oxides, and organics.
Lead (Pb)	30 Day Average Calendar Quarter Rolling 3-Month Average	1.5 µg/m^3 --- ---	--- 1.5 µg/m^3 0.15 µg/m^3	Disturbs gastrointestinal system, and causes anemia, kidney disease, and neuromuscular and neurological dysfunction (in severe cases).	*Present source:* lead smelters, battery manufacturing and recycling facilities. Past source: combustion of leaded gasoline.
Hydrogen Sulfide	1 hour	0.03 ppm	No National Standard	Nuisance odor (rotten egg smell), headache and breathing difficulties (higher concentrations)	Geothermal power plants, petroleum production and refining.
Sulfates (SO_4)	24 hour	25 µg/m^3	No National Standard	Decrease in ventilatory functions; aggravation of asthmatic symptoms; aggravation of cardio-pulmonary disease; vegetation damage; degradation of visibility; property damage.	Industrial processes.
Visibility Reducing Particles	8 hour	Extinction of 0.23/km; visibility of 10 miles or more	No National Standard	Reduces visibility, reduced airport safety, lower real estate value, and discourages tourism.	See $PM_{2.5}$.

NOTE: ppm = parts per million; ppb = parts per billion; µg/m^3 = micrograms per cubic meter.

SOURCE: CARB, 2013.

Federal

California Air Resources Board

Criteria Air Pollutants

CARB, a department of the California Environmental Protection Agency (Cal/EPA), oversees air quality planning and control throughout California by administering the SIP. Its primary responsibility lies in ensuring implementation of the 1989 amendments to the California Clean Air Act (CCAA), responding to the federal CAA requirements, and regulating emissions from motor vehicles sold in California. It also sets fuel specifications to further reduce vehicular emissions.

The amendments to the CCAA establish California Ambient Air Quality Standards (CAAQS), and a legal mandate to achieve these standards by the earliest practical date. These standards apply to the same criteria pollutants as the federal CAA, and also include sulfates, visibility reducing particulates, hydrogen sulfide and vinyl chloride. They are also generally more stringent than the federal standards. Table 4.2-3 shows the CAAQS for these pollutants.

CARB is also responsible for regulations pertaining to TACs. The Air Toxics "Hot Spots" Information and Assessment Act was enacted in 1987 as a means to establish a formal air toxics emission inventory risk quantification program. Assembly Bill (AB) 2588, as amended, establishes a process that requires stationary sources to report the type and quantities of certain substances their facilities routinely release. CARB relies on the Office of Environmental Health Hazard Assessment (OEHHA) for methodology on quantifying risk.

Office of Environmental Health Hazard Assessment

On June 20, 2014, the state Office of Environmental Health Hazard Assessment proposed changes to Air Toxics Hot Spots Program Guidance Manual for the Preparation of Risk Assessments (Risk Assessment Guidelines). These revisions are designed to provide enhanced protection of children, as required under state law, The Children's Environmental Health Protection Act (SB 25, Escutia, 1999), and incorporate three technical support documents developed in 2008 through 2012. OEHHA's proposed changes provide additional guidance on years of exposure, age groups or bins, age sensitivity factors (ASFs), and breathing rates.

It should be noted that there has been a wide variety of debate on how the Revised OEHHA Guidelines will be applied to CEQA projects. The OEHHA guidelines are geared toward addressing AB 2588 air toxic hotspot requirements, specifically. Notwithstanding that, EPA has stated that the ASFs, should only be applied to pollutants that elicit a primary mutagenic mode of action. None of the Project's pollutants elicit a primary mutagenic mode of action.

Notwithstanding, there is no consensus on how the new OEHHA risk assessment guidelines should be applied to CEQA projects, specifically in southern California. At the SCAQMD Governing Board Meeting on October 3, 2014, the SCAQMD, acknowledged OEHHA's updated risk assessment guidelines, but stated that the new guidelines were under review, and were initially expected to be finalized by the first quarter of 2015 (however, this did not happen). Additionally, the SCAQMD again notes that the guidelines could result in a reduction of the

residential exposure period from 70 to 30 years. At the time of this writing, the SCAQMD has not made any formal determination and is still in the process of evaluating the OEHHA guidelines and no public scoping meetings have been conducted nor are any currently scheduled for CEQA purposes. At a June 18, 2015 Association of Environmental Professionals (AEP) meeting, SCAQMD staff (Ms. Jillian Wong, Ph.D.) stated that any new guidance regarding ASFs under CEQA for projects where SCAQMD is *not* the lead agency, still needs to go through a public process. At this time, no such process has commenced and no formal guidance has been adopted. Given that there is no available guidance that has been adopted by the local air district (SCAQMD) and the fact that the project does not emit any pollutants that elicit a primary mutagenic mode of action, it the professional view of the air quality experts working on this project that no changes are needed to the analysis contained in this Draft EIR and application of the new OEHHA risk assessment guidelines would be premature.

South Coast Air Quality Management District

Criteria Air Pollutants

SCAQMD attains and maintains air quality conditions in the SCAB through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues. The clean air strategy of SCAQMD includes preparation of plans for attainment of ambient air quality standards, adoption and enforcement of rules and regulations concerning sources of air pollution, and issuance of permits for stationary sources of air pollution. SCAQMD also inspects stationary sources of air pollution and responds to citizen complaints; monitors ambient air quality and meteorological conditions; and implements programs and regulations required by the CAA, CAAA, and CCAA.

Air Quality Management Plan

SCAQMD and the SCAG are responsible for preparing the air quality management plan (AQMP), which addresses federal and state CAA requirements. The AQMP details goals, policies, and programs for improving air quality in the SCAB.

The 2012 AQMP was adopted by the SCAQMD Governing Board on December 12, 2012. The purpose of the 2012 AQMP for the SCAB is to set forth a comprehensive and integrated program that will lead the region into compliance with the federal 24-hour $PM_{2.5}$ air quality standard, and to provide an update to the SCAB's commitment towards meeting the federal 8-hour ozone standards (SCAQMD, 2013a). The AQMP would also serve to satisfy recent EPA requirements for a new attainment demonstration of the revoked 1-hour ozone standard, as well as a vehicle miles travelled (VMT) emissions offset demonstration. Specifically, the AQMP would serve as the official SIP submittal for the federal 2006 24-hour $PM_{2.5}$ standard, for which EPA has established a due date of December 14, 2012. In addition, the AQMP updates specific new control measures and commitments for emissions reductions to implement the attainment strategy for the 8-hour ozone SIP. The 2012 AQMP sets forth programs which require integrated planning efforts and the cooperation of all levels of government: local, regional, state, and federal.

SCAQMD Rules and Regulations

All projects are subject to SCAQMD rules and regulations in effect at the time of construction. Specific rules applicable to the construction anticipated under the project would include the following:

Rule 401 – Visible Emissions. A person shall not discharge into the atmosphere from any single source of emission whatsoever any air contaminant for a period or periods aggregating more than three minutes in any 1 hour that is as dark or darker in shade as that designated No. 1 on the Ringelmann Chart, as published by the United States Bureau of Mines.

Rule 402 – Nuisance. A person shall not discharge from any source whatsoever such quantities of air contaminants or other material that cause injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or that endanger the comfort, repose, health, or safety of any such persons or the public, or that cause, or have a natural tendency to cause, injury or damage to business or property. The provisions of this rule do not apply to odors emanating from agricultural operations necessary for the growing of crops or the raising of fowl or animals.

Rule 403 – Fugitive Dust. This rule is intended to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (human-made) fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions. Rule 403 applies to any activity or human-made condition capable of generating fugitive dust.

Rule 1113 – Architectural Coatings. No person shall apply or solicit the application of any architectural coating within the SCAQMD with VOC content in excess of the values specified in the Rule.

Toxic Air Contaminants

At the local level, air pollution control or management districts may adopt and enforce CARB control measures. Under SCAQMD Regulation XIV (Toxics and Other Non-Criteria Pollutants), and in particular Rule 1401 (New Source Review), all sources that possess the potential to emit TACs are required to obtain permits from SCAQMD. Permits may be granted to these operations if they are constructed and operated in accordance with applicable regulations, including new source review standards and air toxics control measures. SCAQMD limits emissions and public exposure to TACs through a number of programs. SCAQMD prioritizes TAC-emitting stationary sources based on the quantity and toxicity of the TAC emissions and the proximity of the facilities to sensitive receptors.

The Air Toxics Control Plan (March 2000, revised March 26, 2004) is a planning document designed to examine the overall direction of SCAQMD's air toxics control program. It includes development and implementation of strategic initiatives to monitor and control air toxics emissions. Control strategies that are deemed viable and are within SCAQMD's jurisdiction will each be brought to the SCAQMD Board for further consideration through the normal public review process. Strategies that are to be implemented by other agencies will be developed in a cooperative effort, and the progress will be reported back to the Board periodically.

In May 2015, the SCAQMD released the *Multiple Air Toxics Exposure Study IV* (MATES IV) which is a follow up to the MATES III study. The MATES IV study includes an updated emissions inventory of TACs, a TAC monitoring program, as well as modeling to characterize the risk levels across the Basin. The study focuses on the carcinogenic risk from exposure to air toxics. However, it does not estimate mortality or other health effects from particulate exposures. The MATES IV study indicates that cancer risk has decreased by more than 50 percent from that reported in the MATES III study. According to the MATES IV study, basin wide the cancer risk from exposure to TAC is approximately 367 in one million. Predicted cancer risk for the project area is identified as 172 in one million. 80 percent of the total risk identified in the MATES IV study is associated with the emissions of DPM.

City of Lake Elsinore

General Plan

The goals and policies relevant to the Air Quality analysis include:

Goal 1 Continue to coordinate with the Air Quality Management District and the City's Building Department to reduce the amount of fugitive dust that is emitted into the atmosphere from unpaved areas, parking lots, and construction sites.

Policy 1.1 …The City shall continue to condition projects to comply with the South Coast Air Quality Management District rules and regulations.

Policy 2.1 Support the SCAQMD in its development of improved ambient air quality monitoring capabilities and establishment of standards, thresholds, and rules to address, and where necessary mitigate, the air quality impacts of new development.

4.2.3 Thresholds of Significance

Based on the State CEQA Guidelines, a project would have a significant adverse effect on air quality resources if it 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 of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors).
- Expose sensitive receptors to substantial pollutant concentrations.
- Create objectionable odors affecting a substantial number of people.

The City of Lake Elsinore has not developed specific air quality thresholds for air quality impacts. However, as stated in Appendix G of the State CEQA Guidelines, the significance criteria established by the applicable air quality management or air pollution control district may be relied upon to make the above determinations. As such, the significance thresholds and analysis methodologies in SCAQMD's CEQA Air Quality Handbook are used in evaluating project impacts. SCAQMD has established daily mass thresholds for regional pollutant emissions, which are shown in **Table 4.2-4**.

Aside from regional air quality impacts, projects in the SCAB are also required to analyze local air quality impacts. As discussed previously, SCAQMD has developed LSTs that represent the maximum emissions from a project that are not expected to cause or contribute to an exceedance of the most stringent applicable federal or state ambient air quality standards, and thus would not cause or contribute to localized air quality impacts. LSTs are developed based on the ambient concentrations of that pollutant for each of the 38 source receptor areas (SRAs) in the SCAB. The localized thresholds, which are found in the mass rate look-up tables in SCAQMD's Final Localized Significance Threshold Methodology document, were developed for use on projects that are less than or equal to 5 acres in size or have a disturbance of less than or equal to 5 acres daily. For projects that exceed 5 acres in size, the 5-acre LST look-up values can be used as a screening tool to determine which pollutants require detailed analysis.[2] This approach is conservative as it assumes that all on-site emissions would occur within a 5-acre area and would over predict potential localized impacts (i.e., more pollutant emissions occurring within a smaller area and within closer proximity to potential sensitive receptors). If the project exceeds the LST look-up values, then the SCAQMD recommends that project specific air quality modeling be performed. The construction and operational LSTs for a 5-acre site in SRA 25, which are shown in **Table 4.2-5**, would be used as a screening level to evaluate the project's localized air quality impacts.

It should be noted that with regards to NOx emissions, the two principal species of NOx are NO and NO_2, with the vast majority (95 percent) of the NOx emissions being comprised of NO. However, because adverse health effects are associated with NO_2, not NO, the analysis of localized air quality impacts associated with NOx emissions is focused on NO_2 levels. For combustion sources, SCAQMD assumes that the conversion of NO to NO_2 is complete at a distance of 5,000 meters from the source.

[2] Personal communication with Mr. Ian MacMillan, Planning and Rules Manager with the SCAQMD, November 17, 2011

TABLE 4.2-4
SCAQMD REGIONAL AIR QUALITY SIGNIFICANCE THRESHOLDS

	Mass Daily Thresholds (lbs/day)	
Pollutant	**Construction**	**Operations**
Oxides of Nitrogen (NO_X)	100	55
Reactive Organic Gases (ROG)	75	55
Respirable Particulate Matter (PM_{10})	150	150
Fine Particulate Matter ($PM_{2.5}$)	55	55
Oxides of Sulfur (SO_X)	150	150
Carbon Monoxide (CO)	550	550
TACs (Health Risk) (including carcinogens and non-carcinogens	Maximum Incremental Cancer Risk ≥ 10 in 1 million Cancer Burden > 0.5 excess cancer cases (in areas ≥ 1 in 1 million) Chronic & Acute Hazard Index ≥ 1.0 (project increment)	

[a] As the proposed project would not involve the development of any major lead emissions sources, lead emissions would not be analyzed further in this report.

SOURCE: Urban Crossroads, 2015a (Appendix B1, SCAQMD, 2015b.

TABLE 4.2-5
SCAQMD LOCALIZED SIGNIFICANCE THRESHOLDS

Pollutant Monitored Within SRA 25 – Lake Elsinore	**82 (ft)**
Construction Thresholds – 5 acre Site	
Nitrogen Oxides (NO_x)[a]	371
Carbon Monoxide (CO)	1,965
Respirable Particulate Matter (PM_{10})	13
Fine Particulate Matter ($PM_{2.5}$)	8
Operational Thresholds – 5 acre Site	
Nitrogen Oxides (NO_x)[a]	371
Carbon Monoxide (CO)	1,965
Respirable Particulate Matter (PM_{10})	4
Fine Particulate Matter ($PM_{2.5}$)	2

[a] The localized thresholds listed for NOx in this table take into consideration the gradual conversion of NO to NO_2.The analysis of localized air quality impacts associated with NOx emissions focuses on NO_2 levels as they are associated with adverse health effects.

SOURCE*:* Urban Crossroads, 2015a (Appendix B1)

CO Hotspot

A CO hotspot would occur if emissions from vehicle emissions at intersections exceed the state 1-hour (20 ppm) or 8-hour (9 ppm) standards. For this analysis, intersections that exceed 400,000 vehicles per day, or 24,000 vehicles per hour (as detailed in the methodology section), would have the potential to create a CO hotspot and a refined analysis would be required.

4.2.4 Methodology

Air pollutant emissions associated with the project would result from operations commercial development at the project site and from traffic volumes generated by this new use. Construction activities would generate air pollutant emissions at the project site and on roadways resulting from construction-related activities and traffic. The increase in emissions generated by these activities and other secondary sources have been estimated and compared to the applicable thresholds of significance recommended by SCAQMD.

The proposed project has two options that are included in the analysis. Both options include the construction of a 154,487 square foot (SF) Walmart Supercenter that includes a 3,090 SF garden center. Option A would also include the development of a gas station (with 16 fueling stations, an approximately 3,100 SF convenience store, and a drive-through car wash) and two other buildings which would be developed as separate drive-thru restaurants (3,700 SF and 3,100 SF). Option B would also include the development of two buildings as retail or sit-down restaurant space (3,680 SF and 5,630 SF); and two other buildings developed as the same separate drive-thru restaurants as Option A. These two options are addressed as a worst case scenario or separately throughout the analysis where appropriate. The following summarizes the worst case scenario for each analysis with a detailed discussion included in the analysis of each impact area.

- Construction:
    - Criteria Air Pollutants: Option B is utilized as the worst case scenario because of the greater building square footage, resulting in greater construction related-emissions..
    - LST analysis: Necessary construction activities are the same. Therefore the analysis is the same for both Options and they are discussed as one.
    - TAC analysis: TAC emissions for both options would be nearly identical therefore the analysis is the same for both Options and they are discussed as one.
    - Odor analysis: As the construction activities, and therefore odor sources for both options would be similar if not the same, the odor analysis is the same for both and they are discussed as one.
- Operation:
    - Criteria Air Pollutants: Because of the operational differences between the two options, the analysis discusses each Option separately.

- CO Hotspot analysis: Option B is utilized as the worst case scenario for this option because of the greater number of vehicle trips.
- LST analysis: Option B is utilized as the worst case scenario because of the greater building square footage
- TAC analysis: Because of the operational differences between the two options, the analysis discusses each Option separately.
- Odor analysis: As the land uses would be similar for both Options, the odor analysis is the same for both, and they are discussed as one.

- Cumulative: Options A and B are discussed either together or separate for cumulative impacts as they were discussed in the project impact analysis described above.

Construction Impacts

Short-term construction-generated emissions of criteria air pollutants and ozone precursors associated with the project were modeled using the California Emissions Estimator Model (CalEEMod), Version 2013.2.2, as recommended by SCAQMD. Modeling was based on project-specific data provided by the applicant, where available. Where project-specific information was not available, reasonable assumptions based on other similar projects and default model settings were used to estimate criteria air pollutant and ozone precursor emissions. The modeling represents a worst case scenario and includes the potential overlap of the building construction, paving, and architectural coating phases. Modeling Assumptions and output files are provided in Appendix B1 of this report.

In addition, to determine whether or not construction activities associated with the project would create significant adverse localized air quality impacts on nearby sensitive receptors, the worst-case daily emissions contribution from the project were compared to SCAQMD's localized significance thresholds (LSTs). The LSTs developed by SCAQMD are based on the pounds of emissions per day that can be generated by a project without causing or contributing to adverse localized air quality impacts, and only applies to the following criteria pollutants: CO, NOx, PM_{10}, and $PM_{2.5}$. The analysis of localized air quality impacts focuses only on the on-site activities of a project, and does not include emissions that are generated off-site such as from on-road haul or delivery truck trips (SCAQMD, 2009).

For the purpose of analyzing localized air quality impacts, SCAQMD has developed LSTs for three project site sizes: 1-acre, 2-acre, and 5-acre sites. The LSTs established for each of the aforementioned site acreages represent the amount of pollutant emissions that would not exceed the most stringent applicable federal or state ambient air quality standards. Although the project site is 17.66 acres, the actual daily disturbance based on the equipment used on-site would equal 5 acres. Therefore, the LSTs for the 5-acre site was used to represent the maximum amount of daily pollutant emission that could occur without causing or contributing to adverse localized air quality impacts. Under conditions where the project's on-site construction emissions would, even with incorporation of mitigation, exceed the LSTs for a 5-acre site, air dispersion modeling of the

project's construction emissions would be required to evaluate the potential localized air quality impacts of the project on the closest off-site sensitive receptors, in accordance with SCAQMD's recommendation. However, under conditions where it is determined that the project's peak daily construction emissions would not exceed the LSTs for a 5-acre site, then it can be concluded that the project's construction emissions would not result in any adverse localized air quality impacts on off-site sensitive receptors.

In conducting the localized air quality analysis, which focuses only on on-site emissions, the project's on-site construction emissions generated from combustion sources (e.g., off-road construction equipment) under a worst-case construction scenario were extracted from the CalEEMod run outputs. These emissions were used for comparison to the SCAQMD's LSTs for a 5-acre site.

Operational Impacts

Long-term (i.e., operational) regional emissions of criteria air pollutants and precursors associated with the project, including mobile- and area-source emissions, were also quantified using the CalEEMod computer model. Area-source emissions, which are widely distributed and made of many small emissions sources (e.g., building heating and cooling units, landscaping equipment, consumer products, painting operations), were modeled according to the size and type of land use proposed. Mass mobile-source emissions were modeled based on the daily vehicle trips that would result from the project. The resulting long-term operational emissions were then compared with the applicable SCAQMD thresholds for determination of significance. Modeling Assumptions and output files are provided in the *Lake Elsinore Walmart Air Quality Impact Analysis City of Lake Elsinore* (Urban Crossroads, Inc., 2015a), included in Appendix B1.

In addition to the regional air quality impacts, the project's localized air quality impacts during operation is also analyzed by extracting the on-site operational emissions from the CalEEMod model run for the project and evaluating those emissions against SCAQMD's applicable operational LSTs. Since SCAQMD only provides LSTs at receptor distances of 82, 164, 328, 656, and 1,640 feet from the emissions source, and the nearest receptor is adjacent to the project site, the LSTs for a receptor distance of 82 feet from the project site was used to evaluate the potential localized air quality impacts. Although the project is 17.66 acres in size, emissions from the project were compared to the 5-acre LST thresholds to provide a screening-level analysis. Where the project's localized operational emissions exceed the 5-acre LSTs, dispersion modeling of the emissions would be conducted to evaluate the potential localized air quality impacts of the proposed project on the nearest off-site sensitive receptors. Where localized operational emissions do not exceed the 5-acre LSTs, the project is considered to be less-than-significant. Similar to the construction LSTs, on-site mobile emissions for a 1 mile vehicle trip were proportioned from the mobile source emissions and added to the area source emissions.

CO Hotspots

Historically, qualitative screening procedures and guidelines contained in the Transportation Project-Level Carbon Monoxide Protocol (the Protocol) were used to determine whether a project poses the potential for a CO hotspot (UCD ITS, 1997). According to the Protocol, projects may worsen air quality if they increase the percentage of vehicles in cold start modes by two percent

or more; significantly increase traffic volumes (by five percent or more) over existing volumes; or worsen traffic flow, defined for signalized intersections as increasing average delay at intersections operating at level of service (LOS) E or F or causing an intersection that would operate at LOS D or better without the project, to operate at LOS E or F.

However, vehicles emissions standards have become increasingly restrictive over the last two decades reducing allowable CO emissions to a maximum of 3.4 grams/mile for passenger vehicles. CO concentrations in the air basin have steadily decreased due to the turnover of older vehicles, use of cleaner fuels, and the more stringent and efficient emission control technologies.

The SCAQMD's 2003 AQMD and the 1992 Federal Attainment Plan for Carbon Monoxide identified that peak CO concentrations in the SCAB were a result of meteorological and topographical conditions and not the result of intersection congestion. To further support this analysis, the SCAQMD conducted a CO hotspot analysis in 2003 for four heavily traveled intersections in Los Angeles. These included Long Beach Boulevard and Imperial Highway; Wilshire Boulevard and Veteran Avenue; Sunset Boulevard and Highland Avenue; and La Cienega Boulevard and Century Boulevard. Traffic through Wilshire Boulevard and Veteran Avenue had the most traffic of all four of these intersections at approximately 100,000 vehicles per day. None of the analysis conducted for these intersections resulted in a hotspot, with estimated 1-hour concentrations for the Wilshire Boulevard and Veteran Avenue intersection at 4.6 ppm (the 1-hr standard is 20.0 ppm). Based on this concentration level, intersections would need to exceed 400,000 vehicles per day before the threshold would be exceeded. The level of service in the vicinity of this intersection was found to be Level E during the morning peak and level F during the afternoon peak hours.[3,4]

Several air districts, including the Bay Area Air Quality Management District (BAAQMD) (BAAQMD, 2009), have adopted guidelines that focus on criteria other than LOS and percentage traffic increase, and instead focus on total volumes and consistency with congestion management plans. Specifically, projects would have to increase traffic volumes at a single intersection to beyond more than 44,000 vehicles per hour under normal circumstances, or 24,000 vehicles per hour where vertical and/or horizontal air does not mix, in order to have the potential for a CO impact. For the purposes of this analysis, total hourly vehicle volumes through intersections will be evaluated using the more conservative 24,000 vehicles per hour as identified by the BAAQMD to determine the potential impacts associated with CO hotspots.

Toxic Air Contaminants

Construction

The SCAQMD has not adopted a methodology for analyzing health risks associated with temporary use of off-road heavy-duty diesel equipment and does not recommended that health risk assessments be completed for construction-related emissions of TACs. Therefore the discussion of TAC impacts from construction activities is addressed qualitatively.

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3 The Los Angeles Metropolitan Transportation Authority (MTA) measured traffic volumes and calculated the LOS for Wilshire Boulevard at Suplevada Avenue which is a block west of the Wilshire Boulevard and Veteran Avenue intersection but is still east of the I-405.

4 MTA 2004. Congestion Management Program for Los Angeles County. Exhibit 2-6 and Appendix A. July 22.

Operation

SCAQMD requires the preparation of a health risk assessment where projects are expected to generate or attract vehicles which emit diesel particulate matter (DPM) and other TACs, or would be generators TACs from other on-site sources. Because the proposed project would result in diesel truck use at the project site as well as the emission of TACs from other on-site sources such as the potential use of char broilers or from gasoline dispensers, a health risk assessment was prepared for the project. The *Lake Elsinore Walmart Air Toxics Health Risk Assessment City of Lake Elsinore* (Urban Crossroads, Inc., 2015b) is included in Appendix B2 and summarized in this analysis.

The health risk was conducted in accordance with SCAQMD recommended methodology using the EPA's AERMOD model. The model was used to calculate annual average particulate concentrations associated with site operations. Risk characterization combines the maximum annual average concentrations from the exposure assessment and the cancer potency factor and chronic reference exposure levels from estimate the potential cancer risk and chronic hazard index from the exposure to operational TAC emissions.

4.2.5 Impact Analysis

Consistency with Applicable Air Quality Plan

Impact 4.2-1: Would the project conflict with or obstruct implementation of the applicable air quality plan?

The proposed project has two options for development of a small portion of the site (referred to as Option A and Option B), the analysis for this impact supports both Options A and B because the changes in land use intensities are similar when compared to what was identified in the City's General Plan for this area. Therefore, as the land use and project design features impacts are similar, the impacts with respect to their consistency with the AQMP would be the same.

The project is located within the SCAB, which is under the jurisdiction of the SCAQMD. As such, SCAQMD's 2012 AQMP is the applicable air quality plan for the project. Projects that are consistent with the regional population, housing, and employment forecasts identified by SCAG are considered to be consistent with the AQMP growth projections, since the forecast assumptions by SCAG forms the basis of the land use and transportation control portions of the AQMP. Additionally, because SCAG's regional growth forecasts are based upon, among other things, land uses designated in General Plans, a project that is consistent with the land use designated in a General Plan would also be consistent with the SCAG's regional forecast projections, and thus also with the AQMP growth projections.

The General Plan Land Use designations for the project are C-2 (General Commercial) and CMU (Commercial Mixed Use), the zoning designations for the project are General Commercial and Commercial Mixed Use. Although the project is generally consistent with the land use and zoning designation, it is anticipated that the project will result in a more intense land use (e.g., would generate more trips than what would otherwise occur under the existing land use and zoning

designations) and would consequently result in greater emissions than what would have been "accounted for" in the AQMP based on the existing land use and zoning designations.

The project promotes a suburban center setting that increases the diversity of land use. The project design includes: the relocation of the existing bus stop that along Central Avenue, providing a bus turnout accessible to the project; 57 parking spaces reserved for clean air vehicles, and 36 bicycle racks. These project design features would reduce vehicle miles traveled associated with the project, however, this would not offset the emissions increase anticipated by the more intensive land use proposed by the project. As such, the project would not be consistent with the AQMP since it would result in the development of a more intense land use. Therefore, the project would conflict with, or obstruct, implementation of the AQMP and this impact would be significant.

Mitigation Measures: Implementation of the following mitigation measures will reduce operational emissions as detailed under Impact 4.2-2b.

AQ-1: Prior to the issuance of building permits, the Project applicant shall submit energy usage calculations to the Planning Division showing that the Project is designed to achieve 5% efficiency beyond the 2013 California Building Code Title 24 requirements. Example of measures that reduce energy consumption include, but are not limited to, the following (it being understood that the items listed below are not all required and merely present examples; the list is not all-inclusive and other features that reduce energy consumption also are acceptable):

- Increase in insulation such that heat transfer and thermal bridging is minimized;
- Limit air leakage through the structure and/or within the heating and cooling distribution system;
- Use of energy-efficient space heating and cooling equipment;
- Installation of electrical hook-ups at loading dock areas;
- Installation of dual-paned or other energy efficient windows;
- Use of interior and exterior energy efficient lighting that exceeds then incumbent California Title 24 Energy Efficiency performance standards;
- Installation of automatic devices to turn off lights where they are not needed;
- Application of a paint and surface color palette that emphasizes light and off-white colors that reflect heat away from buildings;
- Design of buildings with "cool roofs" using products certified by the Cool Roof Rating Council, and/or exposed roof surfaces using light and off-white colors;
- Design of buildings to accommodate photo-voltaic solar electricity systems or the installation of photo-voltaic solar electricity systems;
- Installation of ENERGY STAR-qualified energy-efficient appliances, heating and cooling systems, office equipment, and/or lighting products.

AQ-2: Enhanced Water Conservation Required: Prior to the issuance of building permits, the Project applicant shall prepare a Water Conservation Strategy demonstrating a minimum 30%

reduction in outdoor water usage when compared to unmitigated water demand (unmitigated water demand is the total expected water demand without implementation of the Water Conservation Strategy)[5]. The Project Water Conservation Strategy shall be subject to review and approval by the City and the Elsinore Valley Municipal Water District (EVMWD).

Significance after Mitigation: Significant and unavoidable.

Violation of Air Quality Standards

Impact 4.2-2: Would the proposed project violate any air quality standard or contribute substantially to any existing or projected air quality violation?

Construction

Construction-related emissions will be approximately the same for both outlot development options A and B, as detailed in the methodology section. Construction emissions are based on construction schedule (length of construction), acreage of the project site, and building size. Regardless of the option chosen, the construction schedule is anticipated to be of equal length. The grading phase emissions which typically has the most intensive construction equipment use, is based on property size. Regardless of the option chosen, the total site size of the project site would not change therefore daily emissions from grading would be identical regardless of option. Additionally, building size will dictate the equipment usage in the building construction phases and the amount of architectural coating used. Because the two options only differ in building size by approximately 6,000 SF, the building construction phase emissions would be identical between the two as the daily amount of equipment usage would be identical for both options, as there is not enough discrepancy in the amount of building development to change the construction equipment used between the two options. For architectural coating, the analysis focused on Option B, the option with the greater square footage of development as it provides for a greater daily usage of architectural coating. While emissions from Option A could be slightly less than identified, the analysis as presented represents a worst case scenario for both options.

The proposed project would construct and operate a retail center providing a Walmart Supercenter and three freestanding retail/restaurant tenants on an undeveloped 17.66-acre site that is zoned for General Commercial and Commercial Mixed Use. Construction activities associated with the proposed project would generate pollutant emissions from the following construction activities: (1) grading; (2) construction workers traveling to and from project site; (3) delivery of construction supplies to, and hauling fill material import to as well as material export and debris from, the project site; (4) fuel combustion by on-site construction equipment; and (5) building construction, application of architectural coatings, and paving. These construction activities would temporarily create emissions of dust, fumes, equipment exhaust, and other air contaminants. The amount of emissions generated on a daily basis would vary, depending on the intensity and types of construction activities occurring simultaneously at the time.

[5] A reduction of 20% indoor water usage shall be achieved consistent with the current CalGreen Code (Part 11 of Title 24) for residential and non-residential land uses. Per CalGreen, the reduction shall be based on the maximum allowable water use per plumbing fixture and fittings as required by the California Building Standards Code.

Construction emissions are considered short term and temporary, but have the potential to represent a significant impact with respect to air quality. Particulate matter (i.e., PM_{10} and $PM_{2.5}$) are among the pollutants of greatest localized concern with respect to construction activities. Particulate emissions from construction activities can lead to adverse health effects and nuisance concerns, such as reduced visibility and soiling of exposed surfaces. Particulate emissions can result from a variety of construction activities, including excavation, grading, demolition, vehicle travel on paved and unpaved surfaces, and vehicle and equipment exhaust. Construction emissions of PM can vary greatly depending on the level of activity, the specific operations taking place, the number and types of equipment operated, local soil conditions, weather conditions, and the amount of earth disturbance.

Emissions of ozone precursors VOC and NOx are primarily generated from mobile sources and vary as a function of vehicle trips per day associated with debris hauling, delivery of construction materials, vendor trips, and worker commute trips, and the types and number of heavy-duty, off-road equipment used and the intensity and frequency of their operation. A large portion of construction-related VOC emissions also result from the application of architectural coatings and vary depending on the amount of coatings applied each day.

Several SCAQMD Rules are applicable during construction activity for this project include but are not limited to: Rule 1113 (Architectural Coatings); Rule 431.2 (Low Sulfur Fuel); Rule 403 (Fugitive Dust); and Rule 1186 / 1186.1 (Street Sweepers).

As required by Rule 403 the following measures were incorporated into the modeling for the reduced project emissions in order to reduce impacts from fugitive dust.

- All clearing, grading, earth-moving, or excavation activities shall cease when winds exceed 25 mph per SCAQMD guidelines in order to limit fugitive dust emissions.
- The contractor shall ensure that all disturbed unpaved roads and disturbed areas within the Project 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.
- The contractor shall ensure that traffic speeds on unpaved roads and Project site areas are reduced to 15 miles per hour or less

Additionally CARB, in Title 13, Chapter 10, Section 2485, Division 3 of the of the California Code of Regulations, imposes a requirement that heavy duty trucks accessing the site shall not idle for greater than five minutes at any location. This measure shall apply to construction traffic. Grading plans shall reference that a sign shall be posted on-site stating that construction workers need to shut off engines at or before five minutes of idling. This regulatory measure reduces the emissions of NOx from construction delivery vehicles.

Table 4.2-6 summarizes the estimated maximum daily construction emissions without Best Available Control Measures (BACMS), regulatory requirements, and mitigation measures. Detailed construction model outputs are presented in Appendix B1. Under the assumed scenarios, emissions resulting from the project construction will exceed criteria pollutant thresholds established by the SCAQMD for emissions of NOx (before mitigation). It should be noted that

the impacts BACMs do not take credit for reductions achieved through standard regulatory requirements (SCAQMD's Rule 403).

As shown in Table 4.2-6, the maximum daily construction emissions generated by the proposed project's worst-case construction scenario (as described in the methodology section) would exceed the SCAQMD's daily significance threshold for NOx. Emissions from the remaining criteria pollutants would not exceed the SCAQMD's daily significance thresholds. Because NOx would exceed the SCAQMD thresholds, this impact is potentially significant.

TABLE 4.2-6
PROPOSED REGIONAL CONSTRUCTION EMISSIONS

Construction Year	Estimated Maximum Daily Emissions (lbs/day)					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
2015	11.72	148.33	89.20	0.16	23.28	12.96
2016	60.89	139.30	85.71	0.16	79.46	26.51
Maximum Daily Emissions	60.89	148.33	89.20	0.16	79.46	26.51
Regional Significance Threshold	*75*	*100*	*550*	*150*	*150*	*55*
Significant Impact?	No	**Yes**	No	No	No	No

SOURCE: Urban Crossroads, 2015a (Appendix B1)

Table 4.2-7 summarizes the estimated maximum daily construction emissions with mitigation. Detailed construction model outputs are presented in Appendix B1. Regulatory measures as discussed above and Mitigation Measure AQ-1 for the reduction of NOx emissions shall be incorporated to reduce the severity of the impact. As shown in Table 4.2-7, after implementation of the recommended mitigation measures, construction activity emissions for NO_X will be reduced to below the SCAQMD regulatory thresholds, and the remaining criteria pollutants will also be reduced.[6]

[6] SO_2 emissions would also be reduced, however due to the low levels of emissions, the minimal reductions from the implementation of regulatory and mitigation measures does not show as presented in the report.

TABLE 4.2-7
PROPOSED MITIGATED REGIONAL CONSTRUCTION EMISSIONS

Construction Year	Estimated Maximum Daily Emissions (lbs/day)					
	VOC	NO_X	CO	SO_2	PM_{10}	$PM_{2.5}$
2015	7.45	86.56	69.34	0.16	11.95	6.94
2016	60.89	79.87	67.94	0.16	68.25	30.62
Maximum Daily Emissions	60.89	85.56	69.34	0.16	68.25	20.62
Regional Significance Threshold	*75*	*100*	*550*	*150*	*150*	*55*
Significant Impact?	No	No	No	No	No	No

SOURCE: Urban Crossroads, 2015a (Appendix B1)

Operations

Implementation of the project would result in long-term regional emissions of criteria air pollutants and ozone precursors associated with area sources, such as natural gas consumption, landscaping, applications of architectural coatings, and consumer products, in addition to operational mobile emissions. The distinct uses under Options A and B with respect to the gas station vs additional retail/restaurant use would result in distinctly different daily emissions levels. Therefore, Options A and B are discussed separately in this section.

Option A

Under Option A the proposed project would include the development of a 154,487 SF Walmart Supercenter (which includes a 3,090 SF Garden Center), two fast-food restaurants with drive-thru windows totaling 6,800 SF, and a gas station/convenience store/car wash with sixteen fuel stations.

Table 4.2-8 shows the maximum anticipated daily operational emissions prior to the implementation of mitigation. As shown, Option A is anticipated to exceed the thresholds of significance established by the SCAQMD for emissions of VOCs and NOx. The incorporation of Mitigation Measures AQ-2 and AQ-3 will reduce emissions of VOC and NOx; however, as shown in **Table 4.2-9**, not to below significance levels. Therefore, Option A would result in a significant impact for VOCs and NOx for project-related regional operational emissions. Detailed operational modeling outputs are presented in Tables **4.2-8** and **4.2-9**.

TABLE 4.2-8
PROPOSED PROJECT UNMITIGATED OPERATIONAL EMISSIONS – OPTION A

	Estimated Emissions (lbs/day)					
Emissions Source	**VOC**	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Area Sources	9.91	8.80 e-4	0.09	1.00e-5	3.30e-4	3.30e-4
Energy Sources	0.06	0.58	0.49	3.50e-3	0.04	0.04
Mobile Sources	50.57	11.38	414.07	0.85	57.77	16.37
Total Emissions	**60.54**	**111.96**	**414.65**	**0.85**	**57.82**	**16.41**
Regional Significance Threshold	*55*	*55*	*550*	*150*	*100*	*55*
Significant Impact?	**Yes**	**Yes**	No	No	No	No

SOURCE: Urban Crossroads, 2015a (Appendix B1)

TABLE 4.2-9
PROPOSED PROJECT MITIGATED OPERATIONAL EMISSIONS – OPTION A

	Estimated Emissions (lbs/day)					
Emissions Source	**VOC**	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Area Sources	9.91	8.80 e-4	0.09	1.00e-5	3.30e-4	3.30e-4
Energy Sources	0.06	0.57	0.48	3.43e-3	0.04	0.04
Mobile Sources	49.61	102.70	387.66	0.77	52.01	14.74
Total Emissions	**59.58**	**103.27**	**388.24**	**0.77**	**52.05**	**14.79**
Regional Significance Threshold	*55*	*55*	*550*	*150*	*100*	*55*
Significant Impact?	**Yes**	**Yes**	No	No	No	No

SOURCE: Urban Crossroads, 2015a (Appendix B1)

Option B

Option B of the proposed project would include the Walmart store and Garden Center along with approximately 4,600 SF of specialty retail shops, 4,600 SF of fast-food restaurants without drive-thru ability, and two fast-food restaurants with drive-thru windows, totaling 6,800 SF.

Table 4.2-10 shows the maximum anticipated daily operational emissions prior to the implementation of mitigation. As shown, Option B is anticipated to exceed the thresholds of significance established by the SCAQMD for emissions of VOCs and NOx. The incorporation of Mitigation Measures AQ-2 and AQ-3 will reduce emissions of VOC and NOx; however, as shown in **Table 4.2-11**, not to below significance levels. Therefore, Option B would also result in a significant impact for VOCs and NOx for project-related regional operational emissions. Detailed operational model outputs are presented in **Tables 4.2-10** and **4.2-11**.

TABLE 4.2-10
PROPOSED PROJECT UNMITIGATED OPERATIONAL EMISSIONS – OPTION B

	Estimated Emissions (lbs/day)					
Emissions Source	**VOC**	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Area Sources	10.09	8.80 e-4	0.09	1.00e-5	3.30e-4	3.30e-4
Energy Sources	0.10	0.89	0.75	5.35e-3	0.07	0.07
Mobile Sources	54.08	122.03	451.05	0.94	63.86	18.09
Total Emissions	**64.27**	**122.92**	**451.89**	**0.94**	**63.93**	**18.15**
Regional Significance Threshold	*55*	*55*	*550*	*150*	*100*	*55*
Significant Impact?	**Yes**	**Yes**	No	No	No	No

SOURCE: Urban Crossroads, 2015a (Appendix B1)

TABLE 4.2-11
PROPOSED PROJECT MITIGATED OPERATIONAL EMISSIONS – OPTION B

	Estimated Emissions (lbs/day)					
Emissions Source	**VOC**	**NO_X**	**CO**	**SO_2**	**PM_{10}**	**$PM_{2.5}$**
Area Sources	10.09	8.80 e-4	0.09	1.00e-5	3.30e-4	3.30e-4
Energy Sources	0.10	0.88	0.74	5.27e-3	0.07	0.07
Mobile Sources	53.02	112.43	421.86	0.85	57.49	16.29
Total Emissions	**63.21**	**113.31**	**422.69**	**0.85**	**57.55**	**16.36**
Regional Significance Threshold	*55*	*55*	*550*	*150*	*100*	*55*
Significant Impact?	**Yes**	**Yes**	No	No	No	No

SOURCE: Urban Crossroads, 2015a (Appendix B1)

Mitigation Measures: Implementation of Mitigation Measures AQ-1 and AQ-2 as detailed under Impact 4.2-1 above.

AQ-3: During grading activity, the contractor shall ensure that all Rubber Tired Dozers and Scrapers shall be California Air Resources Board (CARB) Tier 3 Certified or better. Additionally, during grading activity, the contractor shall ensure the total horsepower-hours per day for all equipment shall not exceed 18,560 horsepower-hours per day and the maximum disturbance (actively graded) area shall not exceed 5 acres per day.

Significance after Mitigation: Less-than-significant for construction; significant and unavoidable for operations.

Impact 4.2-3: Would CO emissions from the project expose sensitive receptors to substantial pollutant concentrations?

Under Option A, daily project activities would result in 9,543 trips on weekdays and 1,092 trips on Saturdays. Under Option B, daily project activities would result in 11,723 trips on weekdays and 1,204 trips on Saturdays. Because the potential for CO hotspots in the Basin is relatively low based as discussed under the methodology section above, the analysis of CO hotspots bases the analysis for both Options A and B on the traffic generated by Option B (the worst case scenario/highest trips). This analysis is designed to determine impacts on sensitive receptors (residences, schools, other receptors deemed sensitive as described in the Sensitive receptors section above, located within 50 feet of an intersection). As the intersection analysis used in this analysis is based on the traffic study, there may or may not be receptors within 50 feet of the studied intersections. However, because the intersection analysis is designed to capture the highest volume and worst congested or potentially congested, it is assumed that all other intersections would have less emissions associated with them. Therefore, although sensitive receptors may not be located near these specific emissions, the analysis is sufficient to determine if there is a potential for impacts on sensitive receptors near less traveled or less congested intersections.

The four local intersections with the greatest daily traffic volumes were analyzed for the determination of CO hotspots. As the emissions from these intersections would be greater than any of the other intersections, if these intersections would not result in a CO hotspot, intersections with fewer daily trips and therefore less emissions, also would not result in CO hotspots. The opening year plus project peak hour conditions were evaluated against the screening level threshold of 24,000 vehicles per hour, and 400,000 vehicles per day.[7,8] The study area intersections with the maximum peak hour traffic volumes are shown in **Table 4.2-12**. As none of the peak hour traffic at any of the intersections would come close to 24,000 vehicles per hour or 400,000 vehicles per day, CO emissions from these vehicles volumes would be less-than-significant. Therefore, emissions at the remaining project intersections would also be anticipated to result in less-than-significant impacts with respect to CO hotspots.

[7] BAAQMD concludes that under existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact. The more conservative threshold (24,000 vehicles per hour) was used as the screening level for this analysis.

[8] SCAQMD's 2003 AQMP.

TABLE 4.2-12
TRAFFIC VOLUMES

Peak Hour					
Intersection Location	**AM**	**PM**	**SMD**	**Threshold**	**Significant?**
I-15 SB Ramps & Central Ave	3,805	4,903	4,624	24,000	No
I-15 NB Ramps & Central Ave	4,222	5,407	5,185	24,000	No
Dexter Ave & Central Ave	4,311	5,289	5,079	24,000	No
Summerhill Dr. / Grape St & Railroad Canyon Rd	4,446	4,932	4,997	24,000	No
Daily[a]					
Intersection Location	**Weekday**	**Saturday**	**Threshold**	**Significant?**	
I-15 SB Ramps & Central Ave	49,030	46,240	400,000	No	
I-15 NB Ramps & Central Ave	54,070	51,850	400,000	No	
Dexter Ave & Central Ave	52,890	50,790	400,000	No	
Summerhill Dr. / Grape St & Railroad Canyon Rd	49,320	49,970	400,000	No	

AM = 7am – 9am, PM = 4pm - 6pm, SMD = Saturday Mid-day peak hour
a. PM peak is assumed to be 10% of the daily vehicle traffic.

SOURCE: Urban Crossroads, 2015a (Appendix B1)

Mitigation Measures: None required.

Significance Determination: Less-than-significant.

Impact 4.2-4: Would emissions of localized criteria pollutants from construction of the project expose sensitive receptors to substantial pollutant concentrations?

Daily disturbance acreage is estimated by the types and amount of equipment used during the construction phases. As the grading phase is the most intensive phase for the daily level of disturbance, the LST emissions for construction are based on emissions from the grading phase. Because the emissions from grading are based on the acreage of development and the development under both Options A and B are identical, the emissions from the grading phase for both options would be the same. Therefore, this analysis is relevant for both Options A and Options B.

The daily on-site construction emissions generated by the project were evaluated against SCAQMD's LSTs for a 5-acre site to determine whether the emissions would cause or contribute to adverse localized air quality impacts. The nearest sensitive receptor land uses are immediately adjacent to the Project site to the southwest of the Project site. As discussed previously, because the mass rate look-up tables provided by SCAQMD only provides LSTs at receptor distances of 82, 164, 328, 656, and 1,640 feet, the LSTs for a receptor distance of 82 feet are used to evaluate the potential localized air quality impacts associated with the project's peak day construction emissions. **Tables 4.2-13** and **4.2-14** identify the daily unmitigated and unmitigated, localized on-site emissions that are estimated to occur during the project's worst-case construction scenario.

TABLE 4.2-13
PROPOSED PROJECT UNMITIGATED LOCALIZED DAILY CONSTRUCTION EMISSIONS

	Estimated Maximum Daily On-Site Emissions (lbs/day)			
	NO_X	**CO**	**PM_{10}[a]**	**$PM_{2.5}$[a]**
Maximum Daily Emissions	116.75	67.66	20.62	11.85
Localized Significance Threshold[b]	371	1,965	13	8
Significant Impact?	No	No	**Yes**	**Yes**

[a] Emissions account for implementation of dust control measures as required by SCAQMD Rule 403—Fugitive Dust.
[b] LST values are extrapolated from the SCAQMD LST Threshold Tables for SRA 24 and is based on the construction-related disturbance of five-acres per day.

SOURCE: Urban Crossroads, 2015a (Appendix B1)

TABLE 4.2-14
PROPOSED PROJECT MITIGATED LOCALIZED DAILY CONSTRUCTION EMISSIONS

	Estimated Maximum Daily On-Site Emissions (lbs/day)			
	NO_X	**CO**	**PM_{10}[a]**	**$PM_{2.5}$[a]**
Maximum Daily Emissions	53.99	47.80	9.28	5.83
Localized Significance Threshold[b]	371	1,965	13	8
Significant Impact?	No	No	No	No

[a] Emissions account for implementation of dust control measures as required by SCAQMD Rule 403—Fugitive Dust.
[b] LST values are extrapolated from the SCAQMD LST Threshold Tables for SRA 24 and is based on the construction-related disturbance of 5 acres per day.

SOURCE: Urban Crossroads, 2015a (Appendix B1)

As shown in Table 4.2-13, the daily unmitigated emissions generated on-site by the project's worst-case construction scenario would exceed the applicable SCAQMD LSTs for a 5-acre site in SRA 25. However as shown in Table 4.2-14, with implementation of Mitigation Measure AQ-1, the daily mitigated emissions generated on-site by the project's worst-case construction scenario would be reduced to below the applicable SCAQMD LSTs for a 5-acre site in SRA 25. Therefore, localized air quality impacts would be less-than-significant with mitigation.

Mitigation Measures: Mitigation Measure AQ-1.

Significance after Mitigation: Less-than-significant.

Impact 4.2-5: Would emissions of localized TACs from construction of the project expose sensitive receptors to substantial pollutant concentrations?

The construction of Options A and B, as discussed above, would result in relatively similar criteria pollutant emissions, and were analyzed under the worst case scenario. Because emissions of TACs during construction are associated with diesel emissions from on-site construction

vehicles, as the number and duration of vehicles anticipated under Options A and B are the same, the emissions associated with diesel exhaust would also be the same. Therefore, the analysis as presented represents impacts related to both Options A and B. The closest sensitive receptors to the project site that would be impacted by the construction of the proposed project would be the residential land uses adjacent to the southwest of the project site and the residential uses directly across Cambern Avenue to the northeast and 3rd Street to the east.

Project construction would result in short-term emissions of diesel PM, a TAC. Diesel PM poses a carcinogenic health risk that is measured using an exposure period of 70 years. The exhaust of off-road heavy-duty diesel equipment would emit diesel PM during site grading and excavation; paving; installation of utilities, materials transport and handling; building construction; and other miscellaneous activities. SCAQMD has not adopted a methodology for analyzing such impacts and has not recommended that health risk assessments be completed for construction-related emissions of TACs.

According to OEHHA, carcinogenic health risk assessments, which determine the exposure of sensitive receptors to TAC emissions, should be based on a 70-year exposure period; however, such assessments should be limited to the period or duration of activities associated with the proposed project. The construction period for the proposed project would be much less than the 70-year period used for risk determination. Because off-road heavy-duty diesel equipment is specific to the construction phase (i.e. grading, building construction, paving) the equipment would be used only for short periods of time throughout the approximately 12 month construction period, reducing exposure times to pollutants to within acceptable limits. Therefore, project construction would not expose sensitive receptors to substantial emissions of TACs. This impact would be less-than-significant.

Mitigation Measures: None required.

Significance after Mitigation: Less-than-significant.

Impact 4.2-6: Would emissions of localized criteria pollutants from the operation of the project expose sensitive receptors to substantial pollutant concentrations?

The analysis of operational LSTs for Options A and Options B are considered as the worst case scenario of both options. Therefore, the analysis presented represents both Options A and B.

During project operations, the daily amount of localized pollutant emissions generated on-site by the project would not be substantial. The proposed project's on-site operational emissions are shown in **Table 4.2-15**. As shown, the project's total operational-related emissions generated on-site would not exceed SCAQMD's screening operational LSTs. Thus no dispersion modeling is required and localized air quality impacts during project operations would be less-than-significant.

TABLE 4.2-15
PROPOSED PROJECT LOCALIZED OPERATIONAL EMISSIONS

	Estimated Emissions (lbs/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
Daily Operational Emissions	6.99	23.39	3.26	0.97
Localized Significance Threshold	371	1,965	4	2
Significant Impact?	No	No	No	No

SOURCE: Urban Crossroads, 2015a (Appendix B1)

Mitigation Measures: None required.

Significance after Mitigation: Less-than-significant.

Impact 4.2-7: Would emissions of localized TACs from the operation of the project expose sensitive receptors to substantial pollutant concentrations?

A health risk analysis was conducted to determine the proposed project's impacts on off-site residential, worker, and school children's exposure to on-site operations.[9] Specifically, risks from the project site include the operation of diesel vehicles on-site and in the project vicinity, charbroilers from fast food restaurants, and emissions from the potential gasoline fueling facility. The following summarizes the results of the health risk analysis for each project option. Detailed modeling, calculations, and results are included in the health risk analysis (Urban Crossroads, Inc., 2015b) included in Appendix B2.

Options A and B of the proposed project would be anticipated to result in the emission of different types and amounts of TACs based on the type of use (specifically the inclusion or exclusion of the gas station). Therefore, the analysis of operational TAC emissions are discussed separately for each Option.

Option A

Option A consists of the development of the proposed Walmart Supercenter, two fast-food restaurants with drive-thru windows and a gas station/convenience store/car wash with sixteen fuel stations. Table **4.2-16** summarizes the anticipated project cancer risks with respect to residential, worker, and school child exposure.

The residential land use with the greatest potential exposure is the site immediately northeast across Cambern Avenue in line with where Crane Street would connect with Cambern Avenue if it continued through from Dexter Avenue. Maximum cancer risk at this location is estimated to be

[9] As discussed in the sensitive receptor section, while people using the gym will have an increased breathing rate and therefore increase exposure, their exposure length would be significantly less than a nearby worker or resident. Therefore, exposure described for both workers and residents would be higher than would be expected from patrons of the LA Fitness adjacent to the project site. Additionally, the exposures from residents assume the residents are outside (conservative methodology) and there are no outside facilities at the LA Fitness. Therefore, exposure would be further reduced by the fact that all activities occur indoors.

3.43 in one million and the non-cancer risk was estimated at 0.098 in one million—neither of which exceed the regulatory thresholds of 10 in a million and 1in a million, for chronic non-carcinogenic health hazard thresholds respectively.

The land use with the greatest potential worker exposure is located directly northeast of the project site across Cambern Avenue, just southeast of Central Avenue.[10] Maximum cancer risk at this location is estimated to be 0.417 in one million and the non-cancer risk was estimated at 0.049—neither of which exceed the regulatory thresholds.

The Earl Warren Elementary School, located at 41221 Rosetta Canyon Drive, is the school site that would result in the maximum potential exposure from on-site operations. The school site is located approximately 0.75 miles east northeast of the project site. Maximum cancer risk at this location is estimated to be 0.001 in one million and the non-cancer risk was estimated at 0.0003—neither of which exceed the regulatory thresholds.

TABLE 4.2-16
SUMMARY OF INHALATION CANCER RISK AND CHRONIC HAZARDS – OPTION A

Time Period	Location	Maximum Lifetime Cancer Risk (risk per million)	Significance Threshold (risk per million)	Exceeds Significance Threshold
70-year exposure (2016 to 2085)	Maximum Exposed Sensitive Receptor	3.43	10	No
40-year exposure (2016 to 2055)	Maximum Exposed Worker Receptor	0.417	10	No
9-year exposure (2016 to 2024)	Maximum Exposed School Child	0.00102	10	No

SOURCE: Urban Crossroads, 2015b (Appendix B2)

Option B

Option B includes the Walmart Supercenter and Garden Center along with approximately 4,600 SF of specialty retail shops and fast-food restaurants with and without drive-thru ability. **Table 4.2-17** summarizes the anticipated project cancer risks with respect to residential, worker, and school child exposure associated with Option B.

The residential land use with the greatest potential exposure is the site immediately adjacent to the south of the project site just north of 3rd Street. Maximum cancer risk at this location is estimated to be 3.00 in one million and the non-cancer risk was estimated at 0.002—neither of which exceed the regulatory thresholds of 10 in a million and 1, respectively.

[10] While no businesses current exist at this location, the parcel is zoned for General Commercial and therefore was included in the health risk analysis as a potential site of worker exposure.

TABLE 4.2-17
SUMMARY OF INHALATION CANCER RISK AND CHRONIC HAZARDS – OPTION B

Time Period	Location	Maximum Lifetime Cancer Risk (risk per million)	Significance Threshold (risk per million)	Exceeds Significance Threshold
70-Year Exposure (2016 to 2085)	Maximum Exposed Sensitive Receptor	3.00	10	No
40-Year Exposure (2016 to 2055)	Maximum Exposed Worker Receptor	0.261	10	No
9-Year Exposure (2016 to 2024)	Maximum Exposed School Child	0.0008	10	No

SOURCE: Urban Crossroads, 2015b (Appendix B2)

The land use with the greatest potential worker exposure is located directly northeast of the project site across Cambern Avenue, just southeast of Central Avenue. This is the same location identified for maximum worker exposure under Option A. Maximum cancer risk at this location is estimated to be 0.261 in one million and the non-cancer risk was estimated at 0.003—neither of which exceed the regulatory thresholds.

The Earl Warren Elementary School, located at 41221 Rosetta Canyon Drive is the school site that would result in the maximum potential exposure from on-site operations. Maximum cancer risk at this location is estimated to be 0.0008 in one million and the non-cancer risk was estimated at 0.000004—neither of which exceed the regulatory thresholds.

As identified above, the cancer and non-cancer risk for all analyzed receptor locations would not exceed the regulatory thresholds under either Option A or Option B. Therefore, the proposed project would not expose sensitive receptors to substantial pollutant concentrations.

Mitigation Measures: None required.

Significance after Mitigation: Less-than-significant.

Impact 4.2-8: Would construction and operation of the project create objectionable odors affecting a substantial number of people?

Land uses that are associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. As the proposed project is a retail and restaurant development, it does not include any of the uses that have been identified as being associated with odors, the proposed project is not expected to result in objectionable odors for the nearby sensitive uses.

During construction of the proposed project, exhaust from equipment and activities associated with the application of architectural coatings and other interior and exterior finishes may produce discernible odors typical of most construction sites. Such odors would be a temporary source of

nuisance to adjacent uses, but would not affect a substantial number of people. As odors associated with project construction would be temporary and intermittent in nature, the odors would not be considered to be a significant environmental impact. Therefore, impacts associated with objectionable odors would be less-than-significant.

Mitigation Measures: None required.

Significance after Mitigation: Less-than-significant..

4.1.6 Cumulative Impacts

Cumulative Increase of Criteria Pollutants

Impact 4.2-9: Would the project result in a cumulatively considerable net increase of criteria pollutants for which the project region is in non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

Options A and B are discussed either together or separate for cumulative impacts as they were discussed in the project impact analysis above.

The proposed project is located within the SCAB, which is considered the cumulative study area for air quality. Because the SCAB is currently classified as a state nonattainment area for ozone, PM_{10}, and $PM_{2.5}$, cumulative development consisting of the proposed project along with other reasonably foreseeable future projects in the SCAB as a whole could violate an air quality standard or contribute to an existing or projected air quality violation.

The SCAQMD has published a report on how to address cumulative impacts from air pollution: White Paper on Potential Control Strategies to Address Cumulative Impacts from Air Pollution.[11] In this report the SCAQMD states (Page D-3):

> …the AQMD uses the same significance thresholds for project specific and cumulative impacts for all environmental topics analyzed in an Environmental Assessment or EIR. The only case where the significance thresholds for project specific and cumulative impacts differ is the Hazard Index (HI) significance threshold for toxic air contaminant (TAC) emissions. The project specific (project increment) significance threshold is HI > 1.0 while the cumulative (facility-wide) is HI > 3.0. It should be noted that the HI is only one of three TAC emission significance thresholds considered (when applicable) in a CEQA analysis. The other two are the maximum individual cancer risk (MICR) and the cancer burden, both of which use the same significance thresholds (MICR of 10 in 1 million and cancer burden of 0.5) for project specific and cumulative impacts.

[11] http://www.aqmd.gov/rules/ciwg/final_white_paper.pdf.

> 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.

As shown in Table 4.2-7, the project's construction emissions, with the implementation of Mitigation Measure AQ-1, would not exceed SCAQMD's daily thresholds during construction. Thus, because the proposed project's construction-period impact would be less-than-significant, the proposed project would not result in a significant cumulative impact, when considered with other past, present and reasonably foreseeable projects.

Operational emissions associated with the proposed project, as shown in Tables 4.2-8 through 4.2-11 would exceed the SCAQMD's thresholds of significance for VOC and NOx even with the implementation of Mitigation Measures AQ-2 and AQ-3. The proposed project could conflict with SCAQMD's air quality planning efforts for nonattainment pollutants and would result in a cumulatively considerable net increase in nonattainment pollutants during operations, specifically for ozone precursors VOC and NOx. Therefore, cumulative impacts associated with operational emissions would be significant and unavoidable.

The four local intersections with the greatest daily traffic volumes were analyzed for the determination of CO hotspots for the General Plan Buildout scenario. As the emissions from these intersections would be greater than any of the other intersections, if these intersections would not result in a CO hotspot, intersections with fewer daily trips and therefore less emissions, also would not result in CO hotspots. The General Plan Buildout scenario project peak hour conditions were evaluated against the screening level threshold of 24,000 vehicles per hour, and 400,000 vehicles per day.[12] The study area intersections with the maximum peak hour traffic volumes are shown in **Table 4.2-18**. As none of the peak hour traffic at any of the intersections would come close to these levels, CO emissions from these vehicles volumes would be less-than-significant. Therefore, emissions at the remaining project intersections would also be anticipated to result in less than cumulatively considerable impacts with respect to CO hotspots.

[12] BAAQMD concludes that under existing and future vehicle emission rates, a given project would have to increase traffic volumes at a single intersection by more than 44,000 vehicles per hour—or 24,000 vehicles per hour where vertical and/or horizontal air does not mix—in order to generate a significant CO impact. The more conservative threshold (24,000 vehicles per hour) was used as the screening level for this analysis. The BAAQMD threshold is used as a threshold for this analysis because the vehicles per hour is a more conservative value than the other available vehicle levels identified in other districts for CO emissions level screening.

TABLE 4.2-18
TRAFFIC VOLUMES

Peak Hour					
Intersection Location	**AM**	**PM**	**SMD**	**Threshold**	**Significant?**
I-15 SB Ramps & Central Ave	6,473	7,748	6,671	24,000	No
I-15 NB Ramps & Central Ave	6,637	5,656	7,080	24,000	No
Dexter Ave & Central Ave	5,848	6,441	6,125	24,000	No
Summerhill Dr. / Grape St & Railroad Canyon Rd	7,410	9,051	7,943	24,000	No

Daily[a]				
Intersection Location	**Weekday**	**Saturday**	**Threshold**	**Significant?**
I-15 SB Ramps & Central Ave	77,480	66,710	400,000	No
I-15 NB Ramps & Central Ave	56,560	70,800	400,000	No
Dexter Ave & Central Ave	64,410	61,250	400,000	No
Summerhill Dr. / Grape St & Railroad Canyon Rd	90,510	79,340	400,000	No

AM = 7am – 9am, PM = 4pm - 6pm, SMD = Saturday Mid-day peak hour
a. PM peak is assumed to be 10% of the daily vehicle traffic.

SOURCE: Urban Crossroads, 2015a (Appendix B1)

Health Risk Assessment

During project scoping, SCAQMD typically requests the preparation of a HRA for projects that are expected to generate/attract diesel trucks, which emit diesel particulate matter (DPM). The mobile source HRA for the proposed project has been prepared in accordance with the document Health Risk Assessment Guidance for Analyzing Cancer Risk from Mobile Source Diesel Idling Emissions for CEQA Air Quality Analysis and is comprised of all relevant and appropriate procedures presented by the EPA, California Environmental Protection Agency and SCAQMD. Cancer risk is expressed in terms of expected incremental incidence per million population. The SCAQMD has established an incidence rate of ten (10) persons per million as the maximum acceptable incremental cancer risk due to DPM exposure. This threshold serves to determine whether or not a given project has a potentially significant development-specific and cumulative impact.

The following analysis summarizes the results of the health risk analysis prepared by Urban Crossroads for the project. Detailed modeling, calculations, and results are included in the health risk analysis (Urban Crossroads, Inc., 2015b) included in Appendix B2. To identify cumulative risk at a specific receptor location, the cumulative projects that would be within the zone of influence for that receptor and would contribute to the impact of a specific receptor were determined. Risk from the cumulative projects, existing conditions, and project specific risk for a receptor is the total cumulative risk for a specific receptor. The health risk analysis identified a one-quarter mile radius (1,320 feet) as the geographic scope for identifying the cumulative health risk impacts. The analysis identifies the maximum exposed receptor for residents, schools, and workers.

Table 4.2-19 identifies the cumulative cancer risk from project Options A and B. Because the existing conditions plus cumulative projects would generate a cancer risk greater than 10 in a million, the cumulative health risk is significant. However, because the project's contribution is less than 10 in one million, and the project plus cumulative projects is less than 10 in a million, the project is not considered to have a cumulatively considerable impact based on SCAQMD methodology. Additionally, while there will be ambient growth in the project vicinity, it is anticipated that any increase in emissions (and thereby cancer risk) resulting from the ambient growth would be offset by decreases in future risk estimates due to the natural turnover of older fleets and equipment being replaced by more efficient, less polluting engines and additional regulatory actions being phased in.

TABLE 4.2-19
SUMMARY OF INHALATION CANCER RISK AND CHRONIC HAZARDS (RISK IN ONE MILLION)

Location	Existing Risk	Project Risk	Cumulative Projects	Total Cumulative Risk	Cumulatively Considerable
Option A					
Maxim Impacts to all receptors without Project	172	-	0.007	~172.007	-
Maximum Exposed Sensitive Receptor	172	3.43	0.007	~175.437	No
Maximum Exposed Worker Receptor	172	0.417	0.007	~172.424	No
Maximum Exposed School Child	172	0.00102	0.007	~172.008	No
Option B					
Maxim Impacts to all receptors without Project	172	-	0.007	~172.007	-
Maximum Exposed Sensitive Receptor	172	3.00	0.007	~175.007	No
Maximum Exposed Worker Receptor	172	0.261	0.007	~172.268	No
Maximum Exposed School Child	172	0.0008	0.007	~172.0078	No

SOURCE: Urban Crossroads, 2015b (Appendix B2)

Mitigation Measures: Mitigation Measures AQ-1 through AQ-3.

Significance after Mitigation: Significant and unavoidable for cumulatively considerable criteria pollutants. Less-than-significant for cancer risk and chronic hazards.

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Urban Crossroads, 2015a. *Walmart EIR Air Quality Impact Analysis, Lake Elsinore California.* April 2015.

Urban Crossroads, Inc. 2015b. *Walmart EIR Health Risk Assessment, Lake Elsinore California.* April 2015.

Urban Crossroads, Inc. 2015c. Walmart EIR Traffic Impact Analysis, Lake Elsinore California. April 2015.

4.3 Biological Resources

This section of the Draft Environmental Impact Report (EIR) identifies the existing biological resources on-site and in the project vicinity, potential impacts that could be created by the project, and recommends mitigation measures to reduce potential impacts to a less-than-significant level. The analysis in this section is based on findings of the Biological Resources Technical Report prepared by ESA (March 2014), which is included as Appendix C, to this EIR.

4.3.1 Environmental Setting

Regional Setting

The proposed project is located in a moderately developed portion of the City of Lake Elsinore (City) in western Riverside County. Regional geographic features within the vicinity of the City, around the area include Lake Elsinore and the Cleveland National Forest to the south and west, Canyon Lake to the east, and scattered pockets of development of various density in all directions.

Climate

The project is located in a region within a semi-permanent high-pressure zone of the eastern Pacific, resulting in a mild climate tempered by cool sea breezes with light average wind speeds. The usually mild climate is interrupted occasionally by periods of extremely hot weather, winter storms, or Santa Ana winds. The area is in a climatic zone characterized as dry summer subtropical or Mediterranean. The City is located in the interior valleys of Southern California where the climate is only slightly influenced by the ocean, and the temperature swing over the year is more extreme, with hotter summers and colder winters than the coastal climates to its west.

Vegetation and Wildlife

Vegetation communities typically found within the region include a mosaic of xeric habitats such as sage scrub, grassland, and chaparral with the occasional riparian or woodland habitat associated with riverine features and/or the fringes of larger bodies of water. Habitats throughout the region are known to support a wide variety of common plants and wildlife as well as many special-status species protected by federal, state, and local policies.

Local Setting

The project site has elevations from approximately 1,300 feet (396 meters) above mean sea level (msl) in the south to approximately 1,320 feet (402 meters) above msl in the north (Google Earth, 2014).

Soils and Vernal Pools

As shown in **Table 4.3-1**, the United States Department of Agriculture, State Soil Survey Geographic Database identified two soil series mapped within the boundary of the project site:

Arbuckle and Garretson (USDA, 1917). These soil types are not typically associated with vernal pool complexes, and the biological survey did not identify the presence of vernal pool indicators (i.e., depressions, cracking of surface soils, or other evidence of pooling or ponding). Additionally, the on-site soils do not include clay or other restrictive layers that could generate an environment conducive for vernal pools. Furthermore, the soil series present on-site are not identified in the Western Riverside County Multiple Species Habitat Conservation Plan (MSHCP) as sensitive soil types and are not considered hydric per the USDA National List of Hydric Soils.

TABLE 4.3-1
SOIL SERIES ON-SITE[1]

Series	Code	Description
Arbuckle	AIC	Arbuckle gravelly loam 2 to 8 percent slopes
	AID	Arbuckle gravelly loam 8 to 15 percent slopes
Garretson	GdC	Garretson gravelly very fine sandy loam, 2 to 8 percent slopes

1 All nomenclature follows standards outlined by the USDA Natural Resources Conservation Service Official Soils Series Descriptions

SOURCE: USDA List of Hydric Soils

Arbuckle: Soils in this series are very deep, well drained and formed in alluvial materials from mainly conglomerate and meta-sedimentary rocks. Typically found in association with annual grasses and forbs either alone or as an understory with open to dense oak woodlands. These soils are also used for row crops and pasture.

Garretson: Soils in this series are well drained with slow to medium runoff and moderate permeability. Typically found in association with naturalized vegetation in untilled areas such as annual grasses and forbs, or native vegetation such as chamise, scattered oak trees, and shrubs. It is widely used for the production of deciduous fruit, citrus fruit, avocados, irrigated field crops, and alfalfa.

Plant Communities and Habitats

The MSHCP identifies two dominant plant communities within the project area, which including non-native grassland and eucalyptus grove. The on-site survey performed by ESA biologists in January 2014, also identified large areas of the site that were disturbed by human activities. Descriptions of each community found on the project site are described below. **Figure 4.3-1** illustrates the location of the on-site plant communities.

SOURCE: ESRI; ESA

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Figure 4.3-1

Existing Biological Resources

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Non-Native Grassland

A total of 9.7 acres of non-native grassland occur within the project boundaries. The non-native grassland within the project site is highly disturbed and generally dominated by invasive, non-native annual herbaceous species, including tocalote (*Centaurea melitensis*), shortpod mustard (*Hirschfeldia incana*), Russian thistle (*Salsola tragus*), redstem filaree (*Erodium cicutarium*), and several brome species (*Bromus* spp.). This habitat also contains scattered remnant patches of native scrub and herbaceous species including common fiddleneck (*Amsinckia menziesii*), common sandaster (*Corethrogyne filaginifolia*), California buckwheat (*Eriogonum fasciculatum*), and goldenbush (*Ericameria* sp.). A complete list of plant species observed on-site is included in Appendix A of the Biological Resources Technical Report (Appendix B of this EIR).

Eucalyptus Grove

A total of 2.8 acres of eucalyptus grove occur within the project boundaries, which is co-dominated by red gum (*Eucalyptus camaldulensis*) and blue gum (*Eucalyptus globulus*), and has little to no shrub or herbaceous understory. The few herbaceous species found beneath the eucalyptus canopy include pretty spurge (*Euphorbia peplus*), horehound (*Marrubium vulgare*), and several species of brome. A complete list of plant species observed on-site is included in Appendix A of the Biological Resources Technical Report and representative photographs of this plant community are included in Appendix C of the Biological Resources Technical Report.

Disturbed Areas

A total of 5.1 acres of disturbed area occur within the project boundaries, and includes graded patches of bare ground, sparsely vegetated footpaths, unpaved access roads, and gravel groundcover on the southern half of the project site. Plant species are sparse in these areas, what exists are similar species found in the non-native grassland community described above. Representative photographs of the disturbed areas are included in Appendix C of the Biological Resources Technical Report.

Common Wildlife

The project site supports a variety of common wildlife species typically found within an urban environment and xeric scrub/grassland habitats of western Riverside County. Common wildlife detected or observed during the reconnaissance surveys included avian species such as turkey vulture (*Cathartes aura*), red-tailed hawk (*Buteo jamaicensis*), bushtit (*Psaltriparus minimus*), and yellow-rumped warbler (*Dendroica coronata*); and mammals such as California ground squirrel (*Spermophilus beecheyi*) and desert cottontail (*Sylvilagus audubonii*). Two large stick nests were observed within the eucalyptus grove on-site (see Figure 4.3.1). Neither nest was occupied as the biological reconnaissance survey was conducted outside of the avian nesting season (February 1 – September 1); however, there is potential that raptors protected under the federal Migratory Bird Treaty Act (MBTA) and California Fish and Game Code could utilize the nests during the nesting season as raptors exhibit nest fidelity. A complete list of all wildlife species detected or observed within the Study Area can be found in Appendix B of the Biological Resources Technical Report.

Sensitive Natural Communities

Sensitive natural communities include riparian habitat or other communities identified in local or regional plans, policies, or regulations, or designated by the California Department of Fish and Wildlife (CDFW) and United States Fish and Wildlife Service (USFWS). Of the plant communities that occur on the project site—non-native grassland, eucalyptus grove, and disturbed –none are considered sensitive and are not specifically designated for protection under federal, state, local or regional plans.

Special-Status Species

Based on the literature/database review and habitat suitability determined by the subsequent reconnaissance survey/mapping described above, several special-status species have a low potential to occur in the project site. The California Natural Diversity Database (CNDDB) recorded occurrences for special-status plants and wildlife within 2.5 miles of the project site, along with additional USFWS data, are depicted in **Figure 4.3-2**.

The "Potential for Occurrence" category referenced in **Table 4.3-2** and **Table 4.3-3** in the following sections is defined as follows:

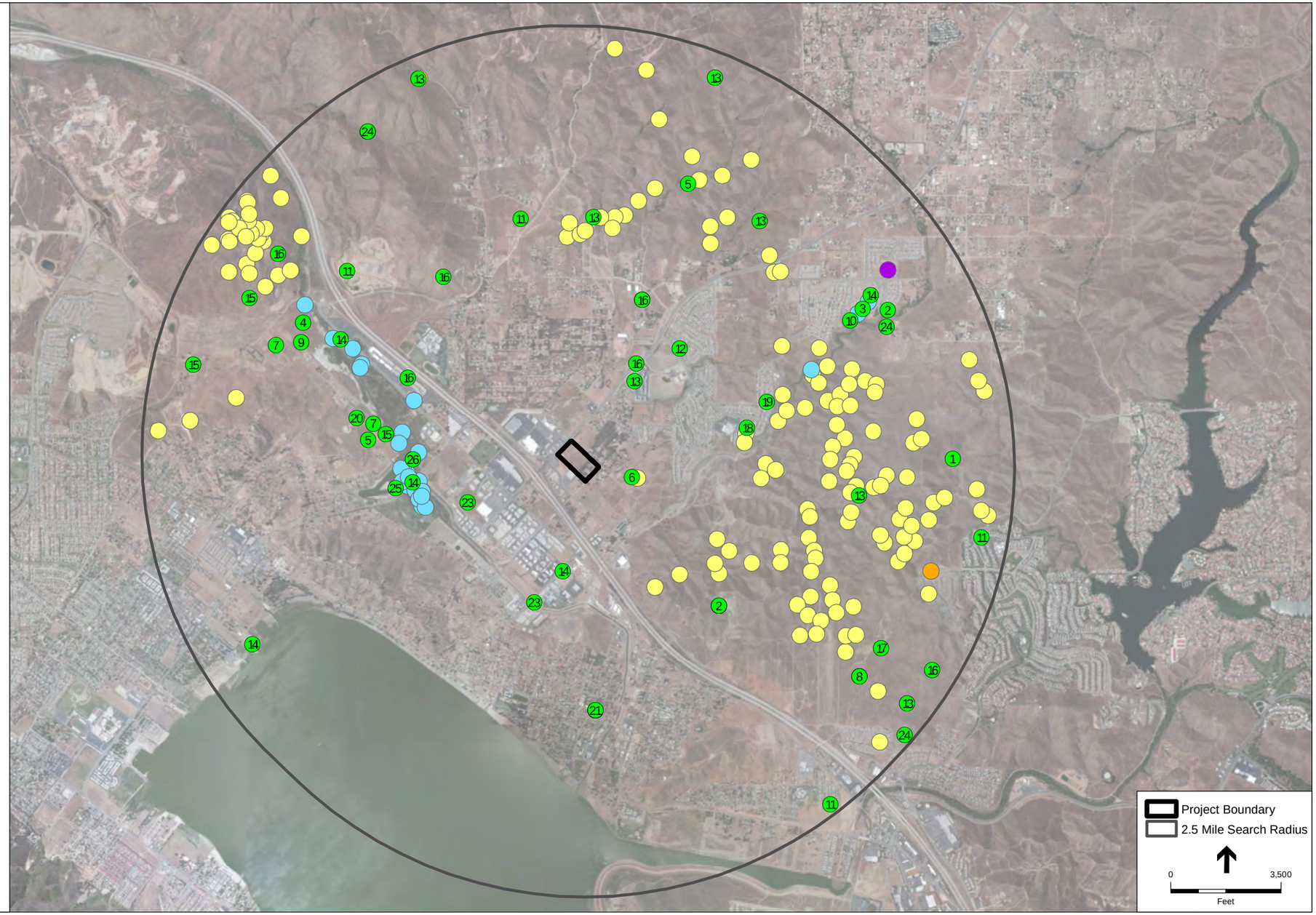
- **Not Expected:** The project site and/or immediate vicinity do not support suitable habitat for a particular species, and therefore the project is unlikely to impact this species.
- **Low Potential:** The project site and/or immediate vicinity only provide limited habitat for a particular species and impacts to this species from the project are unlikely. In addition, the known range for a particular species may be outside of the immediate vicinity.
- **Moderate Potential:** The project site and/or immediate vicinity provide suitable habitat for a particular species, and the project may impact this species. Mitigation will likely avoid potential impacts.
- **High Potential:** The project site and/or immediate vicinity provide ideal habitat conditions for a particular species and/or known populations occur in the project area and/or immediate vicinity. The project may impact this species. Mitigation will likely avoid potential impacts.
- **Present:** The species was observed within the project site and/or immediate vicinity during relevant biological surveys.

US Fish and Wildlife Service

- coastal California gnatcatcher *(Polioptila californica californica)*
- least Bell's vireo *(Vireo bellii pusillus)*
- quino checkerspot butterfly *(Euphydryas editha quino)*
- Stephens' kangaroo rat *(Dipodomys stephensi)*

California Natural Diversity Database

1. Bell's sage sparrow *(Artemisiospiza belli belli)*
2. California horned lark *(Eremophila alpestris actia)*
3. Cooper's hawk *(Accipiter cooperii)*
4. Coulter's goldfields *(Lasthenia glabrata ssp. coulteri)*
5. Munz's onion *(Allium munzii)*
6. Parry's spineflower *(Chorizanthe parryi var. parryi)*
7. San Diego ambrosia *(Ambrosia pumila)*
8. San Diego black-tailed jackrabbit *(Lepus californicus bennettii)*
9. San Jacinto Valley crownscale *(Atriplex coronata var. notatior)*
10. Southern Cottonwood Willow Riparian Forest *(Southern Cottonwood Willow Riparian Forest)*
11. Stephens' kangaroo rat *(Dipodomys stephensi)*
12. coast horned lizard *(Phrynosoma blainvillii)*
13. coastal California gnatcatcher *(Polioptila californica californica)*
14. least Bell's vireo *(Vireo bellii pusillus)*
15. long-spined spineflower *(Chorizanthe polygonoides var. longispina)*
16. orangethroat whiptail *(Aspidoscelis hyperythra)*
17. quino checkerspot butterfly *(Euphydryas editha quino)*
18. red-diamond rattlesnake *(Crotalus ruber)*
19. rosy boa *(Charina trivirgata)*
20. round-leaved filaree *(California macrophylla)*
21. senile tiger beetle *(Cicindela senilis frosti)*
22. slender-horned spineflower *(Dodecahema leptoceras)*
23. smooth tarplant *(Centromadia pungens ssp. laevis)*
24. southern California rufous-crowned sparrow *(Aimophila ruficeps canescens)*
25. western spadefoot *(Spea hammondii)*
26. white-tailed kite *(Elanus leucurus)*



SOURCE: ESRI, California Natural Diversity Database (CNDDB), US Fish and Wildlife Service (USFWS)

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Figure 4.3-2

Special-Status Species Occurrences Map

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TABLE 4.3-2
SPECIAL-STATUS PLANT SPECIES POTENTIAL FOR OCCURRENCE WITHIN THE PROJECT SITE

Species	Listing Status (MSHCP/USFWS/ CDFW/CNPS)	General Habitat	Potential for Species Occurrence within the Project Site
Allium munzii Munz' onion	NE/FE/ST/1B.1	Found in chaparral, coastal scrub, cismontane woodland, pinyon-juniper woodland, valley and foothill grassland, usually in heavy clay soils between elevations of 300-1,035 meters (m).	Not Expected. The project site does not support suitable habitat.
Ambrosia pumila San Diego ambrosia	NE/FE/--/1B.1	Chaparral, coastal scrub, valley and foothill grassland in alkali sandy loam or clay soils. Persist where disturbance has been superficial, sometimes near margins 20 – 415 m in elevation.	Low Potential. Suitable habitat is limited within the non-native grassland on-site; the habitat is highly disturbed and the species was not observed during the biological surveys. No focused botanical surveys are required per the MSHCP.
Atriplex coronata var. *notatior* San Jacinto Valley crownscale	CA/FE/--/1B.1	Found in playas, chenopod scrub, valley and foothill grassland, and vernal pools. Prefers dry, alkali flats in the San Jacinto River Valley at elevations of 400-500 m.	Low Potential. Suitable habitat is limited within the non-native grassland on-site; the habitat is highly disturbed and the species was not observed during the biological surveys. No focused botanical surveys are required per the MSHCP.
Brodiaea filifolia Thread-leaved brodiaea	CA/FT/SE/1B.1	Found in cismontane woodland, coastal scrub, playas, valley and foothill grassland, and vernal pools. Usually associated with annual grassland and vernal pools often surrounded by shrubland habitats. Clay soils and at elevations of 25-860 m.	Low Potential. Suitable habitat is limited within the non-native grassland on-site; the habitat is highly disturbed and the species was not observed during the biological surveys. No focused botanical surveys are required per the MSHCP.
California macrophylla round-leaved filaree	CA/--/--/1B.1	Found in clay soils and associated with cismontane woodlands and valley-foothill grasslands 15 – 1,200 m in elevation.	Low Potential. Suitable habitat is limited within the non-native grassland on-site; the habitat is highly disturbed and the species was not observed during the biological surveys. No focused botanical surveys are required per the MSHCP.
Calochortus plummerae Plummer's mariposa lily	AC/--/--/4.2	Found in coastal scrub, chaparral, valley and foothill grasslands, cismontane woodlands and lower montane coniferous forests; occurs on rocky or sandy sites, usually of alluvial or granitic material; common after fire 100 – 1,700m in elevation	Low Potential. Suitable habitat is limited within the non-native grassland on-site; the habitat is highly disturbed and the species was not observed during the biological surveys. No focused botanical surveys are required per the MSHCP.
Carex buxbaumii Buxbaum's sedge	--/--/--/4.2	Found in bogs and fens, meadows and seeps, and marshes and swamps at elevations from 3 – 3,300 m.	Not Expected. The project site does not support suitable habitat.

TABLE 4.3-2
SPECIAL-STATUS PLANT SPECIES POTENTIAL FOR OCCURRENCE WITHIN THE PROJECT SITE

Species	Listing Status (MSHCP/USFWS/ CDFW/CNPS)	General Habitat	Potential for Species Occurrence within the Project Site
Caulanthus simulans Payson's jewel-flower	AC/--/--/4.2	Found in chaparral and coastal scrub in sandy and granitic soils at elevations from 90-2200 m.	Not Expected. The project site does not support suitable habitat.
Centromadia pungens ssp. *laevis* Smooth tarplant	CA/--/--/1B.1	Associated with valley and foothill grasslands, chenopod scrub, meadows, playas and riparian woodlands 0-640m in elevation.	Low Potential. Suitable habitat is limited within the non-native grassland on-site; the habitat is highly disturbed and the species was not observed during the biological surveys. No focused botanical surveys are required per the MSHCP.
Chorizanthe leptotheca Peninsular spineflower	AC/--/--/4.2	Found in chaparral, coastal scrub, and lower montane coniferous forest at elevations from 300 – 1,900 m.	Not Expected. The project site does not support suitable habitat.
Chorizanthe parryi var. *parryi* Parry's spineflower	AC/--/--/3.2	Found in coastal scrub and chaparral, sometimes on the interface of two vegetation types. Associated with dry, sandy soils, dry slopes and flats. 275-1,220m in elevation.	Not Expected. The project site does not support suitable habitat.
Chorizanthe polygonoides var. *longispina* Long-spined spineflower	AC/--/--/1B.2	Found in chaparral, coastal scrub, meadows, valley and foothill grassland in gabbroic clay soils 30-1,530m in elevation.	Low Potential. Suitable habitat is limited within the non-native grassland on-site; the habitat is highly disturbed and the species was not observed during the biological surveys. No focused botanical surveys are required per the MSHCP.
Convolvulus simulans Small-flowered morning-glory	AC/--/--/4.2	Found in clay, serpentine seeps in chaparral (openings), coastal scrub and valley and foothill grassland at elevations from 30 – 700 m.	Low Potential. Suitable habitat is limited within the non-native grassland on-site; the habitat is highly disturbed and the species was not observed during the biological surveys. No focused botanical surveys are required per the MSHCP.
Deinandra paniculata Paniculate tarplant	--/--/--/4.2	Found in coastal scrub, valley and foothill grassland, and vernal pools. Usually in vernally mesic, sometimes sandy soils at elevations from 25 – 940 m.	Low Potential. Suitable habitat is limited within the non-native grassland on-site; the habitat is highly disturbed and the species was not observed during the biological surveys. No focused botanical surveys are required per the MSHCP.
Dodecahema leptoceras Slender-horned spineflower	NE/FE/SE/1B.1	Sandy soils of alluvial origin in chaparral, cismontane woodland, alluvial fan coastal scrub maintained by infrequent flooding 200-760m in elevation.	Not Expected. The project site does not support suitable habitat.

TABLE 4.3-2
SPECIAL-STATUS PLANT SPECIES POTENTIAL FOR OCCURRENCE WITHIN THE PROJECT SITE

Species	Listing Status (MSHCP/USFWS/ CDFW/CNPS)	General Habitat	Potential for Species Occurrence within the Project Site
Dudleya multicaulis many-stemmed dudleya	NE/--/--/1B.2	Found in chaparral, coastal scrub, and valley and foothill grasslands. Microhabitat includes clayey soils and grassy slopes. 15–790m in elevation.	Not Expected. The project site does not support suitable habitat.
Harpagonella palmeri Palmer's grapplinghook	AC/--/--/4.2	Found in chaparral, coastal scrub, and valley and foothill grassland from 20–955 m in elevation.	Low Potential. Suitable habitat is limited within the non-native grassland on-site; the habitat is highly disturbed and the species was not observed during the biological surveys. No focused botanical surveys are required per the MSHCP.
Juglans californica Southern California black walnut	AC/--/--/4.2	Found in chaparral, cismontane woodland, and coastal scrub in alluvial soils from 50–900 m.	Not Expected. The project site does not support suitable habitat.
Lasthenia glabrata ssp. *coulteri* Coulter's goldfields	CA/--/--/1B.1	Associated with coastal salt marshes, playas, valley foothills and grasslands, and vernal pools, 1–1,220m in elevation.	Low Potential. Suitable habitat is limited within the non-native grassland on-site; the habitat is highly disturbed and the species was not observed during the biological surveys. No focused botanical surveys are required per the MSHCP.
Lepechinia cardiophylla heart-leaved pitcher sage	CA/--/--/1B.2	Associated with closed-cone coniferous forests, chaparral and cismontane woodland at elevations between 520 and 1,370 m.	Not Expected. The project site does not support suitable habitat.
Myosurus minimus ssp. *apus* Little mousetail	CA/--/--/3.1	Found in vernal pools and alkaline soils at elevations of 20–640 m.	Not Expected. The project site does not support suitable habitat.
Orcuttia californica California Orcutt grass	NE/FE/SE/1B.1	Associated with vernal pools at elevations of 15–660 m.	Not Expected. The project site does not support suitable habitat.
Romneya coulteri Coulter's matilija poppy	AC/--/--/4.2	Found in chaparral and coastal scrub; often in burns. From 20–1,200 m in elevation.	Not Expected. The project site does not support suitable habitat.
Tortula californica California screw-moss	--/--/--/1B.2	Found in chenopod scrub, valley and foothill grassland. Grows on sandy soils at elevations of 10–1460 m.	Not Expected. The project site does not support suitable habitat.
Viguiera laciniata San Diego County viguiera	--/--/--/4.2	Found in chaparral and coastal scrub from 60–750 m in elevation.	Not Expected. The project site does not support suitable habitat.

TABLE 4.3-2
SPECIAL-STATUS PLANT SPECIES POTENTIAL FOR OCCURRENCE WITHIN THE PROJECT SITE

Species	Listing Status (MSHCP/USFWS/ CDFW/CNPS)	General Habitat	Potential for Species Occurrence within the Project Site

Explanation of Table 2 Codes, and Summary of Information Sources:

Primary Sources*:* California Native Plant Society (2014), Inventory of Rare and Endangered Plants (online 8th edition, www.cnps.org); CNDDB (2014), Data Base Record Search for Information on Threatened, Endangered, Rare, or Otherwise Sensitive Species and Communities within 2.5 miles; USFWS Species Occurrence Data within 2.5 miles (USFWS 2014a); MSHCP (2004) Table 2-2; MSHCP Conservation Report Generator.

Protection Status Criteria:

Western Riverside County MSHCP
CA = Criteria Area Plant Species under the MSHCP - additional focused surveys may be required if directed to do so by the Conservation Report Generator *and* suitable habitat exists on-site
NE = Narrow Endemic Plant Species under the MSHCP - additional focused surveys may be required if directed to do so by the Conservation Report Generator and suitable habitat exists on-site
AC = Species Adequately Conserved under the MSHCP (subject to the terms and conditions in the MSHCP [Table 2-2])

Federal Status
FE – federally listed as endangered

State of California
SE – State-listed as endangered
ST – State-listed as threatened

California Native Plant Society (CNPS): California Rare Plant Rank (CRPR)
CRPR 1B – plants rare, threatened, or endangered in California, and elsewhere
CRPR 3 – plants for which more information is needed and is undergoing review for CRPR listing
CRPR 4 - plants of limited distribution or infrequent throughout a broader area in California
.1 – Seriously endangered in California
.2 – Fairly endangered in California

TABLE 4.3-3
SPECIAL-STATUS WILDLIFE SPECIES POTENTIAL FOR OCCURRENCE WITHIN THE STUDY AREA

Species	Listing Status (MSHCP/USFWS/ CDFW)	General Habitat	Potential for Species Occurrence within the Study Area
Crustaceans			
Streptocephalus woottoni Riverside fairy shrimp	WS/FE/--	Endemic to western Riverside, Orange and San Diego Counties in areas of tectonic swales/earth slump basins in grassland and coastal sage scrub. Inhabit seasonally astatic pools filled by winter/spring rains. Hatch in warm water later in the season.	Low Potential. No evidence of pooling or ponding was observed during the biological surveys and soil survey data did not reveal the presence of clay lenses or other typical vernal pool soils.
Arthropods			
Cicindela senilis frosti Tiger beetle	--/--/--	Found along mudflats and beaches in southern California.	Not Expected. The project site does not support suitable habitat.
Euphydryas editha quino Quino checkerspot butterfly	AC/FE/--	Found in sunny openings within grassland, chaparral and coastal sage scrub. Requires high densities of host/food plants which include: California plantain (*Plantago erecta),* woolly plantain (*P. insularis*), Coulter's snapdragon (*Antirrhinum coulterianum*), Chinese houses (*Collinsia concolor*), and owl's clover (*Castilleja exserta*).	Low Potential. The site is highly disturbed due to previous grading and ongoing weed abatement activities that has removed most of the vegetation on the site. No suitable host plants or areas for "hill-topping" occur on the site. Additionally, no focused surveys are required per the MSHCP as the species is adequately conserved.
Amphibians			
Spea hammondii Western spadefoot	AC/--/SC	Prefers open areas with sandy or gravelly soils, in a variety of habitats including mixed woodlands, grasslands, chaparral, sandy washes, lowlands, river floodplains, alluvial fans, playas, alkali flats, foothills, and mountains. Rainpools or shallow temporary pools, which do not contain bullfrogs, fish, or crayfish are necessary for breeding.	Not Expected. The project site does not support suitable habitat.
Reptiles			
Aspidoscelis hyperythra Orange-throated whiptail	AC/--/SC	Inhabits low-elevation coastal scrub, chaparral and valley-foothill hardwood habitats, prefers washes and other sandy areas with patches of brush and rocks.	Low Potential. Suitable habitat is limited within the non-native grassland on-site. The habitat is highly disturbed and the species was not observed during the biological surveys. No additional surveys are required as the species is adequately conserved under the MSHCP.

TABLE 4.3-3
SPECIAL-STATUS WILDLIFE SPECIES POTENTIAL FOR OCCURRENCE WITHIN THE STUDY AREA

Species	Listing Status (MSHCP/USFWS/ CDFW)	General Habitat	Potential for Species Occurrence within the Study Area
Charina trivirgata Rosy boa	--/--/--	Found in desert and chaparral, from the coast to the Mojave and Colorado deserts, prefers moderate to dense vegetation and rocky cover.	Not Expected. The project site does not support suitable habitat.
Crotalus ruber ruber Northern red-diamond rattlesnake	AC/--/SC	Found in chaparral, woodland, grassland and desert areas. Occurs in rocky, dense vegetation, requires rodent burrows, cracks in rocks or surface cover objects.	Low Potential. Suitable habitat is limited within the non-native grassland on-site. The habitat is highly disturbed and the species was not observed during the biological surveys. No additional surveys are required as the species is adequately conserved under the MSHCP.
Phrynosoma coronatum blainvillii Coast horned lizard	AC/--/SC	Found in chaparral, coastal sage scrub grassland, and wash habitats. Sandy, rocky or gravelly soils; friable soils.	Low Potential. Suitable habitat is limited within the non-native grassland on-site. The habitat is highly disturbed and the species was not observed during the biological surveys. No additional surveys are required as the species is adequately conserved under the MSHCP.
Birds			
Accipiter cooperii Cooper's hawk	AC/--/SC	Found in riparian areas, and open woodlands, chiefly of open, interrupted or marginal type. Nests in riparian growths of deciduous trees and live oak woodlands.	Moderate Potential. Suitable nesting and foraging habitat is present on-site but is limited to the eucalyptus grove and non-native grassland on-site (respectively). These habitats are highly disturbed and the species was not observed during the biological surveys. No additional surveys are required as the species is adequately conserved under the MSHCP.
Aimophila ruficeps canescens Southern California rufous-crowned sparrow	AC/--/SC	Found in coastal sage scrub and sparse, mixed chaparral, frequents relatively steep, often rocky hillsides with grass and forb patches.	Not Expected. The project site does not support suitable habitat.
Amphispiza belli belli Bell's sage sparrow	AC/--/--	Nests in chaparral dominated by fairly dense strands of chamise. Found in coastal sage scrub.	Not Expected. The project site does not support suitable habitat.

TABLE 4.3-3
SPECIAL-STATUS WILDLIFE SPECIES POTENTIAL FOR OCCURRENCE WITHIN THE STUDY AREA

Species	Listing Status (MSHCP/USFWS/ CDFW)	General Habitat	Potential for Species Occurrence within the Study Area
Athene cunicularia Burrowing owl	AS/--/SC	Found in a variety of habitats that contain small mammal burrows, including open, dry annual or perennial grasslands, agricultural, rangelands, deserts and scrublands characterized by low-growing vegetation.	Moderate Potential. Suitable habitat exists within the non-native grassland on-site and small mammal burrows are highly abundant on-site (Appendix C); however, the project site does not occur within a predetermined survey area for burrowing owl and no further surveys are required per the MSHCP.
Elanus leucurus White-tailed kite	AC/--/SFP	Nests near wet meadows and open grasslands, dense oak, willow or other tree stands.	Not Expected. The project site does not support suitable habitat.
Eremophila alpestris actia California horned lark	AC/--/WL	Found in short-grass prairie, “bald” hills, mountain meadows, open coastal plains, fallow grain fields and alkali flats.	Low Potential. Suitable habitat is limited within the non-native grassland on-site. The habitat is highly disturbed and the species was not observed during the biological surveys. No additional surveys are required as the species is adequately conserved under the MSHCP.
Polioptila californica californica Coastal California gnatcatcher	AC/FT/SC	Coastal sage scrub habitat in arid washes, on mesas or on slopes of coastal hills. Permanent resident of coastal sage scrub below 2500 ft.	Not Expected. The project site does not support suitable habitat.
Vireo bellii pusillus Least Bell’s vireo	WS/FE/SE	Low riparian vegetation near vicinity of water or dry river bottoms, below 2000 ft. Nests are placed along margins of bushes or on twigs projecting into pathways, usually willow, baccharis or mesquite.	Not Expected. The project site does not support suitable habitat.
Mammals			
Dipodomys stephensi Stephens’ kangaroo rat	AC/FE/ST	Primarily found in annual and perennial grasslands, also occurs in coastal scrub and sagebrush with sparse canopy cover.	Low Potential. Suitable habitat is limited within the non-native grassland on-site. The habitat is highly disturbed and the species was not observed during the biological surveys. No additional surveys are required as the species is adequately conserved under the MSHCP (project is within SKR fee area).

TABLE 4.3-3
SPECIAL-STATUS WILDLIFE SPECIES POTENTIAL FOR OCCURRENCE WITHIN THE STUDY AREA

Species	Listing Status (MSHCP/USFWS/ CDFW)	General Habitat	Potential for Species Occurrence within the Study Area
Lepus californicus bennettii San Diego black-tailed jackrabbit	AC/--/SC	Associated with open grassland and brushland, and coastal sage scrub habitats in southern California.	Low Potential. Suitable habitat is limited within the non-native grassland on-site. The habitat is highly disturbed and the species was not observed during the biological surveys. No additional surveys are required as the species is adequately conserved under the MSHCP.

Explanation of Table 3 Codes, and Summary of Information Sources:
Primary Sources: CNDDB (2014), Data Base Record Search for Information on Threatened, Endangered, Rare, or Otherwise Sensitive Species and Communities within 2.5 miles; USFWS Species Occurrence Data within 2.5 miles (USFWS 2014a); MSHCP (2004) Table 2-2.

Protection Status Criteria:

Western Riverside County MSHCP

WS = Wetland Species under the MSHCP – additional surveys may be required as part of wetlands mapping per the MSHCP
AS = Additional surveys may be required for these species within locations shown on survey maps as described in *Section 6.3.2* of the MSHCP.
AC = Adequately Conserved Species under the MSHCP (subject to the terms and conditions in the MSHCP [Table 2-2 footnote 'e'])

Federal Status
FE – Federally listed as endangered
FT – Federally listed as threatened

State of California
SE – State-listed as endangered
ST – State-listed as threatened
SFP – Fully protected species
SC – State Species of Special Concern
WL – Watch List

Special-Status Plants

Of the 25 special-status plant species that have been historically recorded within the vicinity of the project, 11 have a low potential to occur based on species distribution and habitat types found within the project area (i.e., disturbed non-native grassland and eucalyptus grove). The project site is not anticipated to support these species as it is routinely mowed, disked, maintained and highly disturbed. While 11 species have a low potential to occur, no additional surveys or mitigation are required as these species are adequately conserved by the MSHCP. Fourteen are not expected to occur on the project site based on a lack of suitable habitat, or the fact that the project site is located outside of the known geographic and elevation range of the species. Table 4.3-2 provides a summary of these results.

Special-Status Wildlife

As listed in Table 4.3-3, three special-status wildlife species were determined to have a moderate potential to occur: Quino checkerspot butterfly (*Euphydryas editha quino*), Cooper's hawk (*Accipiter cooperii*), and burrowing owl (*Athene cunicularia*). Additionally, seven special-status species have been determined to have a low potential to occur and eight special-status species are

not expected to occur within the project area due to lack of suitable habitat or because the site is well outside of the species' known geographical range.

Special Status wildlife species that are present, or have a moderate to high potential to occur within the project area are described below.

Quino Checkerspot Butterfly (QCB)

The QCB is a member of the brush-footed butterfly family (Nymphalidae) that utilizes plants in the Plantaginaceae and Orobanchaceae families for larval food. Historically, the QCB has been found in Los Angeles, Orange, western Riverside, southwestern San Bernardino, and San Diego Counties in addition to northern Baja California, Mexico. The QCB is associated with a variety of habitats that include clay soil meadows, grassland, coastal sage scrub, chamise chaparral, red shank chaparral, juniper woodland and semi-desert. It ranges in elevation from sea level up to 5,000 feet. Despite association with a wide range of habitat types, distribution of this species is restricted to areas that support larval host plants. The primary host plant for QCB is California plantain (*Plantago erecta)*. Other host plants include woolly plantain (*Plantago patagonica)*, Coulter's snapdragon (*Antirrhinum coulterianum)*, and Chinese houses (*Collinsia concolor*). Owl's clover (*Castilleja exserta*) and rigid bird's beak (*Cordylanthus rigidus*) are considered secondary hosts. Hatching occurs from eggs usually laid on the host plant itself, then the early larvae feed and will enter a physiological dormancy known as diapause during periods of poor host plant conditions. During these periods, they often rest under vegetation and rocks. If adverse conditions occur, the larvae may reenter diapause multiple times, emerging after fall or winter rains. Generally the flight season for the QCB occurs from late February through April, with peak activity typically occurring in March and April. The project site is not anticipated to support QCB as it is routinely mowed, disked, maintained, highly disturbed, and lacks suitable habitat such as vegetation community associations and open areas for "hill-topping"; however, the biological reconnaissance survey was conducted at the time of year when host plants would be undetectable. Although the presence/absence of host plants could not be determined during the reconnaissance survey, the lack of suitable habitat, relatively flat topography and existing disturbances reduces the potential for this species to occur on the project site.

Cooper's Hawk

Cooper's hawk is a CDFW Species of Special Concern and a resident throughout most wooded portions of California. Its preferred nesting habitat is characterized by dense stands of coast live oak, riparian or other forest habitat near water. No Cooper's hawks were observed within the project area; however, there is potential for the species to nest within the project site in the eucalyptus groves.

Burrowing Owl

Burrowing owl is a CDFW Species of Special Concern, and is a species for which focused surveys may be required within locations shown on survey maps as described in Section 6.3.2 of the MSHCP; however, the project site is not within a predetermined survey area for burrowing owl, therefore, no focused surveys are required.

Suitable habitats for the burrowing owl include non-native annual grassland, shrub lands, and agricultural use areas that contain burrows made by mammals such as ground squirrels or badgers. Burrowing owls can also be found in openings of man-made structures such as culvert preconcileipes. Suitable habitat occurs on-site within the non-native grassland where small mammal burrows are highly abundant. While no owls or their sign (feathers, white wash, pellets, etc.) were observed during the biological survey, and the project site does not occur within a predetermined survey area for burrowing owl per the MSHCP, there is potential for the species to occupy the site.

Jurisdictional Resources

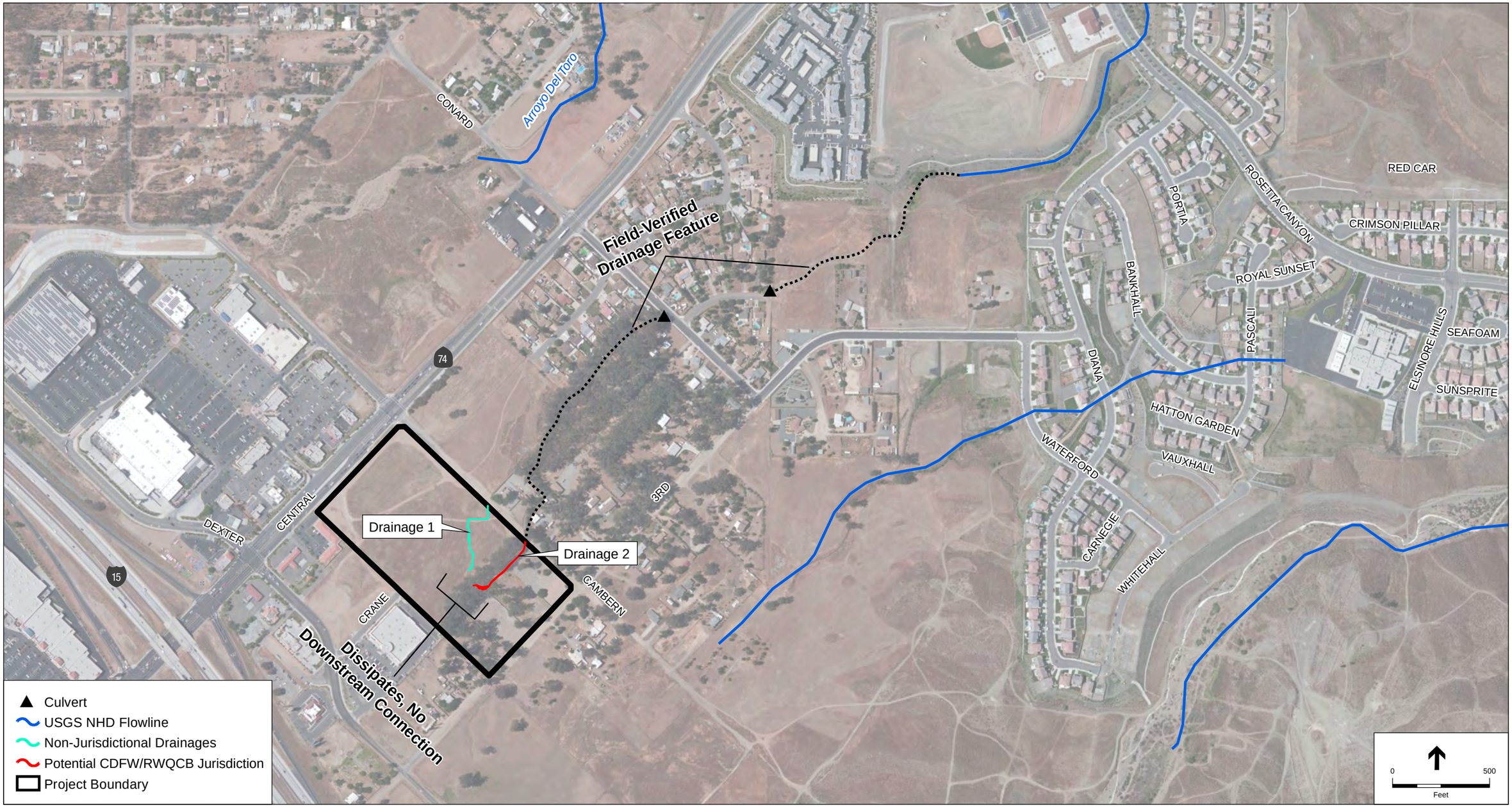
Two ephemeral drainage features enter the project site from the east and terminate on-site within the eucalyptus grove to the south (**Figure 4.3-3**). The northernmost feature is completely isolated and, based on field indicators such as surface scouring and sediment deposits, seems to originate from road runoff along Cambern Avenue. This feature is erosional and does not support riparian vegetation. The southernmost drainage is also erosional but appears to be hydrologically connected upstream to a United States Geologic Survey (USGS) blue-line stream. This feature does not support riparian vegetation and does not connect to any *downstream* riverine feature or riparian habitat. The potential for these features to be of jurisdiction of United States Army Corps of Engineers (USACE), CDFW, Regional Water Quality Control Board and the Riverside County MSHCP (Section 6.1.2) is evaluated below. The Hydrology Section (Section 4.7) of this EIR identifies five drainage features on the project site based on the Preliminary Hydrology Report for the project prepared by Greenberg Farrow in 2015. Identifying the hydrology patterns and areas of stormwater flow on the site takes a different approach than what is considered a drainage feature that could support biological resources potentially under the jurisdiction of the resource agencies. The drainage features discussed in this section were identified for their potential to support biological resources and evaluated for potential regulatory jurisdiction.

USACE Jurisdiction

Federal Wetlands

The three-parameter test was implemented in the field to determine the presence of wetlands as defined by USACE—wetland hydrology, dominance (>50 percent cover) of wetland plant species (hydrophytic plants), and wetland indicator soil series (hydric soils).

Obvious hydrologic indicators were noted within both drainage features on-site. Primary indicators included sediment deposits (non-riverine), while secondary indicators included drainage patterns within an ordinary high-water mark (OHWM). No hydrophytic vegetation was found on-site; therefore, neither feature passed the wetland plant species dominance test for federal wetlands. Soils within the immediate vicinity of the drainage features are mapped as Arbuckle and Garretson soils mapping units,, neither of which is considered hydric by USDA standards. As a result, no federal wetlands as defined by USACE are present on the project site.



SOURCE: ESA

Lake Elsinore Walmart Supercenter Project EIR . 130767

Figure 4.3-3
Jurisdictional Delineation

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Non-Wetland Waters of the United States

No drainages on-site were determined to be non-wetland waters of the United States because of the absence of a *downstream* nexus to Traditional Navigable Waters.

CDFW Jurisdiction

CDFW typically has jurisdiction over the bed and banks of a stream or drainage. The OHWM identified by the USACE typically satisfies the definition of a streambed; however, CDFW jurisdiction also extends beyond the streambed to include the associated banks and any adjacent riparian vegetation.

Drainage 1 is purely erosional, contains no riparian vegetation, and is isolated; therefore, is not anticipated to be under the jurisdictional of CDFW. Drainage 2 does not contain riparian vegetation, but does contain a defined bed and bank that is connected upstream to a USGS blue-line stream (Figure 3.4-3). To that end, 0.04 acre of potential CDFW-jurisdictional unvegetated streambed was mapped on-site. In addition, there were three other isolated features identified on-site that are considered erosional, and contain no riparian vegetation; therefore, they are not anticipated to be under the jurisdictional of CDFW.

RWQCB Jurisdiction

Because no federal jurisdiction occurs on-site, the RWQCB will not require a Clean Water Act Section 401 Water Quality Certification, which is a federal requirement. However, under the Porter-Cologne Water Quality Control Act, waters of the state (including surface and subsurface waters) fall under the jurisdiction of the appropriate RWQCB. Projects that affect wetlands or waters of the state must meet waste discharge requirements of the RWQCB; therefore, a report of waste discharge pursuant to California Water Code Section 13260 may be required by the RWQCB.

County MSHCP Section 6.1.2 Jurisdiction – Riparian/Riverine Resources and Vernal Pools

According to the Western Riverside County Multiple Species Habitat Conservation Plan Permittee Implementation Guidance Manual (2007), riparian/riverine resources can include:

- Areas containing riparian vegetation;
- Riverine areas (streams) that do not contain riparian vegetation, but that have water flow for all or a portion of the year, and contain biological functions and values that contribute to downstream habitat values for covered species inside the MSHCP Conservation Area.

Drainage 1, as well as the erosional features on the project site, do not contain riparian vegetation, nor do they contain biological functions and values that contribute to *downstream* habitat for species inside the MSHCP Conservation Area (i.e., the MSHCP Criteria Area shown in Figure 8 in Appendix C of this EIR). Therefore, no riparian/riverine resources, as defined by Section 6.1.2 of the MSHCP, occur on the project site.

During the biological reconnaissance surveys, the project site was also analyzed for its potential to support vernal pools. The soil types on the project site (Arbuckle and Garretson) are not typically associated with vernal pool complexes. Furthermore, no vernal pools, vernal pools

indicator plant or animal species, or evidence of ponding (i.e., surface soil cracks, unvegetated depressions, etc.) were detected on-site.

USFWS Critical Habitat

Critical habitat is defined as areas of land, water, and air space containing the physical and biological features essential for the survival and recovery of endangered and threatened species. Designated critical habitat includes sites for breeding and rearing, movement or migration, feeding, roosting, cover, and shelter. Designated critical habitats require special management and protection of existing resources, including water quality and quantity, host animals and plants, food availability, pollinators, sunlight, and specific soil types. Critical habitat designation delineates all suitable habitat, occupied or not, essential to the survival and recovery of the species.

The project site does not occur within any USFWS-designated critical habitats. The nearest critical habitat occurs approximately 0.5 mile east of the project site for the coastal California gnatcatcher (*Polioptila californica californica*) as shown in the Biological Resources Technical Report (Appendix B).

4.3.2 Regulatory Setting

Federal

Migratory Bird Treaty Act

The Migratory Bird Treaty Act (MBTA) of 1918, as amended, is designed to protect birds that migrate and cross state lines to provide management of migratory birds at a federal level. The MBTA prohibits the kill or transport of native migratory birds, or any part, nest, or egg of such bird unless allowed by another regulation adopted in accordance with the MBTA.

Federal Endangered Species Act

The Federal Endangered Species Act (FESA) was established to protect wildlife species and habitats from extinction and diminishment. The FESA is administered by the USFWS and applies to federally listed species and habitat occupied by the federally listed species. FESA Section 9 forbids acts that directly or indirectly harm listed species. Specifically, Section 9 identifies prohibited acts related to endangered species, and all persons, including federal, state, and local governments, from taking listed fish and wildlife species, except as specified under the provisions for exceptions (16 U.S.C. 1539). The term ‘take’ is defined as to harass, harm, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such activity (16 U.S.C. 1532[18]).

Clean Water Act

In 1948, Congress passed the Federal Water Pollution Control Act. The Act was later amended in 1972 and became known as the Clean Water Act (CWA). The CWA establishes the basic structure for regulating discharges of pollutants into the waters of the United States. The act specifies a variety of regulatory and non-regulatory tools to sharply reduce direct pollutant

discharges into waterways, finance municipal wastewater treatment facilities, and manage polluted runoff.

- Sections 303 and 304 provide for water quality standards, criteria, and guidelines.
- Section 401 requires every applicant for a federal permit or license for any activity that may result in a discharge to a water body to obtain a water quality certification that the proposed activity will comply with applicable water quality standards. Under Section 401 of the CWA, the State Water Resources Control Board (SWRCB) must certify that actions receiving authorization under Section 404 of the CWA also meet state water quality standards.
- Section 402 regulates point- and nonpoint-source discharges to surface waters through the National Pollutant Discharge Elimination System (NPDES) program. In California, the SWRCB oversees the NPDES program, which is administered by the Regional Water Quality Control Boards. The NPDES program provides for both general permits (those that cover a number of similar or related activities) and individual permits. Anti-backsliding requirements provided for under CWA Sections 402(o)(2) and 303(d)(4) prohibit slackening of discharge requirements and regulations under revised NPDES permits. With isolated/limited exceptions, these regulations require effluent limitations in a reissued permit to be at least as stringent as those contained in the previous permit.
- Section 404 of the Clean Water Act establishes a program to regulate the discharge of dredged and fill material into waters of the United States, including some wetlands. Activities in waters of the United States that are regulated under this program include fills for development, water resource projects (e.g., dams and levees), infrastructure development (e.g., highways and airports), and conversion of wetlands to uplands for farming and forestry. This program is administered by the USACE.

State

State CEQA Guidelines Section 15380

Although threatened and endangered species are protected by specific federal and state statutes, California Environmental Quality Act (CEQA) Guidelines Section 15380(b) provides that a species not listed on the federal or state list of protected species may be considered rare or endangered if the species can be shown to meet certain specified criteria. These criteria have been modeled after the definition in FESA and the section of the California Fish and Game Code dealing with rare or endangered plants or animals. This section was included in CEQA primarily to deal with situations in which a public agency is reviewing a project that may have a significant effect on, for example, a candidate species that has not been listed by either USFWS or CDFW. Thus, CEQA provides an agency with the ability to protect a species from the potential impacts of a project until the respective government agencies have an opportunity to designate the species as protected, if warranted. CEQA also calls for the protection of other locally or regionally significant resources, including natural communities. Although natural communities do not at present have legal protection of any kind, CEQA calls for an assessment of whether any such resources would be affected, and requires findings of significance if there would be substantial losses. Natural communities listed by CNDDB as sensitive are considered by CDFW to be

significant resources and fall under the State CEQA Guidelines for addressing impacts. Local planning documents such as general plans often identify these resources as well.

California Endangered Species Act

The California Endangered Species Act (CESA) is similar in many ways to the FESA. CESA is administered by the CDFW. CESA provides a process for CDFW to list species as threatened or endangered in response to a citizen petition or by its own initiative (Fish and Game Code Section 2070 et seq.). Section 2080 of CESA prohibits the take of species listed as threatened or endangered pursuant to the Act (Fish and Game Code Section 2080). Section 2081 allows CDFW to authorize take prohibited under Section 2080 provided that: (1) the taking is incidental to an otherwise lawful activity; (2) the taking will be minimized and fully mitigated; (3) the applicant ensures adequate funding for minimization and mitigation; and (4) the authorization will not jeopardize the continued existence of listed species (Fish and Game Code Section 2081).

Porter-Cologne Water Quality Control Act

Under the Porter-Cologne Water Quality Control Act, waters of the state fall under the jurisdiction of the appropriate RWQCB. Under the act, the RWQCB must prepare and periodically update water quality control basin plans. Each basin plan sets forth water quality standards for surface water and groundwater, as well as actions to control nonpoint and point sources of pollution to achieve and maintain these standards. Projects that affect wetlands or waters must meet waste discharge requirements of the RWQCB, which may be issued in addition to a water quality certification or waiver under Section 401 of the CWA. A report of waste discharge pursuant to California Water Code Section 13260 may be required by the RWQCB.

California Department of Fish and Game Code

The California Fish and Game Code regulates the taking of birds, mammals, fish, amphibians, and reptiles, as well as natural resources such as wetlands and waters of the state. It includes the CESA (Sections 2050-2115) and Streambed Alteration Agreement regulations (Sections 1600-1616), as well as provisions for legal hunting and fishing, and tribal agreements involving the take of native wildlife. Any project impact to state-listed species within or adjacent to a project site would require a permit under CESA. Also, if a project proposes to alter a state-defined wetland, then a Streambed Alteration Agreement would be required from CDFW.

California Native Plant Protection Act

The California Native Plant Protection Act (CNPPA) of 1977 (Fish and Game Code Sections 1900–1913) is intended to preserve, protect, and enhance endangered or rare native plants in California and gives the CDFW authority to designate state endangered, threatened, and rare plants and provides specific protection measures for identified populations. The Act also directs the California Fish and Game Commission to adopt regulations governing taking, possessing, propagation, and sale of any endangered or rare native plant.

Vascular plants listed as rare or endangered by the California Native Plant Society (2011), but which have no designated status or protection under federal or state endangered species legislation, are defined as follows:

- Rank 1A: Plants Believed Extinct.
- Rank 1B: Plants Rare, Threatened, or Endangered in California and elsewhere.
- Rank 2: Plants Rare, Threatened, or Endangered in California, but more numerous elsewhere.
- Rank 3: Plants About Which More Information is Needed - A Review List.
- Rank 4: Plants of Limited Distribution - A Watch List.

Natural Community Conservation Planning Program

The Natural Community Conservation Program (NCCP) Act, Sections 2800-2840 of the state Fish and Game Code, authorized the preparation of NCCPs to protect natural communities and species while allowing a reasonable amount of economic development. The MSHCP, adopted by the County of Riverside on June 17, 2003, serves as a Habitat Conservation Plan (HCP) pursuant to the NCCP Act and pursuant to Section 10 (a)(1)(B) of the FESA.

Local

Western Riverside County Multiple Species Habitat Conservation Plan

The project site lies within the Western Riverside County MSHCP. The MSHCP involves the assembly and management of a 500,000-acre Conservation Area for the conservation of natural habitats and their constituent wildlife populations. The MSHCP was developed to serve as a HCP pursuant to the Natural Communities Conservation Planning (NCCP) Act and Section 10(a)(1)(B) of the FESA. It encompasses 1.26 million acres and includes all unincorporated Riverside County land west of the crest of the San Jacinto Mountains to the Orange County line as well as jurisdictional areas of the cities of Temecula, Murrieta, Lake Elsinore, Canyon Lake, Norco, Corona, Riverside, Moreno Valley, Banning, Beaumont, Calimesa, Perris, Hemet, and San Jacinto. The overarching purpose of the plan is to balance development and economic interests with species and lands conservation goals. The MSHCP permits development of lands and take of species "in exchange for the assembly and management of a coordinated MSHCP Conservation Area" (Riverside County, 2004).

The approval of the MSHCP and the Implementing Agreement (IA) by the USFWS and the CDFW allows signatories of the IA to issue "take" authorizations for the 146 species covered by the MSHCP (termed "covered species"), including state and federally listed species, as well as other identified sensitive species. The "take" authorization includes impacts to the habitats of the covered species. The MSHCP requires any new development to pay fees to support the financing for the MSHCP. The fees are intended to meet mitigation requirements for CEQA, FESA and CESA. The MSHCP is further broken down into core areas and linkages, which are the focus of reserve and preservation actions. The project is not located within any of the identified core or special linkage areas.

City of Lake Elsinore General Plan

Goal 1: Identify and conserve important biological habitats where feasible while balancing the economic growth and private property right interests of the City, its residence, and landowners.

Policy 1.2: Evaluate the installation of barrier fencing or other buffers between MSHCP Conservation Areas and proposed public and private land uses that may be incompatible with the Conservation Areas in order to minimize illegal, unauthorized public access, domestic animal predation, or dumping in the Conservation Areas while not impeding wildlife movement.

Policy 1.4: Encourage revegetation with native plants compatible with natural surrounding habitat where soils have been disturbed during construction and discourage plants identified in the MSHCP as unsuitable for conservation areas.

Implementation Program: Through the MSHCP, LEAP and CEQA processes the City shall identify and conserve important biological habitats while balancing economic growth and property rights.

Goal 2: Protect sensitive plant and wildlife species residing or occurring within the City.

Policy 2.1: Biological resources analyses of proposed projects shall include discussion of potential impacts to any plant or wildlife species that is officially listed as threatened or endangered by the United States Fish and Wildlife Service and/or the California Department of Fish and Game but not covered by the MSHCP.

Policy 2.2: Development or modification shall be discouraged in areas containing riparian habitat of high functions and values or corridors with 8% or more of natural native habitat co containing 80% or more native plant species. Further, development in areas described for conservation, including areas planned for riparian/riverine restoration included in the MSHCP, shall also be discouraged.

4.3.3 Thresholds of Significance

According to Appendix G of the State CEQA Guidelines, the proposed project could have a potentially significant impact with respect to biological resources if it would:

- Have a substantial adverse impact, 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 CDFW or the USFWS.
- Have a substantial adverse impact on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the CDFW or the USFWS.
- Have a substantial adverse impact on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, and coastal wetlands) 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 resident or migratory wildlife corridors, or impede the use of wildlife nursery sites.
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.
- Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Communities Conservation Plan, or other approved local, regional, or state habitat conservation plan.

It was determined in the Initial Study/NOP (Appendix A) that the proposed project would not result in impacts related to interference of native resident or migratory fish or wildlife species or conflicts with local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance. It is also identified in the Initial Study/NOP and further described above that impacts to federally protected wetlands would not occur because none are present. Therefore, these criteria require no further analysis in the EIR, and no further discussion related to these criteria is provided below.

4.3.4 Methodology

Literature and Database Review

Preliminary biological investigations were conducted by ESA which included a review of aerial photographs, USGS topographic maps, National Wetland Inventory (NWI) maps, and literature and database searches that included a review of the MSHCP.

Databases queried included the California Native Plant Society (CNPS) Inventory of Rare and Endangered Vascular Plants of California and the CDFW CNDDB. These databases were queried for special-status species records in the Lake Elsinore USGS 7.5-minute quadrangle. “Special-status” species are defined as plants and animals that are legally protected by regulations and are categorized as follows:

- Plants or animals covered by the MSHCP
- Plants or animals listed or proposed for listing as threatened or endangered under the FESA (50 Code of Federal regulations [CFR] 17.12 [listed plants], 17.11 [listed animals]
- Plants or animals that are candidates for possible future listing as threatened or endangered under the FESA (61 FR 40, February 28, 1996)
- Plants or animals listed or proposed for listing by the State of California as threatened or endangered under the CESA (14 California Code of Regulations [CCR] 670.5)
- Plants listed as rare or endangered under the California Native Plant Protection Act (California Fish and Game Code, Section 1900 et seq.)
- Plants that meet the definitions of rare and endangered under CEQA (State CEQA Guidelines, Section 15380)

- Plants considered by the CNPS to be "rare, threatened or endangered in California" (Lists 1A, 1B, and 2 in CNPS Inventory 2014)
- Plants listed by CNPS as plants about which more information is needed to determine their status and plants of limited distribution (Lists 3 and 4 in CNPS 2014), which may be included as special-status species on the basis of local significance or recent biological information
- Animals fully protected in California (California Fish and Game Code, Sections 3511 [birds], 4700 [mammals], and 5050 [reptiles and amphibians])

The MSHCP Online Conservation Report Generator and Riverside County Land Information System (RCLIS) databases were queried to determine the specific requirements for compliance with the policies of the MSHCP as described in Volume 1, Chapter 6 Implementation Structure (RCIP 2004), i.e. Reserve Assembly (6.1.1); Riparian/Riverine and Vernal Pools (6.1.2); Narrow Endemic Plants (6.1.3); Urban/Wildlands Interface (6.1.4); and Additional Survey Needs (6.2.3).

From these queries a list of target special-status species was developed for the project area. Target special-status species were defined as having a geographic range and habitat similar to those found within the project area and thus have potential to occur on the project site.

USGS topographic maps, current and historical aerial photographs, and other data (including digital images derived from aerial photography with orthographic projection properties) were used in conjunction with ESA's in-house geographic information system (GIS) database as a base layer to identify soils, topography, previously mapped vegetation communities, previously recorded locations of sensitive plant and animal species, and USFWS-designated critical habitat boundaries. After reviewing the available background data, ESA conducted a general biological habitat assessment (described below).

General Biological Resources Survey

A general biological reconnaissance survey was conducted by ESA biologists on January 10, 2014, within the project boundary and a 500-foot buffer outside the boundary. The survey was conducted to identify potential environmental and regulatory constraints associated with development of the proposed project, and included walking belt transects spaced ten meters apart throughout the site. Special attention was paid to identifying any habitats potentially supporting sensitive flora or fauna that would be essential to efficiently implementing the terms and conditions of the MSHCP, CEQA, and water/wetland features potentially subject to USACE, CDFW, RWQCB. Aerial photography and Geographic Positioning System (GPS) technology was used to accurately locate and survey the area. General plant communities were preliminarily mapped directly on the aerial photographs using visible landmarks in the field (as described below). Representative photographs of the natural resources observed within the project area were also taken during the field survey.

Plant Community/Habitat Classification and Mapping

ESA biologists characterized and mapped plant communities within the project area in January 2014. On-site plant communities were mapped by ESA in order to assess the current site conditions and evaluate the potential for special-status plants and wildlife to utilize the project area. Mapping was conducted with the aid of aerial photographs and GPS technology using the MSHCP Uncollapsed Vegetation classification system (MSHCP 2004, *Table 2-1 - Summary of Collapsed and Uncollapsed Vegetation Communities Classifications*). All plants observed during the reconnaissance survey were either identified in the field or a sample was collected and later identified with the aid of taxonomic keys. Plant taxonomy follows Hickman (1993), as updated in Baldwin, et al. (2012).

General Wildlife Inventory

A general wildlife inventory was conducted during the January 2014 reconnaissance survey; however, no focused wildlife surveys were conducted at that time. Wildlife identified during the reconnaissance surveys by sight, call, tracks, nests, scat, remains, or other sign were recorded in field notes. All wildlife was identified in the field with the aid of binoculars and taxonomic keys (if applicable). Vertebrate taxonomy followed in this report is according to Stebbins (1985) for amphibians and reptiles, the American Ornithologists' Union (1983, and supplemental) for birds, and Jones et al. (1997) for mammals.

Jurisdictional Assessment

To identify potential jurisdiction resource areas, ESA conducted a review of available background information pertaining to the project layout and geography prior to conducting reconnaissance survey. Site maps were generated on aerial photographs and potentially jurisdictional features were highlighted in ArcGIS to assist in field verification. The project area was assessed for potentially jurisdictional wetlands or waters of the United States and state based on the presence of hydrophytic vegetation, stream geomorphology, OHWM, connectivity to traditionally navigable waters, and other appropriate hydrologic indicators. ESA biologists evaluated potentially jurisdictional features within the project area. The jurisdictional analysis was conducted consistent with *U.S. Army Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory, 1987). The definition of growing season and the basis of determining and recording indicators for hydrophytic vegetation and wetland hydrology was based on the *Regional Supplement to the Corps of Engineers Wetlands Delineation Manual: Arid West Region (Version 2.0)*, as well as the *Field Guide to the Identification of the Ordinary High Water Mark (OHWM) in the Arid West Region of the Western United States*. The 1987 USACE Manual, Arid West Supplement, and Field Guide to the OHWM were used for the analysis and evaluation of any normal circumstances, atypical situations, and problem areas, as needed. No pits for hydric soils were excavated on-site because no hydrophytic vegetation was found on-site. The limits of potential jurisdictional features were recorded in the field with a hand-held Trimble™ GeoXH GPS with sub-foot accuracy.

4.3.5 Impact Analysis

Impact 4.3-1: Would implementation of the proposed project have a substantial adverse effect, either directly or through habitat modifications, on species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the CDFW or USFWS?

Vegetation Communities and Habitat

Direct impacts as a result of construction activities associated with the proposed project would include the permanent removal of vegetation communities that may be utilized as habitat for both common and rare wildlife. Indirect impacts associated with construction include fugitive dust and increased noise levels due to heavy equipment operations occurring in these areas. Indirect impacts to habitat could include alterations to existing topographical and hydrological conditions, increased erosion and sediment transport, and the establishment of non-native and invasive weeds. Operational impacts include disturbances associated with increased human presence.

Development of the proposed project would grade and/or otherwise disturb the entire project site. Common plant species would be impacted by the project through the direct, permanent removal of 9.7 acres of non-native grassland, 2.8 acres of eucalyptus grove, and 5.1 acres of disturbed habitat. The plant communities found within the proposed project are highly disturbed, widespread throughout the region, and are not considered sensitive or designated for protection under federal, state, local or regional plans. As a result, the permanent removal of 17.6 acres of disturbed vegetation would be less-than-significant.

Special-Status Plants

No special-status plants were observed during the biological surveys. The potential for species to occur is low, and per Sections 6.1.3 and 6.3.2 of the MSHCP (RCIP, 2004), the project site does not fall within a predetermined survey area for special-status plants and are conserved by the MSHCP Reserve design. Based on the low potential for occurrence and the coverage under the MSHCP, impacts to special-status plants from implementation of the proposed project would be less-than-significant.

Special-Status Wildlife

As described above in Table 4.3-3 and in the discussion of special-status wildlife with a potential to occur on the project site, Cooper's hawk, and Burrowing owl have moderate and high potentials for occurrence on the project site. Activities associated with construction of the project may potentially impact these special-status species. Construction activities could result in the direct loss of active nests of both common and special-status bird species (including raptors) or the abandonment of active nests as a result of noises and/or vibrations generated by temporary construction activities, which would be considered a significant impact by the MTBA and the California Fish and Game Code (3503 and 3503.5). However, potential impacts can be prevented through implementation of pre-construction surveys and associated avoidance measures should

construction occur during nesting season. Implementation of **Mitigation Measures BIO-1** through **BIO-3** would reduce potential impacts to a less-than-significant level.

Critical Habitat

The project site does not occur within any USFWS-designated critical habitats. The nearest critical habitat occurs approximately 0.5 mile east of the project site for the coastal California gnatcatcher. As a result, because the project would not disrupt any USFWS-designated critical habitats, no impacts to designated critical habitat would occur from the proposed project.

Mitigation Measures:

BIO-1: The following Best Management Practices (BMPs) are applicable measures from Appendix C of the MSHCP and shall be implemented by the project proponent for construction activities:

- Prior to the issuance of grading or building permits, a qualified biologist (approved by the City of Lake Elsinore) shall be retained to oversee compliance with protection measures for nesting birds and raptors and potentially jurisdictional resources.
- The project biologist or designated representative shall be on-site during initial ground-disturbing activities, including vegetation removal, tree removal and grading to ensure that nesting birds and raptors and potentially jurisdictional resources identified during the biological survey are not impacted.
- Trash and food items shall be contained in closed containers and removed daily to reduce the attractiveness to opportunistic predators such as common ravens, coyotes, and feral dogs.
- Workers shall be prohibited from bringing pets and firearms to the project site and from feeding wildlife.
- Intentional killing or collection of any plant or wildlife species shall be prohibited.

BIO-2: Prior to the commencement of construction activities, the project proponent shall adhere to the following.

- A qualified biologist (i.e., a biologist approved by the City of Lake Elsinore with previous burrowing owl survey experience) shall conduct a pre-construction clearance survey (regardless of the time of year) of the permanent and temporary impact areas to locate active breeding or wintering burrowing owl burrows no more than 14 days prior to ground-disturbing activities (i.e., vegetation clearance, tree removal, grading, tilling). The survey methodology shall be consistent with the methods outlined in the MSHCP and shall consist of walking parallel transects 7 to 20 meters apart, adjusting for vegetation height and density as needed, and noting any potential burrows with fresh burrowing owl sign or presence of burrowing owls. In the event that a burrowing owl is detected or observed during the preconstruction clearance survey, all measures shall be implemented

as described in Appendix E of the MSHCP to ensure impacts are avoided or reduced to less-than-significant levels.

BIO-3: If removal of the on-site trees and grading occurs during the non-nesting season(September 1 – January 31), and if tree removal and grading occurs during the nesting season and construction is scheduled to commence during the avian non-nesting season (September 1 to January 31), no preconstruction surveys or additional measures are required for nesting birds (other than burrowing owl – see BIO-2). Should construction activities occur within the avian nesting season (February 1 – August 31) the following measures shall be implemented:

- To avoid impacts to nesting birds in the project area for construction activities that are initiated during the breeding season (February 1 to August 31), a qualified wildlife biologist shall conduct preconstruction surveys of all potential nesting habitat within the project site plus a 500-foot buffer. Potential nesting habitat includes shrubs, trees, and structures as well as open areas suitable for ground nesting species. Surveys shall be conducted no more than 14 days prior to construction activities. Surveys need not be conducted for the entire project site at one time; they may be phased so that surveys occur shortly before a portion of the site is disturbed. The surveying biologist must be qualified to determine the status and stage of nesting by migratory birds and all locally breeding raptor species without causing intrusive disturbance. If active nests are found, a suitable buffer (e.g. 200-300 feet for common raptors and 30-50 feet for passerines) shall be established around active nests and no construction within the buffer shall be allowed until a qualified biologist has determined that the nest is no longer active (e.g. the nestlings have fledged and are no longer reliant on the nest). Encroachment into the buffer may occur at the discretion of a qualified biologist.

Significance Determination: Less-than-significant.

Impact 4.3-2: Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations, or by the CDFW or USFWS?

Sensitive natural communities include riparian habitat or other sensitive natural communities identified in local or regional plans, policies, or regulations, or designated by the CDFW or USFWS. A total of 0.04 acres of potentially CDFW-jurisdictional unvegetated streambed (as defined by Fish and Game Code Section 1602) exists within the project site, and would be impacted by project activities. Due to the small size of impact and the fact that the channel does not exhibit any important functions or services to wildlife or habitat other than ephemeral water conveyance, the impact to this channel is less-than-significant.

However, changes to this channel are subject to review and approvals by the CDFW after submittal of a Streambed Alteration Notification. Upon receipt and review of this notification, the agency may decide that no permits are required. Should CDFW confirm jurisdiction over the on-site feature, an application for a CDFW Streambed Alteration Agreement under Section 1602 of the California Fish and Game Code may be necessary. Permit applications would include a narrative description of the on-site feature and submittal of engineering drawings to illustrate and

detail the replacement of lost and regained functions and services. Compliance with CDFW's Streambed Alteration Program would reduce impacts to less-than-significant levels.

Mitigation Measures: None required.

Significance Determination: Less-than-significant.

Impact 4.3-3: Would the project have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the CWA (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

The project site does not contain any federally protected wetlands as defined by Section 404 of the Clean Water Act, and impacts related to wetlands would not occur from implementation of the proposed project. However, the RWQCB regulates wetlands and waters of the state under the Porter-Cologne Water Quality Control Act, and may require a report of waste discharge pursuant to California Water Code Section 13260 for any discharge that could affect the quality of waters of the state, such as the drainage feature (Drainage 1) mapped on-site. Compliance with the waste discharge requirements would reduce impacts to less-than-significant levels.

Mitigation Measures: None required.

Significance Determination: Less-than-significant.

Impact 4.3-4: Would the project conflict with the provisions of an adopted HCP, NCCP, or other approved local, regional, or state habitat conservation plan?

The project site is located within the boundaries of the MSHCP and subject to the Reserve Assembly Requirements (Section 6.1.1); Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools (Section 6.1.2); Protection of Narrow Endemic Plant Species (Section 6.1.3); Guidelines Pertaining to the Urban/Wildlands Interface (Section 6.1.4), and Additional Survey Needs and Procedures (Section 6.3.2), which are described below.

Section 6.1.1 - Project Relationship to Reserve Assembly: The entire project is located within the Elsinore Area Plan of the MSHCP. The project site is not within a Criteria Cell proposed for conservation under the MSHCP; therefore, the project is not subject to the Habitat Evaluation and Acquisition Negotiation Strategy (HANS) or Joint Project Review processes, and thus the project is consistent with the Reserve Assembly requirements of the MSHCP.

Section 6.1.2 - Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools: The project site does not contain areas defined by the MSHCP as riparian/riverine, nor does the project site support vernal pools or vernal pool-associated species; therefore, the project is consistent with the riparian/riverine and vernal pool requirements of the MSHCP.

Section 6.1.3 - Protection of Narrow Endemic Plant Species: The project site is not located within the MSHCP Narrow Endemic Plant Species Survey Area (NEPSSA); therefore, focused

plant surveys are not required for species identified under *Section 6.1.3* of the MSHCP. Thus, the project is consistent with the Narrow Endemic Plant Species requirements of the MSHCP.

Section 6.1.4 - Guidelines Pertaining to the Urban/Wildland Interface: The MSHCP Urban/Wildland Interface Guidelines are intended to address indirect effects associated with locating development in proximity to the MSHCP Conservation Area. The project site is not located within a MSHCP Criteria Area and is not located adjacent to any Criteria Cell describing areas of conservation. The proposed project is not expected to result in significant indirect impacts to special-status biological resources. Implementation of the BMPs in Appendix C of the MSHCP (included as Mitigation Measure BIO-1) would ensure compliance with the MSHCP. Thus, the proposed project is consistent with the Guidelines Pertaining to the Urban/Wildland Interface.

Section 6.3.2 - Additional Survey Needs and Procedures: The project site is not located within the MSHCP Additional Survey Areas for Amphibians, Burrowing Owl, Criteria Area Species, Mammals, or Special Linkage Areas. No surveys are required and the proposed project is consistent with the Additional Survey Needs and Procedures of the MSHCP.

As described above, the proposed project would not conflict with the MSHCP, and with adherence to the BMPs in Appendix C of the MSHCP, as included in Mitigation Measure BIO-1 impacts related to provisions of an adopted habitat conservation plan would be less-than-significant.

Mitigation Measure: BIO-1.

Significance after Mitigation: Less-than-significant.

4.3.6 Cumulative Impacts

The geographic context for the evaluation of cumulative biological resource impacts is the Elsinore Area Plan of the MSHCP. Future development activities could result in incremental loss of undeveloped habitat areas that may support special status plants or other species. As described above, the project site has been disturbed by previous human activity and the vegetation within the proposed project is highly disturbed and not considered sensitive or designated for protection, so its loss would not contribute to a cumulative impact.

The potentially impacted species are all avian species that would be protected through implementation of BIO-1 through BIO-3 and are provided regional coverage under the MSHCP. Likewise, all projects within the boundaries of the MSHCP are subject to the Reserve Assembly Requirements; Protection of Species Associated with Riparian/Riverine Areas and Vernal Pools; Protection of Narrow Endemic Plant Species; Guidelines Pertaining to the Urban/Wildlands Interface, and Additional Survey Needs and Procedures, in addition to state and federal agency requirements, such as the MBTA, that would reduce the potential of cumulative impacts to biological resources. With implementation of BIO-1 through BIO-3 the proposed project would not result in a cumulatively considerable contribution to biological resource impacts.

Mitigation Measures: BIO-1 through BIO-3.

Significance Determination: Less-than-significant.

References

Baldwin, et al., *Jepson Manual: Vascular Plants of California; Second Edition*. University of California Press, 2012.

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Environmental Laboratory, *U.S. Army Corps of Engineers Wetland Delineation Manual,* 1987.

Environmental Science Associates, *Lake Elsinore Walmart Project Biological Resources Technical Report*, March 2014.

County of Riverside, *Riverside County Integrated Project (RCIP) Multiple Species Habitat Conservation Plan (MSHCP)*, March 2004.

4.4 Cultural Resources

This section of the Draft Environmental Impact Report (EIR) addresses the potential impacts of the proposed project to cultural resources in accordance with the significance criteria established in Appendix G of the California Environmental Quality Act (CEQA) Guidelines. This section of the Draft EIR is based on the ESA report *Lake Elsinore Walmart Project, City of Lake Elsinore, Riverside County, California: Phase I Cultural Resources Study* (Gonzalez, 2014) found in Appendix D of this EIR. The following sections describe the environmental setting for cultural and paleontological resources, the applicable regulatory framework, potential impacts of the proposed project, and mitigation measures to reduce potential impacts to a level of less than significant.

Cultural resources are defined as prehistoric and historic sites, structures, districts, and landscapes, or any other physical evidence associated with human activity considered important to a culture, a subculture, or a community for scientific, traditional, religious, or any other reason. Under CEQA, paleontological resources, although not associated with past human activity, are grouped within cultural resources. For analysis purposes, cultural resources may be categorized into four groups: archaeological resources, historic resources, including architectural/engineering resources, contemporary Native American resources, and paleontological resources.

Archaeological resources are places where human activity has measurably altered the earth or left deposits of physical remains. Archaeological resources may be either prehistoric-era (before European contact) or historic-era (after European contact). The majority of such places in California are associated with either Native American or Euro-American occupation of the area. The most frequently encountered prehistoric or historic Native American archaeological sites are village settlements with residential areas and sometimes cemeteries; temporary camps where food and raw materials were collected; smaller, briefly occupied sites where tools were manufactured or repaired; and special-use areas like caves, rock shelters, and rock art sites. Historic-era archeological sites may include foundations or features such as privies, corrals, and trash dumps.

There are no structures on the site, and therefore the topic of historic resources is not discussed in the EIR. Contemporary Native American resources, also called ethnographic resources, can include archaeological resources, rock art, and the prominent topographical areas, features, habitats, plants, animals, and minerals that contemporary Native Americans value and consider essential for the preservation of their traditional values. These locations are sometimes hard to define and traditional culture often prohibits Native Americans from sharing these locations with the public.

Paleontology is a branch of geology that studies the life forms of the past, especially prehistoric life forms, through the study of plant and animal fossils. Paleontological resources represent a limited, non-renewable, and impact-sensitive scientific and educational resource. As defined in this section, paleontological resources are the fossilized remains or traces of multi-cellular invertebrate and vertebrate animals and multi-cellular plants, including their imprints from a previous geologic period. Fossil remains such as bones, teeth, shells, and leaves are found in the geologic deposits (rock formations) where they were originally buried. Paleontological resources

include not only the actual fossil remains, but also the collecting localities, and the geologic formations containing those localities.

4.4.1 Environmental Setting

Regional Setting

The proposed project is located in a moderately developed portion of the City of Lake Elsinore in western Riverside County. Regional geographic features include Lake Elsinore and the Cleveland National Forest to the south and west, Canyon Lake to the east, and scattered pockets of development of various density in all directions. Lake Elsinore, originally named "Laguna Grande" by the Spanish explorers (Hudson, 1978), is the largest freshwater lake in southern California and is fed by the San Jacinto River. Vegetation in this area includes a mosaic of xeric habitats such as sage scrub, grassland, and chaparral with the occasional riparian or woodland habitat associated with riverine features and/or the fringes of larger bodies of water.

Paleoenvironment

The proposed project is located within the northern Peninsular Ranges geomorphic province (Norris and Webb, 1990; Harden, 2004). This geomorphic province is characterized by northwest trending mountain ranges and valleys that extend from the tip of the Baja Peninsula to the Transverse Ranges, which include the San Bernardino and San Gabriel Mountains in southern California. It is bounded to the east by the Colorado Desert (Norris and Webb, 1990; Harden, 2004). Regional mountain ranges in the Peninsular Ranges geomorphic province include the Santa Ana, San Jacinto, and Santa Rosa Mountains. Geologically, these mountains are dominated by Mesozoic, plutonic igneous and metamorphic rocks that are part of the Peninsular Ranges batholith (Southern California batholith) (Jahns, 1954; Harden, 2004). In general, the intervening valleys are underlain by thick sequences of Cenozoic sedimentary rocks shed from the adjacent mountain ranges. Lake Elsinore is underlain by approximately 800 feet of lacustrine (lake) deposits, while Quaternary floodplain and alluvial fan deposits are found in areas surrounding the lake (DWR, 1981; McLeod, 2014).

Prehistoric Setting

The chronology of southern California is typically divided into three general time periods: the Early Holocene [11,000 to 7,600 Before Present (B.P.)] the Middle Holocene (7,600 to 3,600 B.P.), and the Late Holocene (3,600 B.P. to A.D. 1769). This chronology is manifested in the archaeological record by particular artifacts and burial practices that indicate specific technologies, economic systems, trade networks, and other aspects of culture.

Early Holocene (11,000 to 7,600 B.P.)

While it is not certain when humans first came to California, their presence in southern California by about 11,000 B.P. has been well documented. At Daisy Cave, on San Miguel Island, cultural remains have been radiocarbon dated to between 11,100 and 10,950 years B.P. (Byrd and Raab, 2007). On the mainland, radiocarbon evidence confirms occupation of the Orange County and San Diego County coast by about 9,000 B.P., primarily in lagoon and river valley locations (Gallegos 2002). In western Riverside County, few Early Holocene sites are known to exist. One

exception is site CA-RIV-2798, which contains deposits dating to as early as 8580 cal. B.P. (Grenda, 1997). During the Early Holocene, the climate of southern California became warmer and more arid and the human population, residing mainly in coastal or inland desert areas, began exploiting a wider range of plant and animal resources (Byrd and Raab, 2007).

The primary Early Holocene cultural complex in coastal southern California was the San Dieguito Complex, occurring between approximately 10,000 and 8,000 B.P. The people of the San Dieguito Complex inhabited the chaparral zones of southwestern California, exploiting the plant and animal resources of these ecological zones (Warren, 1967). Leaf-shaped and large-stemmed projectile points, scraping tools, and crescentics are typical of San Dieguito Complex material culture.

Middle Holocene (7,600 to 3,600 B.P.)

During the Middle Holocene, there is evidence for the processing of acorns for food and a shift toward a more generalized economy in coastal and inland southern California. The processing of plant foods, particularly acorns, increased, a wider variety of animals were hunted, and trade with neighboring regions intensified (Byrd and Raab, 2007).

Late Holocene (3,600 B.P. to A.D. 1769)

During the Late Holocene, native populations of southern California were becoming less mobile and populations began to gather in small sedentary villages with satellite resource-gathering camps (Byrd and Raab, 2007). Evidence indicates that the overexploitation of larger, high-ranked food resources may have led to a shift in subsistence towards a focus on acquiring greater amounts of smaller resources, such as shellfish and small-seeded plants (Byrd and Raab, 2007).

Major technological changes appeared as well, particularly with the advent of the bow and arrow, which largely replaced the use of the dart and atlatl (Byrd and Raab, 2007). Small projectile points, ceramics, including Tizon brownware pottery, and obsidian from Obsidian Butte (Imperial County), are all representative artifacts of the Late Holocene.

Artifacts include large amounts of faunal and botanical remains, numerous high-quality tools, fire-affected rock, and anthrosols, indicate a wide range of activities (Mason, 1999). Bedrock mortars point to the processing of seeds and acorns, and ceremonial activities are evidenced by the presence of pictographs, petroglyphs, and cupules within village sites.

Ethnographic Setting

Luiseño

The Luiseño were named after the Mission San Luis Rey, to which many of them were relocated. The language of the Luiseño people has been identified as belonging to the Cupan group of the Takic subfamily, which is part of the larger Uto-Aztecan language family (Bean and Shipek, 1978). Luiseño territory was bordered by Agua Hedionda Creek on the south and Aliso Creek on the northwest, encompassed most of the drainage of the San Luis Rey River and the Santa Margarita River, and extended east as far as the San Jacinto Mountains (Kroeber, 1925). Today this area is located within Riverside, northern San Diego, and southern Orange Counties, and

would have encompassed a diverse environment including lagoons and marshes, coastal areas, inland river valleys, foothills, and mountains.

The Luiseño subsisted on small game, coastal marine resources, and a wide variety of plant foods such as grass seeds and acorns. Luiseño houses were conical thatched reed, brush, or bark structures. The Luiseño inhabited permanent villages centered around patrilineal clans, with each village headed by a chief, or *not* (Sparkman, 1908). Seasonal camps associated with villages were also used. Each village or clan had an associated territory and hunting, collecting, and fishing areas. Villages were typically located in proximity to a food or water source, or in defensive locations, often near valley bottoms, streams, sheltered coves or canyons, or coastal strands (Bean and Shipek, 1978). It is estimated that there may have been around 50 Luiseño villages with a population of about 200 each at the time of the first Spanish contact (Bean and Shipek, 1978).

Today, there are six federally recognized tribes in California who share Luiseño tribal affiliation, language, and culture, including the La Jolla Band of Luiseño Indians (La Jolla), Rincon Band of Luiseño Indians (Rincon), Pauma Yuima Band of Mission Indians (Pauma), Pechanga Band of Luiseño Indians (Pechanga), Pala Band of Mission Indians (Pala), and Soboba Band of Luiseño Indians (Soboba).

Historic Setting

Spanish Period (1769 to 1821)

The first European presence in what is now southern California came in 1542, when Juan Rodriguez Cabrillo led an expedition along the coast. Europeans did not return until 1769, when the expedition of Gaspar de Portola traveled overland from San Diego to San Francisco. Juan Bautista de Anza was the first recorded European visitor to the area. He is credited with the discovery of an inland route from Sonora to the northern coast of California in 1774, bringing him through much of what is now known as Riverside County, via the San Jacinto Mountains (Rolle, 2003). With de Anza, the colonization of Alta California began in earnest. After the opening of the overland route, Spanish pueblos were established, evolving into the Spanish system of governance.

In the late 18th century, the Spanish began establishing missions in California and forcibly relocating and converting native peoples (Horne and McDougall, 2003). The purpose of the missions was to encourage, by any means necessary, the assimilation of Native populations to adopt the Spanish custom, language, and religion. The mission strategy relied upon an agricultural economy and as such, locations selected for the construction of a mission depended upon three factors: arable soil for crops, an adequate supply of fresh water, and a large local Indian population for labor (Rolle, 2003). Because of this, no missions were constructed in the immediate vicinity of the project site, but it has been documented that the San Gabriel Mission utilized the fertile grasslands of the inland valleys as pasture for their cattle (Schmid, 2008).

Mexican Period (1821 to 1846)

In 1821 Mexico, which included much of present-day California, became independent from Spain, and during the 1820s and 1830s the California missions were secularized. Mission

property was supposed to have been held in trust for the Native Californians, but instead was handed over to civil administrators and then into private ownership as land grants. The project site is located within the former Rancho La Laguna Mexican-era land grant (Hudson. 1978). The 20,000-acre (including the lake) land grant was acquired by Julian Manriquez in 1844 (Hayes, 1929).

American Period (1846 to Present)

In 1851, ownership of Rancho La Laguna passed to Abel Sterns, the largest landholder in southern California at that time. It was later acquired by Agustin Machado in 1858. The rancho's adobe house, located near present-day Grand Avenue, became a stop on the Butterfield Overland Mail Stage Route, which operated from 1858 to 1861. The rancho lands were subsequently acquired by Franklin Heald, who founded the City of Elsinore in 1883 (City of Lake Elsinore 2014).

Settlement of the area increased throughout the late 19th century, encouraged by the discovery of mineral ores and the advent of the Atchison, Topeka, and Santa Fe Railroad. In 1884, the California Southern Railroad built in line from Colton through the Canon de Rio San Jacinto (now Railroad Canyon) to link with San Diego, a rail station "La Laguna" was built near the corner of present day Mission Trail Road and Diamond Drive. The City of Elsinore was incorporated in 1888 and, by popular vote in 1972, officially changed its name to Lake Elsinore (City of Lake Elsinore, 2011).

4.4.2 Regulatory Setting

Federal

Archaeological resources are protected through the National Historic Preservation Act (NHPA) of 1966, as amended (16 USC 470f), and the implementing regulations, Protection of Historic Properties (36 Code of Federal Regulations [CFR] Part 800), the Archaeological and Historic Preservation Act of 1974, and the Archaeological Resources Protection Act of 1979. Prior to implementing an "undertaking" (e.g., issuing a federal permit), Section 106 of the NHPA requires federal agencies to consider the effects of the undertaking on historic properties and to afford the Advisory Council on Historic Preservation and the State Historic Preservation Officer (SHPO) a reasonable opportunity to comment on any undertaking that would adversely affect properties eligible for listing in the National Register of Historic Places (National Register). As indicated in Section 101(d)(6)(A) of the NHPA, properties of traditional religious and cultural importance to a tribe are eligible for inclusion in the National Register. Under the NHPA, a resource is considered significant if it meets the National Register listing criteria at 36 CFR 60.4.

State

California implements the NHPA through comprehensive cultural resources surveys and preservation programs. The California Office of Historic Preservation (OHP) implements the policies of the NHPA and maintains the California Historical Resources Inventory.

California Environmental Quality Act

CEQA Section 21084.1 states that a project that may cause a substantial adverse change in the significance of an historical resource is a project that may have a significant effect on the environment. Additionally, State CEQA Guidelines Section 15064.5 recognizes that a historical resource includes: (1) a resource listed in, or determined to be eligible by the State Historical Resources Commission, for listing in the California Register of Historical Resources (California Register); (2) a resource included in a local register of historical resources, as defined in PRC Section 5020.1(k) or identified as significant in a historical resource survey meeting the requirements of PRC Section 5024.1(g); and (3) any object, building, structure, site, area, place, record, or manuscript which a lead agency determines to be historically significant or significant in the architectural, engineering, scientific, economic, agricultural, educational, social, political, military, or cultural annals of California by the lead agency, provided the lead agency's determination is supported by substantial evidence in light of the whole record. The fact that a resource does not meet the three criteria outlined above does not preclude the lead agency from determining that the resource may be an historical resource as defined in PRC Sections 5020.1(j) or 5024.1.

As described by Section 21084.1 of CEQA and Section 15064.5 of the State CEQA Guidelines, should a project cause a substantial adverse change (defined as physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired) in the significance of an historical resource, the lead agency must identify potentially feasible measures to mitigate these effects (State CEQA Guidelines Sections 15064.5(b)(1) and 15064.5(b)(4)).

Archaeological resources are defined in CEQA Section 21083.2, which states that a "unique" archaeological resource is an archaeological artifact, object, or site that has a high probability of meeting any of the following criteria:

- Contains information needed to answer important scientific research questions and there is a demonstrable public interest in that information;
- Has a special and particular quality such as being the oldest of its type or the best available example of its type; or
- Is directly associated with a scientifically recognized important prehistoric or historic event or person.

Unique archaeological resources as defined in Section 21083.2, may require reasonable efforts to preserve resources in place (Section 21083.1(a)). If preservation in place is not feasible, mitigation measures shall be required. Additionally, the State CEQA Guidelines state that if an archaeological resource is neither a unique archaeological nor a historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment (State CEQA Guidelines Section 15064.5(c)(4)).

California Health and Safety Code Section 7050.5

California Health and Safety Code Section 7050.5 requires in the event human remains are discovered, the County Coroner be contacted to determine the nature of the remains. In the event the remains are determined to be Native American in origin, the Coroner is required to contact the California Native American Heritage Commission (NAHC) within 24 hours to relinquish jurisdiction.

California Public Resources Code Section 5097.98

Section 5097.98, as amended by Assembly Bill 2641, provides procedures in the event human remains of Native American origin are discovered during project implementation. Section 5097.98 requires that no further disturbances occur in the immediate vicinity of the discovery, that the discovery is adequately protected according to generally accepted cultural and archaeological standards, and that further activities take into account the possibility of multiple burials. Section 5097.98 further requires the NAHC, upon notification by a County Coroner, designate and notify a Most Likely Descendant (MLD) regarding the discovery of Native American human remains. Once the MLD has been granted access to the site by the landowner and inspected the discovery, the MLD then has 48 hours to provide recommendations to the landowner for the treatment of the human remains and any associated grave goods.

In the event that no descendant is identified, or the descendant fails to make a recommendation for disposition, or if the land owner rejects the recommendation of the descendant, the landowner may, with appropriate dignity, reinter the remains and burial items on the property in a location that will not be subject to further disturbance.

Paleontological Resources

Paleontological resources are also afforded protection by CEQA. Appendix G (Part V) of the State CEQA Guidelines provides guidance relative to significant impacts on paleontological resources, stating that a project will normally result in a significant impact on the environment if it will "…disrupt or adversely affect a paleontological resource or site or unique geologic feature, except as part of a scientific study." Section 5097.5 of the Public Resources Code specifies that any unauthorized removal of paleontological remains is a misdemeanor. Further, the California Penal Code Section 622.5 sets the penalties for the damage or removal of paleontological resources.

Local

City of Lake Elsinore General Plan

The City of Lake Elsinore General Plan (2011) contains the following cultural resources goals, policies, and implementation measures that are relevant to the proposed project.

Goal 6: Preserve, protect, and promote the cultural heritage of the City and surrounding region for the education and enjoyment of all City residents and visitors, as well as for the advancement of historical and archeological knowledge.

Policy 6.1: Encourage the preservation of significant archeological, historical, and other cultural resources located within the City.

Policy 6.2: The City shall consult with the appropriate Native American tribes for projects identified under SB 18 (Traditional Tribal Cultural Places).

Policy 6.3: When significant cultural/archeological sites or artifacts are discovered on a site, coordination with professional archeologists, relevant state and, if applicable, federal agencies, and the appropriate Native American tribes regarding preservation of sites or professional retrieval and preservation of artifacts or by other means of protection, prior to development of the site shall be required. Because ceremonial items and items of cultural patrimony reflect traditional religious beliefs and practices, developers shall waive any and all claims to ownership and agree to return all Native American ceremonial items and items of cultural patrimony that may be found on a project site to the appropriate tribe for treatment. It is understood by all parties that unless otherwise required by law, the site of any reburial of Native American human remains or cultural artifacts shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act.

Policy 6.4: If archeological excavations are recommended on a project site, the City shall require that all such investigations include Native American consultation, which shall occur prior to project approval.

Goal 7: Support state-of-the-art research designs and analytical approaches to archeological and cultural resource investigations while also acknowledging the traditional knowledge and experience of the Native American tribes regarding Native American culture.

Policy 7.1: Consult with California Native American tribes prior to decision-making processes for the purpose of preserving cultural places located on land within the City's jurisdiction that may be affected by the proposed plan, in accordance with State or Federal requirements.

Policy 7.2: Continue to identify, document, evaluate, designate, and preserve the cultural resources in the City.

Policy 7.3: Continue to update a citywide inventory of cultural resources in conformance with state standards and procedures while maintaining the confidentiality of information as required by law.

Policy 7.4: Support the permanent curation of archaeological artifact collections by universities or museums or other appropriate tribal facilities.

Policy 7.5: Increase opportunities for cultural heritage tourism by promoting the history of Lake Elsinore to attract cultural heritage travelers while maintaining the confidentiality of Native American sites, places and other information as required by law.

Policy 8.1: For development in areas delineated as "High" or "Undetermined" potential sensitivity for paleontological resources, require the project applicant to hire a certified

paleontologist, who must perform a literature search and/or survey and apply the relevant treatment for the site as recommended by the Society for Vertebrate Paleontology.

Implementation Program: Through the CEQA process the City shall request state-of-the-art and best-available research designs and approaches be used in archaeological and cultural resource investigations.

4.4.3 Thresholds of Significance

According to Appendix G of the State CEQA Guidelines, the proposed project could have a potentially significant impact with respect to cultural resources if it would:

- Cause a substantial adverse change in the significance of a historical resource as defined in §15064.5.
- Cause a substantial adverse change in the significance of an archaeological resource pursuant to §15064.5.
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.
- Disturb any human remains, including those interred outside of formal cemeteries.

It was determined in the Initial Study/Notice of Preparation (Appendix A) that implementation of the proposed project could result in significant impacts to archaeological resources, paleontological resources, and human remains. Project impacts related to those criteria are discussed below.

4.4.4 Methodology

Historical and Archaeological Resources

ESA conducted a Phase I Cultural Resources Study (Gonzalez, 2014) for the proposed project. The study included: a records search of the project site and 1-mile radius commissioned through the Eastern Information Center (EIC); a Sacred Lands File (SLF) search at the California NAHC and follow-up correspondence with all individuals and groups indicated by the NAHC as having affiliation with the project area; a review of historic maps and aerial photographs; and a pedestrian survey.

The records search conducted on January 31, 2014, by staff at the EIC indicated that 44 cultural resources studies have been conducted within a 1-mile radius of the project site. Of these 44 studies, four included portions of the project site with one (RI-7342) covering the entire project site. Approximately 40 percent of the 1-mile radius has been previously surveyed. RI-7342 is a cultural resource study conducted by ASM Affiliates, Inc. (ASM) in June of 2007 for a proposed commercial project, which covered the current project site. The conditions during this survey were excellent with approximately 100 percent ground surface visibility throughout the majority of the project site. During the time of this survey, ASM noted that the project site had been recently plowed and/or tilled and nothing was discovered as a result of the survey. As a result of

the negative findings from their study, ASM concluded that the construction within the project site would not result in direct or indirect impacts to any cultural resources.

The records search indicated that a total of 18 cultural resources have been previously recorded within 1 mile of the project. Of these 18 resources, nine are prehistoric archaeological sites, six are historic-era archaeological sites, and three are historic-period built resources. Of the 18 resources, none are located within the project site. The closest previously recorded resource to the project site is approximately 2,100 feet from the project site (CA-RIV-8861) and is an archaeological site that consists of historic-era refuse scatter.

A SLF search for the project site was requested from the NAHC on January 22, 2014. The SLF search failed to indicate the presence of Native American cultural resources within the project site. Follow-up correspondence was conducted on January 24, 2014, with all individuals and groups listed by the NAHC as having affiliation with the project site. To date, four responses have been received from the Pala Band of Mission Indians (Pala), the Soboba Band of Luiseño Indians (Soboba), the Rincon Band of Luiseño Indians (Rincon), and Pechanga Band of Luiseño Mission Indians (Pechanga). The Pala do not have any objections to the project and defer to Tribes in closer proximity to the project site. The Soboba indicated that the project is outside the existing reservation and the Soboba's Tribal Traditional Use Areas and the Tribe does not have any concerns with the project, but did request notification in the event of inadvertent discoveries. The Rincon indicated that the project site is not located within the Luiseño Aboriginal Territory and suggested contacting a Tribe affiliated with the project site. The Pechanga stated that the project site is located within the Pechanga's ancestral territory, indicated that the sensitivity level of the project site is high, and expressed concerns that the project could impact subsurface cultural resources during ground-disturbing activities, but did not provide any specific resource location information. The Pechanga requested notification of the project entitlement process; copies of all applicable documents; government-to-government consultation with the Lead Agency; archaeological and Native American monitoring; consultation regarding treatment and disposition of artifacts; and participation in cultural surveys.

Historic maps and aerial photographs were examined in order to provide historical information about the project site and to contribute to an assessment of the project site's archaeological sensitivity. Available historic maps include the 1901 and 1941 Lake Elsinore 30' topographic quadrangle, and the 1970 Lake Elsinore 7.5' topographic quadrangles. Historic aerial photographs from 1967, 1978, and 2005 were also examined (historicaerials.com, 2013). Based on a review of these documents, it appears that the project site was undeveloped land until sometime between 1967 and 1978. The 1967 aerial photograph reveals that much of the project site consisted of open space, with a number of trees in the southeastern portion of the project site. The 1978 aerial photograph depicts mobile homes in the southeastern portion of the project site, as well as throughout the project vicinity. The 2005 aerial photograph indicates a number of mobile homes and houses in the southeastern portion of the project site, as well as residential and commercial developments surrounding the project site.

A cultural resources survey of the project site was conducted on March 7, 2014, by ESA. All accessible portions of the project site were surveyed in a systematic manner with transect

intervals spaced no greater than 10 meters (approximately 30 feet) apart. Approximately 100 percent of the project site was surveyed. The northern two-thirds of the project site consisted of an open field that had a graded perimeter and 90 to 100 percent ground surface visibility. The soil consists of a light brown to reddish-brown silty sand, with sporadic areas of exposed marine Paleocene Silverado Formation. Rodent burrows were observed and examined for evidence of subsurface cultural deposits. A row of mature eucalyptus trees separated the northern two-thirds of the project site from the southern one-third. The southern one-third of the project site was covered with a thick layer of gravel and organic tree debris, resulting in ground surface visibility of 0 to 5 percent. The exposed soils in this area consist of brown, dark brown, and reddish-brown silty sand. This area was previously developed with mobile homes, which can be seen on the 1978 and 2005 aerial photographs. Some remnants of previous residential development, such as concrete and wood debris, irrigation pipes and spouts, and a small circular stone wall around one of the mature trees, were observed. No cultural resources were identified during the survey.

No cultural resources were identified in the project site as a result of ESA's Phase I Cultural Resources Study or ASM's 2007 study. While the Pechanga have expressed concerns that the site may contain sensitive cultural resources and that construction may impact these resources, the results from both ASM's 2007 study and ESA's 2014 study indicate that the project site is in an area of low cultural sensitivity.

Paleontological Resources

A paleontological resources records search, commissioned through the Natural History Museum of Los Angeles County (NHMLAC) on January 27, 2014, indicated that no previously-recorded vertebrate fossil localities are located within the project site. The results indicated that localities have been recorded nearby in the similar deposits either as surface or subsurface deposits within the project site. According to the NHMLAC, the project site has surficial deposits consisting of younger Quaternary Alluvium derived as alluvial fan deposits from the elevated areas to the east and northeast. The younger Quaternary Alluvium deposits are unlikely to contain significant vertebrate fossils in the uppermost layers. However, these younger deposits may be underlain by older sedimentary deposits that do contain significant vertebrate fossil remains (McLeod, 2012).

The nearest vertebrate fossil locality from similar older Quaternary sediments that may underlie the project site is LACM 5168 that produced a fossil specimen of horse (*Equus*) approximately 3 miles east of the project site, near Railroad Canyon Reservoir. The next nearest fossil locality in these sediments is LACM 6059 that produced a fossil specimen of camel (*Camelops*) south-southeast of the project site near Lake Elsinore (McLeod, 2012).

The nearest elevated terrain to the east and southwest of the project site contain exposures of metamorphic rocks that will not contain any recognizable fossils. Adjacent to the north, there are exposures of marine and non-marine Paleocene Silverado Formation. The nearest fossil locality in these sediments is LACM 4634 that produced a fossil specimen of tortoise (*Testudinidae*) approximately 20 miles to the west of the project site on Irvine Ranch (McLeod, 2012).

The NHMLAC concluded that shallow excavations in the younger Quaternary Alluvium exposed throughout project site would not uncover significant vertebrate fossils. However, deeper

excavations into older sedimentary deposits may encounter significant fossil vertebrate remains. Therefore, any substantial excavations into the sedimentary deposits in the project site should be "monitored to professionally and expeditiously collect any vertebrate fossil remains uncovered without impeding development" (McLeod, 2012). In addition, "any fossils recovered during mitigation should be deposited in an accredited and permanent scientific institution for benefit of current and future generations" (McLeod. 2012).

As identified in the Phase I Cultural Resources Study, there are areas in the northern two-thirds of the project site that exhibited a light brown to reddish-brown silty sand, with sporadic areas of exposed marine Paleocene Silverado Formation. The perimeters of this area appeared to have been recently graded with small berms of the spoils from grading pushed up on the boundaries of the project site. Fragments of marine sediments (Silverado Formation) were found in these spoils throughout the northern two-thirds of the project site and have potential for vertebrate fossils.

4.4.5 Impact Analysis

Impact 4.4-1: Would the project cause a substantial adverse change in the significance of a historical resource or archaeological resource, as defined in CEQA Guidelines Section 15064.5?

No historical resources or unique archaeological resources were identified in the project site, and the closest previously recorded archaeological resource is approximately 2,100 feet from the project site and consists of historic-era refuse scatter. In addition, results from both ASM's 2007 study and ESA's 2014 study indicate that the project site is in an area of low cultural sensitivity. Furthermore, the project site has been disturbed by non-historic residential development and grading activities. Based on the archaeological studies and the literature review, it is highly unlikely that archaeological resources exist on the project site. However, it is possible for unknown archaeological resources to be located on the project site. Therefore, without mitigation, implementation of the proposed project may result in significant impacts on unknown archaeological resources.

Mitigation Measures:

CULT-1: Prior to earth moving activities, a qualified archaeologist meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology (U.S. Department of the Interior 2008) or a County of Riverside qualified archaeologist shall conduct cultural resources sensitivity training for all construction personnel. Construction personnel shall be informed of the types of archaeological resources that may be encountered, and of the proper procedures to be enacted in the event of an inadvertent discovery of archaeological resources or human remains. The project proponent shall ensure that construction personnel are made available for and attend the training and retain documentation demonstrating attendance.

CULT-2: If unknown prehistoric/historic archaeological resources are encountered during grading and excavation activities, no further excavation or disturbance of the area where the resources were found shall occur within 100 feet of the find until a qualified archaeologist, meeting the Secretary of the Interior's Professional Qualifications Standards for archaeology

(U.S. Department of the Interior 2008) or a County of Riverside qualified archaeologist, is retained by the developer and examines the find. The archaeologist shall determine the significance of the find. If the find is determined not significant then grading and excavation activities can continue, and the archaeologist would determine the need for archaeological monitoring.

If the find is determined to be significant or potentially significant, the archaeologist shall prepare a Treatment Plan and shall contact the appropriate Native American tribal representatives, as identified by the Native American Heritage Commission. If requested by the Tribe(s), the City, the developer, or the Project archaeologist, the City shall, in good faith, consult on the discovery and its disposition (e.g., avoidance, preservation, return of artifacts to tribe, etc.). If the Developer and the Tribe cannot agree on the significance or the mitigation for such resources, these issues will be presented to the Community Development Director (CDD) for decision. The CDD shall make the determination based on the provisions of the California Environmental Quality Act with respect to archaeological resources and shall take into account the religious beliefs, customs, and practices of the appropriate tribe. Notwithstanding any other rights available under the law, the decision of the CDD shall be appealable to the City of Lake Elsinore City Council.

A report of findings shall also be prepared by a qualified archaeologist, and shall include an itemized inventory of any specimens recovered. The report and confirmation of curation of any recovered resources from an accredited museum repository shall signify completion of the program to mitigate impacts to archaeological/historic resources. If disturbed resources are required to be collected and preserved, the Applicant shall be required to participate financially up to the limits imposed by Public Resources Code Section 21083.2.

Significance after Mitigation: Less-than-significant.

Impact 4.4-2: Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

Although the project site has been previously disturbed through grading, agricultural activities and/or development, the paleontological records search and cultural resources survey indicate that at least some portions of the project site are sensitive for the presence of paleontological resources. Excavations may impact exposures of the Silverado Formation, which has the potential for vertebrate fossils.

The City's General Plan EIR states that projects must demonstrate that it will not result in significant impacts to paleontological resources through implementation of General Plan EIR mitigation measure MM Cultural/Paleontological Resources 9, which states that projects shall demonstrate compliance with Cultural and Paleontological Resources Policy 8.1, any potential impacts will be reduced to a less-than-significant level. Policy 8.1 states that for development in areas delineated as "High" or "Undetermined" potential sensitivity for paleontological resources, require the project applicant to hire a certified paleontologist, who must perform a literature search and/or survey and apply the relevant treatment for the site as recommended by the Society for Vertebrate Paleontology. This was completed as part of the Phase I Cultural Resources Study

that is attached as Appendix D to this EIR. As described above, the Phase I Cultural Resources Study identified sediments that have potential for vertebrate fossils throughout the northern two-thirds of the project site. In addition, in response to research on the project site, the NHMLAC concluded that shallow excavations in the younger Quaternary Alluvium exposed throughout project site would not uncover significant vertebrate fossils. However, deeper excavations into older sedimentary deposits may encounter significant fossil vertebrate remains. Therefore, any substantial excavations (i.e., greater than five feet) into the areas with younger Quaternary Alluvium exposed on the surface as well as any excavations into the areas of the site that contains the Silverado Formation could result in potential significant impacts to paleontological resources.

Mitigation Measures:

CULT-3: Prior to earth moving activities, a qualified paleontologist shall be retained to conduct pre-construction worker paleontological resources sensitivity training. This training shall include information on what to do in case an unanticipated discovery is made by a worker. All construction personnel shall be informed of the possibility of encountering fossils, and instructed to immediately inform the construction foreman if any bones or other potential fossils are unexpectedly unearthed in an area where paleontological monitoring is not required. The project proponent shall ensure that construction personnel are made available for and attend the training and retain documentation demonstrating attendance.

CULT-4: Excavations exceeding five feet below the current grade within the surfaces areas containing the younger Quaternary Alluvium as well as any excavation into areas of the site that contains the Silverado Formation shall be monitored by a qualified paleontologist. A qualified paleontologist is defined as an individual on the County of Riverside list of qualified paleontologists or an individual with an M.S. or a Ph.D. in paleontology or geology who is familiar with paleontological procedures and techniques.

A qualified paleontologist shall perform periodic spot check monitoring during excavation activities within the areas containing Quaternary Alluvium on the surface until excavations reach five feet below current grade. However, if paleontological resources are found prior to five feet below current grade within the areas containing Quaternary Alluvium on the surface, the qualified paleontologist shall determine the need for more frequent paleontological monitoring for the remainder of the excavation activities.

If paleontological resources are discovered, the qualified paleontologist shall inform the contractor to cease ground disturbing activities within 50 feet of the find until it can be assessed by the qualified paleontologist. If the find is determine to be not significant, excavation activities can continue. If the find is determined to be significant or potentially significant, the ground disturbing activities within 50 feet of the find shall continue to cease until the sampling and data recovery of resource is completed. After recovering the resource, the paleontologist shall follow the Society of Vertebrate Paleontology standard guidelines for analyzing the fossil specimens, store the specimens at a museum depository that is capable to provide access for future research, prepare a final report documenting the find(s), and submit the document to the City of Lake Elsinore and other interested parties.

Significance after Mitigation: Less-than-significant.

Impact 4.4-3: Would the project disturb human remains, including those interred outside of formal cemeteries?

No known cemeteries or other burial places are known to exist within the project site and the project is unlikely to disturb human remains. However, ground-disturbing activities associated with development have the potential to disturb undiscovered human remains. Hence, because the project would involve ground-disturbing activities, it is possible that such actions could unearth, expose, or disturb previously unknown human remains, and these actions are considered potentially significant. Mitigation Measure CULT-5 is provided to reduce potential impacts to human remains to a less-than-significant level.

Mitigation Measure:

CULT-5: If human remains are encountered, California Health and Safety Code Section 7050.5 states that no further disturbance shall occur until the Riverside County Coroner has made the necessary findings as to origin. Further, pursuant to California Public Resources Code Section 5097.98(b) remains shall be left in place and free from disturbance until a final decision as to the treatment and disposition has been made. If the Riverside County Coroner determines the remains to be Native American, the coroner shall contact the Native American Heritage Commission within 24 hours. Subsequently, the Native American Heritage Commission shall identify the person or persons it believes to be the "most likely descendant." The most likely descendant may then make recommendations, and engage in consultations concerning the treatment of the remains as provided in Public Resources Code 5097.98.

Significance After Mitigation: Less-than-significant.

4.4.6 Cumulative Impacts

The geographic scope for cumulative impacts to cultural and paleontological resources includes the western Riverside County region. This geographic scope of analysis is appropriate because the archaeological, historical, and paleontological resources within this radius are expected to be similar to those that occur on the project site because of the proximity; similar environment, landform, and hydrology would result in similar land-use—and thus, similar potential cultural resources.

Western Riverside County contains archaeological and paleontological resources. Thus, there is potential for development projects in the region to disturb areas that may contain known or unknown cultural resources. Potential cultural resource impacts of the proposed project, in combination with other projects in the region, could contribute to a cumulatively significant impact due to the overall loss of artifacts unique to the region.

However, as described above, the results from both ASM's 2007 study and ESA's 2014 study indicate that the project site is in an area of low cultural sensitivity. In addition, the Mitigation Measures listed above would further reduce the potential of the project to impacts to cultural

resources, including paleontological resources and human remains. Therefore, the proposed project would result in a less-than-significant contribution to an adverse impact to cultural resources.

Mitigation Measures: CULT-1 through CULT-5.

Significance after Mitigation: Less-than-significant.

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4.5 Geology, Soils, and Seismicity

This section of the Draft Environmental Impact Report (EIR) identifies the existing geology, soils and seismicity environment in the project vicinity, potential impacts that could be created by the project, and recommend mitigation measures to reduce impacts to a less than significant level. The analysis in this section is based on information from the Initial Geotechnical Engineering Investigation Report prepared by Moore Twining Associates, Inc. (July 2011) contained as Appendix E to this EIR.

4.5.1 Environmental Setting

Regional Conditions

The project site is located in the western portion of Riverside County, within the Peninsular Range geomorphic province in southern California that consists of a series of mountain ranges separated by northwest trending valleys sub-parallel to faults branching from the San Andreas Fault (CGS, 2002a). The Peninsular Ranges province encompasses an area that is 30 to 100 miles wide and extends approximately 900 miles from the Los Angeles Basin down to the southern tip of Baja California. In general, the province is characterized by rugged mountains underlain by volcanic and igneous rocks of the Southern California Batholith (granitic rocks that constitute the core of many mountain ranges in western North America and underlie large portions of southern California) and sediment filled elongated valleys. The Santa Ana Mountains consist primarily of these granitic or crystalline intrusive rocks that are overlain by younger sedimentary rocks. The Peninsular Ranges Province is traversed by a group of subparallel active faults and fault zones trending roughly northwest to southeast including the Elsinore, San Jacinto, Newport-Inglewood, Whittier, and San Andreas faults. [1]

The City of Lake Elsinore lies within a region of California that is considered seismically active. Seismic hazards pose a danger to property and human safety from damage associated with ground rupture along active faults, strong seismic shaking, liquefaction, ground failure, landsliding, and slope failure.

Regional Faults

The regional active faults represent the dominant structural geologic features that are reflected in the northwest trend of topographical features within the province. The Santa Ana Mountains are located on the west side of the Elsinore Fault while the Perris Block is located to the east of the fault. The Perris Block is bounded to the east by the San Jacinto Fault. The northern perimeter of

[1] An "active" fault is defined by the State of California as a fault that has had surface displacement within Holocene time (approximately the last 11,000 years). A "potentially active" fault is defined as a fault that has shown evidence of surface displacement during the Quaternary (last 1.6 million years), unless direct geologic evidence demonstrates inactivity for all of the Holocene or longer. This definition does not, of course, mean that faults lacking evidence of surface displacement are necessarily inactive. "Sufficiently active" is also used to describe a fault if there is some evidence that Holocene displacement occurred on one or more of its segments or branches (Hart, 1997).

the Los Angeles basin forms part of a northerly dipping blind thrust fault at the boundary between the Peninsular Ranges Province and the Transverse Range Province.

Active faults are delineated by State Geologist in accordance with the Alquist-Priolo Earthquake Fault Hazard Act. Alquist-Priolo Earthquake Fault Zones are regulatory zones around active faults that require limitations on proposed structures within these zones. The project site does not contain any Alquist-Priolo Earthquake Fault Zones; the nearest known active or potentially active fault is the Elsinore (Glen Ivy) Fault, located about 3.2 miles west of the project site (Moore, 2011). The Elsinore Fault Zone has been divided into segments, including the Whittier and Glen Ivy, which form the northern section of the fault. Although there have been no recorded earthquakes along the Elsinore Fault Zone in historic times, the last rupture has been dated at approximately 10,000 years ago, which classifies it as an active fault (Jennings and Bryant, 2010).

The next closest active faults to the project site include the San Jacinto Fault Zone located 18 miles northeast, the Crafton Hills Fault Zone located 20 miles northeast, the Newport-Inglewood Fault Zone located 32 miles west, and the San Andreas Fault located 37 miles north (Jennings, 2010). The San Andreas Fault is a major tectonic feature of western North America. It is interpreted to have formed as a transform fault which delineates the boundary between the North American and Pacific plates (Schultz and Wallace, 2013).

Fault rupture is a seismic hazard that affects structures sited above an active fault. The hazard from fault rupture is the shifting and cracking of the ground surface along a fault during an earthquake. Typically, this movement takes place during the short time of an earthquake, but it also can occur slowly over many years in a process known as creep. Most structures and underground utilities cannot accommodate the surface displacements of several inches to several feet that could be a result of fault rupture or creep. The City's General Plan EIR describes that it is unlikely that the City and sphere of influence would be subject to surface rupture during a seismic event (General Plan EIR, 2011).

Ground Shaking

Richter magnitude (M) is a measure of the size of an earthquake as recorded by a seismograph, a standard instrument that records groundshaking at the location of the instrument. The reported Richter magnitude for an earthquake represents the highest amplitude measured by the seismograph at a distance of 100 kilometers from the epicenter. Richter magnitudes vary logarithmically with each whole number step representing a tenfold increase in the amplitude of the recorded seismic waves. Earthquake magnitudes are also measured by their Moment Magnitude (Mw), which is related to the physical characteristics of a fault including the rigidity of the rock, the size of fault rupture, and movement or displacement across a fault (CGS, 2002).

Ground movement during an earthquake can vary depending on the overall magnitude, distance to the fault, focus of earthquake energy, and type of geologic material. The composition of underlying soils, even those relatively distant from faults, can intensify groundshaking. For this reason, earthquake intensities are also measured in terms of their observed effects at a given

locality. The intensities of an earthquake will vary over the region of a fault and generally decrease with distance from the epicenter of the earthquake.

The Elsinore Fault Zone is the closest active fault zone to the project site. The most recent seismic event within the project vicinity occurred in 1910, with a magnitude of 6.0 (SCEDC, 2014). Over the next 30 years beginning in 2014, the Elsinore Fault Zone is considered to have a 3.8 percent chance of producing a magnitude 6.7 or greater earthquake. In addition, the San Andreas Fault is capable of producing an earthquake with a magnitude of 8.1, with a 19 percent chance of a magnitude 6.7 or greater and a 6.8 percent chance of a magnitude 8.0 or greater within the next 30 years (USGS, 2015). The City's General Plan EIR describes that there are several faults capable of generating moderate to high ground acceleration or shaking in the City that is considered to be similar to what could occur within the southern California region as a whole.

Liquefaction and Lateral Spreading

Soil liquefaction is a phenomenon in which saturated, cohesionless soils layers, lose strength due to cyclic pore water pressure generation from seismic shaking or other large cyclic loading. Soils that are most susceptible to liquefaction are clean, loose, saturated, and uniformly graded fine-grained sands that lie below the groundwater table within approximately 50 feet below ground surface. Lateral spreading is the horizontal displacement of surficial blocks of sediments resulting from liquefaction in a subsurface layer that occurs on slopes ranging between 0.3 and 3 percent and commonly displaces the surface by several meters to tens of meters. The Riverside County Land Information System website identifies the project site as an area having a very high potential for liquefaction and groundwater beneath the site ranges from 13.5 and 25 feet beneath the ground surface (Moore, 2011). Findings from the initial geologic investigation determined that seismic settlements from liquefaction are estimated to range from 1.5 to 2.5 inches and differential seismic settlements up to 1.25 inches in 40 feet may result from seismic activity.

Subsidence

In the Elsinore Valley, subsidence has been attributed to groundwater pumping. Groundwater levels are generally declining throughout the basin. Average declines have been about 15 feet per year throughout the basin over the past 20 years. This decline in water levels increases the risk for land subsidence (City of Lake Elsinore, 2011). If an aquifer has beds of clay or silt within or next to it the lowered water pressure in the sand and gravel causes slow drainage of water from the clay and silt beds. The reduced water pressure is a loss of support for the clay and silt beds. Because these beds are compressible, they compact (become thinner), and the effects are seen as a lowering of the land surface. As a result of this existing condition, the City of Lake Elsinore enforces the provisions of Chapter 18 in the 2013 California Building Code (CBC) and requires development applicants to submit a full foundation and soils investigation to the Planning and Building Department prior to issuance of building permits for all new construction. The report is required to provide recommendations for the design and construction of building foundations that would mitigate the effects of seismically induced liquefaction or lateral spreading.

On-Site Soils

Topography on the project site and its vicinity is relatively flat, and run-off on-site passes over the project site through natural rills and gullies that partially pool in the western portion of the project site and continues to flow off of the site to the southwest to flow onto an adjacent parcel.

Surface soils general consist of silty sands down to about 8.5 feet below the ground surface. Below these surface soils are interbedded layers of clays, sandy silts, sands, and gravel. In addition, undocumented fill soils were encountered and generally consisted of silty sand soils.

Corrosive Soils

Corrosion is a naturally occurring process whereby the surface of a metallic structure is oxidized or reduced to a corrosion product such as iron oxide (rust). Corrosion can lead to damage or destruction of a metallic object. The corrosion potential of soil depends on soil acidity, moisture, and chemical concentrations (Moore, 2011). The Initial Geotechnical Engineering Investigation Report conducted chemical testing of soil samples, which indicate that the soils exhibit a potentially corrosive or moderately corrosive condition.

4.5.2 Regulatory Setting

Federal

Earthquake Hazards Reduction Act

The Earthquake Hazards Reduction Act was enacted in 1997 to "reduce the risks to life and property from future earthquakes in the United States through the establishment and maintenance of an effective earthquake hazards and reduction program." To accomplish this, the Act established the National Earthquake Hazards Reduction Program (NEHRP). This program was significantly amended in November 1990 by NEHRP, which refined the description of agency responsibilities, program goals, and objectives.

NEHRP's mission includes improved understanding, characterization, and prediction of hazards and vulnerabilities; improvement of building codes and land use practices; risk reduction through post-earthquake investigations and education; development and improvement of design and construction techniques; improvement of mitigation capacity; and accelerated application of research results. The NEHRP designates the Federal Emergency Management Agency as the lead agency of the program and assigns it several planning, coordinating, and reporting responsibilities. Programs under NEHRP help inform and guide planning and building code requirements such as emergency evacuation responsibilities and seismic code standards such as those to which the proposed project would be required to adhere.

State

California Building Code

The California Building Code (CBC) has been codified in the California Code of Regulations as Title 24, Part 2. Title 24 is administered by the California Building Standards Commission,

which, by law, is responsible for coordinating all building standards. Under state law, all building standards must be centralized in Title 24 or they are not enforceable. The purpose of the CBC is to establish minimum standards to safeguard the public health, safety and general welfare through structural strength, means of egress, and general stability by regulating and controlling the design, construction, quality of materials, use and occupancy, location, and maintenance of all building and structures within its jurisdiction. The CBC is based on the International Building Code (IBC; previously known as the Uniform Building Code) published by the International Code Conference. In addition, the CBC contains necessary California amendments, which are based on the American Society of Civil Engineers (ASCE) Minimum Design Standards 7-05. ASCE 7-05 provides requirements for general structural design and includes means for determining earthquake loads as well as other loads (flood, snow, wind, etc.) for inclusion into building codes. The provisions of the CBC apply to the construction, alteration, movement, replacement, and demolition of every building or structure or any appurtenances connected or attached to such buildings or structures throughout California.

The earthquake design requirements of the CBC take into account the occupancy category of the structure, site class, soil classifications, and various seismic coefficients, which are used to determine a Seismic Design Category (SDC) for a project. The SDC is a classification system that combines the occupancy categories with the level of expected ground motions at the site and ranges from SDC A (very small seismic vulnerability) to SDC E/F (very high seismic vulnerability and near a major fault). Design specifications are then determined according to the SDC. All constructed elements of the project are subject to seismic design requirements of the CBC.

The currently effective CBC was published in 2010. The 2013 California Building Standards Code was officially published in July of 2013 and went into effect on January 1, 2014. Jurisdictions statewide are currently being prompted to adopt the new code and complete local amendments as necessary. With some minor amendments, the CBC has been adopted by the City.

City of Lake Elsinore Municipal Code

Title 15 (Building Code)

The CBC has been amended and adopted as Title 15 (Building Code) of the Lake Elsinore Municipal Code. Title 15 regulates all building and construction projects within the City limits and implements a minimum standard for building design and construction. These minimum standards include specific requirements for seismic safety, excavation, foundations, retaining walls and site demolition. It also regulates grading activities including drainage and erosion control.

Title 17 (Zoning) Chapter 32 Liquefaction Overlay

The purpose of the Potential Liquefaction Hazard (PL) Overlay District is to protect life and property in the City of Lake Elsinore from the effects of seismic activity in areas subject to liquefaction and ground lurching. This hazard overlay district implements the policies of the Lake Elsinore General Plan to promote the public health, safety and general welfare of its citizenry.

The purpose of this overlay is also to ensure the review of all proposed discretionary projects within identified potential liquefaction areas by professional soil engineers and the incorporation of site-specific recommendations and mitigation measures as conditions of approval [Ord. 772 § 17.08.010, 1986, Code 1987 § 17.08.010].

Prior to the commencement of a proposed discretionary project, which is located either wholly or partially within any area zoned PL, requiring the approval of any development permit or tentative map, the proponent of the project shall prepare, or cause to be prepared, a draft potential liquefaction hazard analysis, and submit the draft analysis to the Director of Community Development, or his designee, shall determine the number of copies of the draft analysis required to be submitted. Before completing the draft potential liquefaction hazard analysis, the preparer shall consult directly with any person whom or organization which the preparer believes will be concerned with the geologic and soils hazards in the project area and with other public agencies involved in carrying out or approving the project.

Local

City of Lake Elsinore General Plan

Public Safety and Welfare Element

Goal: 6 Minimize the risk of loss of life, injury, property damage, and economic and social displacement due to seismic and geological hazards resulting from earthquakes and geological constraints.

Policy: 6.1 Encourage the pursuit of federal and state programs that assist in the seismic upgrading of buildings to meet building and safety codes.

Policy: 6.2 Continue to require Alquist-Priolo and other seismic analyses be conducted for new development to identify the potential for ground shaking, liquefaction, slope failure, seismically induced landslides, expansion and settlement of soils, and other related geologic hazards for areas of new development in accordance with the Fault Rupture Hazard Overlay District adopted by the City of Lake Elsinore Zoning Code. The City may require site-specific remediation measures during permit review that may be implemented to minimize impacts in these areas.

4.5.3 Thresholds of Significance

According to Appendix G of the California Environmental Quality Act (CEQA) Guidelines, the proposed project could have a potentially significant impact with respect to geology, soils and seismicity 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 Zoning Map 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- 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), creating substantial risks to life or property.
- Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems in areas where sewers are not available for the disposal of wastewater.

It was determined in the Initial Study/Notice of Preparation (Appendix A) that the proposed project would result in less than significant impacts in regard to fault rupture, landslides, and expansive soils. It is also identified in the Initial Study that impacts related the use of septic tanks or alternative wastewater disposal system would not occur because the project does not involve construction of use of these facilities. Therefore, no discussion or analysis of these topics is included in the EIR.

4.5.4 Methodology

The significance determination for the geology and soils analysis is based on a review of existing literature as well as the Initial Geotechnical Engineering Investigation Report prepared for the proposed project (Moore, 2011) located in Appendix E of this EIR. The assessment presents findings, conclusions, and recommendations concerning development of the project site based on the engineering analysis of geotechnical properties of on-site soils and subsurface conditions. Resources reviewed also include the City's General Plan EIR and available resources from the United States Geological Survey (USGS) and California Geological Survey (CGS). The sections that follow describe the identified impacts and the measures that would be incorporated to mitigate significant impacts.

4.5.5 Impact Analysis

Impact 4.5-1: Would the project result in exposure people or structure to potential substantial adverse effects, including the risk of loss, injury or death involving strong seismic ground shaking?

The proposed project would construct commercial structures in a currently vacant area that is within a seismically active region. According to forecasts made by the USGS, there is a 60 percent chance that a magnitude 6.7 or greater earthquake will occur in the Southern California region over the next 30 years (USGS, 2015). Locally, the Elsinore fault zone has a 3.8 percent chance and the Southern San Andreas a 19 percent chance of a magnitude 6.7 or greater

earthquake over the next 30 years (USGS, 2015). As a result, people on the project site could be exposed to seismic activity that is capable of producing very strong ground shaking at the site. The intensity of ground shaking would depend upon the magnitude of the earthquake, distance to the epicenter, and the geology of the area between the epicenter and the project site. However, if not constructed appropriately, the proposed improvements could be susceptible to substantive damage.

Earthquakes are unavoidable hazards although the resultant damage can be minimized through appropriate seismic design and engineering. The City requires that all construction meet the latest standards of the CBC for construction which considers proximity to potential seismic sources and the maximum anticipated groundshaking possible. The proposed construction associated with the project would be in accordance with applicable City ordinances and policies and consistent with the most recent version of the CBC, which requires structural design that can accommodate ground accelerations expected from known active faults. In addition, the investigations would be prepared by a California registered Geotechnical Engineer or Engineering Geologist and recommendations would include final design parameters for the walls, foundations, foundation slabs, and surrounding related improvements (e.g., utilities, parking lots, and sidewalks). Compliance with these building safety design standards would reduce potential impacts associated with groundshaking to less than significant levels. Therefore, with implementation of the seismic design requirements into construction specification, the impacts associated with the effects associated with groundshaking would be reduced to less-than-significant levels.

Mitigation Measures: None required.

Significance after Mitigation: Less-than-significant.

Impact 4.5-2: Would the project result in exposure people or structure to potential substantial adverse effects, including the risk of loss, injury or death involving seismic-related ground failure, including liquefaction?

As described above, the project site is located in an area identified as being susceptible to liquefaction hazards. Analysis of site specific soils during the initial geotechnical investigation at the site determined that settlement and differential settlement from liquefaction could range from 1.25 inches up to 2.5 inches. If not designed appropriately settlement of this magnitude could cause substantial damage.

However, there are numerous geotechnical approaches that could be employed in foundation design to address this hazard such as the use of deep foundation systems or the treatment of liquefiable materials. As required by the CBC and the City's Municipal Code Title 17 Chapter 32, the applicant would be required to prepare a liquefaction hazard analysis, and submit it to the Director of Community Development. Adherence to the Municipal Code and building code requirements that would implement proven geotechnical design measures would minimize the potential for liquefaction, differential settlement from liquefaction, and lateral spreading through foundation design, treatment of site soils and/or replacement of liquefiable soils with engineered fills.

Therefore, with implementation of the seismic design requirements into construction specification in accordance with City and building code requirements, the impacts associated with the effects associated with seismic-related ground failure such as liquefaction, would be reduced to less-than-significant levels.

Mitigation Measures: None required.

Significance after Mitigation: Less-than-significant.

Impact 4.5-3: Would the project result in substantial soil erosion or the loss of topsoil?

Topography on the project site and in the vicinity of the project is relatively flat, and runoff on-site passes over the project site through natural rills and gullies that partially pool in the western portion of the project site and continues to flow off of the site to the southwest to flow onto an adjacent parcel. Elevations range from approximately 1,325 feet above mean sea level (msl) in the north portion of the property to approximately 1,302 feet above msl in the southern portion (Google Earth, 2013).

Construction activities would include earthwork activities (e.g., excavation, backfilling and grading) that could expose bare soil to erosive elements (wind and rain). However, project construction would be required to comply with existing regulatory requirements that address soil erosion such as the National Pollutant Discharge Elimination Program (NPDES). Any development site, such as the project site, that disturb one or more acres are required to comply with a General Construction NPDES permit. The General Construction permit requires the development and implementation of a Storm Water Pollution Prevention Plan (SWPPP) which includes the use of erosion control Best Management Practices to protect surface water and groundwater from the adverse effects of construction activities.

The erosion control best management practices (BMPs) (such as scheduling, preservation of existing vegetation, hydroseeding, sandbags, fiber rolls, and silt fences) would prevent the exposure of soil to wind and water and reduce the threat of erosion during construction. The SWPPP and BMPs would be reviewed by the City's Engineering Division prior to issuance of a building or grading permit. Once constructed, landscaped, and drainage improvements constructed the potential for erosion or loss of topsoil is effectively eliminated. Therefore, with implementation of these requirements and associated BMPs, erosion related to construction activities and operation of the project would be less-than-significant.

Mitigation Measures: None required.

Significance Determination: Less-than-significant.

Impact 4.5-4: Would the project be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site lateral spreading, subsidence, liquefaction, or collapse?

As described above, development under the proposed project would be required to adhere to City and CBC requirements, which include the preparation of a geotechnical investigation by a state licensed geotechnical engineer. The required geotechnical report for the proposed improvements would determine the susceptibility of the subject site to settlement and prescribe appropriate engineering techniques for reducing its effects. Where settlement and/or differential settlement is predicted, site preparation measures—such as use of engineered fill, surcharging, wick drains, deep foundations, structural slabs, hinged slabs, flexible utility connections, and utility hangers—could be used. These measures would be evaluated and the most effective, feasible, and economical measures recommended in a geotechnical report and incorporated into site design in accordance with building code requirements. Engineering recommendations included in the project engineering and design plans would be reviewed and approved by the City. Therefore, with adherence to building code requirements the potential for unstable soils to adversely affect proposed improvements would be reduced to less-than-significant levels.

Mitigation Measures: None required.

Significance after Mitigation: Less-than-significant.

4.5.6 Cumulative Impacts

The geographic scope for considering cumulative impacts related to geology and soils can generally be considered as the entire Riverside County; however, because of widely varying conditions on a site-by-site basis, the impacts related to geology and soils are generally site-specific. As described previously, the project site is in a seismically active area, which is bordered by major fault systems including the Elsinore Fault and San Andreas Fault. No areas of Riverside County are considered seismically inactive, therefore other past, present, and future projects in the County share relatively similar overall seismic hazards; however, they typically vary from site to site based on underlying conditions and distances to seismic events. Because potential geologic and seismic hazards are site specific, development projects that are developed to existing code requirements that address site specific conditions, improvements that incorporate seismic design requirements are not of a nature to combine with existing or future projects to result in cumulatively significant effects from geologic and seismic impacts. The geologic conditions present are geotechnically feasible for construction with the appropriate seismic design that is similar to what other projects in the region would be required to include in project design. Furthermore, the less than significant impacts related to the proposed project would be on-site and the project would not result in impacts on-site that could affect off-site properties and generate a cumulative impact.

Mitigation Measures: None required.

Significance Determination: Less-than-significant.

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4.6 Greenhouse Gas Emissions

This section of the Draft Environmental Impact Report (EIR) provides a discussion of global climate change, existing regulations pertaining to global climate change, and potential greenhouse gas (GHG) emissions resulting from development of the project. Impacts related to GHGs and climate change are analyzed and mitigation measures are provided for any potentially significant impacts. This section of the Draft EIR is based on the Greenhouse Gas Analysis prepared by Urban Crossroads and is included in Appendix F.

4.6.1 Environmental Setting

Gases that trap heat in the atmosphere are called GHGs. The major concern with GHGs is that increases in their concentrations are causing global climate change. Global climate change is a change in the average weather on Earth that can be measured by wind patterns, storms, precipitation, and temperature. Although there is disagreement as to the rate of global climate change and the extent of the impacts attributable to human activities, most in the scientific community agree that there is a direct link between increased emissions of GHGs and long-term global temperature increases.

The principal GHGs are carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), sulfur hexafluoride (SF_6), perfluorocarbons (PFCs), and hydrofluorocarbons (HFCs). Because different GHGs have different warming potential and CO_2 is the most common reference gas for climate change, GHG emissions are often quantified and reported as CO_2 equivalents (CO_2e). For example, SF_6 is a GHG commonly used in the utility industry as an insulating gas in circuit breakers and other electronic equipment. SF_6, while comprising a small fraction of the total GHGs emitted annually world-wide, is a much more potent GHG with 22,800 times the global warming potential as CO_2. Therefore, an emission of one metric ton (MT) of SF_6 could be reported as an emission of 22,800 MT of CO_2e. Large emission sources are reported in million metric tons (MMT) of CO_2e.[1]

Some of the potential effects in California of global warming may include loss in snow pack, sea level rise, more extreme heat days per year, more high ozone days, more forest fires, and more drought years (CARB, 2009). Globally, climate change has the potential to impact numerous environmental resources through potential, though uncertain, impacts related to future air temperatures and precipitation patterns. The projected effects of global warming on weather and climate are likely to vary regionally, but are expected to include the following direct effects (IPCC, 2001):

- Higher maximum temperatures and more hot days over nearly all land areas
- Higher minimum temperatures, fewer cold days and frost days over nearly all land areas
- Reduced diurnal temperature range over most land areas
- Increase of heat index over land areas

[1] A metric ton is 1,000 kilograms; it is equal to approximately 1.1 U.S. tons and approximately 2,204.6 pounds.

- More intense precipitation events

Also, there are many secondary effects that are projected to result from global warming, including global rise in sea level, impacts to agriculture, changes in disease vectors, and changes in habitat and biodiversity. While the possible outcomes and the feedback mechanisms involved are not fully understood and much research remains to be done, the potential for substantial environmental, social, and economic consequences over the long term may be great.

California produced 459 gross $MMTCO_2e$ in 2012 (CARB, 2014a). Combustion of fossil fuel in the transportation sector was the single largest source of California's GHG emissions in 2012, accounting for 36 percent of total GHG emissions in the state (CARB, 2014a). This sector was followed by the electric power sector (including both in-state and out-of-state sources) (21 percent) and the industrial sector (19 percent) (CARB, 2014a).

4.6.2 Regulatory Setting

Federal

U.S. Environmental Protection Agency

The federal CAA does not specifically regulate GHG emissions; however, the U.S. Supreme Court has determined that GHGs are pollutants that can be regulated under the federal CAA. There are currently no federal regulations that set ambient air quality standards for GHGs.

State

Executive Order S-3-05

In 2005, in recognition of California's vulnerability to the effects of climate change, Governor Schwarzenegger established Executive Order S-3-05, which set forth a series of target dates by which statewide emissions of GHGs would be progressively reduced, as follows:

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

Executive Order B-30-15

In April 2015, Governor Brown established Executive Order B-30-15 that establishes an interim 2030 GHG reduction targets for California. This target is intended to guide regulatory policy and investments in California to help further California's ability to meet the 2050 reduction target established by Executive Order S-3-05. Executive Order B-30-15 establishes a GHG emissions reduction target of 40 percent below 1990 levels by 2030.

Assembly Bill 32 – California Global Warming Solutions Act

California Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006, requires the California Air Resources Board (CARB) to establish a statewide GHG emissions cap for 2020 based on 1990 emission levels. AB 32 required CARB to adopt and enforce programs and

regulations that identify and require selected sectors or categories of emitters of GHGs to report and verify their statewide GHG emissions. In December 2007 CARB adopted 427 MT CO_2e as the statewide GHG emissions limit equivalent to the statewide levels for 1990. This is approximately 28 percent below forecasted 2020 "business-as-usual"[2] (BAU) emissions of 596 MMT of CO_2e, and about 10 percent below average annual GHG emissions during the period of 2002 through 2004 (CARB, 2009).

CARB published the *Expanded List of Early Action Measures To Reduce Greenhouse Gas Emissions In California Recommended For Board Consideration* in September 2007 (CARB, 2007). CARB adopted nine Early Action Measures for implementation, including Ship Electrification at Ports, Reduction of High Global-Warming-Potential Gases in Consumer Products, Heavy-Duty Vehicle Greenhouse Gas Emission Reduction (Aerodynamic Efficiency), Reduction of Perfluorocarbons from Semiconductor Manufacturing, Improved Landfill Gas Capture, Reduction of Hydrofluorocarbon-134a from Do-It-Yourself Motor Vehicle Servicing, Sulfur Hexaflouride Reductions from the Non-Electric Sector, a Tire Inflation Program, and a Low Carbon Fuel Standard.

As of January 1, 2012, the GHG emissions limits and reduction measures adopted in 2011 by CARB became enforceable. In designing emission reduction measures, CARB aimed to minimize costs, maximize benefits, improve and modernize California's energy infrastructure, maintain electric system reliability, maximize additional environmental and economic co-benefits for California, and complement the state's efforts to improve air quality.

Climate Change Scoping Plan

In December 2008, CARB approved the AB 32 Scoping Plan outlining the state's strategy to achieve the 2020 GHG emissions limit (CARB, 2009). This Scoping Plan, developed by CARB in coordination with the Climate Action Team (CAT), proposes a comprehensive set of actions designed to reduce overall GHG emissions in California, improve the environment, reduce dependence on oil, diversify California's energy sources, save energy, create new jobs, and enhance public health. Based on the 2008 Scoping Plan, CARB determined that by reducing emissions by approximately 28.5 percent from BAU levels, the State could achieve the goal of reducing GHG emissions to 1990 levels by 2020.

As required by AB 32, the Scoping Plan must be updated at least every 5 years to evaluate the mix of AB 32 policies to ensure that California is on track to meet the targets set out in the legislation. In October 2013, a draft update to the initial Scoping Plan was developed by CARB in collaboration with the California Climate Action Team (CCAT). The draft update builds upon the initial Scoping Plan with new strategies and expanded measures, and identifies opportunities to leverage existing and new funds to drive GHG emission reductions through strategic planning and targeted program investments. The draft update to the initial Scoping Plan was presented to CARB for discussion at its February 20, 2014 meeting. Subsequently, the first update to the AB 32 Scoping Plan was approved on May 22, 2014, by CARB.

[2] Business-as-usual represents the emissions from the state (or a project) that would be anticipated to occur in 2020 if the Scoping Plan measures are not implemented.

As part of the proposed update to the Scoping Plan, the emissions reductions required to meet the 2020 statewide GHG emissions limit were further adjusted. The primary reason for adjusting the 2020 statewide emissions limit was based on the fact that the original Scoping Plan relied on the Intergovernmental Panel on Climate Change's (IPCC) 1996 Second Assessment Report (SAR) to assign the global warming potentials (GWPs) of GHGs. Recently, in accordance the United Nations Framework Convention on Climate Change (UNFCCC), international climate agencies have agreed to begin using the scientifically updated GWP values in the IPCC's Fourth Assessment Report (AR4) that was released in 2007. Because CARB has begun to transition to the use of the AR4 100-year GWPs in its climate change programs, CARB recalculated the Scoping Plan's 1990 GHG emissions level with the AR4 GWPs. As the recalculation resulted in 431 $MMTCO_2e$, the 2020 GHG emissions limit established in response to AB 32 is now slightly higher than the 427 $MMTCO_2e$ in the initial Scoping Plan. Considering that the proposed update also adjusted the 2020 BAU forecast of GHG emissions to 509 $MMTCO_2e$, a 15.3 percent reduction below the estimated BAU levels was determined to be necessary to return to 1990 levels by 2020 (CARB, 2014b).

Executive Order S-1-07

Executive Order S-1-07, which was signed by Governor Schwarzenegger in 2007, proclaims that the transportation sector is the main source of GHG emissions in California. It establishes a goal to reduce the carbon intensity of transportation fuels sold in California by at least 10 percent by 2020. As a result of this order, CARB approved a proposed regulation to implement the low carbon fuel standard (LCFS) on April 23, 2009, which will reduce GHG emissions from the transportation sector in California by about 16 MMT in 2020. The LCFS is designed to reduce California's dependence on petroleum, create a lasting market for clean transportation technology, and stimulate the production and use of alternative, low-carbon fuels in California. The LCFS is designed to provide a durable framework that uses market mechanisms to spur the steady introduction of lower carbon fuels. The framework establishes performance standards that fuel producers and importers must meet each year beginning in 2011.

Senate Bill 375

SB 375, which establishes mechanisms for the development of regional targets for reducing passenger vehicle GHG emissions, was adopted by the state on September 30, 2008. On September 23, 2010, CARB adopted the vehicular GHG emissions reduction targets that had been developed in consultation with the metropolitan planning organizations (MPOs); the targets require a 7 to 8 percent reduction by 2020 and between 13 to 16 percent reduction by 2035 for each MPO. SB 375 recognizes the importance of achieving significant GHG reductions by working with cities and counties to change land use patterns and improve transportation alternatives. Through the SB 375 process, MPOs, such as the SCAG will work with local jurisdictions in the development of sustainable communities strategies (SCSs) designed to integrate development patterns and the transportation network in a way that reduces GHG emissions while meeting housing needs and other regional planning objectives. SCAG's reduction target for per capita vehicular emissions is 8 percent by 2020 and 13 percent by 2035 (CARB, 2010). The MPOs prepared their first SCS according to their respective regional transportation plan (RTP) update schedule with the SCAG RTP/SCS adopted on April 4, 2012.

Senate Bill 87

Senate Bill (SB) 97, enacted in August 2007, required the Office of Planning and Research (OPR) to develop guidelines for the mitigation of GHG emissions, or the effects related to releases of GHG emissions. On April 13, 2009, the OPR submitted proposed amendments to the Natural Resources Agency in accordance with SB 97 regarding analysis and mitigation of GHG emissions. As directed by SB 97, the Natural Resources Agency adopted Amendments to the California Environmental Quality Act (CEQA) Guidelines for GHG emissions on December 30, 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.

California Green Building Standards Code

In January 2010, the State of California adopted the 2010 California Green Building Standards Code (CALGreen), which became effective in January 2011. Building off of the initial 2008 California Green Building Code, the 2010 CALGreen Code represents a more stringent building code that requires, at a minimum, that new buildings and renovations in California meet certain sustainability and ecological standards. The 2010 CALGreen Code has mandatory Green Building provisions for all new residential buildings that are three stories or fewer (including hotels and motels) and all new non-residential buildings of any size that are not additions to existing buildings.

In early 2013, the California Building Standards Commission adopted the 2013 California Building Standards Code that also included the latest 2013 CALGreen Code, which became effective on January 1, 2014. The mandatory provisions of the code are anticipated to reduce 3 MMT of GHG emissions by 2020, reduce water use by 20 percent or more, and divert 50 percent of construction waste from landfills. The 2013 California Energy Code (Title 24, Part 6), which is also part of the CALGreen Code (Title 24, Part 11, Chapter 5.2), became effective on July 1, 2014.

South Coast Air Quality Management District

As a method for determining significance under CEQA, SCAQMD developed a draft tiered flowchart in 2008 for determining significance thresholds for GHGs for industrial projects where SCAQMD is acting as the lead agency. In December 2008, SCAQMD adopted a 10,000 $MTCO_2e$/year for industrial facilities, but only with respect to projects where SCAQMD is the lead agency. SCAQMD has not adopted a threshold for residential or commercial projects at the time of this writing.

The SCAQMD flowchart uses a tiered approach in which a proposed project is deemed to have a less than significant impact related to GHG emissions when any of the following conditions are met:

- GHG emissions are within GHG budgets in an approved regional plan;
- Incremental increases in GHG emissions due to the project are below the defined Significance Screening Levels, or Mitigated to Less than the Significance Screening Level;

- Performance standards are met by incorporating project design features and/or implementing emission reduction measures; and
- Carbon offsets are made to achieve target significance screening level.

Local

City of Lake Elsinore

General Plan Sustainable Element

The City of Lake Elsinore has created strategies within its General Plan to counter the adverse impacts of global warming and climate change. The following measures are applicable to the proposed project and would reduce GHG emissions from all activities within the City boundaries to support the State's efforts under AB-32 and to mitigate the impact of climate change on the City, State, and world.

- **14.1** By 2020, the City will reduce greenhouse gas emissions from within its boundaries to 1990 levels consistent with AB 32.
- **14.2** Measures shall be established that aim to reduce emissions generated from City uses, community uses (community actions) and new development (City discretionary actions).

Additionally, the City has prepared and adopted a Climate Action Plan that provides a baseline GHG emissions inventory for municipal facilities and operations and community-wide activities and establishes measures to meet State-wide reduction goals.

City of Lake Elsinore Climate Action Plan

The City of Lake Elsinore Climate Action Plan (CAP) was created to ensure that the City reduces GHG emissions throughout the community. The document is consistent with AB 32 and Executive Order S-3-05 and was prepared concurrently with the City's General Plan and EIR. The CAP's main goal is to serve as the City's primary information and policy document for GHG emissions reductions in order to analyze and reduce potentially significant GHG emissions resulting from development under the City of Lake Elsinore General Plan.

The City's reduction targets are listed below:

- Reduce community-wide emissions to 6.6 MT CO_2e per service population per year by 2020 (944,737 $MTCO_2e$ reduction target)
- Reduce community wide emissions to 4.4 MT CO_2e per service population per year by 2030 (1,334,243 $MTCO_2e$ reduction target).

In order to meet these goals a 119,828 $MTCO_2e$ reduction from a 2008 baseline condition is necessary. This translates to an 11.26 percent reduction from a 2008 baseline condition.

4.6.3 Thresholds of Significance

According to Appendix G of the State CEQA Guidelines, the proposed project could have a potentially significant impact with respect to GHG emissions if it would:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.
- Conflict with an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs.

The increased concentration of GHGs in the atmosphere has been linked to global warming, which can lead to climate change. Construction and operation of the project would incrementally contribute to GHG emissions along with past, present, and future activities, and the State CEQA Guidelines acknowledge this as a cumulative impact. As such, impacts of GHG emissions are analyzed here on a cumulative basis.

The SCAQMD has not adopted thresholds for the determination of significance with respect to GHG emissions for residential or commercial projects. Therefore, the GHG emission levels will be compared to the AB 32 reduction goal of returning to 1990 levels by 2020. The 2008 Scoping Plan indicates that a reduction of 28.5 percent below the BAU scenario is required to meet the goals of AB 32[3]. Therefore, if the project can reduce its GHG emissions by at least 28.5 percent from the BAU scenario, impacts would be considered less than significant. In addition, alternatively, the GHG emission levels are also compared to the threshold established by SCAQMD for industrial projects and Mojave Desert Air Quality Management District (MDAQMD) facility thresholds, even though they do not apply to commercial projects. Nonetheless, it does provide an additional benchmark against which to assess potential impacts. The following details the SCAQMD and MDAQMD thresholds.

A numerical threshold for determining the significance of GHG emissions in the South Coast Air Basin (Basin) has not been established by the SCAQMD for Projects where it is not the lead agency. As an interim threshold based on guidance provided in the CAPCOA CEQA and Climate Change handbook, a non-zero threshold approach based on Approach 2 of the handbook can be a consideration. Threshold 2.5 (Unit-Based Thresholds Based on Market Capture) establishes a numerical threshold based on capture of approximately 90 percent of emissions from future development. In December 2008, staff presented the SCAQMD Governing Board with a significance threshold for industrial projects where it is the lead agency. This threshold uses a tiered approach to determine a project's significance, with 10,000 metric tons of carbon dioxide equivalent ($MTCO_2e$) as a screening numerical threshold for industrial projects. This threshold is based on the review of 711 CEQA projects. This threshold has also been adopted by the SCAQMD for industrial projects where it is the lead agency.

Similarly, the MDAQMD has established a numeric significance threshold for determining when GHG emissions would be considered significant. On May 13, 2010, the U.S. Environmental

[3] The BAU scenario refers to emissions from a project that would be expected to occur in 2020 without inclusion of the GHG reductions identified in the Scoping Plan and without project specific mitigation.

Protection Agency (EPA) finalized the GHG Tailoring Rule (75 FR 31514, June 3, 2010). The Tailoring Rule sets major source emissions thresholds that define when federal operating permits under Prevention Significant Deterioration (PSD) or Title V are required. The Tailoring Rule establishes a threshold of 100,000 tons per year of GHGs from new sources above which sources are considered major sources requiring a federal operating permit. As such, the MDAQMD has adopted a significance threshold for GHGs of 100,000 tons per year. More specifically, 100,000 tons per year of GHG emissions from a single facility constitutes major sources that require a federal operating permit. Similarly, the MDAQMDs NOx significance threshold of 25 tons/year is equal to the major source threshold applicable to areas designated severe non-attainment for ozone. As such use of the EPA's determination of whether a project is a major source and consequently establishing a threshold based on that is supported by substantial evidence by the MDAQMD.

MDAQMD states that, in general, emissions less than those listed in the "Significant Emissions Thresholds" (Table 6 of the Mojave Desert AQMD CEQA and Federal Conformity Guidelines [August 2011]) will result in less-than-significant impact on GHGs. Thus, regional impacts from a project that adds GHG emissions to the air basin in quantities that are less than those listed in Table 6 would be less than cumulatively considerable.

While CARB has provided an update to the Scoping Plan in 2014, modeling tools to easily segregate the inclusion of renewable portfolio standards and Pavely requirements that are currently included in the revised BAU scenario are not available. Therefore, the use of a 28.5 percent reduction from the 2008 BAU scenario is still an appropriate threshold.

The City of Lake Elsinore CAP sets a GHG emissions reduction target that is specific for evaluating the significance of GHG emissions from the General Plan. For 2020 the CAP indicates an 119,828 $MTCO_2e$ reduction is necessary from the 2008 baseline condition to satisfy consistency with the CAP reduction targets. This translates to an 11.26 percent reduction from a 2008 BAU scenario.

4.6.4 Methodology

At the time of writing of this report, SCAQMD has not formally adopted a uniform methodology for analyzing impacts related to GHG emissions or global climate change. Similarly, the City also has not adopted any guidelines for GHG analysis. Pursuant to full disclosure and according to OPR's CEQA Guidelines that state, "A lead agency should make a good-faith effort, based to the extent possible on scientific and factual data, to describe, calculate or estimate the amount of GHG emissions resulting from a project," the construction and operational emissions associated with the project have been quantified using methods described below.

The proposed project has two options that are included in the analysis. Both options include the construction of a 154,487 square foot (SF) Walmart Supercenter that includes a 3,090 SF garden center. Option A would also include the development of a gas station (with 16 fueling stations, an approximately 3,100 SF convenience store, and a drive-through car wash) and two other buildings which would be developed as separate drive-thru restaurants (3,700 SF and 3,100 SF).

Option B would also include the development of two buildings as retail or sit-down restaurants (9,310 SF) and the two other buildings would be developed as the same separate drive-thru restaurants as Option A. These two options are addressed as a worst-case scenario or separately throughout the analysis where appropriate.

Short-term construction-generated emissions of GHGs associated with the project were modeled using CalEEMod, Version 2013.2.2, as recommended by SCAQMD. Modeling was based on project-specific data provided by the applicant, where available. Where project-specific information was not available, reasonable assumptions based on other similar projects and default model settings were used to estimate criteria air pollutant and ozone precursor emissions. Additionally, based on SCAQMD's 2008 *Draft Guidance Document – Interim CEQA Greenhouse Gas (GHG) Significance Threshold* document, SCAQMD recommends that for construction GHG emissions the total emissions for a project be amortized over a 30-year period and added to its operational emission estimates (SCAQMD, 2008) Modeling Assumptions and output files are provided in Appendix F of this report.

Operational emissions of GHGs associated with the project, including mobile- and area-source emissions, were also quantified using the CalEEMod computer model. Direct sources include emissions such as vehicle trips, natural gas consumption, and landscape maintenance. Indirect sources include off-site emissions occurring as a result of the project's operations such as electricity and water consumption and solid waste disposal. The direct and indirect emissions generated during the project's operations were estimated using CalEEMod.

The BAU scenario was calculated using default CalEEMod parameters for landscape maintenance, electricity and natural gas demand, solid waste generation, and water demand. Project specific traffic information was used to determine emissions from mobile sources.

Under the 2020 project scenario the default parameters were used to determine landscape maintenance and solid waste emissions. Other default parameters were adjusted to take into account current regulations as well as project features and applicable mitigation. The current 2013 Title 24 building standards were incorporated into the model and, as required by mitigation measure MM AQ-1 (from Section 4.2), energy efficiencies were increased by 5 percent beyond the 2013 Title 24 requirements. Water demand was calculated based on default parameters however the 20 percent indoor reduction required by 2013 Title 24 was incorporated. Further, a reduction of 30 percent from outdoor water usage was incorporated based on the implementation of mitigation measure MM AQ-2 (from Section 4.2). Project specific traffic information was used to determine emissions from mobile sources.

All construction and operational GHG emission estimate assumptions and calculations are provided in Appendix F to this report.

4.6.5 Impact Analysis

Impact 4.6-1: Would the project generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment?

The project would generate GHG emissions from a variety of sources. First, GHG emissions would be generated during construction of the project. Once fully operational, the project's operations would generate GHG emissions from both area sources and mobile sources. Indirect source emissions generated by the project include electrical consumption, water and wastewater usage (transportation), and solid waste disposal. Mobile (direct) sources of air pollutants associated with the project would consist of motor vehicles trips generated by employees and consumers of the proposed development.

Construction Emissions

Options A and B produce similar construction emissions and therefore the analysis in this section is applicable to both Options. Construction emissions are based on construction schedule (length of construction), acreage of the project site, and building size. Regardless of the option chosen, the construction schedule is anticipated to be of equal length. Regardless of the option chosen, the total site size of the project site would not change therefore daily emissions from grading would be identical regardless of option. Building size will dictate the equipment usage in the building construction, paving and architectural coating phases. Because the two options only differ in building size by approximately 6,000 SF, the equipment used in these phases are anticipated to be identical and therefore emissions would be identical. Therefore, the analysis as presented represents a worst-case scenario for both options.

Construction-related GHG emissions for the proposed project were estimated using the same assumptions as the air quality analysis. The project's total estimated GHG emissions during construction would be approximately 786.63 $MTCO_2e$. This would equal to approximately 26.22 $MTCO_2e$ per year after amortization over 30 years per SCAQMD methodology.

Operational Emissions

Area and indirect sources associated with the project would primarily result from electricity and natural gas consumption, water transport (the energy used to pump water to and from the project site), and solid waste generation. GHG emissions from electricity consumed on the project site would be generated off-site by fuel combustion at the electricity provider. GHG emissions from water transport are also indirect emissions resulting from the energy required to transport water from its source. In addition, the proposed development would result in direct emissions from mobile source emissions from motor vehicle trips generated by employees and consumers.

Business-as-Usual

The BAU scenario was based on the worst-case emissions scenario. For the proposed project that scenario is Option B, or the development of the Walmart Supercenter and Garden Center along with approximately 9,310 SF of retail /restaurants. As shown in **Table 4.6-1**, the BAU scenario is anticipated to generate a total of approximately 14,938.25 $MTCO_2e$ per year. For consistency

with the 2020 project analysis, amortized construction emissions are incorporated into the BAU scenario.

TABLE 4.6-1
ESTIMATED BUSINESS AS USUAL CONSTRUCTION AND OPERATIONS-RELATED GHG EMISSIONS

Emission Source	Estimated Emissions CO_2e (MT/yr)
Construction	
Annual Construction (Amortized over 30 years)	26.22
Operational Emissions	
Area Sources	0.02
Energy Consumption[a]	1,199.66
Mobile Sources	13,248.47
Solid Waste	364.19
Water Consumption[b]	99.69
Total Operational Emissions	14,912.03
Total Project Emissions	**14,938.25**

SOURCE: Urban Crossroads, 2015c (Appendix F)

The distinct uses under Options A and B with respect to the gas station vs additional retail/restaurant use would result in distinctly different annual emissions levels. Therefore, Options A and B are discussed separately in this section. In accordance with SCAQMD's recommendation, the project's amortized construction-related GHG emissions are added to the operational emissions estimate in order to determine the project's total annual GHG emissions.

Option A

As shown on **Table 4.6-2,** Option A is anticipated to generate a total of approximately 8,842.77 $MTCO_2e$ per year. This results in a reduction of 40.80 percent from the BAU scenario and exceeds the AB 32 reduction target of a 28.5 percent reduction from BAU.

Option B

Table 4.6-3, shows the emissions associated with Option B. GHG emissions with the incorporation of the appropriate regulations and mitigation measures results in approximately 9,844.26 $MTCO_2e$ per year. This results in a reduction of 34.1 percent from the BAU scenario and exceeds the AB 32 reduction target of a 28.5 percent reduction from BAU.

TABLE 4.6-2
ESTIMATED CONSTRUCTION AND OPERATIONS-RELATED GHG EMISSIONS – OPTION A

Emission Source	Estimated Emissions CO_2e (MT/yr)
Construction	
Annual Construction (Amortized over 30 years)	26.22
Operational Emissions	
Area Sources	0.02
Energy Consumption[a]	710.06
Mobile Sources	7,709.62
Solid Waste	341.81
Water Consumption[b]	55.03
Total Unmitigated Operational Emissions	8,817.69
Mitigation Measures AQ-2 and AQ-3	(27.36)
Total Project Emissions[a]	**8,842.77**

a. Total project emissions include reductions from incorporated Air Quality Mitigation as well as amortized construction emissions.

SOURCE: Urban Crossroads, 2015 (Appendix F).

TABLE 4.6-3
ESTIMATED CONSTRUCTION AND OPERATIONS-RELATED GHG EMISSIONS – OPTION B

Emission Source	Estimated Emissions CO_2e (MT/yr)
Construction	
Annual Construction (Amortized over 30 years)	26.22
Operational Emissions	
Area Sources	0.02
Energy Consumption[a]	827.66
Mobile Sources	8,566.09
Solid Waste	364.19
Water Consumption[b]	60.08
Total Unmitigated Operational Emissions	9,848.34
Mitigation Measures AQ-2 and AQ-3	(30.30)
Total Project Emissions[a]	**9,844.26**

b. Total project emissions include reductions from incorporated Air Quality Mitigation as well as amortized construction emissions.
SOURCE: Urban Crossroads, 2015 (Appendix F).

Significance Determination: Less-than-Significant.

Mitigation Measures:

While mitigation is not required, the following mitigation measures required to reduce criteria air pollutants (see Section 4.2, *Air Quality*) will also result in GHG emissions. Because these are required with respect to criteria air pollutant emissions, their reductions are also included in the GHG analysis.

AQ-1: Prior to the issuance of building permits, the project proponent shall submit energy usage calculations to the Planning Division showing that the project is designed to achieve 5% efficiency beyond the 2013 California Building Code Title 24 requirements. Example of measures that reduce energy consumption include, but are not limited to, the following (it being understood that the items listed below are not all required and merely present examples; the list is not all-inclusive and other features that reduce energy consumption also are acceptable):

- Increase in insulation such that heat transfer and thermal bridging is minimized.
- Limit air leakage through the structure and/or within the heating and cooling distribution system.
- Use of energy-efficient space heating and cooling equipment.
- Installation of electrical hook-ups at loading dock areas.
- Installation of dual-paned or other energy efficient windows.
- Use of interior and exterior energy efficient lighting that exceeds then incumbent California Title 24 Energy Efficiency performance standards.
- Installation of automatic devices to turn off lights where they are not needed.
- Application of a paint and surface color palette that emphasizes light and off-white colors that reflect heat away from buildings.
- Design of buildings with “cool roofs” using products certified by the Cool Roof Rating Council, and/or exposed roof surfaces using light and off-white colors.
- Design of buildings to accommodate photovoltaic solar electricity systems or the installation of photo-voltaic solar electricity systems.
- Installation of ENERGY STAR–qualified energy-efficient appliances, heating and cooling systems, office equipment, and/or lighting products.

AQ-2: Enhanced Water Conservation Required: Prior to the issuance of building permits, the project proponent shall prepare a Water Conservation Strategy and demonstrating a minimum 30% reduction in outdoor water usage when compared to baseline water demand (baseline water demand is the total expected water demand without implementation of the Water Conservation

Strategy) .[4] The Project Water Conservation Strategy shall be subject to review and approval by the City.

Significance after Mitigation: Less-than-significant.

Although not directly applicable to the project, if either the SCAQMD or MDAQMD thresholds were to be applied, the project would still have a less than significant impact as it relates to GHG emissions as neither Option results in GHG emissions that exceed 10,000 $MTCO_2e$ (SCAQMD threshold) or 100,000 $MTCO_2e$ (MDAQMD threshold). The City has concluded based upon a review of the potential numeric thresholds of significance available for use, as well as the project's compliance with the General Plan Climate Action Plan (as discussed in detail below), that the proposed project's contribution of GHG emissions would be less than significant even if the City were to apply a numeric threshold of significance, rather than the BAU comparison.

Impact 4.6-2: Would the project conflict with applicable plans, policies, or regulations adopted for the purpose of reducing the emissions of GHGs?

Consistency with CARB Scoping Plan

Out of the Recommended Actions contained in CARB's Scoping Plan, the actions that are most applicable to the project would be Actions E-1 (increased Utility Energy efficiency programs including more stringent building and appliance standards), GB-1 (Green building), and W-1 (Increased water use efficiency). CARB Scoping Plan Action E-1, together with Action GB-1 (Green Building), aims to reduce electricity demand by increased efficiency of Utility Energy Programs and adoption of more stringent building and appliance standards, while Action W-1 aims to promote water use efficiency. The proposed project would be designed to comply with the CALGreen Code to ensure that the new commercial development would use resources (energy, water, etc.) efficiently and significantly reduce pollution and waste. Therefore, the project would be consistent with the Scoping Plan measures through incorporation of stricter building and appliance standards.

Consistency with Lake Elsinore Climate Action Plan

The proposed project would not conflict with implementation of the City of Lake Elsinore's Climate Action Plan (CAP). The CAP identifies an emissions reduction target of 944,737 $MTCO_2e$ by the year 2020, meaning an 11.26 percent reduction from a 2008 baseline condition. As a reduction of 28.5 percent below the BAU scenario is required to meet the goals of AB 32 and the project's GHG emissions would result in an emission reduction of between 34.10 percent and 40.80 percent, the targeted GHG emissions reduction identified within the City of Lake Elsinore CAP would be exceeded. The proposed project would implement sustainability features (presented below), that are consistent with specific CAP measures identified in *Appendix D: Project-Level CAP Consistency Worksheet* within the City's CAP. Although not required by the City, Walmart plans to incorporate a number of additional sustainability features into the proposed project, as follows:

[4] A reduction of 20% indoor water usage shall be achieved consistent with the current CalGreen Code for residential and non-residential land uses. Per CalGreen, the reduction shall be based on the maximum allowable water use per plumbing fixture and fittings as required by the California Building Standards Code.

Energy and Resource Conservation:

Lighting:

- The entire store will include occupancy sensors in most non-sales areas, including restrooms, break rooms, and offices. The sensors automatically turn the lights off when the space is unoccupied.
- All lighting in the store will consist of by T-8 fluorescent lamps and electronic ballasts, resulting in up to a 15-20 percent reduction in energy load.
- All exterior building signage and many refrigerated food cases will be illuminated with light-emitting diodes (LEDs). In refrigerated food cases, LEDs perform well in the cold and produce less heat than fluorescent bulbs – heat which must be compensated for by the refrigeration equipment. LEDs also contain no mercury or lead.
    - LED technology is up to 52 percent more energy efficient than fluorescent lights.
    - Total estimated energy savings for LED lighting in the store's grocery section is approximately 59,000 kWh per year, enough energy to power five single family homes.
- The store will include a daylight harvesting system, which incorporates more efficient lighting, electronic continuous dimming ballasts, skylights and computer controlled daylight sensors that monitor the amount of natural light available. During periods of higher natural daylight, the system dims or turns off the store lights if they are not needed, thereby reducing energy usage. This program will help the store save a substantial amount of energy. Dimming and turning off building lights also helps eliminate unnecessary heat in the building.

Central Energy Management System:

- Walmart employs a centralized energy management system (EMS) to monitor and control the heating, air conditioning, refrigeration and lighting systems for all stores from Walmart's corporate headquarters in Bentonville, Arkansas. The EMS enables Walmart to constantly monitor and control the expanded store's energy usage, analyze refrigeration temperatures, observe HVAC and lighting performance, and adjust system levels from a central location 24 hours per day, seven days per week. Energy usage for the entire store will be monitored and controlled in this manner.

HVAC:

- The store will employ one of the industry's most efficient heating, ventilating and air-conditioning (HVAC) units available.

Dehumidification:

- The building will include a dehumidifying system that allows Walmart to operate the store at a higher temperature, use less energy, and allow the refrigeration system to operate more efficiently.

White Roofs:

- The store will utilize a white membrane roof instead of the typical darker colored roof materials employed in commercial construction. The white membrane roof's higher reflectivity helps reduce building energy consumption and reduces the heat island effect, as compared to buildings utilizing darker roofing colors.

Refrigeration:

- Walmart uses non-ozone-depleting refrigerants. It uses R407a for the refrigeration equipment. For air conditioning, Walmart has converted to R410a refrigerant.
- Refrigeration equipment is typically roof-mounted close to the refrigerated cases. This reduces the amount of copper refrigerant piping, insulation, potential for leaks and refrigerant charge needed.

Heat Reclamation:

- The Walmart Supercenter will reclaim waste heat from on-site refrigeration equipment to supply approximately 70% of the hot water needs for the store.

Water Conservation:

- Walmart will install high-efficiency urinals that use only 1/8 gallon (one pint) of water per flush.
    - This fixture reduces water use by 87 percent compared to the conventional one gallon per flush urinal.
    - The 1/8 gallon urinal also requires less maintenance than waterless urinals, making this the better option for Walmart.
- All restroom sinks will use sensor-activated ½-gallon-per-minute high-efficiency faucets.
    - These faucets reduce water usage by approximately 75 percent compared to mandated 1992 EPA Standards.
    - During use, water flows through turbines built into the faucets to generate the electricity needed to operate the motion sensors.
- All restroom toilets will be highly efficient and reduce water use.
    - The fixture uses 20 percent less water compared to mandated EPA Standards of 1.6 gallons per flush fixtures.
    - The toilets use built-in water turbines to generate the power required to activate the flush mechanism.
    - These turbines save energy and material by eliminating electrical conduits required to power automatic flush valve sensors.
- It is estimated that Walmart's water conservation measures could save up to 530,000 gallons of water annually at this store, based upon standard water conservation metrics for these water conservation design features.

Materials and Finishes:

- Cement Mixes: The store will be built using cement mixes that include 15-20 percent fly ash, a waste product of coal-fired electrical generation, or 25-30 percent slag, a by-product of the steel manufacturing process. By incorporating these waste product materials into its cement mixes, Walmart offsets the GHGs emitted in the cement manufacturing process.
- The store will use Non-Reinforced Thermoplastic Panel (NRP) in lieu of Fiber Reinforced Plastic (FRP) sheets on the walls in areas where plastic sheeting is appropriate, including food preparation areas, utility and janitorial areas, and associate break rooms. NRP can be recycled, has better impact resistance and, like FRP, is easy to keep clean.
- The store will use a plant-based oil extracted from a renewable resource as a concrete form release agent (a product sprayed on concrete forms to allow ease of removal after the concrete has set). This release agent is non-petroleum-based nontoxic and a biodegradable agent.
- For the store's exterior and interior field paint coatings, Walmart will use low volatile organic compound (VOC) paint.
- Paint products required for the project will be primarily purchased in 55 gallon drums and 275 gallon totes, reducing the number of one gallon and five gallon buckets needed. These plastic buckets are filled from the drums and totes and then returned to the paint supplier for cleaning and reuse.
- Exposed concrete stores are used "to reduce surface applied flooring materials," eliminating the need for most chemical cleaners, wax strippers and propane-powered buffing.

Recycled Building Materials:

- Construction of the store will use steel containing approximately 90–98 percent recycled structural steel, which utilizes less energy in the mining and manufacturing process than does new steel.
- All of the plastic baseboards and much of the plastic shelving included in the expansion area will be composed of recycled plastic.

Construction and Demolition Recycling:

- Walmart will employ a Construction and Demolition (C&D) program at this location in order to capture and recycle as much of the metals, woods, floor and ceiling tiles, concretes, asphalts and other materials generated as part of Walmart's demolition and construction process as possible. Walmart will work with a waste management company to fully research all available C&D recycling facilities in the area, and its C&D program will seek to include the widest possible range of materials recovery options.

Significance after Mitigation: Less-than-significant.

4.6.6 Cumulative Impacts

Global climate change is a change in the average weather on Earth that can be measured by wind patterns, storms, precipitation, and temperature. Therefore the geographic scope for the analysis of cumulative construction- and operational-related impacts resulting from the emissions of GHG is worldwide. Construction and operation of the project would incrementally contribute to GHG emissions along with past, present, and future activities, and the State CEQA Guidelines acknowledge this as a cumulative impact. As such, impacts of GHG emissions as analyzed in Section 4.6.5 of this EIR represent the cumulative analysis. As discussed in detail in the Section 4.6.5, annual emissions of GHGs from project implementation would result in a 34.10 percent reduction from BAU, thus with implementation of the project's design features and regulatory developments, the project's GHG reduction would exceed the AB 32 reduction target of 28.5 percent. Therefore, the increase in GHG emissions resulting from project implementation would not be cumulatively considerable.

Mitigation: None Required.

Significance after Mitigation: Less-than-significant.

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4.7 Hydrology and Water Quality

This section of the Draft Environmental Impact Report (EIR) describes the environmental and regulatory settings for hydrology and water quality resources. It also identifies potential impacts and the need for mitigation measures, where applicable. The analysis in this section is based on information contained in, and findings of, the Water Quality Management Plan, (Greenberg Farrow, 2015a) Appendix H1 of this Draft EIR Preliminary Hydrology Report (Greenberg Farrow, 2015b) Appendix H2, the Lake Elsinore Master Drainage Plan (MDP) Memorandum, Project Description and Status (Webb and Associates, 2015) Appendix H3 of this Draft EIR and the 3rd Street Storm Drain 35% design package (Otte-Berkeley Groupe, Inc., May 13, 2015) Appendix H4 of this EIR.

4.7.1 Environmental Setting

Regional Setting

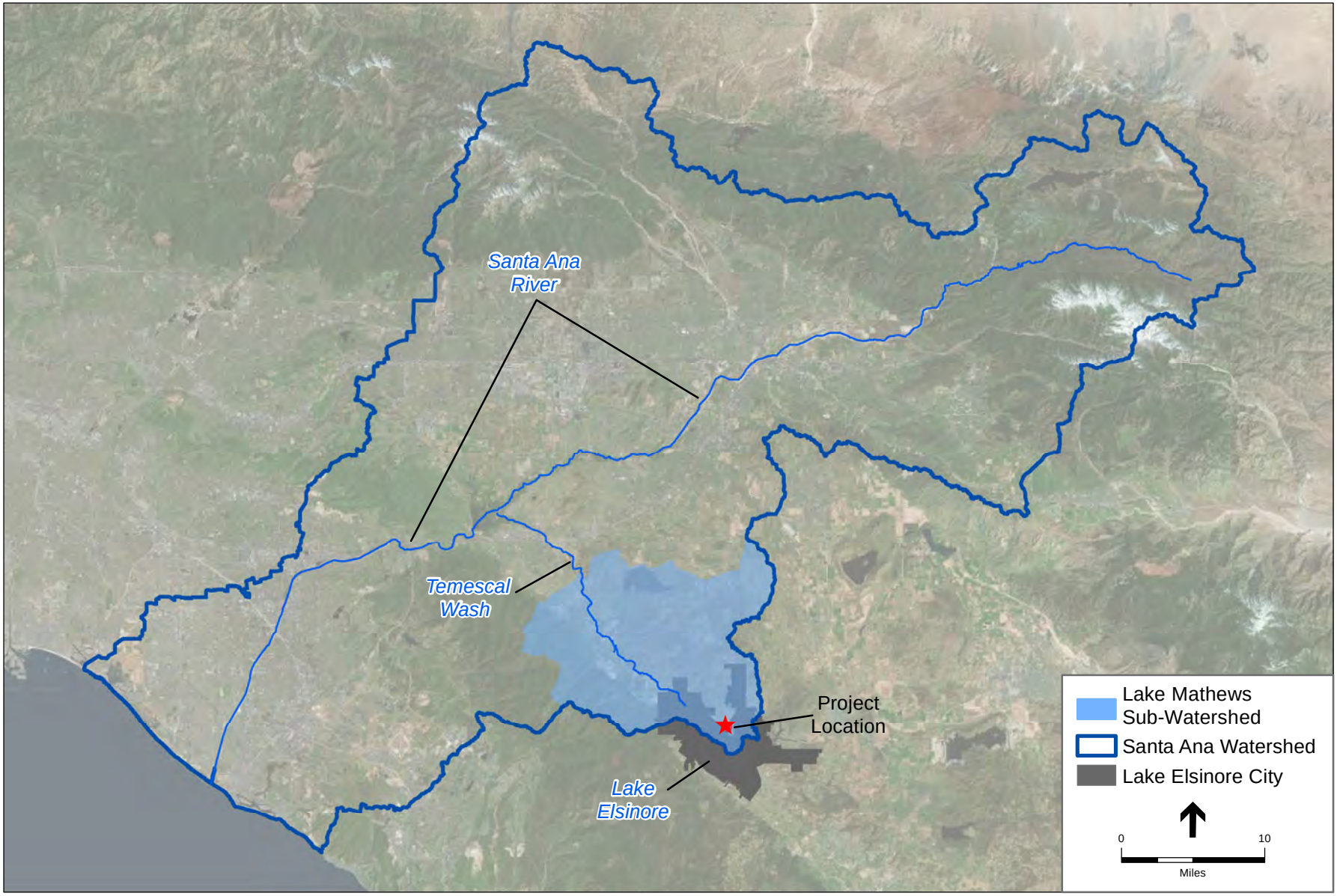
The project site is located within the Santa Ana Region of California, under the jurisdiction of the Santa Ana Regional Water Quality Control Board (RWQCB). Situated between Los Angeles and San Diego, the Santa Ana Region is a group of connected inland basins and open coastal basins drained by surface streams flowing generally southwestward to the Pacific Ocean (see **Figure 4.8-1**). The project site is located in the southeastern portion of the Santa Ana River watershed, within the Lake Matthews sub-watershed. Flows in the Santa Ana River originate mainly from snowmelt and storm runoff upstream of the Seven Oaks Dam. From there, the river flows through San Bernardino and Riverside to the Prado Dam. It then flows down through Santa Ana Canyon into Orange County, where it eventually drains into the Pacific Ocean near Costa Mesa. Currently, the most serious water-related problem in the Santa Ana River watershed is water supply; the region uses approximately twice as much water as is available from local sources (RWQCB, 2008).

Local Setting

Drainage

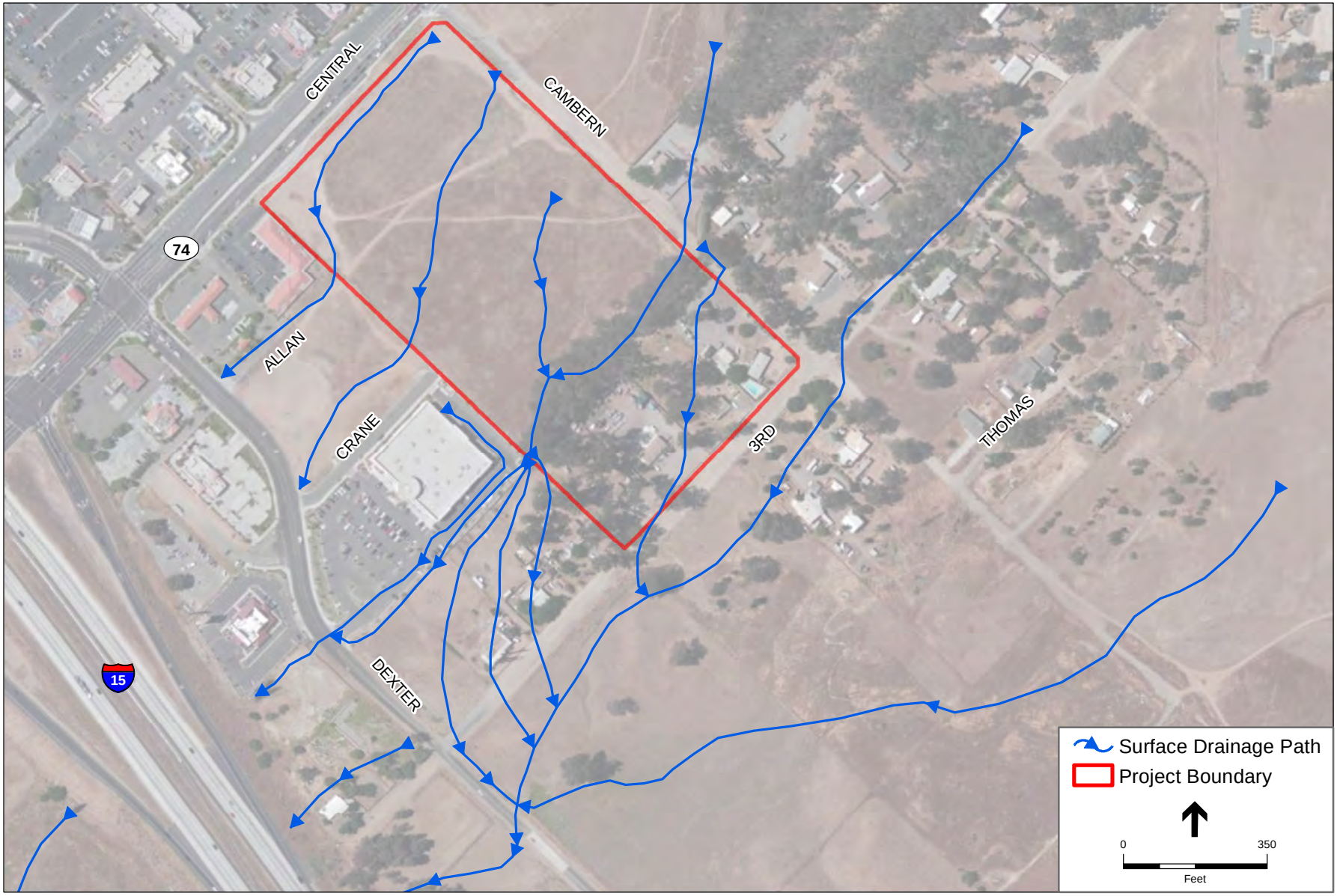
Existing On-Site Drainage

Five drainage features exist on the project site, which all flow in a southerly direction (see **Figure 4.7-2**) (Greenberg Farrow, 2015b). Three of the five drainages originate from roadway runoff collected along Cambern Avenue. The fourth drainage originates on-site and the fifth drainage originates off-site north of the project site. Two of the drainages merge on-site; therefore, a total of four drainage flows exit the project site. Three of the drainage flows exiting the project site outflow directly onto adjacent properties and the fourth drainage exits the project site and crosses 3rd Street.



SOURCE: ESRI Imagery, National Resources Conservation Services (NRCS), National Hydrology Dataset (NHD)

Figure 4.7-1
Watershed



SOURCE: ESRI Imagery

Lake Elsinore Walmart Supercenter Project EIR . 130767

Figure 4.7-2

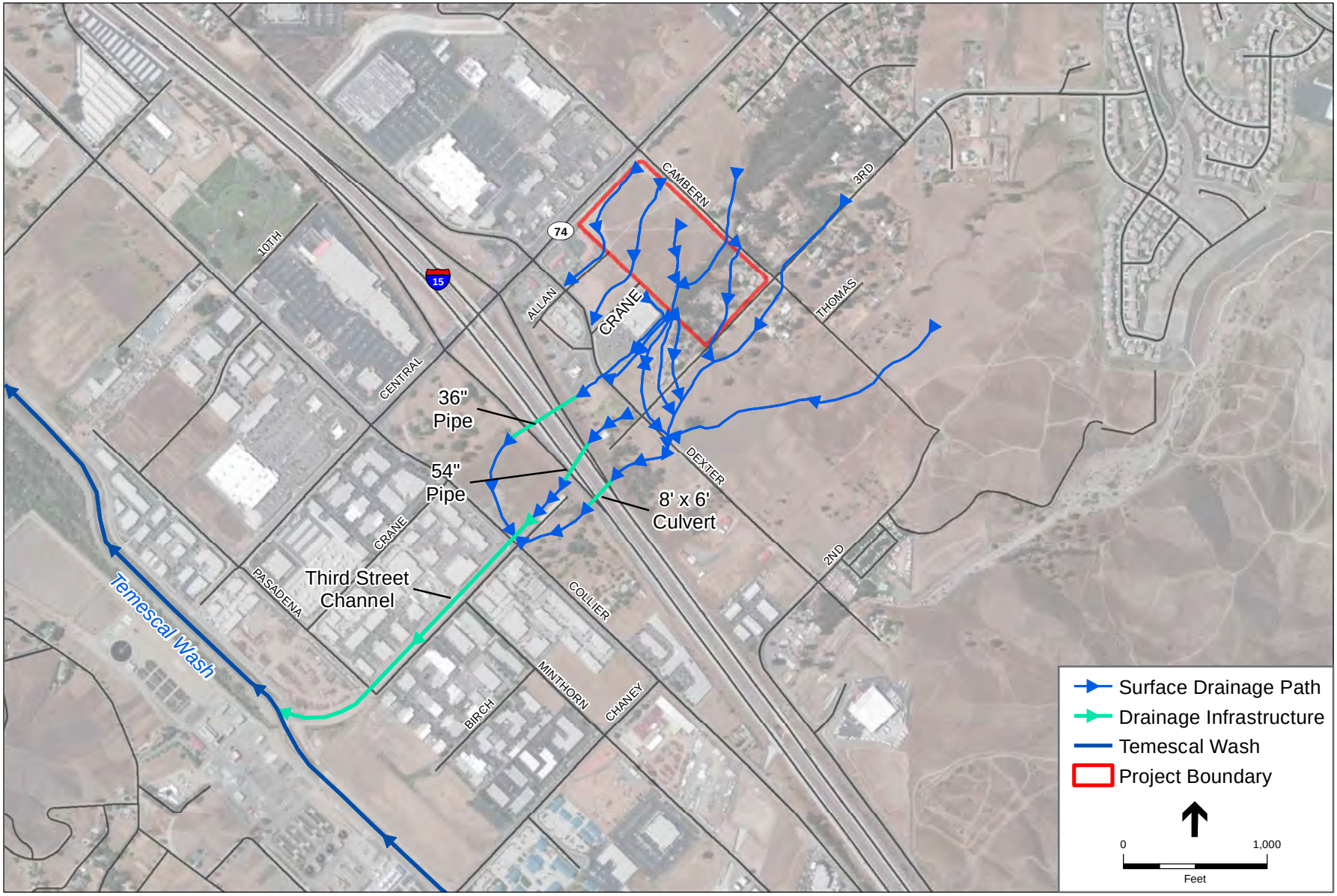
Existing Onsite and Surrounding Area Drainage Features

Drainage 1 begins near the north corner of the project site and flows southwest adjacent to the project site boundary before turning south near the west corner of the project site, flowing out onto Allan Street and connecting with an existing 30-inch storm drain. Drainage 2 flows southwest, outflows onto the vacant lot to the south and connects with the existing 30-inch storm drain located near the corner of Crane Street and Dexter Avenue. Drainage 3 flows south through the middle of the project site, connects with Drainage 4 within the existing Eucalyptus grove, and exits the project site into the adjacent residential uses to the southwest. Drainage 4 has been directed to flow from the property to the northeast of the project site across Cambern Avenue onto and through the project site, and appears to be hydraulically connected to the United States Geologic Survey (USGS) blue-line stream located to the northeast. The collective outflow of merged Drainages 3 and 4 flows onto the adjacent residential parcels to the southwest of the project site, via several drainage paths, creating local flooding conditions. One of these drainage paths continues to flow southwest, crossing Dexter Avenue to the west of the 3rd Street and Dexter Avenue intersection. The other drainage paths flow southeast across a residential parcel, crossing 3rd Street and then outflowing to the vacant parcel to the south of Dexter Avenue. Drainage 5 enters the project site near the southeast corner and outflows as sheet flow onto 3rd Street.

Existing Off-Site Drainage

An unnamed USGS blue-line stream is located to the northeast of the project site and during heavy rainfall, collects sheet flows across Cambern Avenue and directs it onto the project site, becoming Drainage 4 (described previously) (Greenberg Farrow, 2015a). In addition, there is an unnamed drainage to the southeast of the project site (see **Figure 4.7-3)**. This drainage feature flows roughly parallel to 3rd Street, collects off-site runoff before flowing across Dexter Avenue to the vacant parcel to the south and adjacent to Interstate 15 (I-15). The majority of this drainage then flows into an 8-foot by 6-foot concrete box culvert running under I-15 and onto a vacant parcel on the west side of I-15. Other drainage facilities that capture project site flow include a 54-inch reinforced concrete pipe also running under the freeway, approximately 400 feet north of the 8-foot by 6-foot concrete box culvert, and a 36-inch reinforced concrete pipe, approximately another 400 feet north of the 54-inch reinforced concrete pipe. All of the drainages flowing under I-15 in the project vicinity collect and discharge into Riverside County Flood Control and Water Conservation District (RCFCWCD)-operated 3rd Street Channel, which begins at the corner of Collier Street and 3rd Street to the west of I-15. This channel flows into Reach 6 of Temescal Creek, which is defined as the section of the creek from the Lake Elsinore outlet to the end of the Elsinore Groundwater sub-basin boundary (RWQCB, 2008). Temescal Creek converges with the Santa Ana River approximately 22 miles northwest of the project site in the City of Corona, near the junction of Highway 71 and Highway 91.

Arroyo del Toro is an existing off-site drainage that flows across the mostly vacant block to the north of the project site (EPA, 2014) and into a concrete channel adjacent to Costco. This drainage flows under I-15 and eventually converges with Temescal Creek upstream of the project site.



SOURCE: ESRI Imagery

Lake Elsinore Walmart Supercenter Project EIR . 130767

Figure 4.7-3

Existing Regional Drainage Facilities

Water Quality

Reach 6 of Temescal Creek is listed as impaired for indicator bacteria according to federal standards. Arroyo del Toro is not listed as impaired according to federal standards (EPA, 2010). There are no specific water quality objectives identified in the RWQCB Basin Plan for either Arroyo del Toro or Reach 6 of Temescal Creek (RWQCB, 2008). The RWQCB Basin Plan does not list any beneficial uses for Arroyo del Toro. However, it lists the following beneficial uses for Reach 6 of Temescal Creek, which are shown in **Table 4.7-1** below.

TABLE 4.7-1
BENEFICIAL USES OF REACH 6 OF TEMESCAL CREEK AS DEFINED BY THE SANTA ANA REGION BASIN PLAN

Beneficial Use Types	Beneficial Use Designation* for Reach 6 of Temescal Creek
Municipal and Domestic Supply	None
Agricultural Supply	None
Industrial Service Supply	None
Groundwater Recharge	Intermittent
Navigation	None
Hydropower Generation	None
Water Contact Recreation	Intermittent
Non-Contact Water Recreation	Intermittent
Commercial and Sport-fishing	None
Warm Freshwater Habitat	Intermittent
Limited Warm Freshwater Habitat	None
Cold Freshwater Habitat	None
Preservation of Biological Habitats of Special Significance	None
Wildlife Habitat	Intermittent
Rare, Threatened, or Endangered Species	None
Spawning, Reproduction, and Development	None
Estuarine Habitat	None

*There are three possible beneficial use designations: existing, intermittent, and potential.

SOURCE: Santa Ana RWQCB, 2008.

4.7.2 Regulatory Setting

Federal

Clean Water Act

The U.S. Environmental Protection Agency is the federal agency, governed by the Clean Water Act (CWA), responsible for water quality management. The purpose of the CWA is to protect and maintain the quality and integrity of the nation's waters by requiring states to develop and implement state water plans and policies.

CWA Section 303: Total Maximum Daily Loads

Section 303 of the CWA requires states to establish water quality standards consisting of designated beneficial uses of water bodies and water quality standards to protect those uses for all Waters of the United States. Under Section 303(d) of the CWA, states, territories, and authorized tribes are required to develop lists of impaired waters. Impaired waters are waters that do not meet water quality standards, even after point sources of pollution have installed the minimum required levels of pollution control technology. The law requires that these jurisdictions establish a priority rankings for listed waters and develop action plans to improve their water quality. This process includes development of Total Maximum Daily Loads (TMDLs) that set discharge limits for non-point source pollutants. A TMDL is a calculation of the maximum amount of a pollutant that a waterbody can receive and still safely meet water quality standards. The Ducheny Bill (AB 1740) requires the State Water Resources Control Board (SWRCB) and its nine RWQCBs to post this list and to provide an estimated completion date for each TMDL.

CWA Section 401: Water Quality Certification

Section 401 of the CWA specifies that any applicant for a federal license or permit to conduct any activity, including but not limited to the construction or operation of facilities that may result in any discharge into navigable waters, shall provide the federal licensing or permitting agency a certification from the State in which the discharge originates or will originate from the State agency with jurisdiction over those waters (i.e., Los Angeles RWQCB) that the project will comply with water quality standards, including beneficial uses, water quality objectives, and the SWRCB's Anti-Degradation Policy.

CWA Section 402: National Pollutant Discharge Elimination System Permit

Direct discharges of pollutants into waters of the United States are not allowed, except in accordance with the National Pollutant Discharge Elimination System (NPDES) program established in Section 402 of the CWA. The main goal of the NPDES program is to protect human health and the environment. Pursuant to the NPDES program, permits that apply to stormwater discharges from municipal storm drain systems, specific industrial activities, and construction activities (1 acre [ac] or more) have been issued. NPDES permits establish enforceable effluent limitations on discharges, require monitoring of discharges, designate reporting requirements, and require the permittee to include use of best management practices (BMPs). Industrial (point source) stormwater permits are required to meet effluent limitations; municipal and construction permits are governed by the maximum extent practicable (MEP) or the Best Available Technology (BAT)/Best Control Technology (BCT) application of BMPs.

State

Porter-Cologne Water Quality Control Act

The Porter-Cologne Water Quality Control Act (Water Code Sections 13000 et seq.), passed in 1969, requires protection of water quality by appropriate design, sizing, and construction of erosion and sediment controls. The Porter-Cologne Act established the SWRCB and divided California into nine regions, each overseen by a RWQCB. The SWRCB is the primary state agency responsible for protecting the quality of the State's surface and groundwater supplies and has delegated primary implementation authority to the nine RWQCBs. The Porter-Cologne Act assigns responsibility for implementing CWA Sections 401 through 402 and 303(d) to the SWRCB and the nine RWQCBs.

The Porter-Cologne Act requires the development and periodic review of water quality control plans (Basin Plans) that designate beneficial uses of California's major rivers and groundwater basins and establish narrative and numerical water quality objectives for those waters, provide the technical basis for determining waste discharge requirements, identify enforcement actions, and evaluate clean water grant proposals. Compliance with basin plans is primarily achieved through implementation of the NPDES, which regulates waste discharges as discussed above.

The Porter-Cologne Water Quality Control Act requires that any person discharging waste or proposing to discharge waste within any region, other than to a community sewer system, which could affect the quality of the "waters of the state," file a report of waste discharge. This report requires a complete characterization of the discharge including design and actual flows, a list of constituents and the discharge concentration of each constituent, a list of other appropriate waste discharge characteristics, a description and schematic drawing of all treatment processes, a description of any BMPs used, and a description of disposal methods, and a site map.

Statewide NPDES Permit for General Construction Activity

The State of California adopted a Construction General Permit on September 2, 2009 (Order No. 2009-0009-DWQ, as amended by 2010-0014-DWQ and 2012-0006-DWQ). The most recent Construction General Permit amendment became effective on February 16, 2012. The Construction General Permit regulates construction site stormwater management. Dischargers whose projects disturb one or more acres of soil, or whose projects disturb less than one acre but are part of a larger common plan of development that in total disturbs one or more acres, are required to obtain coverage under the general permit for discharges of stormwater associated with construction activity. Construction activity subject to this permit includes clearing, grading, and disturbances to the ground, such as stockpiling or excavation, but does not include regular maintenance activities performed to restore the original line, grade, or capacity of the facility.

To obtain coverage under this permit, project operators must electronically file Permit Registration Documents, which include a Notice of Intent, a Storm Water Pollution Prevention Plan (SWPPP), and other compliance-related documents, including a risk-level assessment for construction sites, an active stormwater effluent monitoring and reporting program during construction (for Risk Level II and III sites), rain event action plans, and numeric action levels

(NELs) for pH and turbidity as well as requirements for qualified professionals that prepare and implement the plan. An appropriate permit fee must also be mailed to SWRCB.

The Construction General Permit requires that the SWPPP identify BMPs that must be implemented to reduce construction effects on receiving water quality based on potential pollutants. The BMPs identified are directed at implementing both sediment and erosion control measures and other measures to control potential chemical contaminants. The SWPPP also includes descriptions of the BMPs to reduce pollutants in stormwater discharges after all construction phases have been completed at the site (post-construction BMPs).

Governor's Executive Order B-29-15

Following the call for a State Emergency due to severe drought conditions in California, Govenor Brown issued Executive Order B-29-15 which contains mandatory conservation measures. Among these requirements, the order requires the State Water Resources Control Board (Water Board) to impose restrictions to achieve a statewide 25 percent reduction in potable urban water usage through February 28, 2016. These restrictions will require water suppliers to California's cities and towns to reduce usage as compared to the amount used in 2013. The Water Board will also prohibit irrigation with potable water outside of newly constructed homes and buildings that is not delivered by drip or microspray systems.

Santa Ana Regional Municipal Separate Storm Sewer System Permit

The current Municipal Separate Storm Sewer System (MS4) Permit for the Santa Ana Region of Riverside County (Order No. R8-2010-033) became effective on January 29, 2010, and expired on January 29, 2015 but is in the process of renewal at the time of this analysis. The MS4 Permit regulates urban runoff from areas under jurisdiction of the Permit's various permittees, which include the City of Lake Elsinore. When discharged, urban runoff (or stormwater) has the potential to mix with and carry various pollutants into receiving waters. The Permit lists allowable and unallowable discharges, and requires implementation of low-impact development (LID) principles in site design to the maximum extent practicable (MEP).

Developments meeting specific development or redevelopment criteria are required to develop a site-specific water quality management plan (WQMP), which includes site design, source control and treatment control elements to reduce the discharge of pollutants in urban runoff. The WQMP requires identification of hydrologic conditions of concern (HCOC), which is defined as a significant impact on downstream channels caused by an alteration in the project site hydrologic regime. A project-specific WQMP must be approved prior to the issuance of a building or grading permit, and post-construction BMPs must be implemented. Categories of post-construction BMPs include site design, source control and treatment control BMPs.

Riverside County Drainage Area Management Plan – Santa Ana Region

This update of the Drainage Area Management Plan (DAMP) for the Santa Ana Region addresses the requirements of the 2010 MS4 Permit issued to the Riverside County Permittees, and incorporates programs developed since 1993. The DAMP serves as a model to document the SAR MS4 Permit compliance programs and to provide guidance to the Permittees in the development and implementation of their Local Implementation Plans (LIPs) which contain the enforceable

elements of the Permittee compliance programs. The LIPs describe the specific Urban Runoff management programs and activities implemented by each Permittee to comply with the MS4 Permit.

Riverside County Water Quality Management Plan for Urban Runoff – Santa Ana River Region and Santa Margarita River Region

The Riverside County WQMP specifies what types of significant redevelopment and new development categories require a project-specific WQMP to be developed. With a gross land area of 17.66 acres (approximately 769,270 square feet [SF]), the project would meet the following new development category:

> Industrial and commercial development where the land area represented by the proposed map or permit is 100,000 SF or more, including, but not limited to, non-residential developments such as hospitals, educational institutions, recreational facilities, mini-malls, hotels, office buildings, warehouses, light industrial, and heavy industrial facilities.

According to the Riverside County WQMP, a project-specific WQMP must contain: a project description, pollutants of concern and HCOCs, site design BMPs, source control BMPs, treatment control BMPs (where applicable), operation and maintenance requirements program, and proposed funding sources for operations and maintenance of BMPs. Site design BMPs involve site features that reduce and control post-development runoff rates. Source control BMPs can be structural or non-structural, and reduce the potential for runoff and pollutants coming into contact with one another. Treatment control BMPs are engineered systems designed to treat the adverse impacts of urban runoff pollution, through methods including filtration and absorption.

In the City of Lake Elsinore, the Engineering Division has the primary responsibility for reviewing project-specific WQMPs and conditions of approval.

Local

City of Lake Elsinore General Plan

Goal 4: Improve water quality and ensure the water supply is not degraded as a result of urbanization of the City.

Goal 4.1: Encourage developers to provide clean water systems that reduce pollutants being discharged into the drainage system to the maximum extent feasible and meet required federal National Pollutant Discharge Elimination System (NPDES) standards.

Goal 4.2: Support public education and awareness programs to reduce pollutant discharges into the drainage system.

Goal 4.3: Require Best Management Practices through project conditions of approval for development to meet the Federal NPDES permit requirements.

Goal 4.4: The City shall utilize the 1998 North American Vertical Datum to be consistent with the national standard for mean sea level, which would increase the measurement of the mean sea level for Lake Elsinore by approximately 2.4 feet.

City of Lake Elsinore Municipal Code

Title 14 (Environmental Regulations)

Title 14 of the Lake Elsinore Municipal Code is known as the "City of Lake Elsinore Stormwater/Urban Runoff Management and Discharge Controls Ordinance" and is cited as [Ord. 1296 § 1, 2012]. The intent of this chapter is to protect and enhance the water quality of City watercourses, water bodies, groundwater, and wetlands in a manner pursuant to and consistent with the California Water Code Sections 13000 et seq. (Porter-Cologne Water Quality Control Act), Title 33 U.S.C. Sections 1251 et seq. (Federal Clean Water Act). The purpose of this chapter is to ensure the future health, safety, and general welfare of City citizens by:

- Reducing pollutants in stormwater discharges to the maximum extent practicable
- Regulating illegal connections and discharges to the storm drain system
- Regulating non-stormwater discharges to the storm drain system [Ord. 1296 § 1, 2012]

4.7.3 Thresholds of Significance

According to Appendix G of the California Environmental Quality Act (CEQA) Guidelines, the proposed project could have a potentially significant impact with respect to hydrology and water quality if it would:

- Violate any water quality standards or waste discharge requirements.
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted).
- 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 or siltation on- or off-site.
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site.
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff.
- Otherwise substantially degrade water quality.
- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.

- Place structures within a 100-year flood hazard area, floodway, or floodplain 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.
- Inundation by seiche, tsunami, or mudflow.

It was determined in the Initial Study/NOP (Appendix A) that implementation of the proposed project would not result in impacts related to the placement of housing or structures in a flood hazard area. The project would not expose people or structures to impacts related to flooding from dam failure or inundation by seiche, tsunami, or mudflow.

4.7.4 Methodology

The significance determination for the Hydrology and Water Quality analysis is based on a review of existing literature as well as above identified reports prepared for the proposed project and the City of Lake Elsinore. The assessment presents findings, conclusions, and recommendations concerning development of the project site based on the hydraulics analysis of current drainage patterns at the site and in the surrounding area. Resources reviewed also include the City's General Plan EIR and available resources from the Regional Water Control Board's Basin Plan for the Santa Ana Region The sections that follow describe the identified impacts and the measures that would be incorporated to mitigate significant impacts.

4.7.5 Impact Analysis

Impact 4.7-1: Would the project would violate any water quality standards or waste discharge requirements?

Construction

Construction of the proposed project structures would require the use of heavy equipment and construction-related chemicals, such as fuels, oils, grease, solvents and paints that would be stored in limited quantities on-site. In the absence of proper controls, these construction activities could result in accidental spills or disposal of potentially harmful materials used during construction that could mix with stormwater runoff on-site and degrade water quality. Materials that could potentially contaminate the construction area from a spill or leak include diesel fuel, gasoline, lubrication oil, hydraulic fluid, antifreeze, transmission fluid, lubricating grease, concrete, and other fluids. Construction would also expose bare soil to erosive elements (wind and rain), increasing the potential for sedimentation to occur on-site, another form of water quality degradation.

As project construction would disturb more than one acre of soil, the project proponent would be required to comply with the NPDES Construction General Permit. In compliance with this permit, a SWPPP would be prepared and implemented, which would require non-stormwater and waste and material management BMPs that would prevent construction chemicals used on-site from washing into local water bodies. The SWPPP would also include erosion and sediment control BMPs that would prevent the mixing of exposed soil with stormwater. The SWPPP would be submitted to and reviewed by the City's Engineering Division prior to issuance of a building or grading permit. With implementation of the SWPPP and its associated BMPs, impacts related to water quality during construction of the project would be less than significant.

Operation

Operation of the proposed project could adversely impact water quality if not designed appropriately. The proposed development would introduce commercial land uses that could introduce potential pollutants to the runoff from the project site. Pollutants associated with similar commercial uses typically include trash and debris; nutrients, pesticides, sediment from landscaping; and oils and greases. As previously stated, Temescal Creek, a downstream waterbody, is impaired for indicator bacteria. After being used or generated on-site, pollutants could drain into surface waters either directly or during stormwater runoff events, resulting in further impairment of downstream surface water quality. Although commercial uses would not typically increase the risk of indicator bacterial pollution, the proposed development could create new impairments in downstream waterbodies.

In accordance with MS4 NPDES Permit requirements for new development, the proposed project would be required to develop a site-specific WQMP that would identify HCOC, highlight LID principles utilized on-site and list all site design, source control and treatment control BMPs that will be implemented during site occupation in order to protect stormwater quality throughout the life of the project. The WQMP would be required to designate maintenance and funding sources for the upkeep of these BMPs. A Preliminary WQMP would be prepared and submitted for Engineering Division review during the design stage of a project. A Final Project WQMP must be approved prior to issuance of building and grading permits, which would include a final hydrology analysis ensuring appropriate sizing and control of BMPs. Through implementation of a site-specific WQMP, impacts to water quality associated with the operation of the project would be less-than-significant.

Mitigation Measures: None required.

Significance after Mitigation: Less-than-significant.

Impact 4.7-2: Would the 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 main water supplier for the City of Lake Elsinore is the Elsinore Valley Municipal Water District (EVMWD). The EVMWD receives its water from a connection to the Metropolitan Water District of Southern California (Metropolitan), local surface water from Canyon Lake, and local groundwater from Lake Elsinore (see Section 3.14, *Utilities and Service Systems*, for a more

detailed discussion on this topic). Currently, supplies are sufficient to meet normal year demands and projected growth, but additional infrastructure such as pumping facilities and conveyance facilities will be required to meet peak demands under maximum day conditions (MDD) (EVMWD, 2011).

The project site is currently vacant, and thus providing the proposed project water would represent additional demand which could indirectly result in depletion of the Elsinore groundwater basin water supplies. The project would employ water conservation practices during operation including regular maintenance of irrigation systems to detect overspray, installation of rain detection devices to prevent irrigation during or following a rain event, and the use of drought-tolerant low-water usage vegetation for landscaping, thereby reducing excessive water demand. Additionally, groundwater makes up a small percentage (less than 10 percent) of the total water supply, and based on EVWMD water supply projections, groundwater pumping for water supply would not exceed the Elsinore groundwater basin's annual recharge nor even increase beyond current levels out to the year 2035. Further, the project has obtained a will-serve letter from EVMWD for the estimated operational water demand**,** indicating the project would not contribute to an over pumping or substantial decrease in groundwater levels. Therefore, operation of the project is not anticipated to substantially deplete groundwater supplies, and impacts would be less-than-significant.

In addition, as stated above, the site is currently vacant and would introduce new impervious surfaces to the site. The increase in impervious surfaces could result in a decreased amount of stormwater runoff that would infiltrate on-site and recharge underlying groundwater resources. However, as required by the MS4 NPDES permit, the inclusion of LID BMP drainage features into project design would encourage the on-site infiltration of stormwater runoff through vegetated swales, bio-retention facilities, permeable paving and other approved LID improvements. Incorporation of these required drainage features would allow for on-site infiltration of stormwater runoff in addition to the requirements that limit the volumes of stormwater allowed to discharge off-site, and the resulting impact to underlying groundwater resources would likely be relatively small and considered less-than-significant.

Therefore, operation of the project constructed in accordance with existing regulatory requirements is not anticipated to substantially deplete groundwater supplies, and impacts would be less-than-significant.

Mitigation Measures: None required.

Significance after Mitigation: Less-than-significant.

Impact 4.7-3: Would the project substantially alter the existing drainage pattern of a site or area through the alteration of the course of a stream or river, or by other means, in a manner that would result in substantial erosion, siltation or flooding on- or off-site?

The City of Lake Elsinore is currently preparing a drainage master plan for the project area which will include drainage and flood control facilities that will encompass the project site and surrounding area. The 35% design drainage improvement plans are depicted in **Figure 4.7.4**. In the event that the city drainage master plan is not completed prior to project construction, an alternative project-specific drainage improvement plan has been prepared for the project site, as an interim solution, until such time as the city drainage master plan improvements are implemented. The on-site drainage improvement scenario is evaluated in this EIR and the City's area drainage plan is discussed conceptually for informational purposes as its design has not been finalized. The project specific drainage improvement plan is shown in Figure 3-7.

The proposed project is located within an area designated as Flood Zone X. The City is in the process of preparing an area hydrology plan (Area Hydrology Plan) for the 3rd Street area in consultation with the Riverside County Flood Control District and Water Conservation District (RCFCWCD) and Caltrans. The City has identified a preferred alignment for the regional drainage solution as shown in Figure 4.8.4. Under the city drainage plan, stormwater would be conveyed from the existing earthen channel located at Cambern Avenue and directed south on Cambern Avenue, and then west on 3rd Street, under 1-15, and into an earthen/rip-rap channel, which would connect to the existing 3rd Street channel and into Temescal Wash. The proposed Area Hydrology Plan would include installation of a permanent drainage system (including an inlet structure, storm drains, curbs and gutters, catch basins, and an open channel) to capture and direct run-off from the project area. Storm drain sizes will range from 84-inch reinforced concrete pipe (RCP) in Cambern Avenue and 72- and 48-inch RCP in 3rd Street. A steel-jacketed 108-inch pipe with an 84-inch RCP will be jack and bored under I-15 and connect to the proposed 378-foot-long, 70-foot-wide earthen/rip-rap trapezoidal channel. The proposed area drainage plan will also capture off-site drainage that currently flows onto the project site and convey it into the proposed area-wide drainage system.

If the Area Hydrology Plan is not adopted and installed by the City prior to construction, then the proposed project design would be implemented to accommodate flows on the southern boundary of the Walmart Supercenter site. The alternative storm drainage project design would include conveyance of stormwater flows from Cambern Avenue through a storm drain structure with varying widths into an on-site 73-foot-wide stormwater detention basin/open channel, which would be located along the southern boundary of the project site adjacent to 3rd Street. The environmental impacts associated with the City's Area Hydrology Plan will be evaluated in a separate CEQA document.

SOURCE: OTTE-Berkley Groupe, Inc., May 2015; Google Earth

Figure 4.7-4
City Area Drainage Plan

Construction

Construction of the proposed project would alter the existing drainage pattern of the project site, as ground disturbance would occur in the path of existing drainage paths. Possible impacts of this include erosion, sedimentation and flooding, all of which are interconnected. Erosion is defined as the washing away of soil by rain or wind. Siltation is an undesired increased transport and sedimentation of suspended material (or water) (BWR, 2007). Flooding is the partial or complete inundation of normally dry land area from unusual and rapid accumulation or runoff of surface waters. Flooding can often cause erosion, which in turn can cause siltation.

Construction of the proposed project facilities would involve alteration of the ground surface and expose a large amount of bare soil, making soil prone to erosion by on-site drainages and stormwater. Project construction would comply with the NPDES Construction General Permit through development and implementation of a SWPPP. The SWPPP would include erosion control BMPs, such as scheduling and preservation of existing vegetation, which would prevent the exposure of soil to water and reduce the threat of erosion during construction. The SWPPP would also implement sediment control BMPs, such as sandbags and fiber rolls, to trap any sediment that mobilizes on-site, thereby preventing siltation from occurring. The SWPPP would be reviewed by the City's Engineering Division prior to issuance of a building or grading permit. Impacts related to erosion on-site would be less than significant.

Alteration of existing site grade or drainage patterns could cause water to pool and/or flood in areas on-site. Flooding conditions already exist on an adjacent parcel to the southwest of the site. However, construction could increase flooding off-site by reducing the drainage's ability to meander or percolate into the soil prior to exiting the site. Increased erosion and siltation could occur in off-site areas as a result of scouring from increased flooding. Furthermore, although construction of the proposed project would not increase the amount of run-on received by the site, run-on would still have to be directed around work areas to avoid flooding.

As stated in Chapter 3, *Project Description*, the flood control facilities and associated utility connections would be constructed sometime after the start of construction in early 2016. Furthermore, the project proponent would be required to obtain a Drainage Permit from the City, which requires the submittal of a Drainage Inspection Application. The application would include engineering drawings of existing and proposed drainage flow during construction. The proponent would receive a letter from the City identifying requirements and providing documents necessary for permit issuance, and using this information, would submit a Drainage Inspection Permit to the City Engineering Division. This application is then reviewed by staff, and a Drainage Permit would be issued if all requirements have been met. Therefore, with flood control structures in place during the rainy season and the City drainage permit review process, impacts relating to flooding both on- and off-site during construction would be less than significant.

Operation

Operation of the proposed project would alter existing drainage patterns. The majority of the project site would be graded and paved during operation; therefore, it is not likely that erosion or sedimentation would occur on-site. Flooding on-site could occur, as the amount of impervious

surfaces would be increased and facilities would be located in existing drainage paths. This could also lead to off-site flooding, which can be a cause of off-site erosion and sedimentation as well.

However, the proposed project would involve the construction of new drainage facilities with the purpose of collecting stormwater runoff and efficiently discharging it off-site in accordance with local drainage control requirements. Compared to existing conditions, the developed project condition would generate 64.07 cubic feet per second (cfs) of runoff during the 100-year event compared to 36 cfs under existing conditions (Greenberg Farrow, 2015b). This increased amount of onsite stormwater would be captured by the proposed on-site detention basin and slowly released into the existing 30-inch storm drain at the intersection of Crane Street and Dexter Avenue, thereby not causing any flooding, erosion or siltation. Should the City's area drainage plan not be completed by project construction, runoff originating from a source to the northeast of the project site would be channeled into a culvert, running under Cambern Avenue and into an open channel on-site. The open channel would collect runoff with a capacity to handle the 100-year, 3hr storm event producing 697cfs off-site from across Cambern Ave. and the 2.73cfs (Q38) from the rainfall over the 0.844 acres taken up by the open channel (Greenberg Farrow, 2015b). At capacity, the channel would then overtop and water would be directed via spillways and flow east onto 3rd Street. Water would then release onto a vacant property's existing drainage ditch that flows southwest, eventually crossing Dexter Avenue, passing under I-15, and entering into the 3rd Street channel. The existing off-site ditch currently accommodates the flows.

With the installation of the City's area drainage plan, the proposed facilities would convey runoff sources from across Cambern Avenue, thereby reducing existing flooding conditions on the adjacent parcel to the southwest of the project site. Through implementation of a WQMP in accordance with MS4 requirements, the project would implement site design, source control and treatment control BMPs. Although these BMPs are primarily designed to prevent water pollution, some involve the containment of stormwater runoff, which would reduce the potential for flooding on-site or off-site. The Final WQMP would include a final hydrology analysis containing calculations to confirm that flooding would not occur on, or off-site and flood control structures would channel water as planned during project operation.[1] With implementation of a WQMP, impacts related to flooding, erosion, and sediment on or off-site would be less-than-significant.

Mitigation Measures: None required.

Significance after Mitigation: Less-than-significant.

[1] Note these calculations relate only to the pre- and post-development conditions on the project site and are not dependent on how off-site flows might be affected by the City's Master Drainage Plan.

Impact 4.7-4: Would the project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?

Construction

The project involves the construction of additional stormwater drainage facilities to accommodate the proposed development. Prior to the complete installation of these new drainage systems, project construction could create runoff that could overwhelm the existing drainage system through flooding from the temporary alteration of on-site drainage patterns (as discussed in Impact 4.7-2). However, as described previously, interim flood control facilities (including stormwater drainage facilities) would be established prior to the start of the rainy season, thereby ensuring excess runoff caused by construction does not overwhelm available drainage control. Furthermore, the project proponent would be required to obtain a Drainage Permit from the City, which requires a multi-level review of site plans prior to issuance of the permit to ensure drainage during construction is appropriately controlled. Impacts to existing stormwater drainage facilities during construction would be less-than-significant.

Operation

During operation, the proposed project would generate greater amounts of runoff compared to existing conditions due to the net increase of impervious surfaces. However, as mentioned above, if the city drainage project is not completed by project construction, the proposed on-site detention basin will be sized to create no net increase in peak runoff discharged from the site. The detention basin would slowly release the stored runoff into an existing 30-inch storm drain at the intersection of Crane Street and Dexter Avenue. According to the preliminary hydrology analysis, the total post-development peak flow detention provided by the proposed flood control facilities on-site is designed in accordance with the Riverside County Flood Control and Water Conservation District Hydrology Manual requirements for drainage system design. Therefore, runoff generated on-site that is released by the detention basin would be designed in a manner such that the runoff channeled into the Crane Street storm drain would not exceed its existing capacity.

The proposed alternative offsite storm drain system is designed to control existing run-off sourced stormwater from across Cambern Avenue and the project site, and route it through the site to the aforementioned detention basin and released off-site in a controlled manner to an existing drainage. This downstream drainage flows across vacant property, and flows southwest onto another vacant property before flowing under I-15 through existing drainage structures and eventually into the 3rd Street channel and Temescal Wash. However, the project facilities would not increase the amount of runoff entering the site, and would therefore not result in the exceedance of the 3rd Street channel drainage capacity. The drainage control requirements not only address stormwater volumes but also water quality such that there would be no substantial increased in sources of polluted runoff. Impacts would be less-than-significant..

Mitigation Measures: None required.

Significance after Mitigation: Less-than-significant.

Impact 4.7-5: Would the project otherwise substantially degrade water quality?

Construction

As previously stated, the project has the potential to degrade water quality during construction, either resulting from the use of construction-related chemicals on-site or from the siltation of water resulting from soil disturbance during construction. However, construction activities would disturb more than an acre, and would therefore be required to implement a SWPPP that would include various erosion control, sediment control and non-stormwater BMPs, which would help protect water quality. Construction of the project could also degrade water quality through the creation of flooding on- or off-site, which could lead to siltation of water. However, the proposed flood control facilities would be installed and functional at the start of the rainy season, thereby preventing flooding from occurring in the remaining construction work areas during the rainy season. Furthermore, the project proponent would be required to obtain a Drainage Permit from the City, which requires the submittal and review of construction drainage plans by the City prior to the issuance of the permit. Construction of the project is not expected to pose any additional threats to water quality. Impacts related to the degradation of water quality would be less-than-significant.

Operation

Operation of the project would introduce commercial uses to the project site, which is currently vacant. Pollutants associated with commercial uses include trash and debris; nutrients, pesticides, sediment from landscaping; and oils and greases; should these pollutants be generated on-site and mix with stormwater, a degradation of water quality could result. However, the project would be required to comply with the MS4 Permit requirements, which involve the implementation of post-construction site design, source control and treatment control BMPs implemented throughout the lifetime of the project in order to protect water quality. The City requires that a Preliminary WQMP be submitted during project design and a Final WQMP be submitted prior to issuance of a building or grading permit. The WQMP will include specific on-site stormwater treatment provisions for stormwater originating on-site including bio-filtration landscape strips, pervious pavement and on-site detention. Pass-through stormwater from upstream off-site areas is not proposed to be treated. The project could also degrade water quality during its operation if it were to create flooding on- or off-site, which can lead to siltation of stormwater. However, the project would include a drainage control system, both for anticipated expected run-off generated on-site and the existing run-on. The hydrology analysis included in the Final WQMP would confirm the proposed run-on and run-off leaving the site would be properly controlled, thereby avoiding flooding impacts and associated water quality degradation from siltation. Operation of the proposed project is not expected to otherwise degrade water quality; impacts would be less-than-significant.

Mitigation Measures: None required.

Significance after Mitigation: Less-than-significant.

4.7.6 Cumulative Impacts

The proposed project, in conjunction with other projects, could result in impacts to flooding and water quality. However, similar to the proposed project, other projects in the area disturbing more than one acre during construction would be subject to Construction General Permit requirements, involving implementation of a SWPPP that includes various erosion control, sediment control, non-stormwater management and waste management BMPs that would protect water quality. Operation of cumulative projects would be subject to the MS4 Permit, which requires a WQMP including identification of HCOC and post-construction BMPs designed to protect water quality throughout the life of the project. In regard to cumulative flooding impacts, should the city drainage plan not be complete by project opening, all runoff generated on-site would be collected by an on-site earthen detention basin and slowly released into an existing storm drain. Further, the project would reduce existing flooding conditions on the adjacent parcel to the southwest through the containment of run-on sourced from across Cambern Avenue in the proposed open channel on-site. In 100-year, three hour storm conditions, the downstream open channel would overflow and be discharged to a vacant property to the south to meet an existing drainage. The proposed drainage improvements would substantially improve the drainage condition of the properties to the south-west of the project site, between LA Fitness and 3rd Street (Greenberg Farrow, 2015b). Currently, these parcels experience flooding under existing conditions and have runoff across their properties during all rain events. With development of the proposed improvements, the referenced properties would not have any off-site drainage flowing across their properties during a 2-year rain event. Even in a 100-year flood event, they would be subject to substantially less runoff across their parcels (Greenberg Farrow, 2015b). Although the project would essentially utilize the remaining capacity of the existing 30-inch Crane Street storm drain, potentially preventing other projects in the area from the provision of efficient flood control, other projects would be required to designate appropriate drainage control during construction per submittal of a Drainage Permit Application, requiring City review prior to the issuance of a Drainage Permit. Furthermore, as part of the Final WQMP, a hydrology analysis would be required of other projects similar to those described for the proposed project to prove flood control would be sufficient during operation of the projects. With adherence to existing drainage control requirements, cumulative impacts to hydrology and water quality would be less-than-significant.

Mitigation Measures: None required.

Significance after Mitigation: Less-than-significant.

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4.8 Land Use and Planning

This section of the Draft Environmental Impact Report (EIR) evaluates the existing and planned land use in the project vicinity, identifies potentially significant land use impacts created by the project, and recommend mitigation measures to reduce the significance of impacts, if necessary. The proposed project has been evaluated to determine its consistency with the relevant goals and policies of the City of Lake Elsinore General Plan, consistency with the City's zoning code and land use compatibility.

4.8.1 Environmental Setting

The project site consists of seven coterminous vacant parcels that total 17.66 acres located in the central portion of the City of Lake Elsinore, in Western Riverside County. Interstate 15 (I-15) and State Route 74 (SR-74) provide regional access to the site. Adjacent to and south from the project site is a Mobil gas station with inline retail shops, vacant commercial land, the back side of LA Fitness and single-family residences.

The project site is currently vacant undeveloped land. The project site has General Plan Land Use designations of C-2 (General Commercial) and CMU (Commercial Mixed Use), as shown on Figure 3-3. The project site is also zoned General Commercial and Commercial Mixed Use (Figure 3-4).

Surrounding Land Uses

As described in Chapter 3, *Project Description,* the project site is surrounded by undeveloped land, and residential and commercial uses. A gas station, retail shops, and vacant land zoned and designated General Commercial are located directly adjacent to and west of the project site. Vacant and residential land uses are located north of the project site and are also zoned and designated General Commercial. Land uses to the northeast of the project site include both vacant and residential land uses. The northern portion of this area is zoned and designated General Commercial and the southern area is zoned and designated for high-density residential uses. Vacant and residential land uses with zoning and General Plan land use designations for Commercial Mixed Use are located to the south of the project site. Land to the east and northeast of the project site include both vacant and residential land uses that have zoning and land use designations for Medium and High Density Residential uses.

4.8.2 Regulatory Setting

Local

City of Lake Elsinore General Plan

Land Use Element

The Land Use element and its maps indicate the general distribution, location, types, and relationships of various land uses. The following goals and policies in the Land Use Element are relevant to the project:

Goal 1: Create a diverse and integrated balance of residential, commercial, industrial, recreational, public and open space land uses.

Policy 1.2: Encourage development of unified or clustered community-level and neighborhood-level commercial centers and discourage development of strip commercial uses.

Policy 1.3: Encourage the development of sit-down restaurant establishments where appropriate and discourage the proliferation of drive-through fast food establishments.

Policy 1.9: Encourage rehabilitation and new construction to replace aging commercial facilities.

Goal 3: Establish a development pattern that preserves aesthetics and enhances the environmental resources of the City.

General Plan Land Use Designations

The project site has General Plan Land Use designations of General Commercial and Commercial Mixed Use. The following General Plan Land Use designations are relevant to the project:

Commercial Mixed Use (CMU): The Land Use Chapter describes that the Commercial Mixed Use land use designation provides for a mix of residential and non-residential uses within a single proposed development area, with an emphasis on retail, service, civic, and professional office uses. The floor area ratio (FAR) for non-residential uses is 0.80:1 and a minimum of 50% of the total floor area shall be commercial uses.

General Commercial (GC): The Land Use Chapter describes that the General Commercial land use designation provides for retail, services, restaurants, professional and administrative offices, hotels and motels, mixed-use projects, public and quasi-public uses, and similar and compatible uses. The FAR shall not exceed 0.40.

Circulation Element

The Circulation Element of the Lake Elsinore General Plan is designed to provide mobility for residents and to facilitate business. The following goal and policy in the Circulation Element are relevant to the project:

Goal 6: Optimize the efficiency and safety of the transportation system within the City of Lake Elsinore.

Policy 6.2: Enforce and comply with proper intersection “sight distance” requirements as described by the Engineering Division.

Growth Management Element

The Growth Management Element contains goals and policies for mitigating the impacts to public services and infrastructure to an extent that balances the competing demands for development, natural resource protection, and adequacy of service and infrastructure. The following goal in the Growth Management Element is relevant to the project:

Goal 7: Maintain orderly, efficient patterns of growth that enhance the quality of life for the residents of Lake Elsinore.

Parks and Recreation Element

The Parks and Recreation Element contains goals and policies designed to provide the City with the tools and opportunities necessary to create a recreation destination and foster community building for the City of Lake Elsinore. The following policy is relevant to the project:

Policy 8.2: Ensure parkland and recreation facilities support new development through acquisition and/or dedication. Meet the requirement of the Park Capital Improvement Fund, Resolution No. 91-42 and the Quimby Act by acquiring five (5) acres of useable park land per 1,000 population.

Air Quality Element

The Air Quality Element contains goals and policies for designed to improve regional air quality. The following goal and policy in the Air Quality Element are relevant to the project:

Goal 1: Continue to coordinate with the Air Quality Management District and the City's Building Department to reduce the amount of fugitive dust that is emitted into the atmosphere from unpaved areas, parking lots, and construction sites.

Policy 1.1: Continue to implement requirements identified in the National Pollutant Discharge Elimination System (NPDES).

Implementation Program: The City shall continue to condition projects to comply with the South Coast Air Quality Management District rules and regulations.

Hazards and Hazardous Materials Element

The City of Lake Elsinore General Plan Hazards and Hazardous Materials Element identifies any active enforcement actions or violations relating to hazardous materials in the City. The City implements goals and policies to ensure that the appropriate agencies are adequately prepared to deal with a hazardous material emergency and citizens are protected as much as possible from potential hazards. The following hazards and hazardous materials goal and policies are related to the proposed project:

Goal 3: Reduce the level of risk associated with the use, transport, treatment, and disposal of hazardous materials to protect the community's safety, health, and natural resources.

Wildfire Hazards Element

Wildfire susceptibility is the City of Lake Elsinore is defined as moderately high. The City of Lake Elsinore and the Sphere of Influence are known for periodic high-velocity wind conditions through the Temescal Valley and the steep canyons to the northwest, west, and southwest portions of the Sphere of Influence. The City's Wildfire Hazards Element aims to reduce the threat of wildland fires and to protect life and property. The following wildfire hazards policy is related to the proposed project:

Policy 4.3: Establish fire resistant building techniques for new development such as non-combustible wall surfacing materials, fire-retardant treated wood, heavy timber construction, glazing, enclosed materials and features, insulation without paper-facing, and automatic fire sprinklers.

Seismic Activity Element

The City of Lake Elsinore Seismic Activity Element identifies seismic hazards affecting the City and delineates goals and policies intended to minimize the effects of any seismic events on citizens and property. The following goal and policy in the Seismic Activity Element are related to the proposed project:

Goal 6: Minimize the risk of loss of life, injury, property damage, and economic and social displacement due to seismic and geological hazards resulting from earthquakes and geological constraints.

Policy 6.2: Continue to require Alquist-Priolo and other seismic analyses be conducted for new development to identify the potential for ground shaking, liquefaction, slope failure, seismically induced landslides, expansion and settlement of soils, and other related geologic hazards for areas of new development in accordance with the Fault Rupture Hazard Overlay District adopted by the City of Lake Elsinore Zoning Code. The City may require site-specific remediation measures during permit review that may be implemented to minimize impacts in these areas.

Noise Element

The Noise Element goals and policies are designed to locate new development in areas with compatible noise levels and minimize intrusive noise from existing and new development. The following goal and policies in the Noise Element are relevant to the project:

Goal 7: Maintain an environment for all City residents and visitors free of unhealthy, obtrusive, or otherwise excessive noise.

Policy 7.1: Apply the noise standards set forth in the Lake Elsinore Noise and Land Use Compatibility Matrix and Interior and Exterior Noise Standards when considering all new development and redevelopment proposed within the City.

Policy 7.2: Require that mixed-use structures and areas be designed to prevent transfer of noise and vibration from commercial areas to residential areas.

Policy 7.3: Strive to reduce the effect of transportation noise on the I-15.

Community Facilities and Protection Services

The City of Lake Elsinore Community Facilities and Protection Services Element contains goals and policies designed to promote community welfare and to enhance the overall well-being of the City's residents and visitors through responsive city government, efficient and timely emergency response, academic excellence that includes access to quality school and library facilities for all residents, and effective and efficient delivery of services and utilities. The following goal and

policies in the Community Facilities and Protection Services Element are relevant to the proposed project:

Goal 8: Provide efficient and effective public safety services for the community.

Policy 8.1: Continue to follow Riverside County Fire Department most current guidelines to achieve standard response times and staffing levels.

Policy 8.2: Coordinate with the County of Riverside to provide adequate police service and staffing levels.

Utilities Element

Goal 12: Ensure that adequate electrical, natural gas and telecommunications systems are provided to meet the demand of new and existing development.

Policy 12.1: Coordinate with the utility agencies to provide for the continued maintenance, development and expansion of electricity, natural gas, and telecommunications systems to serve residents and businesses.

Policy 12.2: Encourage developers to contact Southern California Edison early in their planning process, especially for large-scale residential and non-residential development or specific plans, to ensure the projected electric loads for these projects are factored into SCE's load forecasts for the community.

Policy 12.3: Encourage developers to incorporate energy efficient design measures into their projects and pursue available energy efficiency assistance programs from SCE and other utility agencies.

Biological Resources Element

The City of Lake Elsinore General Plan recognizes the need to balance growth with the conservation and enhancement of the area's natural resources as development can impact resources such as water quality and associated watersheds. The goals and policies in the Biological Resources Element are designed to enhance and preserve the City's existing natural resources while balancing the City's other imperatives for balanced economic growth. The following goals and policies related to the proposed project are listed below:

Goal 1: Identify and conserve important biological habitats where feasible while balancing the economic growth and private property right interests of the City, its residence, and landowners.

Policy 1.2: Evaluate the installation of barrier fencing or other buffers between MSHCP Conservation Areas and proposed public and private land uses that may be incompatible with the Conservation Areas in order to minimize illegal, unauthorized public access, domestic animal predation, or dumping in the Conservation Areas while not impeding wildlife movement.

Goal 2: Protect sensitive plant and wildlife species residing or occurring within the City.

Policy 2.1: Biological resources analyses of proposed projects shall include discussion of potential impacts to any plant or wildlife species that is officially listed as threatened or endangered by the United States Fish and Wildlife Service and/or the California Department of Fish and Game but not covered by the MSHCP.

Policy 2.2: Development or modification shall be discouraged n areas containing riparian habitat of high functions and values or corridors with 8% or more of natural native habitat co containing 80% or more native plant species. Further, development in areas described for conservation, including areas planned for riparian/riverine restoration included in the MSHCP, shall also be discouraged.

Water Resources Element

The City of Lake Elsinore General Plan contains goals and policies aimed at protecting and conserving water resources while enhancing their overall quality as the City increasingly becomes more urbanized. The following goal and policies in the Water Resources Element are relevant to the project:

Goal 4: Improve water quality and ensure the water supply is not degraded as a result of urbanization of the City.

Policy 4.1: Encourage developers to provide clean water systems that reduce pollutants being discharged into the drainage system to the maximum extent feasible and meet required federal National Pollutant Discharge Elimination System (NPDES) standards.

Policy 4.3: Require Best Management Practices through project conditions of approval for development to meet the Federal NPDES permit requirements.

Cultural Resources and Paleontological Resources Element

The City of Lake Elsinore General Plan (2011) contains the following cultural resources goal and policies that are relevant to the proposed project:

Policy 6.2: The City shall consult with the appropriate Native American tribes for projects identified under SB 18 (Traditional Tribal Cultural Places).

Policy 6.3: When significant cultural/archeological sites or artifacts are discovered on a site, coordination with professional archeologists, relevant state and, if applicable, federal agencies, and the appropriate Native American tribes regarding preservation of sites or professional retrieval and preservation of artifacts or by other means of protection, prior to development of the site shall be required. Because ceremonial items and items of cultural patrimony reflect traditional religious beliefs and practices, developers shall waive any and all claims to ownership and agree to return all Native American ceremonial items and items of cultural patrimony that may be found on a project area to the appropriate tribe for treatment. It is understood by all parties that unless otherwise required by law, the site of any reburial of Native American human remains or cultural artifacts shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act.

Policy 6.4: If archeological excavations are recommended on a project area, the City shall require that all such investigations include Native American consultation, which shall occur prior to project approval.

Policy 7.1: Consult with California Native American tribes prior to decision-making processes for the purpose of preserving cultural places located on land within the City's jurisdiction that may be affected by the proposed plan, in accordance with State or Federal requirements.

Policy 7.2: Continue to identify, document, evaluate, designate, and preserve the cultural resources in the City.

Policy 7.3: Continue to update a citywide inventory of cultural resources in conformance with state standards and procedures while maintaining the confidentiality of information as required by law.

Policy 7.4: Support the permanent curation of archaeological artifact collections by universities or museums or other appropriate tribal facilities.

Policy 7.5: Increase opportunities for cultural heritage tourism by promoting the history of Lake Elsinore to attract cultural heritage travelers while maintaining the confidentiality of Native American sites, places and other information as required by law.

Policy 8.1: For development in areas delineated as "High" or "Undetermined" potential sensitivity for paleontological resources, require the project applicant to hire a certified paleontologist, who must perform a literature search and/or survey and apply the relevant treatment for the site as recommended by the Society for Vertebrate Paleontology.

Aesthetics Element

The City of Lake Elsinore General Plan describes opportunities and constraints affecting aesthetic resources in the City. The goals and policies are aimed at protecting and enhancing the area's rich array of aesthetic resources. The following goal and policies in the Aesthetics Element are relevant to the proposed project:

Goal 11: Provide and maintain a natural and built environment that is visually pleasing to City residents and visitors.

Policy 11.1: For new developments and redevelopment, encourage the maintenance and incorporation of existing mature trees and other substantial vegetation on the site, whether naturally-occurring or planted, into the landscape design.

Policy 11.2 Maintain and improve the quality of existing landscaping in parkways, parks, civic facilities, rights-of-ways, and other public open areas.

Policy 11.3 Where appropriate, encourage new planting of native and/or non-invasive ornamental plants to enhance the scenic setting of public and private lands.

Policy 13.2: Discourage extractive uses or development that entails excessive light and glare visible from private and public viewpoints.

Sustainable Environment

The City of Lake Elsinore General Plan Sustainable Environment Element describes opportunities for energy and resource efficient building practices. The following goal and policy in the Sustainable Environment Element are relevant to the proposed project:

Goal 14: Reduce greenhouse gas emissions from all activities within the City boundaries to support the State's efforts under AB-32 and to mitigate the impact of climate change on the City, State and world.

Policy14.2: Measures shall be established that aim to reduce emissions generated from City uses, community uses (community actions) and new development (City discretionary actions).

City of Lake Elsinore Municipal Code

The City's Municipal Code Chapter 17, Zoning regulates the location and uses of specific uses within the City, including residences, businesses, trades, industries, use of buildings, structures, and land, the location, height, bulk, and size of buildings and structures. The zoning standards are implemented to promote the growth of the City in an orderly manner and to promote and protect the public health, safety, comfort and general welfare.

The existing zoning for the project site is General Commercial and Commercial Mixed Use. Pursuant to the City's Zoning Code Section 17.124.020 – Permitted uses in the General Commercial zone include:

- Places of religious assembly or institution
- All permitted uses of the C-O and C-1 districts as contain within LEMC 17.116.020 and 17.120.020.[1]
- Antique shops and auction galleries
- Bowling alleys—provided they comply with the requirements of Chapter 17.148 LEMC, Parking Requirements
- Bus depots and transit stations
- Department stores
- Floor covering shops
- Furniture stores
- Home improvement centers
- Hotels

[1] Under the C-1 (Neighborhood Commercial) district "Food stores, including markets, bakeries, health food establishments, and candy stores" and "General merchandise stores" are permitted uses; and therefore have been incorporated by reference into the C-2 (General Commercial) district.

- Motels
- Sale of motor vehicle, motorcycle and recreations vehicle parts and accessories and service incidental to the sale of parts
- Skating rinks
- Secondhand and thrift shops
- Service businesses similar to retail stores which do not involve warehousing or storage, except accessory storage of commodities sold at retail on the premises
- Theaters—provided they comply with the requirements of Chapter 17.148 LEMC, Parking Requirements
- Other uses that the Community Development Director determines to be in accord with the purpose of this chapter and having characteristics similar to those uses listed in this section

Pursuant to the City's Zoning Code Section 17.124.030 (uses subject to a conditional use permit) – It is recognized that certain uses, while similar in characteristics to permitted uses in LEMC 17.124.020, may require outdoor operation and/or have the potential to impact surrounding properties and therefore require additional approval and consideration. Such uses to be permitted in the General Commercial district shall require a use permit pursuant to Chapter 17.168 LEMC and shall include the following:[2]

- Uses permitted subject to a use permit in the C-1 district as contained in LEMC 17.120.030 except churches
- Business colleges and professional schools
- Car washes
- Dance halls, discotheques, or any establishment providing live entertainment
- Motor vehicle, motorcycle and recreational vehicle sales; and service incidental to the sale of parts but excluding major overhauls, painting, and body work
- Outdoor sales and display incidental and accessory to a permitted use
- Structures exceeding the maximum height permitted by LEMC 17.124.070
- Cardrooms, or any other establishment associated with card playing as may be permitted under the provisions of Section 330 of the Penal Code of the State of California

Pursuant to the City's Zoning Code Section 17.134 – Permitted uses in the Commercial Mixed Use zone includes retail sales in addition to other permitted uses and permitted uses with a conditional use permit listed the Table of Mixed Use Land Uses in Section 17.134. Proposed development projects within the Commercial Mixed Use zone are required to submit an

[2] Under the C-1 (Neighborhood Commercial) district "Drive-thru or drive-in establishments; provided a safe and efficient circulation system can be provided completely on site" and gasoline-dispensing establishments; subject to the provisions of Chapter 17.112 LEMC)" are uses subject to a conditional use permit; and therefore have been incorporated by reference into the C-2 (General Commercial) district.

application for a design review, or a conditional use permit that includes design review, reviewed by all City departments and approved by the City Planning Commission.

Title 15 (Building Code)

The California Building Code has been amended and adopted as Title 15 (Building Code) of the Lake Elsinore Municipal Code. Title 15 regulates all building and construction projects within the City limits and implements a minimum standard for building design and construction. These minimum standards include specific requirements for seismic safety, excavation, foundations, retaining walls and site demolition. It also regulates grading activities including drainage and erosion control.

4.8.3 Thresholds of Significance

According to Appendix G of the California Environmental Quality Act (CEQA) Guidelines, the proposed project could have a potentially significant impact with respect to land use and planning if it would:

- Physically divide an established community.
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the General Plan, Specific Plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.
- Conflict with any applicable habitat conservation plan or natural community conservation plan.

As determined in the Initial Study/Notice of Preparation (Appendix A), implementation of the proposed project would not result in significant impacts related to physical division of an established community. There are currently no residences located on-site. While there are residential uses to the northeast, southeast and southwest of the site, these neighborhoods are separated either by streets or vacant land and lack connecting or unifying features to the project site. The project site has been planned and is zoned for general commercial development. For these reasons, the project does not divide an established community, and impacts would be less than significant. No further analysis of that issue is warranted in the EIR.

4.8.4 Methodology

The analysis of land use consistency impacts considerers whether the proposed project would be in substantial conformance with regional and local plans, policies and regulations that are applicable to the proposed project and project site. Consistent with the scope and purpose of this EIR, this discussion primarily focuses on those goals and policies that relate to avoiding or mitigating environmental impacts, and an assessment of whether any inconsistency with these standards creates a significant physical impact on the environment. State CEQA Guidelines Section 15125(d) requires than an EIR discuss inconsistencies with applicable plans that the decision-makers should address. A project need not be consistent with each and every policy and

objective in a planning document. Rather, a project is considered consistent with the provisions of the identified regional and local plans if it meets the general intent of the plans and would not preclude the attainment of the primary goals of the land use plan or policy.

4.8.5 Impact Analysis

Impact 4.8-1: Would the project 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?

General Plan Consistency

A detailed analysis of the proposed project's consistency with the applicable policies of the City's General Plan is provided in **Table 4.8-1**. As described, the proposed project would be consistent with the applicable policies of the City's General Plan. Therefore, implementation of the proposed project would not result in impacts related to conflict with relevant General Plan goals and policies.

TABLE 4.8-1
CONSISTENCY OF PROPOSED PROJECT WITH LAKE ELSINORE GENERAL PLAN POLICIES

Policy #	Policy Text	Consistency Statement
2.3.4 Land Use Element		
Goal 1	Create a diverse and integrated balance of residential, commercial, industrial, recreational, public and open space land uses.	Consistent. The project would establish additional commercial/retail uses, contributing to the City's fiscal viability.
Policy 1.2	Encourage development of unified or clustered community-level and neighborhood-level commercial centers and discourage development of strip commercial uses.	Consistent. As discussed in Chapter 3, *Project Description*, the proposed project would construct and operate a retail center providing a Walmart Supercenter and three freestanding retail/restaurant tenants. The proposed project does not involve construction of a strip mall and would not interfere with development of unified or clustered community-level and neighborhood-level centers.
Policy 1.3	Encourage the development of sit-down restaurant establishments where appropriate and discourage the proliferation of drive-through fast food establishments.	Consistent. Policy 1.3 in the General Plan Land Use Element encourages the development of sit-down restaurants rather than drive-through restaurants "where appropriate." The policy was intended to promote sit-down restaurants in walkable, mixed use areas. The proposed location of the drive-through restaurants is not such an area. The policy does not discourage drive-through fast food restaurants in vehicle-serving areas, such as along Central Avenue (SR-74). Moreover, the policy is intended to encourage sit-down restaurants at appropriate locations that have large enough parcels to accommodate the larger building footprint of sit down restaurants and associated parking requirements. The project site and size cannot efficiently site a sit-down restaurant, when the Walmart Supercenter and associated parking requirements are included. In addition, there are already numerous sit-down restaurants in the vicinity of the proposed project. The proposed project is not inconsistent with Policy 1.3.

TABLE 4.8-1
CONSISTENCY OF PROPOSED PROJECT WITH LAKE ELSINORE GENERAL PLAN POLICIES

Policy #	Policy Text	Consistency Statement
Policy 1.9	Encourage rehabilitation and new construction to replace aging commercial facilities.	Consistent. The project proposes to develop a new commercial building.
Goal 3:	Establish a development pattern that preserves aesthetics and enhances the environmental resources of the City.	Consistent. The project site is disturbed vacant property, absent of unique features. The proposed project would enhance the neighborhood. Potential environmental effects of the proposed project are evaluated, disclosed and mitigated pursuant to this EIR.
2.4.4 Circulation Element		
Goal 6	Optimize the efficiency and safety of the transportation system within the City of Lake Elsinore.	Consistent. The project would include commercial/retail uses pursuant to a cohesive site plan concept, proximate to regional and local roads. The project would accommodate a mix of automobile, pedestrian, and transit modes of transportation.
Policy 6.2	Enforce and comply with proper intersection “sight distance” requirements as described by the Engineering Division.	Consistent. Sight distance at each access point would be reviewed with respect to standard Caltrans and City standards at the time of preparation of final grading, landscape and street improvement plans.
2.5.2 Growth Management Element		
Goal 7	Maintain orderly, efficient patterns of growth that enhance the quality of life for the residents of Lake Elsinore.	Consistent. The project would continue the pattern of growth in Lake Elsinore, consistent with the General Plan, enhancing the quality of life for residents.
2.7.3 Parks and Recreation Element		
Policy 8.2	Ensure parkland and recreation facilities support new development through acquisition and/or dedication. Meet the requirement of the Park Capital Improvement Fund, Resolution No. 91-42 and the Quimby Act by acquiring five (5) acres of useable park land per 1,000 population.	Consistent. The project would pay all requisite Development Impact Fees (DIF); would generate additional tax revenues available to the City, collectively acting to ensure the availability of funding for parkland and recreation facilities.
3.2.2 Air Quality Element		
Goal 1	Continue to coordinate with the Air Quality Management District and the City’s Building Department to reduce the amount of fugitive dust that is emitted into the atmosphere from unpaved areas, parking lots, and construction sites.	Consistent. As discussed in Section 4.2, *Air Quality*, the proposed project would comply with the SCAQMD Rule 403 concerning Fugitive Dust. This rule is intended to reduce the amount of particulate matter entrained in the ambient air as a result of anthropogenic (human-made) fugitive dust sources by requiring actions to prevent, reduce, or mitigate fugitive dust emissions. Rule 403 applies to any activity or human-made condition capable of generating fugitive dust, and requires best available control measures to be applied to earth moving and grading activities.
Policy 1.1	Continue to implement requirements identified in the National Pollutant Discharge Elimination System (NPDES).	Consistent. As described in Section 4.7, *Hydrology and Water* Quality, the project operator would be required to comply with the NPDES Construction General Permit.
3.3.3 Hazards and Hazardous Materials Element		
Goal 3	Reduce the level of risk associated with the use, transport, treatment, and disposal of hazardous materials to protect the community’s safety, health, and natural resources.	Consistent. The project would comply with existing safety standards related to the handling, use, and storage of hazardous materials, and comply with applicable federal, state and local laws and regulations.

TABLE 4.8-1
CONSISTENCY OF PROPOSED PROJECT WITH LAKE ELSINORE GENERAL PLAN POLICIES

Policy #	Policy Text	Consistency Statement
3.4.1 Wildfire Hazards Element		
Policy 4.3	Establish fire resistant building techniques for new development such as non-combustible wall surfacing materials, fire-retardant treated wood, heavy timber construction, glazing, enclosed materials and features, insulation without paper-facing, and automatic fire sprinklers.	Consistent. As discussed in Section 4.10, *Public Services*, to reduce the risk of fires and need for fire services, the proposed project is required to comply with the California Fire Code as adopted by the City, which regulates hydrants, water flow, fuel modification zones, access designs, and use of fire resistant materials. The proposed project would also be subject to Municipal Code Chapter 8.20, Burning and Fire Hazards, which prevents the accumulation of inflammables.
3.6.3 Seismic Activity Element		
Goal 6	Minimize the risk of loss of life, injury, property damage, and economic and social displacement due to seismic and geological hazards resulting from earthquakes and geological constraints.	Consistent. As described in Section 4.5, *Geology, Soils and Seismicity*, the California Building Code (CBC) has provisions to safeguard against major structural failures or loss of life caused by earthquakes or other geologic hazards, and the proposed structures would be designed pursuant to the CBC to resist structural collapse and provide safety from serious injury, property damage, and loss of life. In addition, final seismic design recommendations would be prepared and implemented by a California registered Geotechnical Engineer to provide high level of life safely in the proposed structures.
Policy 6.2	Continue to require Alquist-Priolo and other seismic analyses be conducted for new development to identify the potential for ground shaking, liquefaction, slope failure, seismically induced landslides, expansion and settlement of soils, and other related geologic hazards for areas of new development in accordance with the Fault Rupture Hazard Overlay District adopted by the City of Lake Elsinore Zoning Code. The City may require site-specific remediation measures during permit review that may be implemented to minimize impacts in these areas.	Consistent. As described above, the project would be constructed in compliance with the CBC and design recommendations from final seismic design recommendations that would be developed by a California registered Geotechnical Engineer to minimize the risks from geologic hazards.
3.7.3 Noise Element		
Policy 7.1	Apply the noise standards set forth in the Lake Elsinore Noise and Land Use Compatibility Matrix (see Table 3-1) and Interior and Exterior Noise Standards (see Table 3-2) when considering all new development and redevelopment proposed within the City.	Consistent. A detailed noise analysis (construction and operation) is provided in Section 4.8, *Noise,* and this section includes an analysis of the proposed project and mitigation measures that would reduce potential noise impacts to a less than significant level. Project implementation would adhere to applicable interior and exterior noise standards during construction and operation.
Policy 7.2	Require that mixed-use structures and areas be designed to prevent transfer of noise and vibration from commercial areas to residential areas.	Consistent. As described in Section 4.8, *Noise*, project construction would include mitigation measures to prevent transfer of noise and vibration from the project to adjacent residential areas. Additionally, project operation would be designed to prevent transfer of excessive noise and vibration to residential areas.
3.8.2 Fire and Police/Law Enforcement Element		
Policy 8.1	Continue to follow Riverside County Fire Department most current guidelines to achieve standard response times and staffing levels.	Consistent. As discussed in Section 4.10, *Public Services*, Fire Station No. 97 currently has the structural potential to expand its personnel from nine to twelve firefighters if necessary (City of Lake

TABLE 4.8-1
CONSISTENCY OF PROPOSED PROJECT WITH LAKE ELSINORE GENERAL PLAN POLICIES

Policy #	Policy Text	Consistency Statement
		Elsinore, 2014a). However, the General Plan EIR has evaluated the city's fire service capacity and has determined that no additional facilities or staffing would be required to serve build out of the 3rd Street Annexation area, of which the project site is within and adjacent to. Station 97 which would serve the project site is new (June 2013) and has the potential to expand; and Fire Station No. 10 is approximately 2.8 miles from the project site, existing fire facilities and equipment are in place to service the project and new fire facilities would not be required to be developed or expanded to serve the proposed project. As a result, the project would not result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically fire protection facilities. Moreover, upon project approval, the project proponent would be required to comply with Chapter 16.74 of the Lake Elsinore Municipal Code which requires the payment of development impact fees. Therefore, the proposed project would not result in a substantial adverse physical impact associated with the provision of, or the need for, new or physically fire protection facilities and less-than-significant impacts would occur.
Policy 8.2	Coordinate with the County of Riverside to provide adequate police service and staffing levels.	Consistent. As discussed in Section 4.10, *Public Services*, the Lake Elsinore police station is 1.72 miles south of the project site. The City's General Plan EIR has evaluated police facilities and staffing and has determined that no additional facilities or staffing would be required to serve build out of the 3rd Street Annexation area, of which the project site is within and adjacent to. In addition, the City's General Plan includes measures to meet the service needs of the City as it grows, including a City annual review of police services and staff ratios and coordination with the County of Riverside to provide adequate police service and staffing levels. Furthermore, City development fees require that commercial projects pay fees per 1,000 SF to defray public expenditures for the expansion of services.
3.8.10 Utilities Element		
Goal 12	Ensure that adequate electrical, natural gas and telecommunications systems are provided to meet the demand of new and existing development.	Consistent. Existing overhead electric lines and poles along Cambern Avenue would be relocated underground through coordination with Southern California Edison**.** The proposed project would connect to existing gas mains in 3rd Street; the telephone utility in 3rd Street, and the sanitary sewer system in Crane Street and 3rd Street.
Policy 12.3	Encourage developers to incorporate energy efficient design measures into their projects and pursue available energy efficiency assistance programs from SCE and other utility agencies.	Consistent. As discussed in Chapter 3, *Project Description*, the project would include site sustainability features such as construction and demolition recycling, lighting, dehumidifying system, white roof, high-efficiency restroom toilets, and recycled building materials.
4.2.5 Biological Resources Element		
Goal 1	Identify and conserve important biological habitats where feasible while balancing the economic growth and private property right interests of the City, its residents, and landowners.	Consistent. As discussed in Section 4.3, *Biology*, direct impacts as a result of construction activities associated with the project would include the permanent removal of vegetation communities that may be utilized as habitat for both common and rare

TABLE 4.8-1
CONSISTENCY OF PROPOSED PROJECT WITH LAKE ELSINORE GENERAL PLAN POLICIES

Policy #	Policy Text	Consistency Statement
		wildlife. Indirect impacts associated with construction of the project include fugitive dust and increased noise levels due to heavy equipment operations occurring in these areas. Indirect impacts to habitat could include alterations to existing topographical and hydrological conditions, increased erosion and sediment transport, and the establishment of non-native and invasive weeds. Operational impacts include disturbances associated with increased human presence. The proposed project would grade and/or otherwise disturb the entire project site. Common plant species would be impacted by the project through the direct, permanent removal of 9.7 acres of non-native grassland, 2.8 acres of eucalyptus grove, and 5.1 acres of disturbed habitat. The plant communities found within the proposed project are highly disturbed, widespread throughout the region, and are not considered sensitive or designated for protection under federal, state, local or regional plans. As a result, the permanent removal of 17.6 acres of disturbed vegetation would be less than significant.
Policy 1.2	Evaluate the installation of barrier fencing or other buffers between MSHCP Conservation Areas and proposed public and private land uses that may be incompatible with the Conservation Areas in order to minimize illegal/unauthorized public access, domestic animal predation, or dumping in the Conservation Areas while not impeding wildlife movement.	Consistent. As discussed in Section 4.3 *Biology*, the MSHCP Urban/Wildland Interface Guidelines are intended to address indirect effects associated with locating development in proximity to the MSHCP Conservation Area. The project site is not located within a MSHCP Criteria Area and is not located adjacent to any Criteria Cell describing areas of conservation. The project is not expected to result in significant indirect impacts to special-status biological resources. Implementation of the BMPs in Appendix C of the MSHCP (included as Mitigation Measure BIO-1) would ensure that the project is in compliance with the MSHCP.
Goal 2	Protect sensitive plant and wildlife species residing or occurring within the City.	Consistent. As discussed further in Section 4.3, *Biology*, sensitive natural communities include riparian habitat or other communities identified in local or regional plans, policies, or regulations, or designated by the CDFW and USFWS. Of the plant communities that occur on the project site—non-native grassland, eucalyptus grove, and disturbed –none are considered sensitive and are not specifically designated for protection under federal, state, local or regional plans. Wildlife species that are present, or have a moderate to high potential to occur within the project area are the Quino Checkerspot Butterfly; Cooper's Hawk and Burrowing Owl. While none of these species were identified during surveys, there is potential for the species to occupy the site.
Policy 2.1	Biological resources analyses of proposed projects shall include discussion of potential impacts to any plant or wildlife species that is officially listed as threatened or endangered by the United States Fish and Wildlife Service and/or the California Department of Fish and Game but not covered by the MSHCP.	Consistent. As discussed further in Section 4.3, *Biology*, Table 4.3-2 identifies Special-Status Plant Species that have the potential for occurrence within the project site, as well as their Listing Status (USFWS, CDFW, and CNPS). Further, the project site does not occur within any USFWS-designated critical habitats. The nearest critical habitat occurs approximately 0.5 mile east of the project site for the coastal California gnatcatcher (*Polioptila californica californica*).
Policy 2.2	Development or modification shall be discouraged in areas containing riparian habitat of high functions and values or	Consistent. As discussed in Section 4.3, *Biology*, the project site does not contain areas defined by the MSHCP as riparian/riverine. The two drainage features

TABLE 4.8-1
CONSISTENCY OF PROPOSED PROJECT WITH LAKE ELSINORE GENERAL PLAN POLICIES

Policy #	Policy Text	Consistency Statement
	corridors with 80% or more of natural native habitat that link larger patches of natural native habitat containing 80% or more native plant species. Further, development in areas described for conservation, including areas planned for riparian/riverine restoration included in the MSHCP, shall also be discouraged.	on the project site do not contain riparian vegetation, nor do they contain biological functions and values that contribute to downstream habitat for species inside the MSHCP Conservation Area (i.e., the MSHCP Criteria Area). Therefore, no riparian/riverine resources, as defined by the MSHCP, occur on the project site. The entire project is located within the Elsinore Area Plan of the MSHCP. The project site is not within a Criteria Cell proposed for conservation under the MSHCP; therefore, the project is not subject to the Habitat Evaluation and Acquisition Negotiation Strategy (HANS) or Joint Project Review processes, and thus the project is consistent with the Reserve Assembly requirements of the MSHCP.
4.4.3 Water Resources Element		
Goal 4	Improve water quality and ensure the water supply is not degraded as a result of urbanization of the City.	Consistent. As discussed in Section 4.7, *Hydrology and Water Quality*, construction of the project is not expected to pose any additional threats to water quality. Construction impacts related to the degradation of water quality would be less than significant. During operation, pollutants associated with commercial uses include trash and debris; nutrients, pesticides, sediment from landscaping; and oils and greases; should these pollutants be generated on-site and mix with stormwater, a degradation of water quality could result. However, the project would be required to comply with the MS4 Permit requirements, which involve the implementation of post-construction site design, source control and treatment control Best Management Practices (BMPs) implemented throughout the lifetime of the project in order to protect water quality.
Policy 4.1	Encourage developers to provide clean water systems that reduce pollutants being discharged into the drainage system to the maximum extent feasible and meet required federal National Pollutant Discharge Elimination System (NPDES) standards.	Consistent. As discussed in Section 4.7, *Hydrology and Water Quality*, as project construction would disturb more than one acre of soil, the project operator would be required to comply with the NPDES Construction General Permit. In compliance with this permit, a Stormwater Pollution Prevention Plan (SWPPP) would be prepared and implemented, which would require non-stormwater and waste and material management BMPs that would prevent construction chemicals used on-site from washing into local water bodies. The SWPPP would also include erosion and sediment control BMPs that would prevent the mixing of exposed soil with stormwater. The SWPPP would be submitted to and reviewed by the City's Engineering Division prior to issuance of a building or grading permit. With implementation of the SWPPP and its associated BMPs, impacts related to water quality during construction of the project would be less than significant.
Policy 4.3	Require Best Management Practices through project conditions of approval for development to meet the Federal NPDES permit requirements.	Consistent. As discussed above in Policy 4.3 and in Section 4.,7 *Hydrology and Water Quality*, the Construction General Permit requires that the SWPPP identify BMPs that must be implemented to reduce construction effects on receiving water quality based on potential pollutants. The BMPs identified are directed at implementing both sediment and erosion control measures and other measures to control potential chemical contaminants. The SWPPP also includes descriptions of the BMPs to reduce pollutants in storm water discharges after all construction phases

TABLE 4.8-1
CONSISTENCY OF PROPOSED PROJECT WITH LAKE ELSINORE GENERAL PLAN POLICIES

Policy #	Policy Text	Consistency Statement
		have been completed at the site (post-construction BMPs).
4.6.8 Cultural and Paleontological Resources Element		
Policy 6.2	The City shall consult with the appropriate Native American tribes for projects identified under SB 18 (Traditional Tribal Cultural Places).	Consistent. As discussed in Section 4.4, *Cultural Resources*, SB 18 (Traditional Tribal Cultural Places) requires a city or county to consult with the NAHC and any appropriate Native American tribes prior to the adoption, amendment or revision of a general plan. The proposed project does not include a General Plan revision or amendment, and SB 18 requirements are not applicable to the proposed project. However, the NAHC and all Tribes identified by the NAHC were contacted during preparation of the Phase I Cultural Resources Study and are on the mailing list to receive all public notices regarding the proposed project and the related environmental documentation.
Policy 6.3	When significant cultural/archeological sites or artifacts are discovered on a site, coordination with professional archeologists, relevant state and, if applicable, federal agencies, and the appropriate Native American tribes regarding preservation of sites or professional retrieval and preservation of artifacts or by other means of protection, prior to development of the site shall be required. Because ceremonial items and items of cultural patrimony reflect traditional religious beliefs and practices, developers shall waive any and all claims to ownership and agree to return all Native American ceremonial items and items of cultural patrimony that may be found on a project site to the appropriate tribe for treatment. It is understood by all parties that unless otherwise required by law, the site of any reburial of Native American human remains or cultural artifacts shall not be disclosed and shall not be governed by public disclosure requirements of the California Public Records Act.	Consistent. As discussed above in Section 4.4, Cultural Resources, this was completed as part of the Phase I Cultural Resources Study. This study identified sediments that have potential for vertebrate fossils throughout the northern two-thirds of the project area. In addition, in response to research on the project site, the Natural History Museum of Los Angeles County (NHMLAC) concluded that shallow excavations in the younger Quaternary Alluvium exposed throughout project area would not uncover significant vertebrate fossils. However, deeper excavations into older sedimentary deposits may encounter significant fossil vertebrate remains. Therefore any substantial excavations into the sedimentary deposits in the project area should be monitored to professionally and expeditiously to collect any vertebrate fossil remains uncovered without impeding development and that any fossils recovered should be deposited in an accredited and permanent scientific institution for benefit of current and future generations.
Policy 6.4	If archeological excavations are recommended on a project site, the City shall require that all such investigations include Native American consultation, which shall occur prior to project approval.	Consistent. As discussed in Section 4.4, *Cultural Resources*, Archaeological excavations are not recommended for the project area. However, Mitigation Measure CULT-2 provides for coordination with the appropriate tribe and provides for tribal monitors during excavation/groundbreaking activities; and consultation with Tribes is an ongoing part of the proposed project that would continue to be implemented through Mitigation Measures CULT-2 through CULT-6.
Policy 7.1	Consult with California Native American tribes prior to decision-making processes for the purpose of preserving cultural places located on land within the City's jurisdiction that may be affected by the proposed plan, in accordance with State or Federal requirements.	Consistent. As discussed in Policy 6.2 above, investigation of potential cultural resources in the project area has included consultation with California Native American tribes, and the appropriate coordination would continue through implementation of Mitigation Measures CULT-1 through CULT-6.

TABLE 4.8-1
CONSISTENCY OF PROPOSED PROJECT WITH LAKE ELSINORE GENERAL PLAN POLICIES

Policy #	Policy Text	Consistency Statement
Policy 7.2	Continue to identify, document, evaluate, designate, and preserve the cultural resources in the City.	Consistent. As discussed in Section 4.4, *Cultural Resources,* any cultural resources that are found on the project area would be evaluated for proper treatment and disposition through implementation of Mitigation Measures CULT-1 through CULT-6.
Policy 7.3	Continue to update a citywide inventory of cultural resources in conformance with state standards and procedures while maintaining the confidentiality of information as required by law.	Consistent. As discussed in Section 4.4, *Cultural Resources*, Mitigation Measure CULT-4 requires the landowner to relinquish any cultural resources that are identified on the project site and the Cultural Resources Treatment and Monitoring Agreement that is required by CULT-2 would ensure that appropriate standards and procedures are in place, should any resources be identified during project activities.
Policy 7.4	Support the permanent curation of archaeological artifact collections by universities or museums or appropriate tribal facilities.	Consistent. See Policy 7.3 above. As described, Mitigation Measure CULT-4 requires the landowner to relinquish any cultural resources that are identified on the project site and the Cultural Resources Treatment and Monitoring Agreement that is required by CULT-2 would address final disposition of any cultural resources discovered on the site. These measures would also serve to support the permanent curation of artifacts; therefore, the proposed project would be consistent with Policy 7.4.
Policy 7.5	Increase opportunities for cultural heritage tourism by promoting the history of Lake Elsinore to attract cultural heritage travelers while maintaining the confidentiality of Native American sites, places and other information as required by law.	Consistent. See the Policy 7.3 and 7.4 above. As described, Mitigation Measure CULT-4 requires the landowner to relinquish any cultural resources that are identified on the project site and the Cultural Resources Treatment and Monitoring Agreement required by CULT-2 would address final disposition of any cultural resources discovered on the site. Through implementation of these mitigation measures, resources found on the project site would be preserved and could be used to promote the history of Lake Elsinore.
Goal 8	Preserve paleontological resources occurring within the City.	Consistent. As discussed above in Section 4.4, *Cultural Resources*, the project will comply with CEQA processes regarding Cultural Resources. Paleontological resources are also afforded protection by CEQA. Appendix G (Part V) of the *CEQA Guidelines* provides guidance relative to significant impacts on paleontological resources, stating that a project will normally result in a significant impact on the environment if it will "…disrupt or adversely affect a paleontological resource or site or unique geologic feature, except as part of a scientific study." Section 5097.5 of the Public Resources Code specifies that any unauthorized removal of paleontological remains is a misdemeanor. Further, the California Penal Code Section 622.5 sets the penalties for the damage or removal of paleontological resources.

TABLE 4.8-1
CONSISTENCY OF PROPOSED PROJECT WITH LAKE ELSINORE GENERAL PLAN POLICIES

Policy #	Policy Text	Consistency Statement
Policy 8.1	For development in areas delineated as "High" or "Undetermined" potential sensitivity for paleontological resources, require the project applicant to hire a certified paleontologist, who must perform a literature search and/or survey and apply the relevant treatment for the site as recommended by the Society for Vertebrate Paleontology.	Consistent. As discussed above in Section 4.4, *Cultural Resources*, this was completed as part of the Phase I Cultural Resources Study. This study identified sediments that have potential for vertebrate fossils throughout the northern two-thirds of the project area. In addition, in response to research on the project site, the Natural History Museum of Los Angeles County (NHMLAC) concluded that shallow excavations in the younger Quaternary Alluvium exposed throughout project area would not uncover significant vertebrate fossils. However, deeper excavations into older sedimentary deposits may encounter significant fossil vertebrate remains. Therefore any substantial excavations into the sedimentary deposits in the project area should be monitored to professionally and expeditiously to collect any vertebrate fossil remains uncovered without impeding development and that any fossils recovered should be deposited in an accredited and permanent scientific institution for benefit of current and future generations
4.8.3 Aesthetics Element		
Goal 11	Provide and maintain a natural and built environment that is visually pleasing to City residents and visitors.	Consistent. As described in Section 4.1, *Aesthetics*, the proposed project would include buildings with a contemporary architectural expression. The project would utilize architectural and landscaping treatments throughout the project site that would improve the physical appearance of the site.
Policy 11.1	For new developments and redevelopment, encourage the maintenance and incorporation of existing mature trees and other substantial vegetation on the site, whether naturally-occurring or planted, into the landscape design.	Consistent. As described in Section 4.1, *Aesthetics*, the proposed project would incorporate planters.
Policy 11.3	Where appropriate, encourage new planting of native and/or non-invasive ornamental plants to enhance the scenic setting of public and private lands.	Consistent. As described in Section 4.1, *Aesthetics*, the proposed project would incorporate planters. All project landscaping would be designed consistent with design criteria.
4.8.2 Sustainable Environment Element		
Goal 14	Reduce greenhouse gas emissions from all activities within the City boundaries to support the State's efforts under AB-32 and to mitigate the impact of climate change on the City, State and world.	Consistent. The proposed project would implement sustainability features, that are consistent with specific CAP measures identified in Appendix D: Project-Level CAP Consistency Worksheet within the City's CAP.
Policy 14.2	Measures shall be established that aim to reduce emissions generated from City uses, community uses (community actions) and new development (City discretionary actions).	Consistent. The Walmart Supercenter would be built using cement mixes that include 15-20 percent fly ash, a waste product of coal-fired electrical generation, or 25-30 percent slag, a by-product of the steel manufacturing process. By incorporating these waste product materials into its cement mixes, Walmart offsets the greenhouse gases emitted in the cement manufacturing process.

Zoning Code Consistency

Sections 17.124.020 and 17.134 list uses that would be permitted or conditionally permitted within the project site. The proposed Walmart Supercenter and anticipated outparcel uses (restaurant and retail shops/services), are included in the list of permitted or conditionally permitted uses. Proposed development projects within the General Commercial and Commercial Mixed Use zones are required (per Zoning Code Sections 17.124.120 and 17.134.080) to submit an application for design review or a conditional use permit that includes design review to ensure that new development occurs in a manner which enhances the character and quality of the surrounding properties and that the scale, special relationships and architectural treatment of structures including materials, colors, and design, visually contribute to the area and environment in which they are located. The design review process is also intended to apply to the ancillary elements of projects such as signs and landscaping in order to ensure that the overall development maintains the same integrity of design as approved for the primary structure(s). As described in Chapter 3, *Project Description*, the proposed project would include quality design consistent with the development standards. As required by the zoning code applications for commercial design review and conditional use permits have been submitted for the proposed project's development plans for review by the City. Therefore, the proposed project would be consistent with the existing zoning designation and implementation of the proposed project would result in less-than-significant impacts related to conflicts with the zoning code.

Mitigation Measures: None required.

Significance after Mitigation: Less-than-significant.

Impact 4.8-1: Would the project conflict with any applicable conservation plan or natural community conservation plan?

As discussed in Section 4.3, *Biological Resources*, the project site is located within the Elsinore Area Plan of the Western Riverside Multiple Species Habitat Conservation Plan (MSHCP). The project site is not located within a Criteria Cell proposed for conservation under the MSHCP. Implementation of the BMPs in Appendix C of the MSHCP (included as Mitigation Measure BIO-1) would ensure that the project is in compliance with the MSHCP. Therefore, the proposed project would not conflict with the MSHCP and impacts related to provisions of an adopted habitat conservation plan would be less-than-significant.

Mitigation Measures: Implement BIO-1

Significance after Mitigation: Less-than-significant.

4.8.6 Cumulative Impacts

The cumulative impact area when considering potential cumulative land use and planning issues includes areas that are currently, or anticipated to be, subject to the provisions of the City General Plan, Zoning Ordinance, and/or Specific Plans. The cumulative study area includes the City of Lake Elsinore and surrounding areas lying within the City's Sphere of Influence.

Commercial/retail uses and their configurations proposed by the project are consistent with, and are allowed under, the site's current General Commercial and Commercial Mixed Use General Plan Land Use designations. The proposed project would be implemented and operated consistent with all applicable General Commercial and Commercial Mixed Use regulations and development standards.

The proposed project's contributions to potential cumulative land use impacts are not cumulatively considerable, and the cumulative effects of the proposed project are determined to be less-than-significant.

Mitigation Measures: None required.

Significance after Mitigation: Less-than-significant.

References

City of Lake Elsinore, City of Lake Elsinore Municipal Code, www.codepublishing.com/CA/lakeelsinore/, accessed on April 19, 2015

City of Lake Elsinore, *City of Lake Elsinore General Plan, Chapter 4 Resource Protection and Preservation*, December 13, 2011.

4.9 Noise

The section of the Draft Environmental Impact Report (EIR) evaluates the existing noise environment in the project vicinity, identifies potential significant impacts created by the project, and recommends mitigation measures to reduce the significance of impacts, if necessary. The analysis is this section is based on the findings of the *Lake Elsinore Walmart Noise Impact Analysis* study prepared by Urban Crossroads, which is included as Appendix I of this EIR.

4.9.1 Environmental Setting

Noise Principles and Descriptors

Sound can be described as the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium (e.g., air). Noise is generally defined as unwanted sound (i.e., loud, unexpected, or annoying sound). Acoustics is defined as the physics of sound. In acoustics, the fundamental scientific model consists of a sound (or noise) source, a receiver, and the propagation path between the two. The loudness of the noise source and obstructions or atmospheric factors affecting the propagation path to the receiver determines the sound level and characteristics of the noise perceived by the receiver. Acoustics addresses primarily the propagation and control of sound.

Sound, traveling in the form of waves from a source, exerts a sound pressure level (referred to as sound level) that is measured in decibels (dB), which is the standard unit of sound amplitude measurement. The dB scale is a logarithmic scale that describes the physical intensity of the pressure vibrations that make up any sound, with 0 dB corresponding roughly to the threshold of human hearing and 120 to 140 dB corresponding to the threshold of pain. Pressure waves traveling through air exert a force registered by the human ear as sound.

Sound pressure fluctuations can be measured in units of hertz (Hz), which correspond to the frequency of a particular sound. Typically, sound does not consist of a single frequency, but rather a broad band of frequencies varying in levels of magnitude. When all the audible frequencies of a sound are measured, a sound spectrum is plotted consisting of a range of frequency spanning 20 to 20,000 Hz. The sound pressure level, therefore, constitutes the additive force exerted by a sound corresponding to the sound frequency/sound power level spectrum.

The typical human ear is not equally sensitive to all frequencies of the audible sound spectrum. As a consequence, when assessing potential noise impacts, sound is measured using an electronic filter that deemphasizes the frequencies below 1,000 Hz and above 5,000 Hz in a manner corresponding to the human ear's decreased sensitivity to extremely low and extremely high frequencies. This method of frequency weighting is referred to as A-weighting and is expressed in units of A-weighted decibels (dBA). A-weighting follows an international standard methodology of frequency deemphasis and is typically applied to community noise measurements. For this reason, the A-weighted sound level has become the standard descriptor for environmental noise assessment. A range of representative noise sources associated with

common indoor and outdoor activities and their corresponding A-weighted noise levels are shown in **Figure 4.9-1**.

Noise Exposure and Community Noise

An individual's noise exposure is a measure of noise over a period of time. A noise level is a measure of noise at a given instant in time. The noise levels presented in Figure 4.9-1 are representative of measured noise at a given instant in time; however, they rarely persist consistently over a long period of time. Rather, community noise varies continuously over a period of time with respect to the contributing sound sources of the community noise environment. Community noise is primarily the product of many distant noise sources, which constitute a relatively stable background noise exposure, with the individual contributors unidentifiable. The background noise level changes throughout a typical day, but does so gradually, corresponding with the addition and subtraction of distant noise sources such as traffic. What makes community noise variable throughout a day, besides the slowly changing background noise, is the addition of short-duration, single-event noise sources (e.g., aircraft flyovers, motor vehicles, sirens), which are readily identifiable to the individual.

These successive additions of sound to the community noise environment change the community noise level from instant to instant, requiring the measurement of noise exposure over a period of time to legitimately characterize a community noise environment and evaluate cumulative noise impacts. This time-varying characteristic of environmental noise is described using statistical noise descriptors. The most frequently used noise descriptors are summarized below:

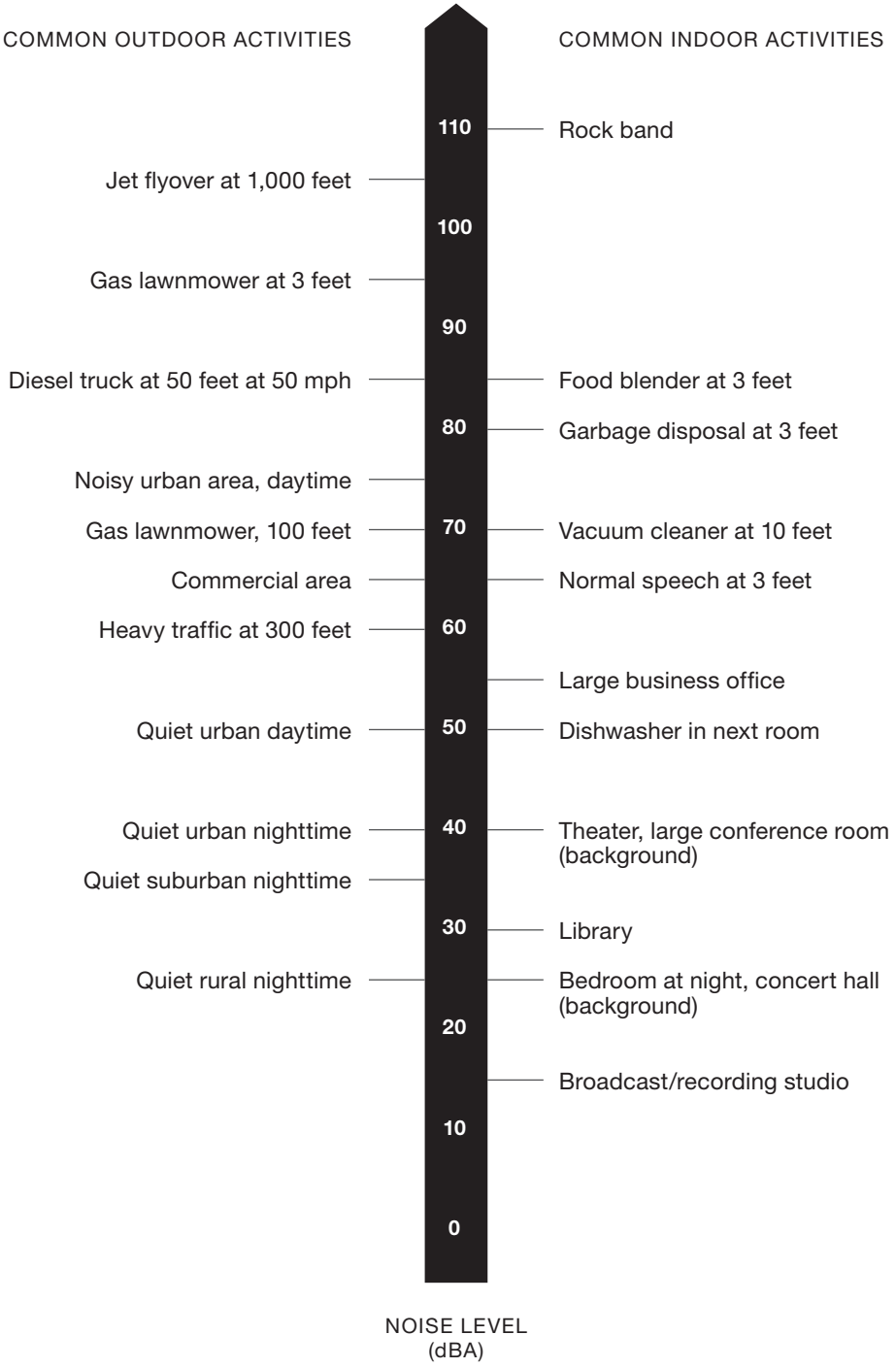
L_{eq}: The L_{eq}, or equivalent sound level, is used to describe noise over a specified period of time in terms of a single numerical value; the L_{eq} of a time-varying signal and that of a steady signal are the same if they deliver the same acoustic energy over a given time. The L_{eq} may also be referred to as the average sound level.

L_{max}: The maximum, instantaneous noise level experienced during a given period of time.

L_{min}: The minimum, instantaneous noise level experienced during a given period of time.

L_x: The noise level exceeded X% of a specified time period. For instance, L_{50} and L_{90} represents the noise levels that are exceeded 50 percent and 90 percent of the time, respectively.

L_{dn}: Also termed the Day-Night Sound Level (DNL), the L_{dn} is the average A-weighted noise level during a 24-hour day, obtained after an addition of 10 dBA to measured noise levels between the hours of 10:00 P.M. to 7:00 A.M. to account nighttime noise sensitivity.



SOURCE: Caltrans

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Figure 4.9-1
Decibel Scale and
Common Noise Sources

CNEL: CNEL, or Community Noise Equivalent Level, is the average A-weighted noise level during a 24-hour day that is obtained after an addition of 5 dBA to measured noise levels between the hours of 7:00 P.M. to 10:00 P.M. and after an addition of 10 dBA to noise levels between the hours of 10:00 P.M. to 7:00 A.M. to account for noise sensitivity in the evening and nighttime, respectively.

Effects of Noise on People

Noise is generally loud, unpleasant, unexpected, or undesired sound that is typically associated with human activity that is a nuisance or disruptive. The effects of noise on people can be placed into four general categories:

- Subjective effects (e.g., dissatisfaction, annoyance);
- Interference effects (e.g., communication, sleep, and learning interference);
- Physiological effects (e.g., startle response); and
- Physical effects (e.g., hearing loss).

Although exposure to high noise levels has been demonstrated to cause physical and physiological effects, the principal human responses to typical environmental noise exposure are related to subjective effects and interference with activities. Interference effects of environmental noise refer to those effects that interrupt daily activities and include interference with human communication activities, such as normal conversations, watching television, telephone conversations, and interference with sleep. Sleep interference effects can include both awakening and arousal to a lesser state of sleep. With regard to the subjective effects, the responses of individuals to similar noise events are diverse and are influenced by many factors, including the type of noise, the perceived importance of the noise, the appropriateness of the noise to the setting, the duration of the noise, the time of day and the type of activity during which the noise occurs, and individual noise sensitivity.

Overall, there is no completely satisfactory way to measure the subjective effects of noise, or the corresponding reactions of annoyance and dissatisfaction on people. A wide variation in individual thresholds of annoyance exists, and different tolerances to noise tend to develop based on an individual's past experiences with noise. Thus, an important way of predicting a human reaction to a new noise environment is the way it compares to the existing environment to which one has adapted (i.e., comparison to the ambient noise environment). In general, the more a new noise level exceeds the previously existing ambient noise level, the less acceptable the new noise level will be judged by those hearing it. With regard to increases in A-weighted noise level, the following relationships generally occur:

- Except in carefully controlled laboratory experiments, a change of 1 dBA cannot be perceived;
- Outside of the laboratory, a 3 dBA change in noise levels is considered to be a barely perceivable difference;

- A change in noise levels of 5 dBA is considered to be a readily perceivable difference; and
- A change in noise levels of 10 dBA is subjectively heard as doubling of the perceived loudness.

These relationships occur in part because of the logarithmic nature of sound and the decibel system. The human ear perceives sound in a non-linear fashion, hence the decibel scale was developed. Because the decibel scale is based on logarithms, two noise sources do not combine in a simple additive fashion, but rather logarithmically. Under the decibel scale, a doubling of sound energy corresponds to a 3 dBA increase. In other words, when two sources are each producing sound of the same loudness, the resulting sound level at a given distance would be approximately 3 dBA higher than one of the sources under the same conditions. For example, if two identical noise sources produce noise levels of 50 dBA, the combined sound level would be 53 dBA, not 100 dBA. Under the decibel scale, three sources of equal loudness together produce a sound level of approximately 5 dBA louder than one source, and ten sources of equal loudness together produce a sound level of approximately 10 dBA louder than the single source.

Noise Propagation

When noise propagates over a distance, it changes in level and frequency content. The manner in which noise reduces with distance depends on factors such as the type of noise source and the propagation path. Noise from a localized source (i.e., point source) propagates uniformly outward in a spherical pattern; therefore, this type of propagation is referred to as “spherical spreading.” Stationary point sources of noise, including stationary mobile sources such as idling vehicles, attenuate (lessen) at a rate between 6 dBA for hard sites and 7.5 dBA for soft sites for each doubling of distance from the reference measurement as their energy is continuously spread out over a spherical surface. Hard sites are those with a reflective surface between the source and the receiver, such as asphalt or concrete surfaces or smooth bodies of water. No excess ground attenuation is assumed for hard sites and the changes in noise levels with distance (drop-off rate) is simply the geometric spreading of the noise from the source. Soft sites have an absorptive ground surface such as soft dirt, grass, or scattered bushes and trees. In addition to geometric spreading, an excess ground attenuation value of 1.5 dBA (per doubling distance) is normally assumed for soft sites.

Roadways and highways, and to some extent, moving trains, consist of several localized noise sources on a defined path, and hence are treated as “line” sources, which approximate the effect of several point sources. Noise from a line source propagates over a cylindrical surface, often referred to as “cylindrical spreading.” Line sources (e.g., traffic noise from vehicles) attenuate at a rate between 3 dBA for hard sites and 4.5 dBA for soft sites for each doubling of distance from the reference measurement (Caltrans, 1998). Therefore, noise due to a line source attenuates less with distance than that of a point source with increased distance.

Additionally, receptors located downwind from a noise source can be exposed to increased noise levels relative to calm conditions, whereas locations upwind can have lowered noise levels.

Sound levels can be increased at large distances (e.g., more than 500 feet) due to atmospheric temperature inversion (i.e., increasing temperature with elevation). Other factors such as air temperature, humidity, and turbulence can also have significant effects.

Noise Attenuation by Shielding

A large object or barrier in the path between a noise source and a receptor can substantially attenuate noise levels at the receptor. The amount of attenuation provided by shielding depends on the size of the object and the frequency content of the noise source. Shielding by trees and other such vegetation typically only has an "out of sight, out of mind" effect. That is, the perception of noise impact tends to decrease when vegetation blocks the line-of-sight to nearby resident. However, for vegetation to provide a substantial, or even noticeable, noise reduction, the vegetation area must be at least 15 feet in height, 100 feet wide, and dense enough to completely obstruct the line-of sight between the source and the receiver. This size of vegetation may provide up to 5 dBA of noise reduction. A noise barrier is most effective when placed close to the noise source or receptor. Noise barriers, however, do have limitations. For a noise barrier to work, it must be high enough and long enough to block the path of the noise source.

Fundamentals of Vibration

Vibration can be interpreted as energy transmitted in waves through the ground or man-made structures. These energy waves generally dissipate with distance from the vibration source. Because energy is lost during the transfer of energy from one particle to another, vibration becomes less perceptible with increasing distance from the source.

As described in the Federal Transit Administration's (FTA) *Transit Noise and Vibration Impact Assessment* (FTA, 2006), ground-borne vibration can be a serious concern for nearby neighbors of a transit system route or maintenance facility, causing buildings to shake and rumbling sounds to be heard. In contrast to airborne noise, ground-borne vibration is not a common environmental problem. It is unusual for vibration from sources such as buses and trucks to be perceptible, even in locations close to major roads. Some common sources of ground-borne vibration are trains, heavy buses and trucks on rough roads, and construction activities such as blasting, pile-driving, and operation of heavy earth-moving equipment.

There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts to buildings, but is not always suitable for evaluating human response (annoyance) because it takes some time for the human body to respond to vibration signals. Instead, the human body responds to average vibration amplitude often described as the root mean square (RMS). The RMS amplitude is defined as the average of the squared amplitude of the signal, and is most frequently used to describe the effect of vibration on the human body. Decibel notation (VdB) is commonly used to measure RMS. The relationship of PPV to RMS velocity is expressed in terms of the "crest factor," defined as the ratio of the PPV amplitude to the RMS amplitude. Peak particle velocity is typically a factor of 1.7 to 6 times greater than RMS vibration velocity (FTA, 2006). The decibel notation acts to compress the range of numbers required to describe vibration. Typically, ground-borne vibration generated by man-

made activities attenuates rapidly with distance from the source of the vibration. Sensitive receptors for vibration include structures (especially older masonry structures), people (especially residents, the elderly, and sick), and vibration sensitive equipment.

The effects of ground-borne vibration include movement of the building floors, rattling of windows, shaking of items on shelves or hanging on walls, and rumbling sounds. In extreme cases, the vibration can cause damage to buildings. Building damage is not a factor for most projects, with the occasional exception of blasting and pile-driving during construction. Annoyance from vibration often occurs when the vibration levels exceed the threshold of perception by only a small margin. A vibration level that causes annoyance will be well below the damage threshold for normal buildings. The FTA measure of the threshold of architectural damage for conventional sensitive structures is 0.2 in/sec PPV (FTA, 2006).

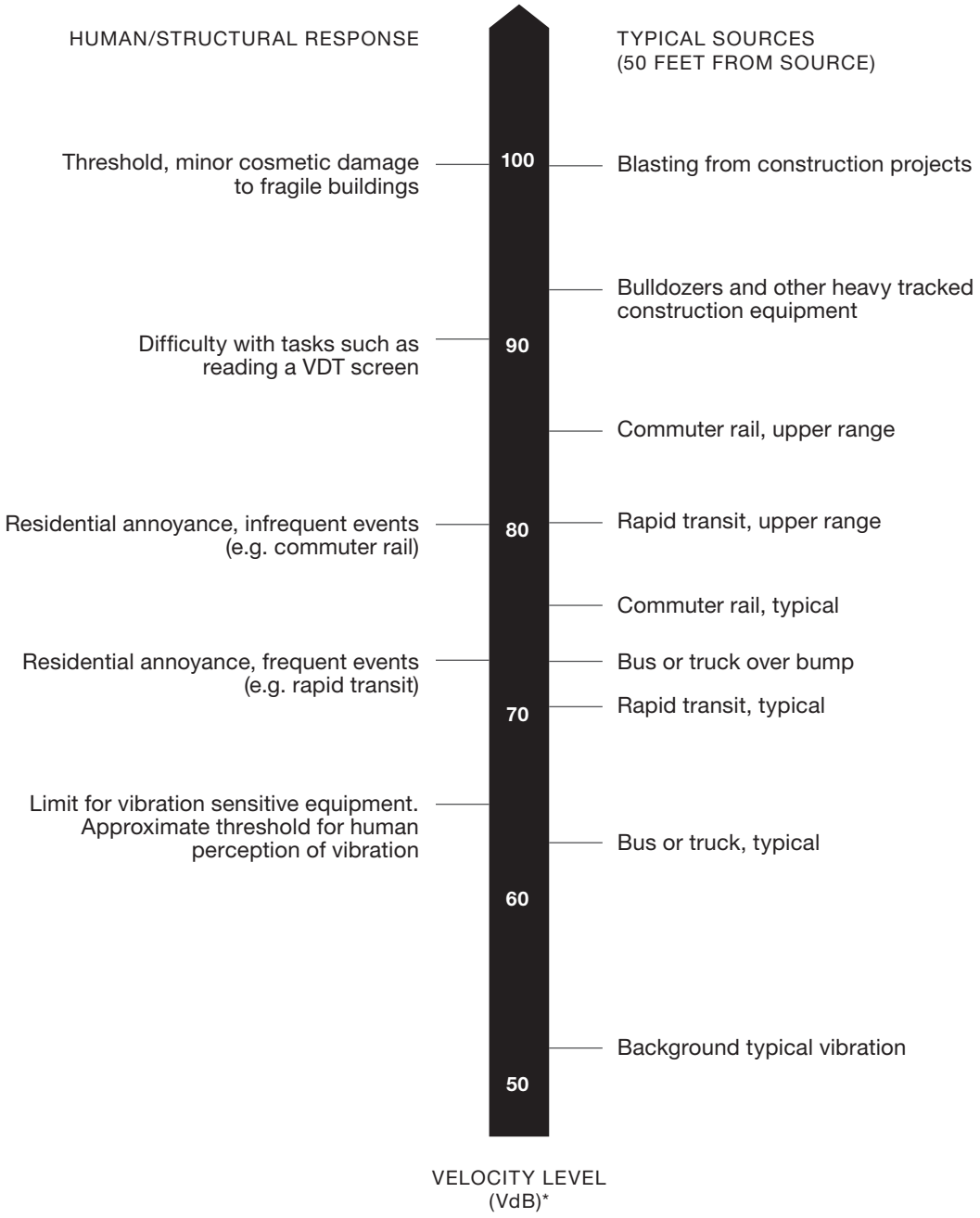
Figure 4.9-2 illustrates common vibration sources and the human and structural response to ground-borne vibration. The range of interest is from approximately 50 VdB to 100 VdB. In residential areas, the background vibration velocity level is usually around 50 VdB (approximately 0.0013 in/sec PPV). This level is well below the vibration velocity level threshold of perception for humans, which is approximately 65 VdB. A vibration velocity level of 75 VdB is considered to be the approximate dividing line between barely perceptible and distinctly perceptible levels for many people (FTA, 2006).

Groundborne Noise

Noise caused by vibration propagated through soil and building structures is referred to as groundborne noise. It is normally radiated by the ground in open air and by walls, floors and ceilings inside a building as a result of groundborne vibration. Groundborne noise in buildings is generated when interior surfaces (walls and floors) are vibrated, or “excited”, into motion by ground vibration transmitted into the structure. For example, ground vibration could cause windows to rattle or items on shelves to move. The construction features of a building’s foundation, structure, and walls determine the building’s response to incident ground vibration.

The relationship between groundborne vibration and groundborne noise depends on the frequency content of the vibration and the acoustical absorption of the receiving room. The more acoustical absorption in the room, the lower will be the noise level. For a room with average acoustical absorption, the unweighted sound pressure level is approximately equal to the average vibration velocity level of the room surfaces.[1] Hence, the A-weighted level of groundborne noise can be estimated by applying A-weighting to the vibration velocity spectrum. Since the A-weighting at 31.5 Hz is -39.4 dB, if the vibration spectrum peaks at 30 Hz, the A-weighted sound level will be approximately 40 decibels lower than the velocity level. Correspondingly, if the vibration spectrum peaks at 60 Hz, the A-weighted sound level will be about 25 decibels lower than the velocity level (FTA, 2006).

[1] The sound level approximately equals the average vibration velocity level only when the velocity level is referenced to 1 micro-inch/second.



*RMS Vibration Velocity Level in VdB relative to 10^{-6} inches/second

SOURCE: Federal Transit Administration

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Figure 4.9-2
Typical Vibration Levels

Table 4.9-1 describes the human response to different levels of ground-borne noise and vibration. Table 4.9-1 illustrates that achieving either the acceptable vibration or acceptable noise levels does not guarantee that the other will be acceptable. For example, the noise caused by vibrating structural components may be very annoying even though the vibration cannot be felt. Alternatively, a low-frequency vibration could be annoying while the ground-borne noise level it generates is acceptable.

TABLE 4.9-1
HUMAN RESPONSE TO DIFFERENT LEVELS OF GROUNDBORNE NOISE AND VIBRATION

Vibration Velocity Level	Noise Level		Human Response
	Low Frequency[a]	Mid Frequency[b]	
65 VdB	25 dBA	40 dBA	Approximate threshold of perception for many humans. Low-frequency sound usually inaudible, mid-frequency sound excessive for quiet sleeping areas.
75 VdB	35 dBA	50 dBA	Approximate dividing line between barely perceptible and distinctly perceptible. Many people find transit vibration at this level annoying. Low-frequency noise acceptable for sleeping areas, mid-frequency noise annoying in most quiet occupied areas.
85 VdB	45 dBA	60 dBA	Vibration acceptable only if there are an infrequent number of events per day. Low-frequency noise annoying for sleeping areas, mid-frequency noise annoying even for infrequent events with institutional land uses such as schools and churches.

[a] Approximate noise level when vibration spectrum peak is near 30 Hz.
[b] Approximate noise level when vibration spectrum peak is near 60 Hz.

SOURCE: FTA, 2006.

Existing Project Area Conditions

Sensitive Receptors

Sensitive receivers are generally defined as locations where people reside or where the presence of unwanted sound could otherwise adversely affect the use of the land. Noise-sensitive land uses are generally considered to include: schools, hospitals, single-family dwellings, mobile home parks, churches, libraries, and recreation areas. Moderately noise-sensitive land uses typically include: multi-family dwellings, hotels, motels, dormitories, out-patient clinics, cemeteries, golf courses, country clubs, athletic/tennis clubs, and equestrian clubs. Land uses that are considered relatively insensitive to noise include business, commercial, and professional developments. Land uses that are typically not affected by noise include: industrial, manufacturing, utilities, agriculture, natural open space, undeveloped land, parking lots, warehousing, liquid and solid waste facilities, salvage yards, and transit terminals.

In the project area, existing sensitive receptors include the single-family residences that are sparsely located to the northeast, southeast, and southwest of the project site.

Existing Ambient Noise Levels

To assess and describe the existing noise environment of the project area, noise level measurements were collected by Urban Crossroads, Inc. on October 23, 2013 and on April 20th to April 21st in 2015. A total of seven 24-hour noise level measurements were taken at the nearest noise-sensitive receiver locations to the project site. To describe the existing noise environment, the hourly noise levels were measured during typical weekday conditions over a 24-hour period. By collecting individual hourly noise level measurements, it was possible to describe the daytime and nighttime hourly noise levels and calculate the 24-hour CNEL noise level. The long-term noise readings were recorded using Piccolo Type 2 integrating sound level meter and dataloggers. The Piccolo sound level meters were calibrated using a Larson-Davis Model CAL 150 calibrator prior to use, and the microphones were equipped with a windscreen during all the measurements. All noise meters were programmed in "slow" mode to record noise levels in "A" weighted form. All of the noise level measurement equipment that was used satisfied the American National Standards Institute (ANSI) standard specifications for sound level meters ANSI S1.4-2014/IEC 61672-1:2013. The noise level measurement locations are depicted in **Figure 4.9-3**.

The results of the 24-hour noise measurements taken at the nearest off-site sensitive receptors to the project site are shown in **Table 4.9-2**, which identifies the hourly and median noise levels during the daytime (7:00 A.M. to 10:00 P.M.) and nighttime (10:00 P.M. to 7:00 A.M.) periods at each noise level measurement location. A summary of the noise measurement results at each location is provided below:

- **Location L1** – This location represents the noise levels at existing single-family residential homes north of the project site along Cambern Avenue. The noise level measurements collected show an overall 24-hour exterior noise level of 60.8 dBA CNEL. The hourly noise levels measured at location L1 ranged from 50.3 to 56.2 dBA L_{eq} during the daytime hours and from 47.6 to 58.4 dBA L_{eq} during the nighttime hours. The energy (logarithmic) average daytime and nighttime noise levels were calculated at 53.0 dBA L_{eq} and 54.4 dBA L_{eq}, respectively.
- **Location L2** – This location represents the noise levels adjacent to a vacant lot east of 3rd Street and south of the project site. The noise level measurements collected show an overall 24-hour exterior noise level of 63.6 dBA CNEL. The hourly noise levels measured at location L2 ranged from 53.6 to 58.3 dBA L_{eq} during the daytime hours and from 47.6 to 61.5 dBA L_{eq} during the nighttime hours. The energy (logarithmic) average daytime and nighttime noise levels were calculated at 56.1 dBA L_{eq} and 57.2 dBA L_{eq}, respectively.
- **Location L3** – This location represents the noise levels within the existing LA Fitness facility parking lot south of the project site. The measured 24-hour CNEL noise level at this location is 68.0 dBA CNEL. At location L3 the background ambient noise levels ranged from 55.5 to 59.9 dBA L_{eq} during the daytime hours to levels of 52.9 to 66.9 dBA L_{eq} during the nighttime hours. The energy (logarithmic) average daytime and nighttime noise levels were calculated at 57.8 dBA L_{eq} and 61.9 dBA L_{eq}, respectively.

SOURCE: Urban Crossroads; ESRI

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Figure 4.9-3
Noise Measurement Locations

TABLE 4.9-2
24-HOUR AMBIENT NOISE LEVEL MEASUREMENTS

Location[a]	Date	Distance To Site (feet)	Description	Energy Average Hourly Noise Level (dBA L_{eq})[b]		Median Noise Level (dBA L_{50})[b]		dBA CNEL
				Daytime	Nighttime	Daytime	Nighttime	
L1	10/23/2013	55	Located near an existing single-family residential home north of the site across Cambern Avenue. Higher nighttime noise levels due to weather conditions.	53.0	54.4	51.4	53.4	60.8
L2	10/23/2013	60	Located adjacent to a vacant lot east of 3rd Street. Higher nighttime noise levels due to weather conditions.	56.1	57.2	55.0	56.2	63.6
L3	10/23/2013	11	Located within the existing LA Fitness parking lot south of the Project site. Higher nighttime noise levels due to weather conditions.	57.8	61.9	56.6	58.5	68.0
L4	4/20/2015	18	Located along Cambern Avenue near existing residential homes north of the Project site.	53.2	52.0	50.5	47.6	58.8
L5	4/20/2015	0	Located along Cambern Avenue near existing residential homes, north of 3rd Street.	56..8	49.9	52.4	51.5	58.5
L6	4/20/2015	0	Located along the Project's southern site boundary across from existing residential homes on 3rd Street.	57.9	52.0	54.7	50.2	60.3
L7	4/20/2015	57	Located along 3rd Street south of the Project site at existing residential land use.	58.2	52.1	54.2	50.5	60.4

Notes: "Daytime" = 7:00 A.M. to 10:00 P.M.; "Nighttime" = 10:00 P.M. to 7:00 A.M.

[a] Refer to Figure 4.10-3 for the noise level measurement locations.
[b] The long-term 24-hour measurement printouts are included in Appendix 5.2 of the Lake Elsinore Walmart Noise Impact Analysis study, which is included in Appendix I of this EIR.

SOURCE: Urban Crossroads, Inc., 2015.

- **Location L4** – Located along Cambern Avenue, this location represents the existing noise levels north of the project site near existing residential homes. The noise level measurements collected show an overall 24-hour exterior noise level of 58.8 dBA CNEL. The hourly noise levels measured at location L4 ranged from 49.0 to 56.6 dBA L_{eq} during the daytime hours and from 44.4 to 54.7 dBA L_{eq} during the nighttime hours. The energy (logarithmic) average daytime and nighttime noise levels were calculated at 53.2 dBA L_{eq} and 52.0 dBA L_{eq}, respectively.
- **Location L5** – This location represents the noise levels along Cambern Avenue near existing residential homes north of 3rd Street. The noise level measurements collected show an overall 24-hour exterior noise level of 58.5 dBA CNEL. The hourly noise levels measured at location L5 ranged from 51.5 to 62.1 dBA L_{eq} during the daytime hours and from 45.5 to 53.9 dBA L_{eq} during the nighttime hours. The energy (logarithmic) average daytime and nighttime noise levels were calculated at 56.8 dBA L_{eq} and 49.9 dBA L_{eq}, respectively.
- **Location L6** – This location represents the noise levels along the project's southern site boundary across from existing residential homes on 3rd Street. The noise level measurements collected show an overall 24-hour exterior noise level of 60.3 dBA CNEL. The hourly noise levels measured at location L6 ranged from 51.7 to 60.4 dBA L_{eq} during the daytime hours and from 44.7 to 55.9 dBA L_{eq} during the nighttime hours. The energy (logarithmic) average daytime and nighttime noise levels were calculated at 57.9 dBA L_{eq} and of 52.0 dBA L_{eq}, respectively.
- **Location L7** – This location represents the noise levels along 3rd Street south of the project site at the nearby commercial mixed use land use. The noise level measurements collected show an overall 24-hour exterior noise level of 60.4 dBA CNEL. At location L7 the background ambient noise levels ranged from 52.5 to 62.7 dBA L_{eq} during the daytime hours to levels of 45.0 to 57.0 dBA L_{eq} during the nighttime hours. The energy (logarithmic) average daytime and nighttime noise levels were calculated at 58.2 dBA L_{eq} and 52.1 dBA L_{eq}, respectively.

The background ambient noise levels in the project area are dominated by transportation-related noise associated with the arterial roadway network. This includes the auto and heavy truck activities near the noise level measurement locations. Secondary background ambient noise is also included in the noise level measurements from existing stationary noise sources in the project area such as parking lot vehicle movements from the existing LA Fitness facility and nearby commercial plazas along Central Avenue; however, these impacts are generally overshadowed by vehicular traffic noise levels on the Interstate 15 (I-15) Freeway. The 24-hour existing noise level measurements shown on Table 4.9-2 present the worst-case existing unmitigated ambient noise conditions.

Existing Roadway Noise Levels Off-Site

Existing roadway noise levels were also calculated for 45 roadway segments located in the project area vicinity based on traffic data provided in the proposed project's traffic impact analysis prepared by Urban Crossroads, Inc. Calculation of the existing roadway noise levels was

accomplished using a computer program that replicates the Federal Highway Administration (FHWA) Traffic Noise Prediction Model (FHWA-RD-77-108). The model calculates the average noise level at specific locations based on traffic volumes, average speeds, and site environmental conditions. The average daily noise levels at the nearest adjacent land use from the roadway segments along with the distances from the centerline of each roadway segment to its respective 60 dBA CNEL, 65 dBA CNEL, and 70 dBA CNEL contours are presented in **Table 4.9-3**.

TABLE 4.9-3
EXISTING ROADWAY NOISE LEVELS AND CONTOURS

ID	Road	Segment	Adjacent Land Use	CNEL at Nearest Adjacent Land Use (dBA)	Distance to Contour from Centerline (Feet)[a]		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
1	Lakeshore Dr.	n/o Riverside Dr.	General Commercial	71.1	71	153	330
2	Lakeshore Dr.	s/o Riverside Dr.	General Commercial	68.1	RW	72	156
3	Graham Av.	n/o Main St.	General Commercial	65.3	RW	41	88
4	Lakeshore Dr.	n/o Railroad Cyn. Dr.	Tourist Commercial	70.5	65	139	300
5	Mission Trail	s/o Railroad Cyn. Dr.	Commercial Mixed Use	71.1	71	154	332
6	Gunnerson St.	n/o Riverside Dr.	Residential	59.1	RW	RW	RW
7	Strickland Av.	s/o Riverside Dr.	Residential	51.9	RW	RW	RW
8	Collier Av.	n/o Riverside Dr.	Limited Industrial	64.3	RW	RW	97
9	Collier Av.	s/o Riverside Dr.	Limited Industrial	72.9	94	202	435
10	Collier Av.	n/o Central Av.	General Commercial	72.8	92	198	427
11	Collier Av.	s/o Central Av.	General Commercial	66.7	RW	64	139
12	Casino Dr.	s/o Railroad Cyn. Dr.	General Commercial	65.2	RW	52	111
13	I-15 NB Fwy.	n/o Nichols Rd.	Specific Plan	75.1	278	600	1292
14	I-15 SB Fwy.	s/o Nichols Rd.	Specific Plan	74.2	243	524	1130
15	I-15 NB Fwy.	n/o Central Av.	General Commercial	75.2	281	606	1307
16	I-15 SB Fwy.	s/o Central Av.	General Commercial	74.6	260	560	1206
17	I-15 NB Fwy.	n/o Main St.	Gateway Commercial	75.7	308	664	1430
18	I-15 SB Fwy.	s/o Main St.	Gateway Commercial	74.7	264	569	1226
19	I-15 NB Fwy.	n/o Railroad Cyn. Dr.	Tourist Commercial	76.0	318	685	1475
20	I-15 SB Fwy.	s/o Railroad Cyn. Dr.	General Commercial	73.9	233	502	1082
21	Dexter Av.	n/o 11th St.	Residential	59.6	RW	RW	RW
22	Dexter Av.	n/o Central Av.	General Commercial	69.0	RW	109	236
23	Dexter Av.	s/o Central Av.	General Commercial	66.7	RW	51	110
24	Dexter Av.	s/o Alan St.	General Commercial	64.9	RW	39	83
25	Dexter Av.	n/o 3rd St.	General Commercial	63.7	RW	RW	66
26	Dexter Av.	s/o 3rd St.	Commercial Mixed Use	63.8	RW	RW	67
27	Cambern Av.	n/o Central Av.	General Commercial	67.0	RW	50	108
28	Cambern Av.	n/o 3rd St.	Residential	47.2	RW	RW	RW
29	Riverside Dr.	w/o Lakeshore Dr.	General Commercial	72.7	90	195	420

TABLE 4.9-3
EXISTING ROADWAY NOISE LEVELS AND CONTOURS

ID	Road	Segment	Adjacent Land Use	CNEL at Nearest Adjacent Land Use (dBA)	Distance to Contour from Centerline (Feet)[a]		
					70 dBA CNEL	65 dBA CNEL	60 dBA CNEL
30	Riverside Dr.	e/o Lakeshore Dr.	General Commercial	72.2	84	180	389
31	Riverside Dr.	w/o Gunnerson St.	Residential	72.2	84	182	391
32	Riverside Dr.	e/o Gunnerson St.	Public Institutional	72.5	88	190	409
33	Riverside Dr.	w/o Collier Av.	Limited Industrial	72.5	89	191	412
34	Central Av.	e/o Collier Av.	General Commercial	74.1	125	270	581
35	Central Av.	w/o Dexter Av.	General Commercial	75.6	159	342	737
36	Central Av.	e/o Dexter Av.	General Commercial	74.8	140	301	648
37	Central Av.	w/o Cambern Av.	General Commercial	72.6	114	245	528
38	Central Av.	e/o Cambern Av.	General Commercial	72.6	113	243	524
39	Central Av.	e/o Conard Av.	Residential	72.2	107	230	495
40	Central Av.	w/o Rosetta Cyn. Dr.	Specific Plan	74.2	127	274	591
41	Central Av.	e/o Rosetta Cyn. Dr.	Specific Plan	73.8	120	260	559
42	Central Av.	e/o Riverside St.	Residential	73.4	113	244	525
43	Main St.	w/o Graham Av.	Residential Mixed Use	65.5	RW	42	91
44	Main St.	e/o Graham Av.	Commercial Mixed Use	65.4	RW	41	89
45	Main St.	w/o I-15 SB Fwy.	Gateway Commercial	68.1	RW	63	135

Notes: “n/o” = north of; “s/o” = south of; “w/o” = west of; “e/o” = east of.

[a] "RW" = Location of the respective noise contour falls within the right-of-way of the road.

SOURCE: Urban Crossroads, Inc., 2015.

Existing Groundborne Vibration Levels

The project site is currently vacant and undeveloped land that is covered by grasses, weeds, brush, and some barren areas with exposed gravelly soils, and a row of mature eucalyptus trees. Surrounding land uses consist of a gas station with inline retail shops to the west, an LA Fitness facility and single-family residential uses to the southwest, a retail shopping center (Lake Elsinore Marketplace) to the northwest, across Central Avenue (Highway 74), and single-family residential uses to the north, northeast, south, and east. These types of surrounding land uses generally do not involve activities or employ heavy machinery that generates perceptible levels of groundborne vibration. The likely sources of groundborne vibration in the project site vicinity would be heavy-duty vehicular travel (e.g., refuse trucks, delivery trucks, and transit buses) on local roadways. Trucks and buses typically generate groundborne vibration velocity levels of around 63 VdB, and these levels could reach 72 VdB where trucks and buses pass over bumps in the road (FTA, 2006). In terms of PPV levels, a heavy-duty vehicle traveling at a distance of 50 feet can result in a vibration level of approximately 0.001 inch per second. However, according to

the FTA it is also unusual for vibration from vehicular sources (including buses and trucks) to be perceptible, even in locations close to major roads (FTA, 2006).

4.9.2 Regulatory Setting

To limit population exposure to physically and/or psychologically damaging as well as intrusive noise levels, the federal government, the State of California, various county governments, and most municipalities in the state have established standards and ordinances to control noise. In most areas, automobile and truck traffic is the major source of environmental noise. Traffic activity generally produces an average sound level that remains fairly constant with time. Air and rail traffic, and commercial and industrial activities are also major sources of noise in some areas. Federal, state, and local agencies regulate different aspects of environmental noise. Federal and state agencies generally set noise standards for mobile sources such as aircraft and motor vehicles, while regulation of stationary sources is left to local agencies.

Federal

Noise Standards

There are no federal noise standards that directly regulate environmental noise related to the construction or operational activities associated with the proposed project. With regard to noise exposure and workers, the Office of Safety and Health Administration (OSHA) regulations safeguard the hearing of workers exposed to occupational noise. Federal regulations also establish noise limits for medium and heavy trucks (more than 4.5 tons, gross vehicle weight rating) under 40 CFR, Part 205, Subpart B. The federal truck pass-by noise standard is 80 dBA at 15 meters from the vehicle pathway centerline. These controls are implemented through regulatory controls on truck manufacturers.

Federal Transit Authority Vibration Standards

The FTA has adopted vibration standards that are used to evaluate potential building damage impacts related to construction activities. The vibration damage criteria adopted by the FTA are shown in **Table 4.9-4**.

TABLE 4.9-4
CONSTRUCTION VIBRATION DAMAGE CRITERIA

Building Category	PPV (in/sec)
I. Reinforced-concrete, steel or timber (no plaster)	0.5
II. Engineered concrete and masonry (no plaster)	0.3
III. Non-engineered timber and masonry buildings	0.2
IV. Buildings extremely susceptible to vibration damage	0.12

SOURCE: FTA, 2006.

In addition, the FTA has also adopted standards associated with human annoyance for groundborne vibration impacts for the following three land-use categories: Vibration Category 1 – High Sensitivity, Vibration Category 2 – Residential, and Vibration Category 3 – Institutional. The FTA defines Category 1 as buildings where vibration would interfere with operations within the building, including vibration-sensitive research and manufacturing facilities, hospitals with vibration-sensitive equipment, and university research operations. Vibration-sensitive equipment includes, but is not limited to, electron microscopes, high-resolution lithographic equipment, and normal optical microscopes. Category 2 refers to all residential land uses and any buildings where people sleep, such as hotels and hospitals. Category 3 refers to institutional land uses such as schools, churches, other institutions, and quiet offices that do not have vibration-sensitive equipment, but still have the potential for activity interference. The vibration thresholds associated with human annoyance for these three land-use categories are shown in **Table 4.9-5**. No thresholds have been adopted or recommended for commercial and office uses.

TABLE 4.9-5
GROUNDBORNE VIBRATION IMPACT CRITERIA FOR GENERAL ASSESSMENT

Land Use Category	Frequent Events [a]	Occasional Events [b]	Infrequent Events [c]
Category 1: Buildings where vibration would interfere with interior operations.	65 VdB[d]	65 VdB[d]	65 VdB[d]
Category 2: Residences and buildings where people normally sleep.	72 VdB	75 VdB	80 VdB
Category 3: Institutional land uses with primarily daytime use.	75 VdB	78 VdB	83 VdB

[a] Frequent Events" is defined as more than 70 vibration events of the same source per day.
[b] Occasional Events" is defined as between 30 and 70 vibration events of the same source per day.
[c] Infrequent Events" is defined as fewer than 30 vibration events of the same kind per day.
[d] This criterion is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes.

SOURCE: FTA, 2006.

State

Noise Requirements

The State of California regulates freeway noise, sets standards for sound transmission, provides occupational noise control criteria, identifies noise standards and provides guidance for local land use compatibility. State law, under Section 65302(f) of the California Government Code, requires each county and city in the State to prepare and adopt a comprehensive long-range General Plan for its physical development, with Section 65302(g) requiring a noise element to be included in the General Plan. The purpose of the noise element is to limit the exposure of the community to excessive noise levels. In particular, the noise element must: (1) identify and appraise noise problems in the community; (2) recognize Office of Noise Control guidelines; and (3) analyze and quantify current and projected noise levels. In addition, the California Environmental Quality Act (CEQA) requires that all known environmental effects of a project be analyzed, including environmental noise impacts.

The California Department of Health Services (DHS) has established guidelines for evaluating the compatibility of various land uses as a function of community noise exposure. These guidelines for land use and noise exposure compatibility are shown in **Table 4.9-6**.

TABLE 4.9-6
COMMUNITY NOISE EXPOSURE (L_{dn} OR CNEL)

Land Use	Normally Acceptable[a]	Conditionally Acceptable[b]	Normally Unacceptable[c]	Clearly Unacceptable[d]
Single-family, Duplex, Mobile Homes	50 - 60	55 - 70	70 - 75	above 75
Multi-Family Homes	50 - 65	60 - 70	70 - 75	above 75
Schools, Libraries, Churches, Hospitals, Nursing Homes	50 - 70	60 - 70	70 - 80	above 80
Transient Lodging – Motels, Hotels	50 - 65	60 - 70	70 - 80	above 75
Auditoriums, Concert Halls, Amphitheaters	---	50 - 70	---	above 70
Sports Arena, Outdoor Spectator Sports	---	50 - 75	---	above 75
Playgrounds, Neighborhood Parks	50 - 70	---	67 - 75	above 75
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50 - 75	---	70 - 80	above 80
Office Buildings, Business and Professional Commercial	50 - 70	67 - 77	above 75	---
Industrial, Manufacturing, Utilities, Agriculture	50 - 75	70 - 80	above 75	---

[a] Normally Acceptable: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.
[b] Conditionally Acceptable: New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.
[c] Normally Unacceptable: New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
[d] Clearly Unacceptable: New construction or development should generally not be undertaken.

SOURCE: Office of Planning and Research, 2003.

The State of California also establishes noise limits for vehicles licensed to operate on public roads. For heavy trucks, the State pass-by standard is consistent with the federal limit of 80 dBA. The State pass-by standard for light trucks and passenger cars (less than 4.5 tons, gross vehicle rating) is also 80 dBA at 15 meters from the centerline. These standards are implemented through controls on vehicle manufacturers and by legal sanction of vehicle operators by state and local law enforcement officials.

California Green Building Standards Code

The 2013 State of California's Green Building Standards Code contains mandatory measures for non-residential building construction in Section 5.506 on Environmental Comfort. These noise standards are applied to new construction in California for the purpose of controlling interior

noise levels resulting from exterior noise sources. The regulations specify that acoustical studies must be prepared when non-residential structures are developed in areas where the exterior noise levels exceed 65 dBA CNEL, such as within a noise contour of an airport, freeway, railroad, and other areas where noise contours are not readily available. If the development falls within an airport or freeway 65 dBA CNEL noise contour, the combined sound transmission class (STC) rating of the wall and roof-ceiling assemblies must be at least 50. In addition, Section 5.507.4.1 of the Code stipulates that for those developments in areas where noise contours are not readily available and the noise level exceeds 65 dBA L_{eq} for any hour of operation, a wall and roof-ceiling combined STC rating of 45, and exterior windows with a minimum STC rating of 40 are required.

California Department of Transportation Vibration Criteria

There are no State vibration standards applicable to the proposed project. Moreover, according to the California Department of Transportation's (Caltrans) *Transportation and Construction Vibration Guidance Manual* (2013), there are no official Caltrans standards for vibration. However, this manual provides guidelines that can be used as screening tools for assessing the potential for adverse vibration effects related to structural damage and human perception. The manual is meant to provide practical guidance to Caltrans engineers, planners, and consultants who must address vibration issues associated with the construction, operation, and maintenance of Caltrans projects. The vibration criteria established by Caltrans for assessing structural damage and human perception are shown in **Table 4.9-7** and **Table 4.9-8**, respectively.

TABLE 4.9-7
CALTRANS VIBRATION DAMAGE POTENTIAL THRESHOLD CRITERIA

	Maximum PPV (in/sec)	
Structure and Condition	**Transient Sources**	**Continuous/Frequent Intermittent Sources**
Extremely fragile historic buildings, ruins, ancient monuments	0.12	0.08
Fragile buildings	0.2	0.1
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5
Modern industrial/commercial buildings	2.0	0.5

NOTE: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

SOURCE: Caltrans, 2013.

TABLE 4.9-8
CALTRANS VIBRATION ANNOYANCE POTENTIAL CRITERIA

	Maximum PPV (in/sec)	
Structure and Condition	**Transient Sources**	**Continuous/Frequent Intermittent Sources**
Barely perceptible	0.04	0.01
Distinctly perceptible	0.25	0.04
Strongly perceptible	0.9	0.10
Severe	2.0	0.4

NOTE: Transient sources create a single isolated vibration event, such as blasting or drop balls. Continuous/frequent intermittent sources include impact pile drivers, pogo-stick compactors, crack and-seat equipment, vibratory pile drivers, and vibratory compaction equipment.

SOURCE: Caltrans, 2013.

Local

City of Lake Elsinore General Plan Public Safety and Welfare Element

The City of Lake Elsinore has adopted Section 3.7, Noise, of the Public Safety and Welfare Element of the General Plan to control and abate environmental noise, and to protect the citizens of Lake Elsinore from excessive exposure to noise. The Noise section specifies the maximum exterior noise levels allowable for new developments impacted by transportation noise sources such as arterial roads, freeways, airports and railroads. In addition, the Noise section identifies noise polices designed to protect, create, and maintain an environment free from noise that may jeopardize the health or welfare of sensitive receivers, or degrade quality of life. To protect City of Lake Elsinore residents from excessive noise, the Noise section contains the following goal related to the proposed project:

Goal 7: Maintain an environment for all City residents and visitors free of unhealthy, obtrusive, or otherwise excessive noise.

To ensure noise-sensitive land uses are protected from excessive noise levels, the Noise section identifies the following policies:

Policy 7.1: Apply the noise standards set forth in the Lake Elsinore Noise and Land Use Compatibility Matrix (see Table 4.9-9) and Interior and Exterior Noise Standards (see Table 4.9-10) when considering all new development and redevelopment proposed within the City.

Policy 7.2: Require that mixed-use structures and areas be designed to prevent transfer of noise and vibration from commercial areas to residential areas.

Policy 7.3: Strive to reduce the effect of transportation noise on the I-15.

Policy 7.4: Consider estimated roadway noise contours based upon Figure 3.6, Noise Contours, (of the City's General Plan Public Safety and Welfare Element) when making land use design decisions along busy roadways throughout the City.

Policy 7.5: Participate and cooperate with other agencies and jurisdictions in the development of noise abatement plans for highways.

Land Use Compatibility

The Noise section of the City of Lake Elsinore General Plan Public Safety Welfare Element provides guidelines to evaluate the compatibility of different land uses with transportation related noise. The City's noise and land use compatibility criteria, which are shown in **Table 4.9-9**, provides the City with a planning tool to gauge the compatibility of land uses relative to existing and future exterior noise levels. These criteria describe categories of compatibility and not specific noise standards.

The Noise and Land Use Compatibility Matrix describes categories of compatibility and not specific noise standards. According to these categories of compatibility, the proposed Lake Elsinore Walmart commercial land use is considered clearly compatible with unmitigated exterior noise levels below 70 dBA CNEL and normally compatible with noise levels below 80 dBA L_{dn}. For normally compatible land use, new construction or development should be undertaken only after a detailed analysis of noise reduction requirements is made and needed noise insulation features are included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning, will normally suffice.

Transportation Noise Standards

The City of Lake Elsinore General Plan Noise section also specifies the interior and exterior noise standards allowable for new developments. These interior and exterior noise standards are shown in **Table 4.9-10**. According to these noise standards, an exterior noise level of 60 dBA L_{dn} is identified for noise-sensitive residential land uses, while no exterior noise level standards for commercial and industrial land uses have been identified. In addition, the City requires that all land uses achieve an indoor noise standard of 45 dBA L_{dn} with windows closed consistent with the California Building Code requirements. The noise standards shown in Table 4.9-10 typically apply to transportation-related (mobile) noise sources, while the City's Municipal Code, discussed below, identifies the noise level limits for stationary sources of noise (Urban Crossroads, 2015).

TABLE 4.9-9
CITY OF LAKE ELSINORE NOISE AND LAND USE COMPATIBILITY MATRIX

		Day-Night Noise Level (dBA L_{dn})						
Land Use Categories	**Uses**	**≤55**	**55 – 60**	**60 – 65**	**65 – 70**	**70 – 75**	**75 – 80**	**≥80**
Residential	Single, Family, Duplex, Multiple Family	A	A	B	B	C	D	D
Residential	Mobile Homes	A	A	B	C	C	D	D
Commercial Regional District	Hotel, Motel, Transient Lodging	A	A	B	B	C	C	D
Commercial Regional Village, District Special	Commercial, Retail, Bank, Restaurant, Movie Theatre	A	A	A	A	B	B	C
Commercial Industrial Institutional	Office Building, Research and Development, Professional Offices, City Office Building	A	A	A	B	B	C	D
Commercial Regional Institutional Civic Center	Amphitheatre, Concert Hall, Auditorium, Meeting Hall	B	B	C	C	D	D	D
Commercial Recreation	Children's Amusement Park, Miniature Golf Course, Go-cart Track, Equestrian Center, Sports Club	A	A	A	B	B	D	D
Commercial General, Special Industrial Institutional	Automobile Service Station, Auto Dealership, Manufacturing, Warehousing, Wholesale, Utilities	A	A	A	A	B	B	B
Institutional General	Hospital, Church, Library, Schools, Classroom	A	A	B	C	C	D	D
Open Space	Parks	A	A	A	B	C	D	D
Open Space	Golf Course, Cemeteries, Nature Centers, Wildlife Reserves, Wildlife Habitat	A	A	A	A	B	C	C
Agriculture	Agriculture	A	A	A	A	A	A	A

[A] Clearly compatible: Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction without any special noise insulation requirements.
[B] Normally compatible: New construction or development should be undertaken only after detailed analysis of the noise reduction requirements are made and needed noise insulation features in the design are determined. Conventional construction, with closed windows and fresh air supply systems or air conditioning, will normally suffice.
[C] Normally incompatible: New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of noise reduction requirements must be made and needed noise insulation features included in the design.
[D] Clearly incompatible: New construction or development should generally not be undertaken.

SOURCE: City of Lake Elsinore, 2011.

TABLE 4.9-10
CITY OF LAKE ELSINORE INTERIOR AND EXTERIOR NOISE STANDARDS

		Energy Average L_{dn}	
Categories	**Uses**	**Interior[a]**	**Exterior[b]**
Residential	Single Family, Duplex, Multiple Family	45[c,e]	60[c]
	Mobile Homes	--	60[d]
Commercial, Institutional	Hotel, Motel, Transient Lodging	45[e]	--
	Hospital, School's Classroom	45	--
	Church, Library	45	--

NA = nonapplicable

[a] Indoor environment excluding: Bathrooms, toilets, closets, corridors.
[b] Outdoor environment limited to: Private yard of single family, multi-family private patio or balcony which is served by a means of exit from inside, mobile home park.
[c] Noise level requirement with closed windows. Mechanical ventilating system or other means of natural ventilation shall be provided as of Chapter 12, Section 1205 of Uniform Building Code (UBC).
[d] Exterior noise level should be such that interior noise level will not exceed 45 CNEL.
[e] As per California Administrative Code, Title 24, Part 6, Division T25, Chapter 1, Subchapter 1, Article 4, Section T25-28.

SOURCE: City of Lake Elsinore, 2011.

City of Lake Elsinore Municipal Code

Chapter 17.176 of the City of Lake Elsinore Municipal Code defines the regulations and standards used to control unnecessary, excessive, and annoying noise and vibration in the City. With respect to operational noise, Section 17.176.060 of the City's Municipal Code established exterior noise level limits that should be applied to different receiving land uses in the City. These exterior noise limits are shown in **Table 4.9-11**.

The exterior noise levels shown in Table 4.9-11 are meant to be further applied as noise standards based on the duration of the noise; i.e., the louder the noise, the shorter the time it can last. Section 17.176.060 of the City's Municipal Code uses a number of noise metrics to define the permissible noise levels. These metrics include L_{50}, L_{25}, $L_{8.3}$, $L_{1.7}$, and L_{max}, and are based upon a one-hour timeframe which indicates exceedances of 50, 25, 8.3, and 1.7 percent of the time, plus the maximum sound level during that time period. Overall, Section 17.176.060 states the following: *No person shall operate, or cause to be operated, any source of sound at any location within the incorporated City or allow the creation of any noise on property owned, leased, occupied or otherwise controlled by such person, which causes the noise level when measured on any other property, either incorporated or unincorporated, to exceed*:

- The noise standard for that land use as specified in Table 4.9-11 for a cumulative period of more than 30 minutes in any hour; or
- The noise standard for that land use as specified in Table 4.9-11 plus five dB for a cumulative period of more than 15 minutes in any hour; or

- The noise standard for that land use as specified in Table 4.9-11 plus 10 dB for a cumulative period of more than five minutes in any hour; or
- The noise standard for that land use as specified in Table 4.9-11 plus 15 dB for a cumulative period of more than one minute in any hour; or
- The noise standard for that land use as specified in Table 4.9-11 plus 20 dB or the maximum measured ambient level, for any period of time.

TABLE 4.9-11
CITY OF LAKE ELSINORE EXTERIOR NOISE LIMITS

Receiving Land Use Category	Time Period	Noise Level (dBA)
Single-Family Residential	10:00 P.M. – 7:00 A.M.	40
	7:00 A.M. – 10:00 P.M.	50
Multiple Dwelling Residential	10:00 P.M. – 7:00 A.M.	45
	7:00 A.M. – 10:00 P.M.	50
Public Space, Limited Commercial and Office	10:00 P.M. – 7:00 A.M.	55
	7:00 A.M. – 10:00 P.M.	60
General Commercial	10:00 P.M. – 7:00 A.M.	60
	7:00 A.M. – 10:00 P.M.	65
Light Industrial	Anytime	70
Heavy Industrial	Anytime	75

SOURCE: City of Lake Elsinore Municipal Code, Section 17.176.060.

In addition, Section 17.176.060 also stipulates that if the measured ambient level differs from that permissible within any of the first four noise limit categories above, the allowable noise exposure standard should be adjusted in five decibels increments in each category as appropriate to encompass or reflect said ambient noise level. In the event the ambient noise level exceeds the fifth noise limit category above, the maximum allowable noise level under this category should be increased to reflect the maximum ambient noise level. Where the noise measurement location is on a boundary between two different zones (i.e., land use categories), the noise level limit applicable to the lower noise zone plus six decibels should be applied.

Section 17.176.070 of the City's Municipal Code also established interior noise standards for multi-family dwelling units in the City based on the allowable interior noise levels shown in **Table 4.9-12**.

TABLE 4.9-12
CITY OF LAKE ELSINORE INTERIOR NOISE STANDARDS FOR DWELLING UNITS

Noise Zone	Type of Land Use	Time Interval	Allowable Interior Noise Level (dBA)
All	Multifamily Residential	10:00 P.M. to 7:00 A.M.	35
		7:00 A.M. to 10:00 P.M.	45

SOURCE: City of Lake Elsinore Municipal Code, Section 17.176.070.

As indicated in Section 17.176.070, no person is allowed to operate or cause to be operated within a dwelling unit, any source of sound, or allow the creation of any noise, which causes the noise level when measured inside a neighboring receiving dwelling unit to exceed:

- The noise standard as specified in Table 4.9-12 for a cumulative period of more than five minutes in any hour;
- The noise standard as specified in Table 4.9-12 plus five dB for a cumulative period of more than one minute in any hour; or
- The noise standard as specified in Table 4.9-12 plus 10 dB or the maximum measured ambient, for any period of time.

In addition, if the measured ambient level differs from that permissible within any of the noise limit categories above, the allowable noise exposure standard shall be adjusted in five decibel increments in each category as appropriate to reflect said ambient noise level.

With respect to construction noise in the City, Section 17.176.080(F) of the City's Municipal Code prohibits the operation of any tools or equipment used between weekday hours of 7:00 P.M. and 7:00 A.M., or at any time on weekends or holidays, that will create a noise disturbance across a residential or commercial real-property line. The only exceptions would be emergency work of public service utilities or by variance issued by the City. Additionally, where technically and economically feasible, construction activities are required to be conducted in a manner that the working hours and maximum levels of equipment and activity noise not exceed those shown in **Table 4.9-13**. Furthermore, all mobile or stationary internal combustion engine powered equipment or machinery are required to be equipped with suitable exhaust and air intake silencers in proper working order.

City of Lake Elsinore Groundborne Vibration Regulation

With respect to vibration, the City's Municipal Code identifies a presumed perception threshold of 0.01 inches per second over the range of one to 100 hertz. Section 17.176.080(G) of the City's Municipal Code prohibits the operation of any device that creates vibration above the vibration perception threshold of any individual at or beyond the property boundary of the source if on private property, or at 150 feet (46 meters) from the source if on a public space or public right-of-way.

TABLE 4.9-13
CITY OF LAKE ELSINORE CONSTRUCTION NOISE LIMITS

	Type I Areas: Single-Family Residential		Type II Areas: Multi-Family Residential		Type III Areas: Semi-Residential/Commercial	
Time Period	**Mobile Equipment[a]**	**Stationary Equipment[b]**	**Mobile Equipment[a]**	**Stationary Equipment[b]**	**Mobile Equipment[a]**	**Stationary Equipment[b]**
Residential Properties						
Daily 7:00 am to 7:00 pm[c]	75 dBA	60 dBA	80 dBA	65 dBA	85 dBA	70 dBA
Daily 7:00 pm to 7:00 am[d]	60 dBA	50 dBA	65 dBA	55 dBA	70 dBA	60 dBA
Business Properties						
Daily (all hours)[d]	85 dBA					

[a] Represents maximum noise levels for nonscheduled, intermittent, short-term operation (less than 10 days).
[b] Represent maximum noise level for repetitively scheduled and relatively long-term operation (periods of 10 days or more).
[c] Exception for Sundays and legal holidays.
[d] Includes all day Sunday and legal holidays.

SOURCE: City of Lake Elsinore Municipal Code, Section 17.176.080(F).

4.9.3 Thresholds of Significance

According to Appendix G of the State CEQA Guidelines, the proposed project could have a potentially significant impact with respect to noise it would:

- Result in exposure of persons to, or generation of, noise levels in excess of standards established in the local General Plan or noise ordinance, or applicable standards of other agencies.
- Result in exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels.
- Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.
- Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.
- For a project located within an airport land use plan area, or, where such a plan has not been adopted, in an area within two miles of a public airport or public use airport, would the project expose people residing or working in the area to excessive noise levels.
- For a project located in the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels.

As determined in the Initial Study/Notice of Preparation (Appendix A), implementation of the proposed project would not result in any impacts with respect to the exposure of people residing or working in the project area to excessive noise levels associated with a public use airport or private airstrip. The project site is located approximately 4.8 miles northwest of Skylark Field, a small private airport in the City of Lake Elsinore, and is located outside of the Influence Area of this airport. No other private or public airports are located in the immediate project vicinity. Given the distance to the airport, intervening land uses, and relatively small scale of aviation operations of Skylark Field, the project's potential to expose employees and visitors of the project site to excessive aircraft-related noise would not occur, and no further analysis is warranted in this EIR.

Noise Criteria

For the purpose of determining whether the project would result in the exposure of persons to or generate noise levels that would exceed established noise standards, construction and stationary operational noise levels associated with the proposed project would result in a significant impact if the City's applicable noise standards from the General Plan and Municipal Code are exceeded.

However, while the State CEQA Guidelines and the City of Lake Elsinore General Plan and Municipal Code provide direction on noise/land use compatibility and establish noise standards by land use type, they do not define the levels at which permanent and temporary increases in ambient noise are considered "substantial." Under CEQA, consideration must be given to the magnitude of the noise increase, the existing ambient noise levels, and the location of noise-sensitive receivers in order to determine if a noise increase represents a significant adverse environmental impact. This approach recognizes that there is no single noise increase that renders the noise impact significant.

Unfortunately, there is no completely satisfactory way to measure the subjective effects of noise or of the corresponding human reactions of annoyance and dissatisfaction. This is primarily because of the wide variation in individual thresholds of annoyance and differing individual experiences with noise. Thus, an important way of determining a person's subjective reaction to a new noise is the comparison of it to the existing environment to which one has adapted – the so-called "ambient" environment.

In general, the more a new noise exceeds the previously existing ambient noise level, the less acceptable the new noise will typically be judged. With this in mind, the Federal Interagency Committee on Noise (FICON) developed guidance to be used for the assessment of project-generated increases in noise levels that take into account the ambient noise level. The FICON recommendations are based on studies that relate aircraft noise levels to the percentage of persons highly annoyed by aircraft noise. Although the FICON recommendations were specifically developed to assess aircraft noise impacts, these recommendations are often used in environmental noise impact assessments involving the use of cumulative noise exposure metrics, such as the average-daily noise level (i.e., CNEL). For example, if the ambient noise environment is quiet (<60 dBA) and the new noise source greatly increases the noise levels, an impact may occur even though the noise criteria might not be exceeded. Therefore, for the purpose of this

analysis, a readily perceptible 5 dBA or greater project related noise level increase is considered a significant impact when nearby noise-sensitive receivers are affected. According to the FICON guidance, in areas where the "without project" noise levels range from 60 to 65 dB, a 3 dBA barely perceptible noise level increase appears to be appropriate for most people. When the "without project" noise levels already exceed 65 dBA, any increase in community noise louder than 1.5 dBA or greater is considered a significant impact if noise-sensitive receivers are affected, since it likely contributes to an existing noise exposure exceedance. A summary of the potential noise impact significance criteria based on guidance from FICON are shown in **Table 4.9-14**.

TABLE 4.9-14
MEASURES OF SUBSTANTIAL INCREASE FOR NOISE EXPOSURE

Without Project Noise Level	Potential Significant Impact
< 60 dBA	5 dBA or more
60 - 65 dBA	3 dBA or more
> 65 dBA	1.5 dBA or more

SOURCE: FICON, 1992

Based on the measures of substantial increase for noise exposure outlined in Table 4.9-14, noise impacts associated with off-site traffic noise shall be considered significant if any of the following occur as a direct result of the proposed project:

- If the off-site traffic noise levels at nearby noise-sensitive land uses adjacent to roadways conveying project-related traffic:
  - Are less than 60 dBA CNEL and the project creates a readily perceptible 5 dBA CNEL or greater project-related noise level increase; or
  - Range from 60 to 65 dBA CNEL and the project creates a barely perceptible 3 dBA CNEL or greater project-related noise level increase; or
  - Already exceed 65 dBA CNEL, and the project creates a 1.5 dBA CNEL or greater project-related noise level increase.

Vibration Criteria

As described previously, Section 17.176.080(G) of the City's Municipal Code prohibits the operation of any device that creates vibration above the vibration perception threshold of any individual at or beyond the property boundary of the source if on private property, or at 150 feet (46 meters) from the source if on a public space or public right-of-way. The City's Municipal Code identifies a presumed perception threshold of 0.01 inches per second over the range of one to 100 hertz. Thus, the project's potential vibration impacts will also be evaluated against the City's vibration perception threshold.

4.9.4 Methodology

Construction Noise Levels

Noise generated by the project's construction equipment will include a combination of trucks, power tools, concrete mixers and portable generators that when combined can reach high levels. The number and mix of construction equipment is expected to occur in the following five stages:

- Grading
- Utilities/Underground
- Building Construction
- Paving
- Architectural Coating

This construction noise analysis was prepared using the FHWA published Roadway Construction Noise Model (RCNM) that includes a national database of construction equipment reference noise emission levels. The RCNM equipment database provides a comprehensive list of the noise generating characteristics for specific types of construction equipment. In addition, the database provides an acoustical usage factor to estimate the fraction of time each piece of construction equipment is operating at full power (i.e., its loudest condition) during a construction operation.

Noise levels generated by heavy construction equipment can range from approximately 70 dBA to in excess of 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. The construction noise levels including the number and mix of construction equipment by construction phase are consistent with the data used to support the construction emissions in the *Lake Elsinore Walmart Air Quality Impact Analysis* prepared by Urban Crossroads Inc. in April 2015, which is included as Appendix I of this EIR.

Overall, the estimated construction noise levels resulting from the proposed project at the nearby off-site sensitive receptors were analyzed against the construction noise standards established in the City's Municipal Code to determine whether an exceedance of allowable noise levels would occur.

Operational Noise Levels

Operational noise levels generated by the proposed project would result from on-site noise sources that include loading dock activities, a trash compactor, rooftop air conditioning units, shopping cart carousels, drive-thru speakerphones, parking lot vehicle movements, and car wash activities. To determine the potential noise impacts resulting from project operations, reference noise levels that were previously collected for each of the identified operational noise sources by Urban Crossroads Inc. at other Walmart or related businesses were used to estimate the noise

levels that would be experienced by the nearest off-site sensitive receptors. For the purposes of conducting a conservative analysis, the concurrent operation of all of the identified operational noise sources (i.e., trash compactor, rooftop air conditioning units, shopping cart carousels, drive-thru speakerphones, parking lot vehicle movements, and car wash activity) was assumed in the impact analysis. This would present a worst-case analysis, as in reality, these noise level impacts will vary throughout the day. Overall, the project's operational noise levels at the identified receptor locations (i.e., R1 through R6) were evaluated against the City's applicable noise standards.

Groundborne Vibration Levels

Groundborne vibration levels resulting from construction activities at the project site were estimated using data published by the FTA in its *Transit Noise and Vibration Impact Assessment* document for construction equipment. The vibration levels associated with various types of construction equipment are summarized on **Table 4.9-15**. The potential vibration levels resulting from construction activities at the project site are identified at off-site locations that are sensitive to vibration, including the nearby single-family residences, based on their distance from construction activities. As the City has identified a presumed perception threshold of 0.01 inches per second for vibration levels and, Section 17.176.080(G) of the City's Municipal Code, prohibits the operation of any device that creates vibration above the vibration perception threshold, the project's vibration levels are evaluated against this threshold.

Additionally, while groundborne vibration levels could also be generated from automobile traffic, these vibration levels 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. As such, any "excessive" groundborne vibration or noises that would occur at the project site would be those generated during the construction activities.

TABLE 4.9-15
VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT

Equipment	PPV (in/sec) at 25 feet
Small bulldozer	0.003
Jackhammer	0.035
Loaded Trucks	0.076
Large bulldozer	0.089

SOURCE: FTA, 2006.

Roadway Noise Levels

Roadway noise levels were calculated for a total of 45 study roadway segments near the project site based on information provided in the *Lake Elsinore Walmart Traffic Impact Analysis*

prepared by Urban Crossroads, Inc., which is included as Appendix I of this EIR. The estimated roadway noise impacts from the project's vehicular traffic were calculated using a computer program that replicates the FHWA Traffic Noise Prediction Model (FHWA-RD-77-108). The FHWA Model arrives at a predicted noise level through a series of adjustments to the Reference Energy Mean Emission Level (REMEL). In California the national REMELs are substituted with the California Vehicle Noise (Calveno) Emission Levels. Adjustments are then made to the REMEL to account for: the roadway classification (e.g., collector, secondary, major or arterial), the roadway active width (i.e., the distance between the center of the outermost travel lanes on each side of the roadway), the total average daily traffic (ADT), the travel speed, the percentages of automobiles, medium trucks, and heavy trucks in the traffic volume, the roadway grade, the angle of view (e.g., whether the roadway view is blocked), the site conditions ("hard" or "soft" relates to the absorption of the ground, pavement, or landscaping), and the percentage of total ADT which flows each hour throughout a 24-hour period. The detailed parameters used to model the project's traffic noise levels are included in the *Lake Elsinore Walmart Noise Impact Analysis* study that is included as Appendix I of this EIR.

4.9.5 Impact Analysis

Impact 4.9-1: 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?

To assess the potential for short-term construction and long-term operational noise impacts resulting from project implementation, the following six receiver locations, as shown on **Figure 4.9-4**, were identified as representative locations for analysis.

Representative sensitive receivers in the vicinity of the project site include the single-family residential homes at locations R1 to R6 shown in Figure 4.9-4. The closest sensitive receiver is represented by location R6, where an existing residential home is located approximately 41 feet from the project site. A general description of these receiver locations is provided below:

- **Receiver R1** – Located approximately 108 feet north of the project site along Cambern Avenue, R1 represents an existing single-family residential home. A long-term noise measurement was taken near this receiver at Location L4 (refer to Figure 4.9-3) to describe the existing ambient noise environment.
- **Receiver R2** – This receiver represents the existing residential home located roughly 125 feet north of the project site on Cambern Avenue. A long-term noise measurement was taken near this receiver at Location L1 (refer to Figure 4.9-3) to describe the existing ambient noise environment.
- **Receiver R3** – This receiver represents the existing residential home situated north of the project site at a distance of approximately 164 feet. A long-term noise measurement was taken near this receiver at Location L5 (refer to Figure 4.9-3) to describe the existing ambient noise environment.

Receiver Locations

Distance from Receiver to Project Site Boundary (in feet)

N

SOURCE: Urban Crossroads

Lake Elsinore Walmart Supercenter Project EIR . 130767

Figure 4.9-4

Off-Site Receiver Locations

- **Receiver R4** – This receiver represents the existing residential home situated approximately 206 feet southeast of the project site on 3rd Street. A long-term noise measurement was taken near this receiver at Location L6 (refer to Figure 4.9-3) to describe the existing ambient noise environment.
- **Receiver R5** – This receiver represents the single-family residential home situated along 3rd Street at a distance of approximately 235 feet south of the Project site. A long-term noise measurement was taken near this receiver at Location L6 (refer to Figure 4.9-3) to describe the existing ambient noise environment.
- **Receiver R6** – This receiver represents the residential homes located along 3rd Street at a distance of 41 feet southwest of the project site. A long-term noise measurement was taken near this receiver at Location L2 (refer to Figure 4.9-3) to describe the existing ambient noise environment.

Construction

The project's construction noise impacts will include both short-term mobile equipment and long-term stationary equipment. Short-term mobile construction activities (e.g. graders, pavers, trucks, nail guns, power tools, etc.) are generated throughout the project site and are not staged or stationary. During construction, all of the long-term stationary construction equipment (e.g. generators, compressors, pumps, etc.) staging activities will be located in areas that will create the greatest distance between construction-related noise sources and the noise-sensitive receivers. It is expected that the project's construction activities will consist primarily of short-term mobile equipment. Using the stationary-source RCNM noise prediction model, calculations of the project's construction noise level impacts at the six noise receiver locations (i.e., R1 through R6) were completed. A summary of the unmitigated peak short-term mobile and long-term stationary construction noise levels that were estimated at the six noise receiver locations are shown in **Table 4.9-16** and **Table 4.9-17**, respectively.[2] As discussed previously, the City's Municipal Code limits the noise levels due to mobile equipment to 75 dBA L_{max} at single-family residential receivers for non-scheduled, intermittent, short-term operation (less than 10 days) of mobile equipment and limits the noise levels from long-term stationary construction equipment to 60 dBA L_{max} for single-family residential receivers for repetitively scheduled and relatively long-term operation (periods of 10 days or more) of stationary equipment (refer to Table 4.9-13). While both mobile and stationary construction equipment would be used at the project site, for the purpose of this analysis only the City's noise limits for long-term stationary construction equipment are used to assess the project's potential noise impacts because the project's construction activities would occur for more than 10 days.

[2] The detailed construction noise levels for each phase of construction at the six receiver locations are depicted in Tables 10-1 to 10-6 of the *Lake Elsinore Walmart Noise Impact Analysis* study prepared in May 2015 by Urban Crossroads, which is included as Appendix I of this EIR.

TABLE 4.9-16
UNMITIGATED MOBILE EQUIPMENT NOISE LEVEL SUMMARY

Noise Receiver[a]	Construction Phase Hourly Noise Level (dBA L_{max})						Potential Significant Impact?[c]
	Grading	Utilities	Building Const.	Paving	Arch. Coating	Peak[b]	
R1	76.5	69.1	71.5	70.4	n/a	76.5	**Yes**
R2	75.8	68.4	70.8	69.7	n/a	75.8	**Yes**
R3	74.5	67.2	69.5	68.4	n/a	74.5	**Yes**
R4	73.0	65.6	68.0	66.9	n/a	73.0	**Yes**
R5	72.3	65.0	67.3	66.2	n/a	72.3	**Yes**
R6	79.9	72.5	74.9	73.8	n/a	79.9	**Yes**

"n/a" = No mobile equipment used in the construction phase.

[a] Noise receiver locations are shown on Exhibit 10-A in Appendix I of this EIR.
[b] Estimated construction noise levels during peak operating conditions.
[c] The City's long-term stationary construction noise standards (refer to Table 4.10-13) are used to assess the noise levels generated by mobile construction equipment at the project site because the project's construction activities would occur for more than 10 days. 4

SOURCE: Urban Crossroads, Inc., 2015.

TABLE 4.9-17
UNMITIGATED STATIONARY EQUIPMENT NOISE LEVEL SUMMARY

Noise Receiver[a]	Construction Phase Hourly Noise Level (dBA L_{max})						Potential Significant Impact?[c]
	Grading	Utilities	Building Const.	Paving	Arch. Coating	Peak[b]	
R1	n/a	n/a	68.3	n/a	65.3	68.3	**Yes**
R2	n/a	n/a	65.9	n/a	62.9	65.9	**Yes**
R3	n/a	n/a	60.9	n/a	57.9	60.9	**Yes**
R4	n/a	n/a	58.4	n/a	55.4	58.4	No
R5	n/a	n/a	58.5	n/a	55.5	58.5	No
R6	n/a	n/a	62.6	n/a	59.6	62.6	**Yes**

: "n/a" = No stationary equipment used in the construction phase.

[a] Noise receiver locations are shown on Exhibit 10-A in Appendix I of this EIR.
[b] Estimated construction noise levels during peak operating conditions.
[c] Refer to the long-term stationary construction noise standards shown in Table 4.10-13.

SOURCE: Urban Crossroads, Inc., 2015.

As shown in Table 4.9-16, the highest construction noise levels generated from mobile equipment would occur during grading construction activities when all equipment is operating simultaneously at a distance of 100 feet from the project site boundary. The unmitigated peak mobile construction noise levels are expected to range from 72.3 to 79.9 dBA L_{max}. The architectural coating phase of construction does not include the use of mobile equipment. The

construction noise analysis shows that the unmitigated construction noise levels at nearby sensitive residential receivers represent a potentially significant impact and would exceed the City's applicable noise level standard of 60 dBA for single-family residential land uses.

With respect to stationary construction equipment, this equipment is expected to be used at the project site during the building construction and architectural coating phases of construction. As shown in Table 4.9-17, for the stationary construction noise levels analysis, the noise levels at the project boundary are expected to range from 58.4 to 68.3 dBA L_{max}. The grading, utilities/underground, and paving phases of construction would not include the use of stationary equipment. The analysis shows that the unmitigated stationary construction noise levels represent a potentially significant impact and would exceed the City's stationary equipment noise level standard of 60 dBA for single-family residential land uses.

To control noise impacts associated with the construction of the proposed project, the City has established limits to the hours of operation and maximum noise levels for mobile and stationary equipment. As discussed previously, Section 17.176.080 (F) of the City's Municipal Code prohibits the operation of any tools or equipment used between weekday hours of 7:00 P.M. and 7:00 A.M., or at any time on weekends or holidays, that will create a noise disturbance across a residential or commercial real-property line. The only exceptions would be emergency work of public service utilities or by variance issued by the City. Additionally construction activities are required to be conducted in such a manner that the maximum (L_{max}) noise levels at affected properties will not exceed the mobile and stationary equipment noise standards shown in Table 4.9-13, depending on the length of the construction period (i.e., either less than 10 days or 10 days or more). For single-family residential development, mobile equipment noise levels occurring for less than 10 days are limited to 75 dBA L_{max} and stationary equipment noise levels occurring for 10 days or more are limited to 60 dBA L_{max} during the daytime hours. Furthermore, all mobile or stationary internal combustion engine powered equipment or machinery are required to be equipped with suitable exhaust and air intake silencers in proper working order.

Since project construction would occur at the project site for more than 10 days, the City's noise standards for stationary equipment at single-family residential land uses are used to assess the noise levels generated from both mobile and stationary construction equipment at the project site. As shown in Table 4.9-16, the unmitigated mobile equipment construction noise level impacts are expected to exceed the 60 dBA L_{max} daytime noise level threshold at all of the identified noise receiver locations. Consequently, the noise levels from mobile equipment would represent a potentially significant noise level impact. In addition, unmitigated noise level impacts at nearby receivers from stationary equipment are expected to exceed the 60 dBA L_{max} daytime noise level threshold at receiver locations R1, R2, R3, and R6. Therefore, temporary noise mitigation would be needed to reduce the potential construction noise impacts. Implementation of Mitigation Measure NOI-1 would require the use of practices and techniques at the project site during construction to reduce noise levels, including the installation of temporary exterior noise control barriers that would provide a minimum attenuation of 10 dBA. The peak construction noise levels for both the mobile and stationary equipment with the attenuation provided by the temporary

construction noise barrier required under Mitigation Measure NOI-1 are shown in **Table 4.9-18** and **Table 4.9-19**, respectively.

TABLE 4.9-18
MITIGATED MOBILE EQUIPMENT NOISE LEVEL SUMMARY

Noise Receiver[a]	Distance To Property Line (Feet)	Peak Construction Noise Level (dBA L_{max})[b]	Construction Noise Level Criteria (dBA L_{max})[c]	Compliance?	Temporary Noise Barrier Attenuation (dBA L_{max})	Const. Noise Levels With Attenuation (dBA L_{max})[d]	Compliance With Attenuation?
R1	209	76.5	60.0	No	-10.0	66.5	No
R2	226	75.8	60.0	No	-10.0	65.8	No
R3	262	74.5	60.0	No	-10.0	64.5	No
R4	312	73.0	60.0	No	-10.0	63.0	No
R5	337	72.3	60.0	No	-10.0	62.3	No
R6	141	79.9	60.0	No	-10.0	69.9	No

[a] Noise receiver locations are shown on Exhibit 10-A in Appendix I of the EIR.
[b] Estimated mobile equipment construction noise levels during peak operating conditions, as shown on Table 4.9-16.
[c] As the project's construction would occur for more than 0days, the City's construction noise level criteria for stationary equipment identified in Section 17.176.080 (F) of the City's Municipal Code is used for this analysis.
[d] Peak construction noise levels with the recommended minimum temporary noise barrier attenuation of 10.0 dBA when operating adjacent to nearby sensitive receivers.

SOURCE: Urban Crossroads, Inc., 2015.

TABLE 4.9-19
MITIGATED STATIONARY EQUIPMENT NOISE LEVEL SUMMARY

Noise Receiver[a]	Distance To Property Line (Feet)	Peak Construction Noise Level (dBA L_{max})[b]	Construction Noise Level Criteria (dBA L_{max})[c]	Compliance?	Temporary Noise Barrier Attenuation (dBA L_{max})	Const. Noise Levels With Attenuation (dBA L_{max})[d]	Compliance With Attenuation?
R1	217	68.3	60.0	No	-10.0	58.3	Yes
R2	284	65.9	60.0	No	-10.0	55.9	Yes
R3	504	60.9	60.0	No	-10.0	50.9	Yes
R4	673	58.4	60.0	Yes	0.0	58.4	Yes
R5	669	58.5	60.0	Yes	0.0	58.5	Yes
R6	414	62.6	60.0	No	-10.0	52.6	Yes

[a] Noise receiver locations are shown on Exhibit 10-A in Appendix I of EIR.
[b] Estimated stationary equipment construction noise levels during peak operating conditions, as shown on Table 4.10-17.
[c] City's applicable construction noise level criteria rom Section 17.176.080 (F) of the City's Municipal Code.
[d] Peak construction noise levels with the recommended minimum temporary noise barrier attenuation of 10.0 dBA when operating adjacent to nearby sensitive receivers.

SOURCE: Urban Crossroads, Inc., 2015.

As shown in Table 4.9-18, the peak construction noise levels from mobile equipment are expected to range from 62.3 to 69.9 dBA L_{max} with the attenuation from the temporary construction noise barriers at all the receiver locations (i.e., R1 through R6). Despite the implementation of Mitigation Measure NOI-1, the noise levels generated from mobile construction equipment would continue to exceed the City's 60 dBA L_{max} noise standard at all of the receiver locations. Therefore, noise impacts from the use of mobile equipment would be significant and unavoidable.

As for peak construction noise levels from stationary equipment, Table 4.9-19 shows that these noise levels would range from 50.9 to 58.5 dBA L_{max} with the attenuation from the temporary construction noise barriers at receiver locations R1 to R3, and R6, which would not exceed the City's applicable noise standard of 60 dBA L_{max} for single-family land uses. Thus, with implementation of Mitigation Measure NOI-1, the stationary construction noise levels at the nearby residential receivers would be reduced to a less-than-significant level.

Overall, because the use of mobile construction equipment at the project site would, despite implementation of mitigation, result in noise levels that exceed the City's noise standard of 60 dBA L_{max} at single-family residential uses for construction activities occurring for more than 10 days, construction noise impacts of the project would be significant and unavoidable

Operations

The operational noise impacts associated with the proposed project are expected to include loading dock activities, a trash compactor, rooftop air conditioning units, shopping cart carousels, drive-thru speakerphones, parking lot vehicle movements, and car wash activities.[3] To analyze potential noise impacts from project operations on the nearby sensitive receptors (i.e., single-family residences to the northeast, southeast, and southwest of the project site), the noise levels generated by these project-related operational noise sources are evaluated against the noise standards established under the City's Municipal Code. As discussed previously, Section 17.176.060 of the City's Municipal Code established exterior noise level limits that should be applied to different receiving land uses in the City, which are shown in Table 4.9-11. Additionally, the exterior noise levels shown in Table 4.9-11 are meant to be further applied as noise standards based on the duration of the noise (i.e., , L_{50}, L_{25}, $L_{8.3}$, $L_{1.7}$, and L_{max}) over a one-hour timeframe. Given that the nearest sensitive receptors that would be affected by the project's operational noise levels are single-family residential uses, the applicable noise standards for these receiving land uses based on the City's exterior noise level limits under Section 17.176.060 of the Municipal Code are presented in **Table 4.9-20**.

[3] The representative receiver locations and noise source locations used to assess the operational noise levels for both proposed project options (i.e., Option A and Option B) are shown in Exhibits 9-A and 9-B in Appendix I of this EIR.

TABLE 4.9-20
APPLICABLE PROJECT OPERATIONAL NOISE STANDARDS

Time Period	Condition	Municipal Code Section[a]	Exterior Noise Level Standards (dBA)[b]				
			L_{50} (30 mins)	L_{25} (15 mins)	L_8 (5 mins)	L_2 (1 min)	L_{max} (Anytime)
Daytime	Base Exterior Residential Noise Level Standards	17.176.060(A)(1)/(2)	50	55	60	65	70
	Lowest Measured Ambient Noise Levels[c]	n/a	50.5	51.9	53.9	59.3	73.7
	Ambient Exceedance Adjustment[d]	17.176.060(A)(3)	+5	0	0	0	+3.7
	Zone Boundary Adjustment[e]	17.176.060(A)(4)	+6	+6	+6	+6	+6
	Project Nighttime Exterior Noise Level Criteria[f]	17.176.060(A)(3)/(4)	61	61	66	71	80
Nighttime	Base Exterior Residential Noise Level Standards	17.176.060(A)(1)/(2)	40	45	50	55	60
	Lowest Measured Ambient Noise Levels[c]	n/a	47.6	49.3	52.4	60.6	72.7
	Ambient Exceedance Adjustment[d]	17.176.060(A)(3)	+5	+5	+5	+10	+15
	Zone Boundary Adjustment[e]	17.176.060(A)(4)	+6	+6	+6	+6	+6
	Project Nighttime Exterior Noise Level Criteria[f]	17.176.060(A)(3)/(4)	51	56	61	71	81

"Daytime" = 7:00 A.M. to 10:00 P.M.; "Nighttime" = 10:00 P.M. to 7:00 A.M.; n/a = nonapplicable

[a] City of Lake Elsinore Municipal Code, Chapter 17.176 Noise Control.
[b] The percent noise level is the level exceeded "n" percent of the time during the measurement period.
[c] Lowest ambient noise levels collected at measurement Location L4, shown on Figure 4.9-3. See Table 4.9-2.
[d] ection 17.176.060(A)(3) of the City's Municipal Code states: "If the measured ambient level differs from that permissible within any of the first four noise limit categories above, the allowable noise exposure standard shall be adjusted in five dB increments in each category as appropriate to encompass or reflect said ambient noise level. In the event the ambient noise level exceeds the fifth noise limit category, the maximum allowable noise level under this category shall be increase to reflect the maximum ambient noise level."
[e] Section 17.176.060(A)(4) of the City's Municipal Code states: "If the measurement location is on a boundary between two different zones, the noise level limit applicable to the lower noise zone plus six dB shall apply. Since the measurement locations conducted for the project (refer to Figure 4.9-3) are on a boundary between two different zones (residential and commercial), the noise level limit applicable to the lower noise zone plus 6 dBA shall apply to the noise standards.
[f] Combined base noise level standards and adjustments per the City's Municipal Code.

SOURCE: Urban Crossroads, Inc., 2015.

Reference Noise Levels

To estimate the project's operational noise impacts, reference noise level measurements were collected from similar types of activities to represent the noise levels expected with the development of the proposed project. These reference noise levels are shown in **Table 4.9-21**.

TABLE 4.9-21
REFERENCE NOISE LEVEL MEASUREMENTS

Noise Source	Duration (mm:ss)	Distance From Source (Feet)	Noise Source Height (Feet)	Hourly Activity (Minutes)[a]	Noise Level (dBA) Leq (Average)	Noise Level (dBA) L_{50} (Median)
Loading Dock Activities	1:00	20	8	18	77.3	77.2
Trash Compactor	2:22	5	5	20	75.5	70.5
Rooftop Air Conditioning Unit	1:00	5	25	30	81.9	81.6
Shopping Cart Carousel	0:16	5	3	20	72.9	61.9
Drive-Thru Speakerphones	2:00:00	15	3	60	62.0	60.9
Parking Lot Vehicle Movements	15:00	5	4	60	60.1	56.7
Car Wash	8:43	10	9	30	76.5	64.1

[a] Anticipated duration (minutes within the hour) of noise activity during peak hourly conditions expected at the project site.

SOURCE: Urban Crossroads, Inc., 2015.

A detailed description of each of the project's operational noise sources presented in Table 4.9-21 is provided below.

Loading Dock Activities

As part of its operations, the proposed project would include truck doors and loading facilities at the rear of the proposed Walmart Supercenter. Loading docks would be located along the store's southerly (rear) elevation to accommodate truck and vendor deliveries. Truck deliveries may occur 24 hours per day, and would consist of both semi-trucks (larger deliveries would be accomplished by way of 3+ axle tractor-trailer combinations with trailers up to 68 feet in length), and small to medium size (two-axle) trucks.

It is expected that the loading docks would be constructed to allow trailers to seal to the docks, thereby directing the unloading noise into the store, rather than onto neighboring uses. The loading dock areas would also be screened by a proposed 10-foot-high wall.[4] In order to evaluate the noise impacts associated with the project's delivery truck tractor trailer unloading/loading activities, a reference noise level of 77.3 dBA L_{eq} at a distance of 20 feet from the tractor trailer, which was derived from noise level measurements taken at the Huntington Beach Walmart by Urban Crossroads Inc. on April 14, 2011, was used to determine the noise levels at the off-site sensitive receptors. The primary noise generated by tractor trailer unloading is the noise of the truck arriving, backing into the dock area, detaching the cab, attaching the cab to the empty trailer, and exiting the loading dock. Because the trailer seals to the loading dock, employees unload the tractor trailer from the inside of the store. Delivery truck activities will typically last an average of 3–6 minutes per truck, depending on whether or not the loading bay is empty at the time of arrival. In the event idling does occur, idling time would be limited to no more than five

[4] Refer to Exhibits 9-A and 9-B in Appendix I of this EIR.

minutes under California State law (Cal Code Regs. 2485). Delivery trucks are generally equipped with an engine shutdown system that automatically turns off the engine after 5 minutes of idling. In order to analyze a worst-case condition for noise impacts related to delivery, it is assumed that there would be a maximum of three delivery trucks coming to the proposed Walmart Supercenter's loading docks and that delivery activities would be completed within a one-hour period for both daytime and nighttime hours. For the purpose of this noise analysis, a maximum average delivery time of six minutes per delivery is used for a total of 18 minutes of activity during the peak noise hour.

Trash Compactors

In order to assess the impacts created by the trash compactor planned on the project site, a reference noise level of 75.5 dBA L_{eq} at a distance of five feet from the compactor, which was derived from measured noise levels at the Irvine Walmart Supercenter conducted by Urban Crossroads on January 23, 2014, was used to determine the noise levels at the off-site sensitive receptors. For the purpose of the project's analysis, it is expected the project's trash compactor would operate for a maximum of 20 minutes during typical hourly daytime and nighttime conditions.

Rooftop Air Conditioning Units

In order to assess the noise impacts created by the rooftop air conditioning units associated with the project's on-site structures at project site, a reference noise level of 81.9 dBA L_{eq} at a distance of five feet was used to determine the noise levels at the nearest off-site sensitive receptors. This reference noise level was based on noise levels measurements taken at the Rancho Cordova Walmart by Urban Crossroads Inc. on October 13, 2010. The noise level measurements conducted by Urban Crossroads Inc. describe a cluster of mechanical rooftop air conditioning units that consisted of two Krack MXE-04 4-fan units and one MXE-02 2-fan unit. For the purpose of the proposed project's noise analysis, the air conditioning units are expected to be located on the roof at a noise elevation of 25 feet and are estimated to operate for approximately 30 minutes during typical daytime and nighttime conditions. The noise attenuation provided by a 3-foot-high parapet wall was included as part of the analysis.

Shopping Cart Carousel (Metal Carts)

To evaluate the noise level impacts associated from the proposed project from shopping carts placed by customers into assigned shopping cart areas, a reference noise level of 72.9 dBA L_{eq} at a distance of five feet from the noise source is used to determine the noise levels at the nearest off-site sensitive receptors. This reference noise level was derived from collected noise level measurements conducted by Urban Crossroads Inc. at the Laguna Niguel Walmart on May 30, 2012. The noise impacts resulting from this noise source are mainly due to the metal shopping carts crashing into other carts already placed in the carousel as well as striking the side rails. For the purpose of the proposed project's noise analysis, it is anticipated that noise levels from shopping cart carousels are expected for approximately 20 minutes per hour for the typical daytime and nighttime conditions.

Drive-Thru Speakerphones

To describe the potential noise level impacts associated with the project's planned drive-thru speakerphones and vehicle activities, a reference noise level of 62.0 dBA L_{eq} at a distance of 15 feet from the speakerphone is used to determine that noise levels at the nearest off-site sensitive receptors. This reference noise level measurement was collected by Urban Crossroads Inc. on December 19, 2014 at a Panera Bread restaurant located at 423 South Associated Road in the City of Brea. The reference noise levels collected at the Panera Bread restaurant are expected to reflect the drive-thru speakerphone noise level activities at the project site, since the reference measurement includes both drive-thru speakerphone and vehicle activity noise. The noise sources included in the reference noise level measurement consist of voices of the Panera Bread employees over the speakerphone, customers' voices ordering food, car engines idling, car radios playing music, and cars queuing in the drive-thru lane. It should be noted that the collected reference noise level measurement overstates the actual average noise levels because it represents the average of 28 speakerphone menu board ordering events observed over a two-hour period. In other words, the Panera Bread speakerphone menu board reference noise level describes continuous drive-through operations and does not include any periods of inactivity. For the purpose of the project's analysis, noise associated with drive-thru speakerphones is expected during the typical daytime and nighttime conditions for the entire hour (60 minutes).

While drive-thru speakerphones are identified in this analysis as a noise source within the project site, they are not included in the project-only operational noise level calculations due to the distance and location of the drive-thru speakerphone behind the proposed fast food restaurant buildings within the site. The six receiver locations (i.e., R1 through R6) will not have a direct line of sight to the speakerphone locations, and the drive-thru speakerphone noise levels will be overshadowed by other operational noise sources and the background ambient conditions.

Parking Lot Vehicle Movements

To determine the noise level impacts associated with the project's parking lot vehicle movements, a reference noise level of 60.1 dBA Leq at a distance of 5 feet is used to determine the noise levels at the nearest off-site sensitive receptors. This reference noise level was collected by Urban Crossroads Inc. on May 30, 2012 at the Laguna Niguel Walmart located at 27470 Alicia Parkway. The parking lot noise levels associated with the project would be mainly due to cars pulling in and out of spaces, car alarms sounding, and customers moving shopping carts. For the purpose of the project's analysis, noise associated with parking lot vehicle movements is expected during the typical daytime and nighttime conditions for the entire hour (60 minutes).

Car Wash Activity

To describe the potential noise level impacts associated with the project's proposed car wash at the northern corner of the project site under Option A, a reference noise level of 76.5 dBA L_{eq} at a distance of 10 feet from the car wash's exit tunnel and blowers is used to determine the noise levels at the nearest off-site sensitive receptors. This reference noise level is based on a noise level measurement that was collected by Urban Crossroads Inc. on November 8, 2013 at the Plano Trabuco Shell Gas Station car wash. The reference noise level measurement includes one

complete car wash cycle. The high powered blowers that are used to dry the car at the end wash cycle represent the primary source of car wash noise. For the purpose of the project's analysis, noise associated with car wash activity is expected during the typical daytime and nighttime conditions for approximately 30 minutes per hour.

Project Operational Noise Levels

Based upon the reference noise levels discussed above, the project's operational stationary-source noise levels at each of the sensitive receiver locations located off-site were estimated. The estimated exterior noise levels at each of the off-site sensitive receiver locations under Option A and Option B are shown in **Table 4.9-22** and **Table 4.9-23**, respectively. The noise levels presented in Tables 4.9-22 and 4.9-23 accounts for the barrier attenuation provided by the planned 8-foot-high barrier along the project's southwestern boundary, 10-foot-high loading dock barrier, and the 5-foot-high parapet walls.[5]

The operational noise level calculations shown on Tables 4.9-22 and 4.9-23 account for the distance attenuation provided due to geometric spreading, when sound from a localized stationary source (i.e., a point source) propagates uniformly outward in a spherical pattern. With geometric spreading, sound levels attenuate (or decrease) at a rate of 6 dBA for each doubling of distance from a point source (loading dock activities, trash compactor, rooftop air conditioning units, shopping cart carousels, drive-thru speakerphones, and car wash activities) and 4.5 dBA for each doubling of distance from a line source (parking lot vehicle movement, drive-thru vehicle movement).

Table 4.9-22 indicates that the hourly noise levels associated with the project under Option A are expected to range from 40.5 to 43.5 dBA L_{50} at the sensitive receiver locations. Table 4.9-23 indicates that the hourly noise levels associated with the project under Option B are also expected to range from 40.5 to 43.5 dBA L_{50} at the sensitive receiver locations. The operational noise level calculation worksheets are included in Appendix 9.1 of the *Lake Elsinore Walmart Noise Impact Analysis* study, which is included as Appendix I of this EIR.

5 Refer to Exhibits 9-A and 9-B in Appendix I of this EIR for the locations of the project's planned 8-foot-high barrier along the project's southwestern boundary, 10-foot-high loading dock barrier, and the 5-foot-high parapet walls.

TABLE 4.9-22
PROJECT OPTION A OPERATIONAL NOISE LEVEL PROJECTIONS

			Hourly Operational Noise Levels (dBA)c					
Receiver Location[a]	**City**	**Noise Sources[b]**	**Leq (Average)**	**L50**	**L25**	**L8**	**L2**	**Lmax (Anytime)**
R1	City of Lake Elsinore	Rooftop Air Conditioning Unit	41.4	41.1	42.3	43.3	43.9	43.1
		Parking Lot Vehicle Movement	37.8	34.4	38.4	41.4	44.8	57.2
		Shopping Cart Carousel	35.5	24.5	32.9	42.1	45.3	46.0
		Car Wash	38.5	26.1	35.6	44.7	44.9	45.6
		Combined Noise Level:	44.8	42.1	44.7	49.1	50.8	57.9
R2		Rooftop Air Conditioning Unit	41.4	41.1	42.3	43.3	43.9	43.1
		Parking Lot Vehicle Movement	34.1	30.7	34.7	37.7	41.1	53.5
		Shopping Cart Carousel	31.3	20.3	28.7	37.9	41.1	41.8
		Combined Noise Level:	42.5	41.5	43.2	45.2	47.0	54.1
R3		Rooftop Air Conditioning Unit	40.2	39.9	41.1	42.1	42.7	41.9
		Parking Lot Vehicle Movement	29.8	26.4	30.4	33.4	36.8	49.2
		Shopping Cart Carousel	26.5	15.5	23.9	33.1	36.3	37.0
		Trash Compactor	35.1	30.1	31.4	39.7	44.9	45.9
		Combined Noise Level:	41.8	40.5	41.9	44.7	47.7	51.5
R4		Rooftop Air Conditioning Unit	37.5	37.2	38.4	39.4	40.0	39.2
		Trash Compactor	34.0	29.0	30.3	38.6	43.8	44.8
		Loading Dock Activity	39.2	39.1	39.5	39.8	40.1	42.5
		Combined Noise Level:	42.2	41.5	42.3	44.1	46.5	47.5
R5		Rooftop Air Conditioning Unit	37.0	36.7	37.9	38.9	39.5	38.7
		Trash Compactor	33.3	28.3	29.6	37.9	43.1	44.1
		Loading Dock Activity	40.4	40.3	40.7	41.0	41.3	43.7
		Combined Noise Level:	42.6	42.1	42.7	44.2	46.3	47.5
R6		Rooftop Air Conditioning Unit	41.0	40.7	41.9	42.9	43.5	42.7
		Parking Lot Vehicle Movement	30.6	27.2	31.2	34.2	37.6	50.0
		Shopping Cart Carousel	27.8	16.8	25.2	34.4	37.6	38.3
		Loading Dock Activity	40.1	40.0	40.4	40.7	41.0	43.4
		Combined Noise Level:	43.9	43.5	44.5	45.6	46.7	51.7

[a] See Exhibit 9-B in Appendix I of this EIR for the receiver and noise source locations.
[b] Reference noise sources as shown on Table 4.10-21.
[c] Operational noise level calculations are provided in Appendix I of this EIR.

SOURCE: Urban Crossroads, Inc., 2015.

TABLE 4.9-23
PROJECT OPTION B OPERATIONAL NOISE LEVEL PROJECTIONS

			Hourly Operational Noise Levels (dBA)c					
Receiver Location[a]	**City**	**Noise Sources[b]**	**Leq (Average)**	**L50**	**L25**	**L8**	**L2**	**Lmax (Anytime)**
R1	City of Lake Elsinore	Rooftop Air Conditioning Unit	41.4	41.1	42.3	43.3	43.9	43.1
		Parking Lot Vehicle Movement	37.8	34.4	38.4	41.4	44.8	57.2
		Shopping Cart Carousel	35.5	24.5	32.9	42.1	45.3	46.0
		Combined Noise Level:	43.7	42.0	44.1	47.1	49.5	57.7
R2		Rooftop Air Conditioning Unit	41.4	41.1	42.3	43.3	43.9	43.1
		Parking Lot Vehicle Movement	34.1	30.7	34.7	37.7	41.1	53.5
		Shopping Cart Carousel	31.3	20.3	28.7	37.9	41.1	41.8
		Combined Noise Level:	42.5	41.5	43.2	45.2	47.0	54.1
R3		Rooftop Air Conditioning Unit	40.2	39.9	41.1	42.1	42.7	41.9
		Parking Lot Vehicle Movement	29.8	26.4	30.4	33.4	36.8	49.2
		Shopping Cart Carousel	26.5	15.5	23.9	33.1	36.3	37.0
		Trash Compactor	35.1	30.1	31.4	39.7	44.9	45.9
		Combined Noise Level:	41.8	40.5	41.9	44.7	47.7	51.5
R4		Rooftop Air Conditioning Unit	37.5	37.2	38.4	39.4	40.0	39.2
		Trash Compactor	34.0	29.0	30.3	38.6	43.8	44.8
		Loading Dock Activity	39.2	39.1	39.5	39.8	40.1	42.5
		Combined Noise Level:	42.2	41.5	42.3	44.1	46.5	47.5
R5		Rooftop Air Conditioning Unit	37.0	36.7	37.9	38.9	39.5	38.7
		Trash Compactor	33.3	28.3	29.6	37.9	43.1	44.1
		Loading Dock Activity	40.4	40.3	40.7	41.0	41.3	43.7
		Combined Noise Level:	42.6	42.1	42.7	44.2	46.3	47.5
R6		Rooftop Air Conditioning Unit	41.0	40.7	41.9	42.9	43.5	42.7
		Parking Lot Vehicle Movement	30.6	27.2	31.2	34.2	37.6	50.0
		Shopping Cart Carousel	27.8	16.8	25.2	34.4	37.6	38.3
		Loading Dock Activity	40.1	40.0	40.4	40.7	41.0	43.4
		Combined Noise Level:	43.9	43.5	44.5	45.6	46.7	51.7

[a] See Exhibit 9-A in Appendix I of this EIR for the receiver and noise source locations.
[b] Reference noise sources as shown on Table 4.10-21.
[c] Operational noise level calculations are provided in Appendix I of this EIR.

SOURCE: Urban Crossroads, Inc., 2015.

For analysis purposes, the City of Lake Elsinore median noise level (L_{50}) standards for stationary-source (operational) noise are applied to the project-only operational noise levels previously shown on Tables 4.9-22 and 4.9-23. The operational noise levels associated with the proposed project under Option A as they relate to the City's noise standards are shown in **Table 4.9-24**. As shown, the operational noise levels under Option A would not exceed the daytime (7:00 A.M. to 10:00 P.M.) noise level standard of 61 dBA L_{50} or the nighttime (10:00 P.M. to 7:00 A.M.) noise level standard of 51 dBA L_{50} at the sensitive residential locations based on the City's noise standards, which are shown on Table 4.9-20.

The proposed project's operational noise levels under Option B as they relate to the City's noise standards are shown in **Table 4.9-25**. As shown in Table 4.9-25, the project under Option B would also not result in noise levels exceeding the City's noise level standards at any of the sensitive receiver locations.

It should be noted that the projected noise levels for the project under Options A and B assume the worst-case noise environment with all of the on-site noise sources (i.e., loading dock activities, a trash compactor, rooftop air conditioning units, etc.) operating simultaneously. In reality, these noise level impacts will vary throughout the day. Nonetheless, operational noise levels associated with the proposed project under both Option A and Option B would not exceed the City's noise level standards at any of the off-site sensitive receiver locations. As such, impacts associated with operational noise levels would be less than significant.

TABLE 4.9-24
PROJECT OPTION A OPERATIONAL NOISE LEVEL COMPLIANCE

Receiver Location[a]	City	Land Use	Noise Level at Receiver Locations (dBA)[b]						Compliance[c]	
			Leq (Average)	L_{50}	L_{25}	L_8	L_2	L_{max} (Anytime)	Daytime	Nighttime
R1	City of Lake Elsinore	Residential	44.8	42.1	44.7	49.1	50.8	57.9	Yes	Yes
R2		Residential	42.5	41.5	43.2	45.2	47.0	54.1	Yes	Yes
R3		Residential	41.8	40.5	41.9	44.7	47.7	51.5	Yes	Yes
R4		Residential	42.2	41.5	42.3	44.1	46.5	47.5	Yes	Yes
R5		Residential	42.6	42.1	42.7	44.2	46.3	47.5	Yes	Yes
R6		Residential	43.9	43.5	44.5	45.6	46.7	51.7	Yes	Yes

"Daytime" = 7:00 A.M. to 10:00 P.M.; "Nighttime" = 10:00 P.M. to 7:00 A.M.

[a] See Exhibit 9-B in Appendix I of this EIR for the receiver and noise source locations.
[b] Estimated Project stationary source noise levels as shown on Table 4.9-22.
[c] Do the project's estimated stationary source noise levels meet the City of Lake Elsinore noise standards (shown on Table 4.9-20) on the affected land uses?

SOURCE: Urban Crossroads, Inc., 2015.

TABLE 4.9-25
PROJECT OPTION B OPERATIONAL NOISE LEVEL COMPLIANCE

Receiver Location[a]	City	Land Use	Noise Level at Receiver Locations (dBA)[b]						Compliance[c]	
			Leq (Average)	L_{50}	L_{25}	L_8	L_2	L_{max} (Anytime)	Daytime	Nighttime
R1	City of Lake Elsinore	Residential	43.7	42.0	44.1	47.1	49.5	57.7	Yes	Yes
R2		Residential	42.5	41.5	43.2	45.2	47.0	54.1	Yes	Yes
R3		Residential	41.8	40.5	41.9	44.7	47.7	51.5	Yes	Yes
R4		Residential	42.2	41.5	42.3	44.1	46.5	47.5	Yes	Yes
R5		Residential	42.6	42.1	42.7	44.2	46.3	47.5	Yes	Yes
R6		Residential	43.9	43.5	44.5	45.6	46.7	51.7	Yes	Yes

"Daytime" = 7:00 A.M. to 10:00 P.M.; "Nighttime" = 10:00 P.M. to 7:00 A.M.

[a] See Exhibit 9-A in Appendix I of this EIR for the receiver and noise source locations.
[b] Estimated Project stationary source noise levels as shown on Table 4.9-23.
[c] Do the project's estimated stationary source noise levels meet the City of Lake Elsinore noise standards (shown on Table 4.9-20) on the affected land uses?

SOURCE: Urban Crossroads, Inc., 2015.

Although the routine operation of the project would not exceed the City's standards for stationary noise impacts, implementation of Mitigation Measure NOI-2, which requires specific Conditions of Approval for the project, is recommended to further reduce potential operational noise levels received at adjacent residential land uses.

Mitigation Measures:

NOI-1:

The following practices shall be implemented by the project applicant during construction activities:

- Prior to approval of grading plans and/or issuance of building permits, plans shall include a note indicating that noise-generating project construction activities shall only occur between the hours of 7:00 A.M. and 7:00 P.M. on weekdays. Construction is prohibited on weekends and holidays. The project construction supervisor shall ensure compliance with the note and the City shall conduct periodic inspection at its discretion.
- Prior to the start of construction, install temporary noise control barriers that provide a minimum noise level attenuation of 10.0 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 designed to block the view of the noise source.
- Any damage to noise barriers must be repaired within 48 hours. Gaps or holes in the barrier or openings between the barrier and the ground shall be repaired within 48 hours.

- The noise control barriers and associated elements shall be completely removed and the site 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 mufflers operated and maintained 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 a minimum distance of 100 feet between construction-related noise sources and noise-sensitive receivers nearest the project site (i.e., the center of the site) during all project construction.
- The construction contractor shall limit haul truck deliveries to the same hours specified for construction equipment (between the hours of 7:00 A.M. and 7:00 P.M. on weekdays. Construction is prohibited on weekends and holidays). The haul route exhibit shall design delivery routes to minimize the exposure of sensitive land uses or residential dwellings to delivery truck-related noise.

NOI-2:

The following practices shall be adopted as Conditions of Approval prior to the issuance of a building permit for the proposed project:

- All trucks, tractors, and forklifts shall be operated with proper operating and well maintained mufflers, consistent with manufacturer's specifications.
- Maintain pavement conditions that are free of bumps to minimize truck noise.
- The truck access gates and loading docks within the truck court on the project site shall be posted with signs which state:
    - Truck drivers shall turn off engines when not in use.
    - Diesel trucks servicing the Project shall not idle for more than five (5) minutes.
    - Post telephone numbers of the building facilities manager to report violations.

Significance after Mitigation: Significant and unavoidable, during construction.

Impact 4.9-2: 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 ground-borne vibration from the project's construction activities would cause only an

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 a 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.

Ground-borne vibration levels resulting from construction activities occurring within the project site were estimated by data published by the FTA. Construction activities that would have the potential to generate low levels of ground-borne vibration within the project site would occur primarily during the grading phase. Using the vibration source level of construction equipment provided on Table 4.9-15 and the construction vibration assessment methodology published by the FTA, the project's potential vibration impacts at off-site sensitive receiver locations were estimated. **Table 4.9-26** presents the expected project-related vibration levels at each of the six sensitive receiver locations located off-site.

TABLE 4.9-26
CONSTRUCTION EQUIPMENT VIBRATION LEVELS

Noise Receiver[a]	Distance To Property Line (Feet)	Receiver PPV Levels (in/sec)[b]					RMS Velocity Levels (in/sec)[c]	Potential Significant Impact?[d]
		Small Bulldozer	Jack-hammer	Loaded Trucks	Large Bulldozer	Peak Vibration		
R1	209	0.0001	0.0014	0.0031	0.0037	0.004	0.003	No
R2	226	0.0001	0.0013	0.0028	0.0033	0.003	0.002	No
R3	262	0.0001	0.0010	0.0022	0.0026	0.003	0.002	No
R4	312	0.0001	0.0008	0.0017	0.0020	0.002	0.001	No
R5	337	0.0001	0.0007	0.0015	0.0018	0.002	0.001	No
R6	141	0.0002	0.0026	0.0057	0.0066	0.007	0.005	No

[a] Receiver locations are shown on Exhibit 10-A in Appendix I of this EIR.
[b] Based on the vibration source levels for construction equipment shown in Table 4.9-15.
[c] Vibration levels in PPV are converted to RMS velocity using a 0.71 conversion factor identified in the Caltrans' *Transportation and Construction Vibration Guidance Manual*, September 2013.
[d] Does the peak vibration exceed the City's maximum acceptable vibration standard of 0.01 in/sec?

SOURCE: Urban Crossroads, Inc., 2015.

Based on the reference vibration levels provided by the FTA, a large bulldozer represents the peak source of vibration with a reference velocity of 0.089 in/sec (PPV) at a distance of 25 feet. At distances ranging from 141 to 337 feet from the project site, construction vibration velocity levels are expected to range from 0.002 to 0.007 in/sec (PPV), as shown in Table 4.9-26. In order

to assess the human perception of vibration levels in PPV, the velocities are converted to RMS vibration levels based on the Caltrans' *Transportation and Construction Vibration Guidance Manual* conversion factor of 0.71. Table 4.9-26 shows the construction vibration levels in RMS are expected to range from 0.001 to 0.005 in/sec (RMS) at the six receiver locations. Based on the City's vibration standards, the proposed project site will not include or require equipment, facilities, or activities that would result in a "barely perceptible" human response (annoyance).

Further, vibration levels at the site of the closest sensitive receiver are unlikely to be sustained during the entire construction period, but will occur rather only during the times that heavy construction equipment is operating within 100 feet of the project site perimeter. 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.

Overall, impacts associated with groundborne vibration from implementation of the proposed project would be less-than-significant.

Mitigation Measures: None required.

Significance after Mitigation: Less-than-significant.

Impact 4.9-3: Would the project result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?

A potential noise impact associated with project operations could occur if the project's operational noise sources would result in substantial permanent increase in ambient noise levels at nearby sensitive receptors in the project vicinity above levels existing without the project. Noise levels associated with operation of the proposed project would result from the on-site noise sources (i.e., dock activities, a trash compactor, rooftop air conditioning units, shopping cart carousels, drive-thru speakerphones, parking lot vehicle movements, and car wash activities) and project-generated traffic on the local roadway system. The potential for these operational noise sources to result in a substantial permanent increase in ambient noise levels in the project vicinity are evaluated below.

On-Site Operational Noise Levels

To describe the project's operational noise level contributions, the project operational noise levels were combined with the existing ambient noise levels measurements at the sensitive receiver locations. The difference between the combined project and ambient noise levels against the existing ambient noise levels describe the project noise level contributions. Noise levels that would be experienced at receiver locations when project-source noise is added to ambient daytime and nighttime conditions under Option A are presented in **Table 4.9-27** and **Table 4.9-28**, respectively. For Option B, the noise levels that would be experienced at receiver locations when project-source noise is added to ambient daytime and nighttime conditions are presented in **Table 4.9-29** and **Table 4.9-30**, respectively. The noise levels presented in Tables 4.9-27 to 4.9-30 include the attenuation provided by the planned 8-foot-high barrier along the project's southwestern boundary, 10-foot-high loading dock barrier, and the 5-foot-high parapet walls. For the purposes of this analysis, the project's contribution to the ambient noise environment is

shown in energy average (dBA L_{eq}) and median (dBA L_{50}) noise levels due to the City's median noise level (L_{50}) standards for stationary-source (operational) noise.

TABLE 4.9-27
PROJECT OPTION A DAYTIME OPERATIONAL NOISE LEVEL CONTRIBUTIONS

Location			Noise Levels (dBA)						
Receiver[a]	Measurement[b]	Type of Noise	Leq (Average)	L_{50}	L_{25}	L_8	L_2	L_{max} (Anytime)	Potential Significant Impact?[g]
R1	L4	Project Noise Level[c]	44.8	42.1	44.7	49.1	50.8	57.9	No
		Ambient Noise Level[d]	49.0	47.0	48.5	51.0	55.0	67.0	
		Combined[e]	50.4	48.2	50.0	53.2	46.4	67.5	
		Project Contribution[f]	1.4	1.2	1.5	2.2	1.4	0.5	
R2	L1	Project Noise Level[c]	42.5	41.5	43.2	45.2	47.0	54.1	No
		Ambient Noise Level[d]	50.3	48.0	49.5	51.5	57.0	66.3	
		Combined[e]	51.0	48.9	50.4	52.4	47.4	66.6	
		Project Contribution[f]	0.7	0.9	0.9	0.9	0.4	0.3	
R3	L5	Project Noise Level[c]	41.8	40.5	41.9	44.7	47.7	51.5	No
		Ambient Noise Level[d]	51.5	49.5	50.5	52.0	56.0	75.0	
		Combined[e]	51.9	50.0	51.1	52.7	56.6	75.0	
		Project Contribution[f]	0.4	0.5	0.6	0.7	0.6	0.0	
R4	L6	Project Noise Level[c]	42.2	41.5	42.3	44.1	46.5	47.5	No
		Ambient Noise Level[d]	51.7	50.0	51.5	53.5	57.5	69.2	
		Combined[e]	52.2	50.6	52.0	54.0	57.8	69.2	
		Project Contribution[f]	0.5	0.6	0.5	0.5	0.3	0.0	
R5	L6	Project Noise Level[c]	42.6	42.1	42.7	44.2	46.3	47.5	No
		Ambient Noise Level[d]	51.7	50.0	51.5	53.5	57.5	68.2	
		Combined[e]	52.2	50.6	52.0	54.0	57.8	68.2	
		Project Contribution[f]	0.5	0.6	0.5	0.5	0.3	0.0	
R6	L2	Project Noise Level[c]	43.9	43.5	44.5	45.6	46.7	51.7	No
		Ambient Noise Level[d]	53.6	52.5	54.0	55.5	58.0	68.1	
		Combined[e]	54.0	53.0	54.5	55.9	58.3	68.2	
		Project Contribution[f]	0.4	0.5	0.5	0.4	0.3	0.1	

[a] See Exhibit 9-B in Appendix I of this EIR for the receiver and noise source locations.
[b] Measurement locations are shown in Exhibit 5-A in Appendix I of this EIR.
[c] Total operational noise levels as shown on Table 4.9-24.
[d] Existing ambient noise level measurements provided in Appendix 5.2 of the *Lake Elsinore Walmart Noise Impact Analysis* study, which is included as Appendix I of this EIR.
[e] Represents the combined ambient conditions plus the project activities.
[f] he noise level increase expected with the addition of the proposed project activities.
[g] Refer to Table 4.9-14.

SOURCE: Urban Crossroads, Inc., 2015.

TABLE 4.9-28
PROJECT OPTION A NIGHTTIME OPERATION NOISE LEVEL CONTRIBUTIONS

Location			Noise Levels (dBA)						
Receiver[a]	Measurement[b]	Type of Noise	Leq (Average)	L_{50}	L_{25}	L_8	L_2	L_{max} (Anytime)	Potential Significant Impact?[g]
R1	L4	Project Noise Level[c]	44.8	42.1	44.7	49.1	50.8	57.9	No
		Ambient Noise Level[d]	44.4	43.5	44.5	46.0	49.0	54.8	
		Combined[e]	47.6	45.9	47.6	50.8	53.0	59.7	
		Project Contribution[f]	3.2	2.4	3.1	4.8	4.0	4.9	
R2	L1	Project Noise Level[c]	42.5	41.5	43.2	45.2	47.0	54.1	No
		Ambient Noise Level[d]	47.6	43.0	44.5	46.5	54.0	68.5	
		Combined[e]	48.8	45.3	46.9	48.9	54.8	68.7	
		Project Contribution[f]	1.2	2.3	2.4	2.4	0.8	0.2	
R3	L5	Project Noise Level[c]	41.8	40.5	41.9	44.7	47.7	51.5	No
		Ambient Noise Level[d]	45.5	42.5	44.5	47.0	53.5	60.6	
		Combined[e]	47.0	44.6	46.4	49.0	54.5	61.1	
		Project Contribution[f]	1.5	2.1	1.9	2.0	1.0	0.5	
R4	L6	Project Noise Level[c]	42.2	41.5	42.3	44.1	46.5	47.5	No
		Ambient Noise Level[d]	44.7	44.0	45.5	47.0	49.5	53.4	
		Combined[e]	46.6	45.9	47.2	48.8	51.2	54.4	
		Project Contribution[f]	1.9	1.9	1.7	1.8	1.7	1.0	
R5	L6	Project Noise Level[c]	42.6	42.1	42.7	44.2	46.3	47.5	No
		Ambient Noise Level[d]	44.7	44.0	45.5	47.0	49.5	53.4	
		Combined[e]	46.8	46.1	47.3	48.8	51.2	54.4	
		Project Contribution[f]	2.1	2.1	1.8	1.8	1.7	1.0	
R6	L2	Project Noise Level[c]	43.9	43.5	44.5	45.6	46.7	51.7	No
		Ambient Noise Level[d]	47.6	46.0	48.0	50.5	53.0	56.8	
		Combined[e]	49.1	47.9	49.6	51.7	53.9	58.0	
		Project Contribution[f]	1.5	1.9	1.6	1.2	0.9	1.2	

[a] See Exhibit 9-B in Appendix I of this EIR for the receiver and noise source locations.
[b] Measurement locations as shown in Exhibit 5-A in Appendix I of this EIR.
[c] Total operational noise levels as shown on Table 4.9-24.
[d] Existing ambient noise level measurements provided in Appendix 5.2 of the *Lake Elsinore Walmart Noise Impact Analysis* study, which is included as Appendix I of this EIR.
[e] Represents the combined ambient conditions plus the project activities.
[f] The noise level increase expected with the addition of the proposed project activities.
[g] Refer to Table 4.9-14.

SOURCE: Urban Crossroads, Inc., 2015.

TABLE 4.9-29
PROJECT OPTION B DAYTIME OPERATIONAL NOISE LEVEL CONTRIBUTIONS

Location			Noise Levels (dBA)						
Receiver[a]	Measurement[b]	Type of Noise	Leq (Average)	L_{50}	L_{25}	L_8	L_2	L_{max} (Anytime)	Potential Significant Impact?[f]
R1	L4	Project Noise Level[c]	43.7	42.0	44.1	47.1	49.5	57.7	No
		Ambient Noise Level[d]	49.0	47.0	48.5	51.0	55.0	67.0	
		Combined[e]	50.1	48.2	49.9	52.5	56.1	67.5	
		Project Contribution[f]	1.1	1.2	1.4	1.5	1.1	0.5	
R2	L1	Project Noise Level[c]	42.5	41.5	43.2	45.2	47.0	54.1	No
		Ambient Noise Level[d]	50.3	48.0	49.5	51.5	57.0	66.3	
		Combined[e]	51.0	48.9	50.4	52.4	57.4	66.6	
		Project Contribution[f]	0.7	0.9	0.9	0.9	0.4	0.3	
R3	L5	Project Noise Level[c]	41.8	40.5	41.9	44.7	47.7	51.5	No
		Ambient Noise Level[d]	51.5	49.5	50.5	52.0	56.0	75.0	
		Combined[e]	51.9	50.0	51.1	52.7	56.6	75.0	
		Project Contribution[f]	0.4	0.5	0.6	0.7	0.6	0.0	
R4	L6	Project Noise Level[c]	42.2	41.5	42.3	44.1	46.5	47.5	No
		Ambient Noise Level[d]	51.7	50.0	51.5	53.5	57.5	69.2	
		Combined[e]	52.2	50.6	52.0	54.0	57.8	69.2	
		Project Contribution[f]	0.5	0.6	0.5	0.5	0.3	0.0	
R5	L6	Project Noise Level[c]	42.6	42.1	42.7	44.2	46.3	47.5	No
		Ambient Noise Level[d]	51.7	50.0	51.5	53.5	57.5	68.2	
		Combined[e]	52.2	50.6	52.0	54.0	57.8	68.2	
		Project Contribution[f]	0.5	0.6	0.5	0.5	0.3	0.0	
R6	L2	Project Noise Level[c]	43.9	43.5	44.5	45.6	46.7	51.7	No
		Ambient Noise Level[d]	53.6	52.5	54.0	55.5	58.0	68.1	
		Combined[e]	54.0	53.0	54.5	55.9	58.3	68.2	
		Project Contribution[f]	0.4	0.5	0.5	0.4	0.3	0.1	

[a] See Exhibit 9-A in Appendix I of this EIR for the receiver and noise source locations.
[b] Measurement locations as shown on Exhibit 5-A in Appendix I of this EIR.
[c] Total operational noise levels as shown on Table 4.9-25.
[d] Existing ambient noise level measurements provided in Appendix 5.2 of the *Lake Elsinore Walmart Noise Impact Analysis* study, which is included as Appendix I of this EIR.
[e] Represents the combined ambient conditions plus the project activities.
[f] The noise level increase expected with the addition of the proposed project activities.
[g] Refer to Table 4.9-14.

SOURCE: Urban Crossroads, Inc., 2015.

TABLE 4.9-30
PROJECT OPTION B NIGHTTIME OPERATION NOISE LEVEL CONTRIBUTIONS

Location			Noise Levels (dBA)						
Receiver[a]	Measurement[b]	Type of Noise	Leq (Average)	L_{50}	L_{25}	L_8	L_2	L_{max} (Anytime)	Potential Significant Impact?[g]
R1	L4	Project Noise Level[c]	43.7	42.0	44.1	47.1	49.5	57.7	No
		Ambient Noise Level[d]	44.4	43.5	44.5	46.0	49.0	54.8	
		Combined[e]	47.1	45.8	47.3	49.6	52.3	59.5	
		Project Contribution[f]	2.7	2.3	2.8	3.6	3.3	4.7	
R2	L1	Project Noise Level[c]	42.5	41.5	43.2	45.2	47.0	54.1	No
		Ambient Noise Level[d]	47.6	43.0	44.5	46.5	54.0	68.5	
		Combined[e]	48.8	45.3	46.9	48.9	54.8	68.7	
		Project Contribution[f]	1.2	2.3	2.4	2.4	0.8	0.2	
R3	L5	Project Noise Level[c]	41.8	40.5	41.9	44.7	47.7	51.5	No
		Ambient Noise Level[d]	45.5	42.5	44.5	47.0	53.5	60.6	
		Combined[e]	47.0	44.6	46.4	49.0	54.5	6.1	
		Project Contribution[f]	1.5	2.1	1.9	2.0	1.0	0.5	
R4	L6	Project Noise Level[c]	42.2	41.5	42.3	44.1	46.5	47.5	No
		Ambient Noise Level[d]	44.7	44.0	45.5	47.0	49.5	53.4	
		Combined[e]	46.6	45.9	47.2	48.8	51.2	54.4	
		Project Contribution[f]	1.9	1.9	1.7	1.8	1.7	1.0	
R5	L6	Project Noise Level[c]	42.6	42.1	42.7	44.2	46.3	47.5	No
		Ambient Noise Level[d]	44.7	44.0	45.5	47.0	49.5	53.4	
		Combined[e]	46.8	46.1	47.3	48.8	51.2	54.4	
		Project Contribution[f]	2.1	2.1	1.8	1.8	1.7	1.0	
R6	L2	Project Noise Level[c]	43.9	43.5	44.5	45.6	46.7	51.7	No
		Ambient Noise Level[d]	47.6	46.0	48.0	50.5	53.0	56.8	
		Combined[e]	49.1	47.9	49.6	51.7	53.9	58.0	
		Project Contribution[f]	1.5	1.9	1.6	1.2	0.9	1.2	

[a] See Exhibit 9-A in Appendix I of this EIR for the receiver and noise source locations.
[b] Measurement locations as shown on Exhibit 5-A in Appendix I of this EIR.
[c] Total operational noise levels as shown on Table 4.9-25.
[d] Existing ambient noise level measurements provided in Appendix 5.2 of the *Lake Elsinore Walmart Noise Impact Analysis* study, which is included as Appendix I of this EIR.
[e] Represents the combined ambient conditions plus the project activities.
[f] The noise level increase expected with the addition of the proposed project activities.
[g] Refer to Table 4.9-14.

SOURCE: Urban Crossroads, Inc., 2015.

As indicated in Table 4.9-27, the proposed project under Option A is expected to generate a daytime operational noise level contribution of up to 1.4 dBA L_{eq}, 1.2 dBA L_{50}, 1.5 dBA L_{25}, 2.2 dBA L_8, 1.4 dBA L_2, and 0.5 dBA L_{max} at nearby receiver locations. Additionally, as indicated in Table 4.9-28, the proposed project is expected to generate a nighttime operational noise level contribution of up to 3.2 dBA L_{eq}, 2.4 dBA L_{50}, 3.1 dBA L_{25}, 4.8 dBA L_8, 4.0 dBA L_2, and 4.9 dBA L_{max} at nearby receiver locations under Option A. Based on the significance criteria described in Table 4.9-14, the project-related operational noise level contributions to both the daytime and nighttime ambient noise levels at nearby sensitive receiver locations would be less than significant. On this basis, project operational stationary-source noise under Option A would not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project, and impacts in will be less than significant.

As indicated in Table 4.9-29, the proposed project under Option B is expected to generate a daytime operational noise level contribution of up to 1.1 dBA L_{eq}, 1.2 dBA L_{50}, 1.4 dBA L_{25}, 1.5 dBA L_8, 1.1 dBA L_2, and 0.5 dBA L_{max} at nearby receiver locations. Additionally, as indicated in Table 4.9-30, the proposed project is expected to generate a nighttime operational noise level contribution of up to 2.7 dBA L_{eq}, 2.3 dBA L_{50}, 2.8 dBA L_{25}, 3.6 dBA L_8, 3.3 dBA L_2, and 4.7 dBA L_{max} at nearby receiver locations under Option B. Based on the significance criteria described in Table 4.9-14, the project-related operational noise level contributions to both the daytime and nighttime ambient noise levels at nearby sensitive receiver locations would be less than significant. On this basis, project operational stationary-source noise under Option B would not result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the Project, and impacts in will be less than significant.

Roadway Noise Levels

The increase in traffic resulting from implementation of the project could increase the ambient noise levels at land uses fronting the roadways located in proximity to the project site. The estimated roadway noise impacts from the project's vehicular traffic were calculated using a computer program that replicates the FHWA-RD-77-108 Model. Based on *Lake Elsinore Walmart Traffic Impact Analysis* study that is included as Appendix I of this EIR, in combination with an analysis of the surrounding land uses, roadway noise levels were forecasted to determine if the project's vehicular traffic would result in a significant noise impact at receptor locations located in proximity to the project site.

Table 4.9-31 presents a comparison of the traffic noise levels between the "existing without project" and "existing with project" conditions. As shown on Table 4.9-31, the project is expected to generate an exterior noise level increase of up to 3.0 dBA CNEL; however, the ambient conditions where roadway segments 7 and 28 experience a barely perceptible 3.0 dBA CNEL increase are below the applicable significance thresholds described under Section 4.9.3, *Thresholds of Significance*. Therefore, the off-site traffic noise level increases are considered less than significant for existing conditions.

TABLE 4.9-31
EXISTING PROJECT-RELATED TRAFFIC NOISE IMPACTS

			CNEL at Adjacent Land Use (dBA)			
ID	Road	Segment	Without Project	With Project	Project Contribution	Potential Significant Impact?
1	Lakeshore Dr.	n/o Riverside Dr.	71.1	71.2	0.1	No
2	Lakeshore Dr.	s/o Riverside Dr.	68.1	68.2	0.1	No
3	Graham Av.	n/o Main St.	65.3	65.4	0.1	No
4	Lakeshore Dr.	n/o Railroad Cyn. Dr.	70.5	70.5	0.0	No
5	Mission Trail	s/o Railroad Cyn. Dr.	71.1	71.2	0.1	No
6	Gunnerson St.	n/o Riverside Dr.	59.1	60.1	1.0	No
7	Strickland Av.	s/o Riverside Dr.	51.9	54.9	3.0	No
8	Collier Av.	n/o Riverside Dr.	64.3	64.5	0.2	No
9	Collier Av.	s/o Riverside Dr.	72.9	73.3	0.4	No
10	Collier Av.	n/o Central Av.	72.8	73.2	0.4	No
11	Collier Av.	s/o Central Av.	66.7	66.8	0.1	No
12	Casino Dr.	s/o Railroad Cyn. Dr.	65.2	65.3	0.1	No
13	I-15 NB Fwy.	n/o Nichols Rd.	75.1	75.1	0.0	No
14	I-15 SB Fwy.	s/o Nichols Rd.	74.2	74.3	0.1	No
15	I-15 NB Fwy.	n/o Central Av.	75.2	75.2	0.0	No
16	I-15 SB Fwy.	s/o Central Av.	74.6	74.7	0.1	No
17	I-15 NB Fwy.	n/o Main St.	75.7	75.8	0.1	No
18	I-15 SB Fwy.	s/o Main St.	74.7	74.8	0.1	No
19	I-15 NB Fwy.	n/o Railroad Cyn. Dr.	76.0	76.0	0.0	No
20	I-15 SB Fwy.	s/o Railroad Cyn. Dr.	73.9	74.0	0.1	No
21	Dexter Av.	n/o 11th St.	59.6	60.2	0.6	No
22	Dexter Av.	n/o Central Av.	69.0	69.2	0.2	No
23	Dexter Av.	s/o Central Av.	66.7	68.1	1.4	No
24	Dexter Av.	s/o Alan St.	64.9	66.5	1.6	No
25	Dexter Av.	n/o 3rd St.	63.7	64.5	0.8	No
26	Dexter Av.	s/o 3rd St.	63.8	64.7	0.9	No
27	Cambern Av.	n/o Central Av.	67.0	67.2	0.2	No
28	Cambern Av.	n/o 3rd St.	47.2	50.2	3.0	No
29	Riverside Dr.	w/o Lakeshore Dr.	72.7	72.7	0.0	No
30	Riverside Dr.	e/o Lakeshore Dr.	72.2	72.4	0.2	No
31	Riverside Dr.	w/o Gunnerson St.	72.2	72.4	0.2	No
32	Riverside Dr.	e/o Gunnerson St.	72.5	72.9	0.4	No
33	Riverside Dr.	w/o Collier Av.	72.5	72.9	0.4	No
34	Central Av.	e/o Collier Av.	74.1	74.4	0.3	No
35	Central Av.	w/o Dexter Av.	75.6	76.3	0.7	No
36	Central Av.	e/o Dexter Av.	74.8	75.4	0.6	No
37	Central Av.	w/o Cambern Av.	72.6	73.1	0.5	No

TABLE 4.9-31
EXISTING PROJECT-RELATED TRAFFIC NOISE IMPACTS

ID	Road	Segment	CNEL at Adjacent Land Use (dBA)			Potential Significant Impact?
			Without Project	With Project	Project Contribution	
38	Central Av.	e/o Cambern Av.	72.6	72.8	0.2	No
39	Central Av.	e/o Conard Av.	72.2	72.4	0.2	No
40	Central Av.	w/o Rosetta Cyn. Dr.	74.2	74.4	0.2	No
41	Central Av.	e/o Rosetta Cyn. Dr.	73.8	74.0	0.2	No
42	Central Av.	e/o Riverside St.	73.4	73.5	0.1	No
43	Main St.	w/o Graham Av.	65.5	65.8	0.3	No
44	Main St.	e/o Graham Av.	65.4	65.8	0.4	No
45	Main St.	w/o I-15 SB Fwy.	68.1	68.4	0.3	No

"n/o" = north of; "s/o" = south of; "w/o" = west of; "e/o" = east of.

SOURCE: Urban Crossroads, Inc., 2015.

Table 4.9-32 presents a comparison of the traffic noise levels between the "Year 2016 without project" and "year 2016 with project" conditions. As shown on Table 4.9-32, the project is expected to generate an exterior noise level increase of up to 2.4 dBA CNEL; however, the ambient conditions are below the significance thresholds identified under Section 4.9.3, *Thresholds of Significance*. Therefore, the off-site traffic noise level increases are considered less than significant for Year 2016 conditions.

TABLE 4.9-32
YEAR 2016 PROJECT-RELATED TRAFFIC NOISE IMPACTS

ID	Road	Segment	CNEL at Adjacent Land Use (dBA)			Potential Significant Impact?
			Without Project	With Project	Project Contribution	
1	Lakeshore Dr.	n/o Riverside Dr.	71.6	71.7	0.1	No
2	Lakeshore Dr.	s/o Riverside Dr.	68.3	68.4	0.1	No
3	Graham Av.	n/o Main St.	65.5	65.7	0.2	No
4	Lakeshore Dr.	n/o Railroad Cyn. Dr.	71.1	71.2	0.1	No
5	Mission Trail	s/o Railroad Cyn. Dr.	71.8	71.9	0.1	No
6	Gunnerson St.	n/o Riverside Dr.	59.9	60.7	0.8	No
7	Strickland Av.	s/o Riverside Dr.	53.1	55.5	2.4	No
8	Collier Av.	n/o Riverside Dr.	65.3	65.4	0.1	No
9	Collier Av.	s/o Riverside Dr.	73.6	73.9	0.3	No
10	Collier Av.	n/o Central Av.	73.5	73.9	0.4	No
11	Collier Av.	s/o Central Av.	67.4	67.5	0.1	No
12	Casino Dr.	s/o Railroad Cyn. Dr.	66.1	66.2	0.1	No

TABLE 4.9-32
YEAR 2016 PROJECT-RELATED TRAFFIC NOISE IMPACTS

			CNEL at Adjacent Land Use (dBA)			
ID	**Road**	**Segment**	**Without Project**	**With Project**	**Project Contribution**	**Potential Significant Impact?**
13	I-15 NB Fwy.	n/o Nichols Rd.	75.2	75.3	0.1	No
14	I-15 SB Fwy.	s/o Nichols Rd.	74.6	74.6	0.0	No
15	I-15 NB Fwy.	n/o Central Av.	75.3	75.4	0.1	No
16	I-15 SB Fwy.	s/o Central Av.	75.0	75.0	0.0	No
17	I-15 NB Fwy.	n/o Main St.	75.9	76.0	0.1	No
18	I-15 SB Fwy.	s/o Main St.	75.0	75.1	0.1	No
19	I-15 NB Fwy.	n/o Railroad Cyn. Dr.	76.1	76.1	0.0	No
20	I-15 SB Fwy.	s/o Railroad Cyn. Dr.	74.2	74.3	0.1	No
21	Dexter Av.	n/o 11th St.	60.5	60.9	0.4	No
22	Dexter Av.	n/o Central Av.	69.3	69.5	0.2	No
23	Dexter Av.	s/o Central Av.	67.1	68.3	1.2	No
24	Dexter Av.	s/o Alan St.	68.0	68.8	0.8	No
25	Dexter Av.	n/o 3rd St.	64.6	65.3	0.7	No
26	Dexter Av.	s/o 3rd St.	64.5	65.2	0.7	No
27	Cambern Av.	n/o Central Av.	67.7	67.9	0.2	No
28	Cambern Av.	n/o 3rd St.	50.2	52.0	1.8	No
29	Riverside Dr.	w/o Lakeshore Dr.	73.5	73.6	0.1	No
30	Riverside Dr.	e/o Lakeshore Dr.	73.2	73.3	0.1	No
31	Riverside Dr.	w/o Gunnerson St.	73.0	73.2	0.2	No
32	Riverside Dr.	e/o Gunnerson St.	73.3	73.5	0.2	No
33	Riverside Dr.	w/o Collier Av.	73.4	73.7	0.3	No
34	Central Av.	e/o Collier Av.	74.6	75.0	0.4	No
35	Central Av.	w/o Dexter Av.	76.6	77.2	0.6	No
36	Central Av.	e/o Dexter Av.	75.2	75.7	0.5	No
37	Central Av.	w/o Cambern Av.	73.0	73.5	0.5	No
38	Central Av.	e/o Cambern Av.	73.0	73.2	0.2	No
39	Central Av.	e/o Conard Av.	72.6	72.8	0.2	No
40	Central Av.	w/o Rosetta Cyn. Dr.	74.6	74.8	0.2	No
41	Central Av.	e/o Rosetta Cyn. Dr.	74.2	74.4	0.2	No
42	Central Av.	e/o Riverside St.	74.0	74.1	0.1	No
43	Main St.	w/o Graham Av.	66.1	66.3	0.2	No
44	Main St.	e/o Graham Av.	65.9	66.3	0.4	No
45	Main St.	w/o I-15 SB Fwy.	68.6	68.9	0.3	No

"n/o" = north of; "s/o" = south of; "w/o" = west of; "e/o" = east of.

SOURCE: Urban Crossroads, Inc., 2015.

Table 4.9-33 presents a comparison of the traffic noise levels between the "Year 2035 without project" and "Year 2035 with Project" conditions. As shown on Table 4.9-33, the project is expected to generate an exterior noise level increase of up to 0.5 dBA CNEL; however, the ambient conditions are below the significance thresholds identified under Section 4.9.3 (Thresholds of Significance). Therefore, the off-site traffic noise level increases are considered less than significant for Year 2035 conditions.

TABLE 4.9-33
YEAR 2035 PROJECT-RELATED TRAFFIC NOISE IMPACTS

			CNEL at Adjacent Land Use (dBA)			
ID	**Road**	**Segment**	**Without Project**	**With Project**	**Project Contribution**	**Potential Significant Impact?**
1	Lakeshore Dr.	n/o Riverside Dr.	74.2	74.2	0.0	No
2	Lakeshore Dr.	s/o Riverside Dr.	69.3	69.4	0.1	No
3	Graham Av.	n/o Main St.	66.9	67.1	0.2	No
4	Lakeshore Dr.	n/o Railroad Cyn. Dr.	75.1	75.1	0.0	No
5	Mission Trail	s/o Railroad Cyn. Dr.	75.8	75.9	0.1	No
6	Gunnerson St.	n/o Riverside Dr.	63.7	64.0	0.3	No
7	Strickland Av.	s/o Riverside Dr.	62.7	63.1	0.4	No
8	Collier Av.	n/o Riverside Dr.	70.6	70.7	0.1	No
9	Collier Av.	s/o Riverside Dr.	75.8	76.0	0.2	No
10	Collier Av.	n/o Central Av.	76.1	76.3	0.2	No
11	Collier Av.	s/o Central Av.	71.4	71.4	0.0	No
12	Casino Dr.	s/o Railroad Cyn. Dr.	72.0	72.1	0.1	No
13	I-15 NB Fwy.	n/o Nichols Rd.	76.0	76.0	0.0	No
14	I-15 SB Fwy.	s/o Nichols Rd.	76.4	76.5	0.1	No
15	I-15 NB Fwy.	n/o Central Av.	75.8	75.9	0.1	No
16	I-15 SB Fwy.	s/o Central Av.	76.5	76.5	0.0	No
17	I-15 NB Fwy.	n/o Main St.	76.3	76.4	0.1	No
18	I-15 SB Fwy.	s/o Main St.	76.1	76.2	0.1	No
19	I-15 NB Fwy.	n/o Railroad Cyn. Dr.	76.1	76.2	0.1	No
20	I-15 SB Fwy.	s/o Railroad Cyn. Dr.	75.9	75.9	0.0	No
21	Dexter Av.	n/o 11th St.	64.8	65.0	0.2	No
22	Dexter Av.	n/o Central Av.	67.4	67.6	0.2	No
23	Dexter Av.	s/o Central Av.	66.5	66.8	0.3	No
24	Dexter Av.	s/o Alan St.	66.4	66.8	0.4	No
25	Dexter Av.	n/o 3rd St.	65.8	66.3	0.5	No
26	Dexter Av.	s/o 3rd St.	68.2	68.5	0.3	No
27	Cambern Av.	n/o Central Av.	72.5	72.6	0.1	No
28	Cambern Av.	n/o 3rd St.	70.4	70.4	0.0	No
29	Riverside Dr.	w/o Lakeshore Dr.	76.3	76.3	0.0	No
30	Riverside Dr.	e/o Lakeshore Dr.	76.7	76.8	0.1	No

TABLE 4.9-33
YEAR 2035 PROJECT-RELATED TRAFFIC NOISE IMPACTS

			CNEL at Adjacent Land Use (dBA)			
ID	Road	Segment	Without Project	With Project	Project Contribution	Potential Significant Impact?
31	Riverside Dr.	w/o Gunnerson St.	75.1	75.2	0.1	No
32	Riverside Dr.	e/o Gunnerson St.	75.3	75.4	0.1	No
33	Riverside Dr.	w/o Collier Av.	76.5	76.6	0.1	No
34	Central Av.	e/o Collier Av.	76.6	76.9	0.3	No
35	Central Av.	w/o Dexter Av.	77.5	78.0	0.5	No
36	Central Av.	e/o Dexter Av.	77.2	77.7	0.5	No
37	Central Av.	w/o Cambern Av.	75.1	75.5	0.4	No
38	Central Av.	e/o Cambern Av.	75.3	75.4	0.1	No
39	Central Av.	e/o Conard Av.	74.7	74.8	0.1	No
40	Central Av.	w/o Rosetta Cyn. Dr.	76.8	76.9	0.1	No
41	Central Av.	e/o Rosetta Cyn. Dr.	76.6	76.7	0.1	No
42	Central Av.	e/o Riverside St.	77.8	77.9	0.1	No
43	Main St.	w/o Graham Av.	69.1	69.3	0.2	No
44	Main St.	e/o Graham Av.	69.1	69.3	0.2	No
45	Main St.	w/o I-15 SB Fwy.	71.7	71.9	0.2	No

"n/o" = north of; "s/o" = south of; "w/o" = west of; "e/o" = east of.

SOURCE: Urban Crossroads, Inc., 2015.

The off-site traffic noise analysis shows that the existing noise level contribution of 3.0 dBA CNEL will decrease to 2.4 dBA CNEL by Year 2016 conditions, and to 0.5 dBA CNEL by Year 2035 conditions. This shows that the project's incremental traffic-related noise level increases at land uses adjacent to roadways conveying project traffic will diminish over time. This occurs as the background traffic on the study area roadway segments increases and the project represents a smaller percentage of the overall traffic volume. The off-site traffic noise analysis indicates that the project's contributions to roadway noise levels will be less-than significant.

Mitigation Measures: None required.

Significance after Mitigation: Less-than-significant.

Impact 4.9-4: Would the project result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?

The project's construction-related noise levels would represent a short-term increase on the existing ambient noise levels in the immediate project vicinity. Based on the five phases of project construction, the unmitigated construction-related noise impacts are expected to create

temporary and intermittent high-level noise conditions at receivers surrounding the project site when certain activities occur within 100 feet of the project site boundaries.

As discussed under Impact 4.9-1, with implementation of Mitigation Measure NOI-1, the recommended temporary noise control barriers providing a minimum attenuation of 10 dBA would reduce the project's construction noise levels to below the City's 75 dBA L_{max} short-term mobile or 60 dBA L_{max} long-term stationary construction noise level standards at the nearby sensitive receivers. Therefore, the construction of the proposed project will result in noise impacts that are less-than-significant with implementation of Mitigation Measure NOI-1.

Mitigation Measures: Mitigation Measure NOI-1.

Significance after Mitigation: Less-than-significant.

4.9.6 Cumulative Impacts

Cumulative noise assessment considers development of the proposed project in combination with ambient growth and other development projects within the vicinity of the proposed project. As noise is a localized phenomenon, and drastically reduces in magnitude as distance from the source increases, only projects and ambient growth in the nearby area could combine with the proposed project to result in cumulative noise impacts.

Development of the proposed project in combination with the related projects could result in an increase in construction-related and traffic-related noise. However, each of the related projects would be subject to the exterior noise level limits that should be applied to different receiving land uses in the City as established in Section 17.176.060 of the City's Municipal Code. Related projects would also be subject to Section 17.176.080(F) of the City's Municipal Code with respect to construction-related noise levels, which prohibits the operation of any tools or equipment used between weekday hours of 7:00 P.M. and 7:00 A.M., or at any time on weekends or holidays, that will create a noise disturbance across a residential or commercial real-property line. Additionally, the maximum noise levels that are allowable for both mobile and stationary equipment in the City are also defined for different land uses under Section 17.176.080(F).

Construction noise is localized in nature and decreases substantially with distance. Consequently, in order to achieve a substantial cumulative increase in construction noise levels, more than one source emitting high levels of construction noise would need to be in close proximity to the proposed project. The nearest future related project to the project site is the proposed 7,798 square foot (SF) Golden Corral Restaurant development, which is located over 700 feet west of the project site. Due to this distance, and along with the numerous intervening structures located between this related project site and the project site that would serve to reduce construction-related noise levels, a substantial increase in combined construction noise levels would not occur should construction of this related project occur at the same time as the proposed project. Therefore, cumulative noise impacts associated with construction activities would be less than significant.

Cumulative construction in the City may result in the exposure of people to or the generation of excessive groundborne vibration. As described above, the nearest future related project to the proposed project is the proposed Golden Corral Restaurant development located over 700 feet west of the project site. Due to this distance, and the rapid attenuation of groundborne vibration, the proposed project and this related project are not in close enough proximity to each other such that vibration levels generated during construction could potentially affect the same sensitive receptor should construction of this related project occur at the same time as the proposed project. Only receptors located in the immediate vicinity of each construction site would be potentially impacted by each development. Thus, the project would not contribute to cumulative vibration impacts even if concurrent construction occurs for the project and the related project. As such, cumulative impacts associated with groundborne vibration from construction activities would not be cumulatively considerable, and would be less than significant.

Cumulative mobile source noise impacts would occur primarily as a result of increased traffic on local roadways due to the proposed project and related projects within the study area. Therefore, cumulative traffic-generated noise impacts have been assessed based on the contribution of the proposed project to both the near-term (2016) and long-term (2035) cumulative base traffic volumes on the roadway segments in the project vicinity.[6] The noise levels associated with existing traffic volumes and cumulative base traffic volumes with the proposed project (i.e., future cumulative traffic volumes) during both near-term (2016) and long-term (2035) conditions are identified in **Table 4.9-34** and **Table 4.9-35**, respectively**.**

As shown in Tables 4.9-34 and 4.9-35, a total of three roadway segments in the project vicinity would experience an increase in noise levels that exceeds the applicable thresholds identified under Section 4.9.3, *Thresholds of Significance*, as a result of near-term cumulative development along with the proposed project in 2016, while a total of 35 roadway segments in the project site vicinity would experience an increase in noise levels that exceeds applicable thresholds as a result of cumulative development along with the proposed project in 2035, respectively. As such, cumulative impacts related to a substantial permanent increase in traffic noise levels would be cumulatively considerable for these identified roadway segments. However, as shown in Tables 4.9-34 and 4.9-35, the project's contribution to cumulative traffic noise impacts would only reach as high as 1.8 dBA CNEL during near-term (2016) conditions and 0.5 dBA CNEL during long-term (2035) conditions, which would not exceed the significance thresholds identified under Section 4.9.3. Thus, the project's contribution to a substantial permanent increase in traffic noise levels would be less- than-significant.

Mitigation Measures: None required.

Significance after Mitigation: Less-than-significant.

[6] Consistent with the project's traffic assessment in Chapter 4.11, *Transportation and Traffic*, of this EIR, the cumulative traffic noise level analysis was conducted for both the 2017 near-term (i.e., project opening year) and 2035 long-term (General Plan buildout) cumulative conditions scenarios.

TABLE 4.9-34
NEAR-TERM CUMULATIVE ROADWAY NOISE LEVELS WITH PROJECT

			Noise Levels in dBA CNEL[a]							
ID	**Roadway**	**Segment**	**Existing Traffic Volumes**	**Future (2016) Without Traffic Volumes**	**Future (2016) With Project Traffic Volumes**	**Cumulative Increase**	**Significance Threshold[b]**	**Significance of Cumulative Increase?**	**Project Contribution to Cumulative Increase**	**Significance of Project Contribution**
1	Lakeshore Dr.	n/o Riverside Dr.	71.1	71.6	71.7	0.6	1.5	No	0.1	No
2	Lakeshore Dr.	s/o Riverside Dr.	68.1	68.3	68.4	0.3	1.5	No	0.1	No
3	Graham Av.	n/o Main St.	65.3	65.5	65.7	0.4	1.5	No	0.2	No
4	Lakeshore Dr.	n/o Railroad Cyn. Dr.	70.5	71.1	71.2	0.7	1.5	No	0.1	No
5	Mission Trail	s/o Railroad Cyn. Dr.	71.1	71.8	71.9	0.8	1.5	No	0.1	No
6	Gunnerson St.	n/o Riverside Dr.	59.1	59.9	60.7	1.6	5	No	0.8	No
7	Strickland Av.	s/o Riverside Dr.	51.9	53.1	55.5	3.6	5	No	0.4	No
8	Collier Av.	n/o Riverside Dr.	64.3	65.3	65.4	1.1	3	No	0.1	No
9	Collier Av.	s/o Riverside Dr.	72.9	73.6	73.9	1.0	1.5	No	0.3	No
10	Collier Av.	n/o Central Av.	72.8	73.5	73.9	1.1	1.5	No	0.4	No
11	Collier Av.	s/o Central Av.	66.7	67.4	67.5	1.2	1.5	No	0.1	No
12	Casino Dr.	s/o Railroad Cyn. Dr.	65.2	66.1	66.2	1.0	1.5	No	0.1	No
13	I-15 NB Fwy.	n/o Nichols Rd.	75.1	75.2	75.3	0.2	1.5	No	0.1	No
14	I-15 SB Fwy.	s/o Nichols Rd.	74.2	74.6	74.6	0.4	1.5	No	0.0	No
15	I-15 NB Fwy.	n/o Central Av.	75.2	75.3	75.4	0.2	1.5	No	0.1	No
16	I-15 SB Fwy.	s/o Central Av.	74.6	75.0	75.0	0.4	1.5	No	0.0	No
17	I-15 NB Fwy.	n/o Main St.	75.7	75.9	76.0	0.3	1.5	No	0.1	No
18	I-15 SB Fwy.	s/o Main St.	74.7	75.0	75.1	0.4	1.5	No	0.1	No
19	I-15 NB Fwy.	n/o Railroad Cyn. Dr.	76.0	76.1	76.1	0.1	1.5	No	0.0	No
20	I-15 SB Fwy.	s/o Railroad Cyn. Dr.	73.9	74.2	74.3	0.4	1.5	No	0.1	No

TABLE 4.9-34
NEAR-TERM CUMULATIVE ROADWAY NOISE LEVELS WITH PROJECT

			Noise Levels in dBA CNEL[a]							
ID	**Roadway**	**Segment**	**Existing Traffic Volumes**	**Future (2016) Without Traffic Volumes**	**Future (2016) With Project Traffic Volumes**	**Cumulative Increase**	**Significance Threshold[b]**	**Significance of Cumulative Increase?**	**Project Contribution to Cumulative Increase**	**Significance of Project Contribution**
21	Dexter Av.	n/o 11th St.	59.6	60.5	60.9	1.3	5	No	0.4	No
22	Dexter Av.	n/o Central Av.	69.0	69.3	69.5	0.5	1.5	No	0.2	No
23	Dexter Av.	s/o Central Av.	66.7	67.1	68.3	1.6	1.5	Yes	1.2	No
24	Dexter Av.	s/o Alan St.	64.9	68.0	68.8	3.9	3	Yes	0.8	No
25	Dexter Av.	n/o 3rd St.	63.7	64.6	65.3	1.6	3	No	0.7	No
26	Dexter Av.	s/o 3rd St.	63.8	64.5	65.2	1.4	3	No	0.7	No
27	Cambern Av.	n/o Central Av.	67.0	67.7	67.9	0.9	1.5	No	0.2	No
28	Cambern Av.	n/o 3rd St.	47.2	50.2	52.0	4.8	5	No	1.8	No
29	Riverside Dr.	w/o Lakeshore Dr.	72.7	73.5	73.6	0.9	1.5	No	0.1	No
30	Riverside Dr.	e/o Lakeshore Dr.	72.2	73.2	73.3	1.1	1.5	No	0.1	No
31	Riverside Dr.	w/o Gunnerson St.	72.2	73.0	73.2	1.0	1.5	No	0.2	No
32	Riverside Dr.	e/o Gunnerson St.	72.5	73.3	73.5	1.0	1.5	No	0.2	No
33	Riverside Dr.	w/o Collier Av.	72.5	73.4	73.7	1.2	1.5	No	0.3	No
34	Central Av.	e/o Collier Av.	74.1	74.6	75.0	0.9	1.5	No	0.4	No
35	Central Av.	w/o Dexter Av.	75.6	76.6	77.2	1.6	1.5	Yes	0.6	No
36	Central Av.	e/o Dexter Av.	74.8	75.2	75.7	0.9	1.5	No	0.5	No
37	Central Av.	w/o Cambern Av.	72.6	73.0	73.5	0.9	1.5	No	0.5	No
38	Central Av.	e/o Cambern Av.	72.6	73.0	73.2	0.6	1.5	No	0.2	No
39	Central Av.	e/o Conard Av.	72.2	72.6	72.8	0.6	1.5	No	0.2	No
40	Central Av.	w/o Rosetta Cyn. Dr.	74.2	74.6	74.8	0.6	1.5	No	0.2	No
41	Central Av.	e/o Rosetta Cyn. Dr.	73.8	74.2	74.4	0.6	1.5	No	0.2	No
42	Central Av.	e/o Riverside St.	73.4	74.0	74.1	0.7	1.5	No	0.1	No

TABLE 4.9-34
NEAR-TERM CUMULATIVE ROADWAY NOISE LEVELS WITH PROJECT

			Noise Levels in dBA CNEL[a]							
ID	**Roadway**	**Segment**	**Existing Traffic Volumes**	**Future (2016) Without Traffic Volumes**	**Future (2016) With Project Traffic Volumes**	**Cumulative Increase**	**Significance Threshold[b]**	**Significance of Cumulative Increase?**	**Project Contribution to Cumulative Increase**	**Significance of Project Contribution**
43	Main St.	w/o Graham Av.	65.5	66.1	66.3	0.8	1.5	No	0.2	No
44	Main St.	e/o Graham Av.	65.4	65.9	66.3	0.9	1.5	No	0.4	No
45	Main St.	w/o I-15 SB Fwy.	68.1	68.6	68.9	0.8	1.5	No	0.3	No

"n/o" = north of; "s/o" = south of; "w/o" = west of; "e/o" = east of.

[a] Noise levels are at nearest adjacent land use to roadway segment.
[b] Significance criteria are based on the measures of substantial increase for noise exposure outlined in Table 4.9-14.

SOURCE: Urban Crossroads, Inc., 2015.

TABLE 4.9-35
LONG-TERM CUMULATIVE ROADWAY NOISE LEVELS WITH PROJECT

			Noise Levels in dBA CNEL[a]							
ID	**Roadway**	**Segment**	**Existing Traffic Volumes**	**Future (2035) Without Traffic Volumes**	**Future (2035) With Project Traffic Volumes**	**Cumulative Increase**	**Significance Threshold[b]**	**Significance of Cumulative Increase?**	**Project Contribution to Cumulative Increase**	**Significance of Project Contribution**
1	Lakeshore Dr.	n/o Riverside Dr.	71.1	74.2	74.2	3.1	1.5	Yes	0.0	No
2	Lakeshore Dr.	s/o Riverside Dr.	68.1	69.3	69.4	1.3	1.5	No	0.1	No
3	Graham Av.	n/o Main St.	65.3	66.9	67.1	1.8	1.5	Yes	0.2	No
4	Lakeshore Dr.	n/o Railroad Cyn. Dr.	70.5	75.1	75.1	4.6	1.5	Yes	0.0	No
5	Mission Trail	s/o Railroad Cyn. Dr.	71.1	75.8	75.9	4.8	1.5	Yes	0.1	No
6	Gunnerson St.	n/o Riverside Dr.	59.1	63.7	64.0	4.9	5	No	0.3	No
7	Strickland Av.	s/o Riverside Dr.	51.9	62.7	63.1	11.2	5	Yes	0.4	No
8	Collier Av.	n/o Riverside Dr.	64.3	70.6	70.7	6.4	3	Yes	0.1	No
9	Collier Av.	s/o Riverside Dr.	72.9	75.8	76.0	3.1	1.5	Yes	0.2	No
10	Collier Av.	n/o Central Av.	72.8	76.1	76.3	3.5	1.5	Yes	0.2	No
11	Collier Av.	s/o Central Av.	66.7	71.4	71.4	4.7	1.5	Yes	0.0	No
12	Casino Dr.	s/o Railroad Cyn. Dr.	65.2	72.0	72.1	6.9	1.5	Yes	0.1	No
13	I-15 NB Fwy.	n/o Nichols Rd.	75.1	76.0	76.0	0.9	1.5	No	0.0	No
14	I-15 SB Fwy.	s/o Nichols Rd.	74.2	76.4	76.5	2.3	1.5	Yes	0.1	No
15	I-15 NB Fwy.	n/o Central Av.	75.2	75.8	75.9	0.7	1.5	No	0.1	No
16	I-15 SB Fwy.	s/o Central Av.	74.6	76.5	76.5	1.9	1.5	Yes	0.0	No
17	I-15 NB Fwy.	n/o Main St.	75.7	76.3	76.4	0.7	1.5	No	0.1	No
18	I-15 SB Fwy.	s/o Main St.	74.7	76.1	76.2	1.5	1.5	Yes	0.1	No
19	I-15 NB Fwy.	n/o Railroad Cyn. Dr.	76.0	76.1	76.2	0.2	1.5	No	0.1	No
20	I-15 SB Fwy.	s/o Railroad Cyn. Dr.	73.9	75.9	75.9	2.0	1.5	Yes	0.0	No

TABLE 4.9-35
LONG-TERM CUMULATIVE ROADWAY NOISE LEVELS WITH PROJECT

			Noise Levels in dBA CNEL[a]							
ID	Roadway	Segment	Existing Traffic Volumes	Future (2035) Without Traffic Volumes	Future (2035) With Project Traffic Volumes	Cumulative Increase	Significance Threshold[b]	Significance of Cumulative Increase?	Project Contribution to Cumulative Increase	Significance of Project Contribution
21	Dexter Av.	n/o 11th St.	59.6	64.8	65.0	5.4	5	Yes	0.2	No
22	Dexter Av.	n/o Central Av.	69.0	67.4	67.6	(1.4)	1.5	No	0.2	No
23	Dexter Av.	s/o Central Av.	66.7	66.5	66.8	0.1	1.5	No	0.3	No
24	Dexter Av.	s/o Alan St.	64.9	66.4	66.8	1.9	3	No	0.4	No
25	Dexter Av.	n/o 3rd St.	63.7	65.8	66.3	2.6	3	No	0.5	No
26	Dexter Av.	s/o 3rd St.	63.8	68.2	68.5	4.7	3	Yes	0.3	No
27	Cambern Av.	n/o Central Av.	67.0	72.5	72.6	5.6	1.5	Yes	0.1	No
28	Cambern Av.	n/o 3rd St.	47.2	70.4	70.4	23.2	5	Yes	0.0	No
29	Riverside Dr.	w/o Lakeshore Dr.	72.7	76.3	76.3	3.6	1.5	Yes	0.0	No
30	Riverside Dr.	e/o Lakeshore Dr.	72.2	76.7	76.8	4.6	1.5	Yes	0.1	No
31	Riverside Dr.	w/o Gunnerson St.	72.2	75.1	75.2	3.0	1.5	Yes	0.1	No
32	Riverside Dr.	e/o Gunnerson St.	72.5	75.3	75.4	2.9	1.5	Yes	0.1	No
33	Riverside Dr.	w/o Collier Av.	72.5	76.5	76.6	4.1	1.5	Yes	0.1	No
34	Central Av.	e/o Collier Av.	74.1	76.6	76.9	2.8	1.5	Yes	0.3	No
35	Central Av.	w/o Dexter Av.	75.6	77.5	78.0	2.4	1.5	Yes	0.5	No
36	Central Av.	e/o Dexter Av.	74.8	77.2	77.7	2.9	1.5	Yes	0.5	No
37	Central Av.	w/o Cambern Av.	72.6	75.1	75.5	2.9	1.5	Yes	0.4	No
38	Central Av.	e/o Cambern Av.	72.6	75.3	75.4	2.8	1.5	Yes	0.1	No
39	Central Av.	e/o Conard Av.	72.2	74.7	74.8	2.6	1.5	Yes	0.1	No
40	Central Av.	w/o Rosetta Cyn. Dr.	74.2	76.8	76.9	2.7	1.5	Yes	0.1	No
41	Central Av.	e/o Rosetta Cyn. Dr.	73.8	76.6	76.7	2.9	1.5	Yes	0.1	No
42	Central Av.	e/o Riverside St.	73.4	77.8	77.9	4.5	1.5	Yes	0.1	No

TABLE 4.9-35
LONG-TERM CUMULATIVE ROADWAY NOISE LEVELS WITH PROJECT

			Noise Levels in dBA CNEL[a]							
ID	**Roadway**	**Segment**	**Existing Traffic Volumes**	**Future (2035) Without Traffic Volumes**	**Future (2035) With Project Traffic Volumes**	**Cumulative Increase**	**Significance Threshold[b]**	**Significance of Cumulative Increase?**	**Project Contribution to Cumulative Increase**	**Significance of Project Contribution**
43	Main St.	w/o Graham Av.	65.5	69.1	69.3	3.8	1.5	Yes	0.2	No
44	Main St.	e/o Graham Av.	65.4	69.1	69.3	3.9	1.5	Yes	0.2	No
45	Main St.	w/o I-15 SB Fwy.	68.1	71.7	71.9	3.8	1.5	Yes	0.2	No

"n/o" = north of; "s/o" = south of; "w/o" = west of; "e/o" = east of.

[a] Noise levels are at nearest adjacent land use to roadway segment.
[b] Significance criteria are based on the measures of substantial increase for noise exposure outlined in Table 4.9-14.

SOURCE: Urban Crossroads, Inc., 2015.

References

California Department of Transportation (Caltrans), Technical Noise Supplement (TeNS), *A Technical Supplement to the Traffic Noise Analysis Protocol*, October 1998.

California Department of Transportation (Caltrans), *Transportation and Construction Vibration Guidance Manual*, September, 2013.

City of Lake Elsinore, Safety and Welfare Element, *City of Lake Elsinore General Plan*. December 13, 2011.

City of Lake Elsinore, City of Lake Elsinore Municipal Code, <www.codepublishing.com/CA/lakeelsinore/, accessed on June 11, 2015.

Federal Transit Administration (FTA), *Transit Noise and Vibration Impact Assessment*, May 2011.

Federal Interagency Committee on Noise (FICON), Federal Agency Review of Selected Airport Noise Analysis Issues, August 1992.

Governor's Office of Planning and Research (OPR), *General Plan Guidelines*, October 2003.

Urban Crossroads Inc., Lake Elsinore Walmart Noise Impact Analysis (Revised), City of Lake Elsinore, June 11, 2015.

4.10 Public Services

This section of the Draft Environmental Impact Report (EIR) evaluates existing police and fire protection services in the City of Lake Elsinore and describes potential impacts generated by the proposed project. The Initial Study (Appendix A) concluded that no further analysis was required for schools and parks and other public facilities in this Draft EIR.

4.10.1 Environmental Setting

Fire Protection and Emergency Services

The City of Lake Elsinore contracts for fire and emergency services with the Riverside County Fire Department (RCFD) and the California Department of Forestry and Fire Protection (CAL FIRE). There are four fire stations within the City. The closest fire station to the project site is Station No. 97, the Rosetta Canyon Fire Station, which is located at 41725 Rosetta Canyon Drive, approximately 0.75 mile northeast of the northeastern project boundary. Station No. 97 became operational as of June 2013 and has an existing three-apparatus bay, nine-person fire station with the potential to expand to house 12 firefighters (City of Lake Elsinore, 2014a). In addition, Fire Station No. 10, which is located at 410 W. Graham Avenue, is approximately 2.8 miles from the project site. Equipment located at Station 10 includes paramedic Engine 10, Engine 3173 and Engine 3175, Squad 10. Both Stations 97 and 10 provide full service, municipal and wildland fire protection, pre-hospital emergency medical response, technical rescue services and response to hazardous materials discharges (RCFD, 2014).

The fire stations within the City limits are operated by RCFD; however, CAL FIRE staffs firefighters and stores firefighting equipment at the stations, especially during peak fire season. Both agencies respond to all types of emergencies, depending on the need. RCFD guidelines call for the response time to any location within the City to be seven (7) minutes, with the intent to reduce that time to five (5) minutes (General Plan, 2011).

Police Protection

The Lake Elsinore Police Department (LEPD) is a contract service from the Riverside County Sheriff's Department. The LEPD is responsible for local, state and federal statutes, public safety, traffic enforcement and maintaining public order (City of Lake Elsinore, 2014b).

The LEPD Station, located at 333 Limited Avenue approximately 1.7 miles south of the project site. The City is staffed at approximately 0.85 officers per 1,000 residents with a goal of 1.0 officer per 1,000 residents (General Plan, 2011). Average response times for City police protection vary due to the differing priorities of each call received by 911 and dispatched to officers (General Plan, 2011). During the fiscal year 2010/2011, the average response time for priority one calls was 6.98 minutes; for priority two calls, 16.33 minutes; for priority three calls, 36.91 minutes; and for priority four calls, 56.72 minutes (General Plan, 2011).
The Police Department also utilizes Reserve Police Officers, who are volunteers that are fully trained as police officers and offer an additional level of service and cost savings to the City of Lake Elsinore (General Plan, 2011).

4.10.2 Regulatory Setting

Regional

Riverside County Fire Department Strategic Plan 2009–2029

The RCFD Strategic Plan (Strategic Plan) was devised to set goals and priorities for the future with its limited financial resources. The Strategic Plan includes strategies and implementation action plans centered on its goals, which include fiscal sustainability, efficient and effective performance, well-maintained facilities and the provision of cost effective services while maintaining a high level of customer service:

The Strategic Plan lists several factors that have been and that are projected to affect the fire service, including building code improvements, an aging population, technological innovations, legislative and regulatory changes, changing climate and decreased water supply. As a result of these factors, structure fires are on the decrease, and medical emergencies and wildfires are on the increase (Management, 2009).

Local

Lake Elsinore General Plan

Goal 4: Adhere to an integrated approach to minimizing the threat of wildland fires to protect life and property using pre-fire management, suppression, and post-fire management.

Policy 4.1: Require on-going brush clearance and establish low fuel landscaping policies to reduce combustible vegetation along the urban/wildland interface boundary.

Policy 4.2: Create fuel modification zones around development within high hazard areas by thinning or clearing combustible vegetation within 100 feet of buildings and structures. The fuel modification zone size may be altered with the addition of fuel resistant building techniques. The fuel modification zone may be replanted with fire-resistant material for aesthetics and erosion control.

Policy 4.3: Establish fire resistant building techniques for new development such as non-combustible wall surfacing materials, fire-retardant treated wood, heavy timber construction, glazing enclosed materials and features, insulation without paper-facing, and automatic fire sprinklers.

Policy 4.4: Encourage programs that educate citizens about the threat of human wildfire origination from residential practices such as outdoor barbeques and from highway use such as cigarette littering.

Goal 8: Provide efficient and effective public safety services for the community.

Policy 8.1: Continue to follow Riverside County Fire Department most current guidelines to achieve standard response times and staffing levels.

Policy 8.2: Coordinate with the County of Riverside to provide adequate police service and staffing levels.

Policy 8.3: Continue to provide Lake Patrol personnel who enforce boating rules and regulations, and perform rescue tactics.

Policy 8.4: Promote the establishment of programs such as Neighborhood Watch and Crime-Free Multi-Housing in conjunction with law enforcement agencies to encourage community participation in the surveillance of neighborhoods.

Lake Elsinore Municipal Code

Fire Code

According to Chapter 15.56, *Fire Code* of the City Municipal Code, the City has adopted the California Fire Code as published by the California Building Standards Commission and the International Code Council (with some City-specific amendments). The California Fire Code is Title 24, Part 9 of the California Code of Regulations, and regulates new structures, alterations, additions, changes in use or changes in structures. The Code includes specific information regarding safety provisions, emergency planning, fire-resistant construction, fire protection systems, means of egress and hazardous materials.

Burning and Fire Hazards

As detailed in Chapter 8.20, *Burning and Fire Hazards* of the City Municipal Code, the City includes policies pertaining to the prevention of inflammables accumulation and allowed burning and incinerator use.

Development Impact Fees

Chapter 16.74 of the Lake Elsinore Municipal Code establishes a "program for the adoption and administration of development impact fees by the City for the benefit of the citizens whereby as a condition to the issuance of a building permit or certificate of occupancy by the City the property owner or land developer will be required to pay development impact fees or provide other consideration to the City for the purpose of defraying the costs of public expenditures for capital improvements (and operational services to the extent allowed by law) which will benefit such new development."

Section 16.74.049 is intended to mitigate burdens created by new development for City fire facilities. According to the Lake Elsinore Capital Improvement Fund Development Fees list, all developers must pay fees per 1,000 square-feet (SF) of commercial development (City of Lake Elsinore, 2014c).

4.10.3 Thresholds of Significance

According to Appendix G of the California Environmental Quality Act (CEQA) Guidelines, the proposed project could have a potentially significant impact with respect to public services if it would:

- Result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the following public services:
  - Fire protection
  - Police protection
  - Schools
  - Parks
  - Other public facilities

As determined in the Initial Study/Notice of Preparation (Appendix A), implementation of the proposed project would not result in impacts with regard to schools, parks or any other public facilities. Therefore, no further analysis of those significance criteria is included in the EIR.

4.10.4 Methodology

The threshold of significance for this topic focuses on whether there would be adverse physical impacts associated with new or altered facilities for the provision of fire or law enforcement services. The methodology, therefore, evaluates the ability to serve the City and proposed project using the existing fire and police facilities and the potential need for new or physically altered facilities.

4.10.5 Impact Analysis

Impact 4.10-1: Would the project result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered fire protection facilities?

As described above, the closest fire station to the project site is Station 97, located approximately 0.75 mile northeast of the site. Also, Station 10 is located 2.8 miles from the site. Both stations are within five minutes driving time to the site. The proposed project would introduce new commercial structures and employees and visitors to a site that is currently undeveloped. This would increase the potential for fire or emergency medical needs to occur on-site, which would in turn require services by the existing fire stations. The service demands resulting from the proposed project could increase the need for additional equipment or personnel.

As described above, Fire Station No. 97 currently has the structural potential to expand its personnel from nine to twelve firefighters if necessary (City of Lake Elsinore, 2014a). However, the General Plan EIR has evaluated the city's fire service capacity and has determined that no additional facilities or staffing would be required to serve build out of the 3rd Street Annexation area, within which a portion of the project site is located (General Plan, 2011). The 3rd Street Annexation area considered commercial retail development for the project area.

Station 97, which would serve the project site, is new (June 2013) and has the potential to expand; and Fire Station No. 10 is approximately 2.8 miles from the project site, existing fire facilities and equipment are in place to service the project and new fire facilities would not be required to be developed or expanded to serve the proposed project. As a result, the project would not result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered fire protection facilities.

Moreover, the City's General Plan EIR states that individual projects implemented pursuant to the Land Use Plan will be required to demonstrate their avoidance of significant impacts associated with public services related to: (1) law enforcement facilities, (2) fire protection facilities, (3) schools, (4) libraries, and (5) animal control through implementation of the following:

- Compliance with applicable state and local laws and regulations
- Policy 1.6 of the Community Form chapter, Land Use section
- Policies 8.1 through 8.4 under Goal 8 of the Community Facilities and Protection Services section of the Public Safety and Welfare chapter
- Goals 9 through 11 and associated policies of the Community Facilities and Protection Services section of the Public Safety and Welfare chapter addressing schools, libraries, and animal control services

Additionally, to reduce the risk of fires and need for fire services, the proposed project is required to comply with the California Fire Code as adopted by the City, which regulates hydrants, water flow, fuel modification zones, access designs, and use of fire resistant materials. The proposed project would also be subject to Municipal Code Chapter 8.20, *Burning and Fire Hazards*, which prevents the accumulation of inflammables. Moreover, upon project approval, the project proponent would be required to comply with Chapter 16.74 of the Lake Elsinore Municipal Code which requires the payment of development impact fees for the purpose of defraying the costs of public expenditures for capital improvements (and operational services to the extent allowed by law). Therefore, the proposed project would not result in a substantial adverse physical impact associated with the provision of, or the need for, new or physically fire protection facilities and less-than-significant impacts would occur.

Mitigation Measures: None required.

Significance after Mitigation: Less-than-significant.

Impact 4.10-2: Would the project result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered police protection facilities?

The Lake Elsinore police station is 1.72 miles south of the project site. The City's General Plan EIR has evaluated police facilities and staffing and has determined that no additional facilities or staffing would be required to serve build out of the 3rd Street Annexation area, within which the project site is located. In addition, the City's General Plan includes measures to meet the service needs of the City as it grows, including a City annual review of police services and staff ratios (Goal 8 General Plan Implementation Program) and coordination with the County of Riverside to

provide adequate police service and staffing levels (Policy 8.2). Furthermore, City development fees require that commercial projects pay fees per 1,000 SF to defray public expenditures for the expansion of services.

Although the project would increase the amount of employees and visitors to the site, thereby potentially requiring increased police protection services, the project would provide security systems and staff to provide theft management and promote patron safety**.** Calls for police services from the proposed project would be minimized through the provision of on-site security personnel 24 hours a day at the Walmart Supercenter that would monitor and patrol the store and parking areas. Security personnel would serve as a first line of defense against criminal activities and nuisances, and would be able to resolve minor incidents that ordinarily would not warrant a police response (e.g., a lost child or a verbal dispute between customers). In addition, exterior lighting would be provided along buildings and in the parking area, which would serve to deter criminal activity during the nighttime hours.

Due to the existing police services ability to service the proposed project and the additional security that would be provided by the project proponent, no significant impacts are anticipated. The project would not result in substantial adverse physical impacts associated with the provision of, or the need for, new or physically altered law enforcement facilities. Furthermore, impacts related to law enforcement services would be less-than-significant.

Mitigation Measures: None required.

Significance after Mitigation: Less-than-significant.

4.10.6 Cumulative Impacts

The geographic context for cumulative fire protection and police services is the City of Lake Elsinore, which is the service area relative to the City's contracts for services with the Riverside County Fire and Sheriff's Departments and the area currently served by existing fire and police facilities within the City.

As described above, the project would comply with the applicable fire and public safety related regulations and provide on-site measures, such as security and fire resistant building materials to reduce demands related to fire and police services; and the project would be served by existing law enforcement and fire facilities that have adequate capacity to service the project. However, increased development within the City, such as the projects listed in Table 3-8, could eventually require additional service facilities, such as a sheriff's substation. As a result, both the project and cumulative projects would be required to pay development impact fees to offset potential future demands for fire and police services. The General Plan EIR describes that implementation of future development in accordance with its Land Use Plan (that the proposed project is consistent with as described in Section 4.8, *Land Use and Planning*) would not have significant cumulative impacts upon physical impacts associated with or the need for, new or physically altered fire protection facilities or law enforcement police protection facilities. Furthermore, because the proposed project would not require new facilities and would contribute toward funding future

facilities, cumulative impacts associated with fire and police service facilities would be less-than-significant.

Mitigation Measures: None required.

Significance after Mitigation: Less-than-significant.

References

City of Lake Elsinore, City of Lake Elsinore Municipal Code, www.codepublishing.com/CA/lakeelsinore/, accessed April 19, 2015.

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Riverside County Fire Department (RCFD), Riverside County Fire Department, 2014, http://www.rvcfire.org/Pages/default.aspx accessed on March 21, 2014.

Management Partners, Incorporated (Management), Riverside County Fire Department Strategic Plan 2009-2029, November 2009,.http://www.rvcfire.org/stationsAndFunctions/AdminSppt/StrategicPlanning/Documents/StrategicPlan2009.pdf accessed on March 24, 2014.

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4.11 Transportation and Traffic

This section of the Draft Environmental Impact Report (EIR) evaluates the existing transportation and traffic environment in the project vicinity, evaluates potential significant impacts created by the project, and recommends mitigation measures to reduce the significance of impacts. This analysis is a summary of the Transportation Impact Analysis (TIA) report prepared in 2015 by Urban Crossroads, which is provided in Appendix J of this EIR. The program-level traffic analysis evaluates the following scenarios:

- Baseline Traffic Conditions[1]
- Baseline Plus Project Traffic Conditions
- Near-Term Cumulative (Opening Year 2016) Base Traffic Conditions – ambient growth and cumulative development projects[2]
- Near-Term Cumulative (Opening Year 2016) Plus Project Traffic Conditions
- Long-Term Cumulative (General Plan Buildout Post-2035) Base Traffic Conditions
- Long-Term Cumulative (General Plan Buildout Post-2035) Plus Project Traffic Conditions

4.11.1 Environmental Setting

Roadway Network

Regional Roadways

Interstate 15 (I-15): I-15 is a major north–south state highway connecting San Bernardino, Riverside, and San Diego Counties. To the north, I-15 connects with the Riverside Freeway (State Route 91), the Pomona Freeway (State Route 60), and the San Bernardino Freeway (Interstate 10) and is the link to greater Los Angeles and the Inland Empire. To the south, I-15 connects with the Escondido Freeway (I-215) and is the link to San Diego County. Currently, I-15 has three lanes in each direction within the Lake Elsinore Sphere of Influence (General Plan, 2011).

State Route 74 (SR 74): SR 74 is an east-west state highway connecting the City of San Juan Capistrano with the City of Palm Desert, passing through the City of Lake Elsinore as Central Avenue. In the project area, SR 74 has four to six travel lanes.

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1 Weekday PM peak-hour and Saturday peak-hour intersection counts were conducted in May 2013. Although the date of the project Notice of Preparation (NOP) was May 2014, the traffic counts that reflect May 2013 for baseline conditions are considered representative of the conditions that existed at the time of the NOP's release. In other words, the City experienced nominal traffic growth due to new development between May 2013 and May 2014, there were few changes to street configurations within the study area, and ambient growth in traffic was also nominal over the same time period.

2 The traffic analysis presented in this section (see page 4.11-28) was prepared at a time when the project's opening year was expected to be 2016. However, the opening year is now anticipated to be 2017. Although this change adds another year of 2% growth in traffic volumes in the study area, the impact determinations for the Near-Term Cumulative condition is unaffected (i.e., no new significant impacts would occur beyond those identified in this section).

Local Access Roadways

The proposed project would have access on Central Avenue (SR 74), Cambern Avenue (two driveways) and Dexter Avenue (via Crane Street and Allan Street), with two truck access driveways on 3rd Street. All project access points are proposed to be full-access, with the exception of Driveway 1 on Central Avenue and Driveway 2 on Cambern Avenue, both of which would provide right-in/right-out access only.

Pedestrian and Bicycle Facilities

The City's pedestrian network includes all the paved sidewalks and trails in Lake Elsinore. There are several local roadways (including some adjacent to the project site) that do not have paved pedestrian facilities. In addition, some of the bus stops are not accessible by paved sidewalks, and transit riders must wait along the side of the road in unpaved areas (General Plan, 2011). There is a Regional Trail south of the proposed project along 2nd Street/Wasson Canyon Road and the Lake Elsinore Lake, River, Levee Regional Trail that runs along Alberhill Creek (Urban Crossroads, 2015). Bikeways are classified, by type, with the following class designations:

- **Class I bikeways** are dedicated trails, separated from vehicular traffic. There are no Class I bikeway facilities within the study area.
- **Class II bikeways** are striped bike lanes on roadways. There currently are no Class II bike lanes within the study area. However, there are planned Class II bikeways along Nichols Road, Collier Avenue, Riverside Drive, Camino del Norte, 11th Street, Lakeshore Drive, La Strada, Railroad Canyon Road/Diamond Drive, Grape Street, and Greenwald Avenue.
- **Class III bikeways** are designated bike routes on roadways, although they are not striped, and bicyclists shared the road width with vehicles. There currently are no Class III bike routes within the study area. However, future Class III bikeways are planned along North Main Street, Summerhill Drive, and Camino del Norte (south of North Main Street).

Transit Service

The project area is currently served by the Riverside Transit Agency (RTA) with bus services along the I-15 Freeway, Nichols Road, Collier Avenue, and Central Avenue (SR 74) via Commuter Route 206; along Collier Avenue and Central Avenue (SR 74) via Route 22; and along Collier Avenue, Chaney Street, Graham Avenue, Lakeshore Drive, Diamond Drive and Grape Street, via Route 7. The RTA Route 22 would serve the project site. The proposed project would provide a bus turnout for a future stop along its frontage on Central Avenue.

Baseline Traffic Conditions

The intersection level of service (LOS) analysis is based on the peak-hour traffic volumes collected in May 2013 (see page 4.11-12 regarding LOS analysis methodologies). The following peak hours were selected for analysis:

- Weekday AM Peak Hour (peak hour between 7:00 AM and 9:00 AM)

- Weekday PM Peak Hour (peak hour between 4:00 PM and 6:00 PM)
- Saturday Mid-Day Peak Hour (peak hour between 12:00 PM and 3:00 PM)

There were no indications of atypical traffic conditions on the count dates, such as construction activity or detour routes. Traffic counts at intersections of freeway ramps and local roads included a breakdown of vehicle types (passenger cars and trucks of different sizes). The raw manual peak hour turning movement traffic count data sheets are included in Appendix J of this EIR.

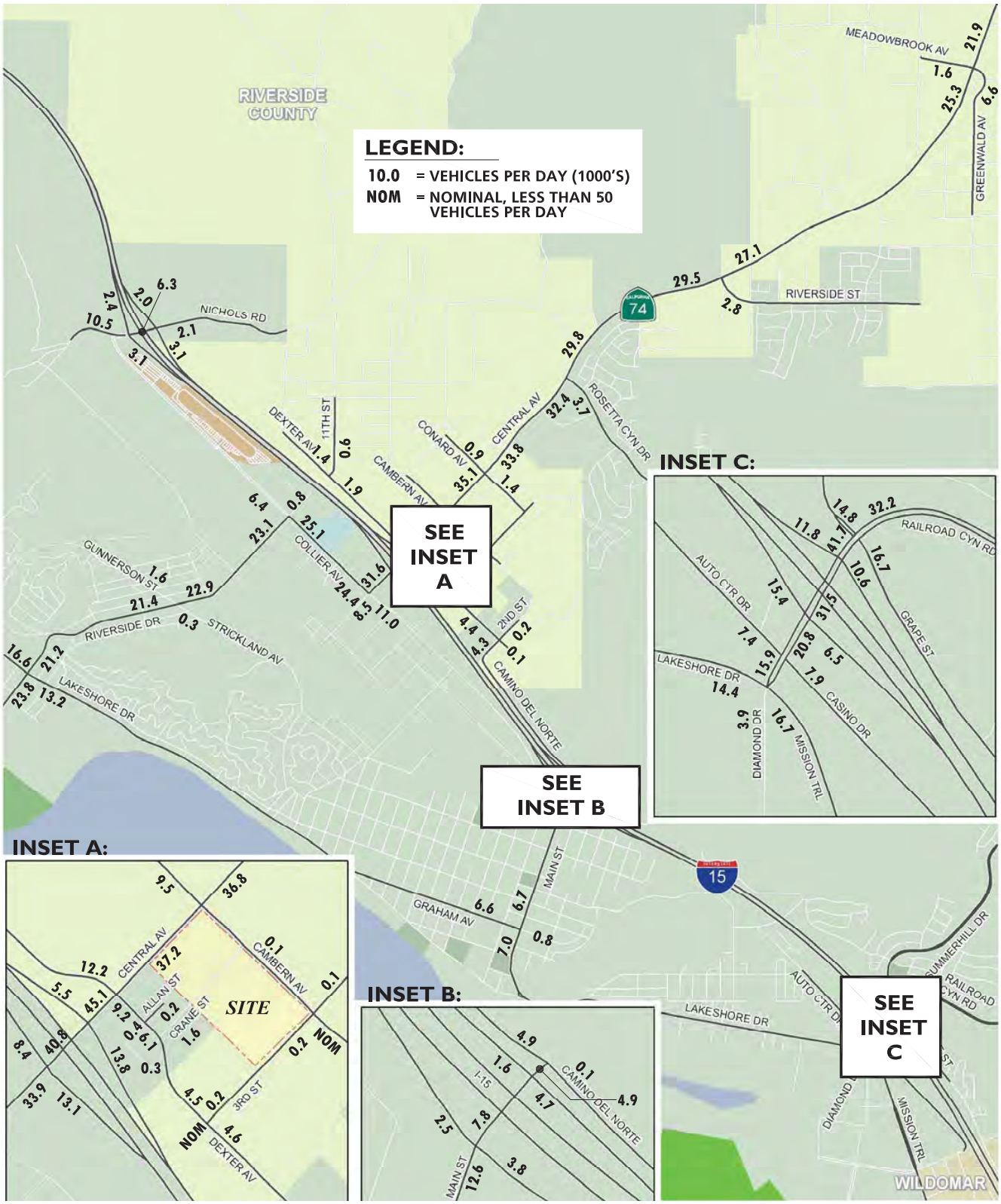
To represent the impact large trucks, buses and recreational vehicles have on traffic flow, trucks counted in the May 2013 data were converted into Passenger Car Equivalents (PCEs). By their size alone, these vehicles occupy more space than passenger cars. In addition, the time it takes for them to accelerate and decelerate is longer than for passenger cars, and varies depending on the type of vehicle and number of axles.

Baseline weekday AM, weekday PM, and Saturday mid-day peak-hour traffic volumes at the study intersections are shown on **Figure 4.11-1a** of this EIR and Exhibits 3-11, 3-12, and 3-13, respectively, of the TIA in Appendix J of this EIR. Baseline average daily traffic (ADT) volumes on arterial highways throughout the study area are shown on Exhibit 3-10 of the TIA in Appendix J of this EIR. Baseline ADT volumes are based upon factored intersection peak hour counts, using the assumption that PM peak-hour traffic volumes are approximately eight to nine percent of the total 24-hour volume on select road segments.

Baseline Intersection LOS Conditions

Baseline peak hour traffic operations have been evaluated for the study area intersections based on the analysis methodologies presented in Section 4.11.3, *Methodology*. As shown on **Figure 4.11-1b** and in **Table 4.11-1**, all but the following six study area intersections currently operate at acceptable LOS (i.e., LOS D or better) during the peak hours:

3. East Lakeshore Drive / Diamond Drive – LOS F, AM, PM. and Saturday peak hours
4. Gunnerson Street / Riverside Drive (SR 74) – LOS E, AM peak hour; LOS F, PM and Saturday peak hours
11. I-15 Southbound Ramps / Railroad Canyon Road – LOS F, PM peak hour; LOS E, Saturday peak hour
12. I-15 Northbound Ramps / Nichols Road LOS E, AM peak hour
14. I-15 Northbound Ramps / North Main Street – LOS F, AM and PM peak hours
23. Summerhill Drive / Railroad Canyon Road – LOS F, AM, PM. and Saturday peak hours

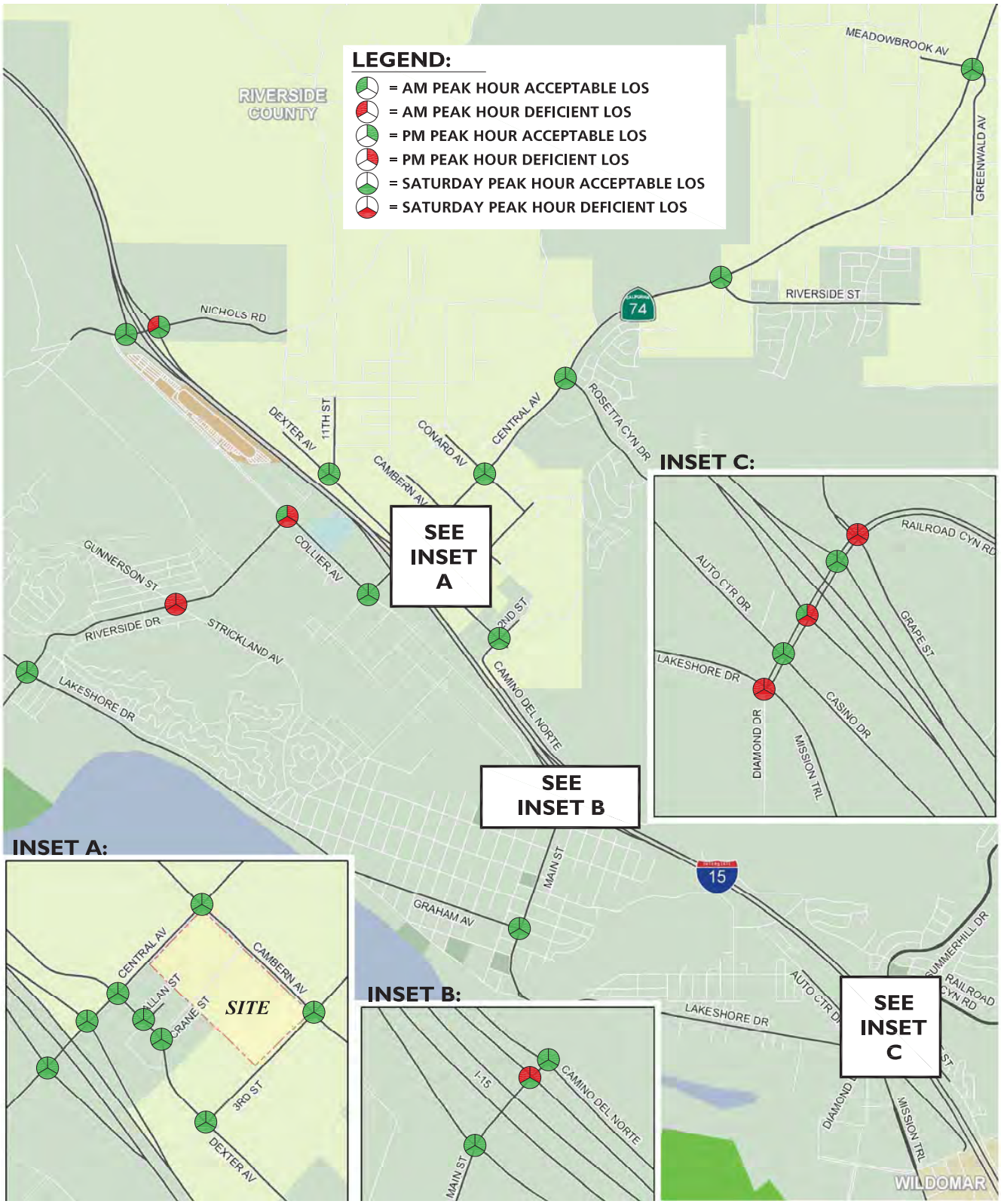


SOURCE: Urban Crossroads

Lake Elsinore Walmart Supercenter Project EIR . 130767

Figure 4.11-1a

Existing (2013) Average Daily Traffic (ADT)



SOURCE: Urban Crossroads

Lake Elsinore Walmart Supercenter Project EIR . 130767

Figure 4.11-1b

Summary of Peak Hour Intersections LOS for Existing (2013) Conditions

TABLE 4.11-1
INTERSECTION LEVEL OF SERVICE ANALYSIS – BASELINE CONDITIONS

#	Intersection	Traffic Control[a]	Delay (secs.)[b]			Level of Service		
			AM	PM	Sat	AM	PM	Sat
1	Lakeshore Dr / Riverside Dr (SR 74)	TS	41.3	43.7	43.5	D	D	D
2	W Graham Av / N Main St	AWS	9.0	11.8	10.4	A	B	B
3	E Lakeshore Dr / Diamond Dr	TS	**147.6**	**204.9**	**259.2**	**F**	**F**	**F**
4	Gunnerson St / Riverside Dr (SR 74)	CSS	**47.0**	**141.9**	**156.3**	**E**	**F**	**F**
5	Collier Av / Riverside Dr (SR 74)	TS	12.4	17.3	20.1	B	B	C
6	Collier Av / Central Av (SR 74)	TS	37.9	35.8	33.2	D	D	C
7	Auto Center Dr / Diamond Dr	TS	22.8	23.8	24.5	C	C	C
8	I-15 SB Ramps / Nichols Rd	AWS	10.1	9.7	9.2	B	A	A
9	I-15 SB Ramps / Central Av (SR 74)	TS	24.5	31.6	25.1	C	C	C
10	I-15 SB Ramps / N Main St	CSS	12.9	13.9	10.5	B	B	B
11	I-15 SB Ramps / Railroad Canyon Rd	TS	50.1	**96.1**	**63.7**	D	**F**	**E**
12	I-15 NB Ramps / Nichols Rd	CSS	**40.1**	30.2	19.0	**E**	D	C
13	I-15 NB Ramps / Central Av (SR 74)	TS	20.8	23.7	21.4	C	C	C
14	I-15 NB Ramps / N Main St	CSS	**57.7**	**52.9**	15.9	**F**	**F**	C
15	I-15 NB Ramps / Railroad Canyon Rd	TS	36.1	46.6	28.4	D	D	C
16	Dexter Av / 11th St	CSS	9.9	9.4	9.4	A	A	A
17	Dexter Av / Central Av (SR 74)	TS	32.3	33.4	33.9	C	C	C
18	Dexter Av / Allan St	CSS	10.4	11.1	10.0	B	B	A
19	Dexter Av / Crane St	CSS	10.0	11.9	9.8	B	B	A
20	Dexter Av / 3rd St	CSS	10.1	10.2	9.4	B	B	A
21	Dexter Av / 2nd St	AWS	8.6	8.7	8.0	A	A	A
22	Camino del Norte / N Main St	CSS	10.2	10.5	9.8	B	B	A
23	Summerhill Dr / Railroad Canyon Rd	TS	**92.5**	**146.1**	**94.5**	**F**	**F**	**F**
24	Driveway 1 / Central Av (SR 74)	*Does not currently exist (Project Access Driveway)*						
25	Cambern Av / Central Av (SR 74)	TS	16.9	23.8	25.9	B	C	C
26	Cambern Av / Driveway 2	*Does not currently exist (Project Access Driveway)*						
27	Cambern Av / Driveway 3	*Does not currently exist (Project Access Driveway)*						
28	Cambern Av / 3rd St	AWS	6.8	6.9	6.9	A	A	A
29	Conard Av / Central Av (SR 74)	TS	18.1	22.3	18.8	B	C	B
30	Rosetta Canyon Dr / Central Av (SR 74)	TS	18.6	16.5	15.0	B	B	B
31	Riverside St / Central Av (SR 74)	TS	13.4	14.5	12.7	B	B	B
32	Greenwald Av / Central Av (SR 74)	TS	21.8	22.5	21.7	C	C	C

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

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

[b] Overall average intersection delay and level of service are shown for intersections with a traffic signal or all-way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.

SOURCE: Urban Crossroads, 2015

Baseline Basic Freeway Segment Conditions

Baseline mainline directional volumes for the weekday AM, weekday PM and Saturday mid-day peak hours are provided on Exhibit 3-15 of the TIA in Appendix J of this EIR. As shown in **Table 4.11-2**, the I-15 study segments currently operate at an acceptable LOS (i.e., LOS D or better) during the peak hours, with the exception of the northbound segment between North Main Street and Railroad Canyon, which operates at LOS E during the PM peak hour. Basic freeway segment analysis worksheets are provided in Appendix J of this EIR. See page 4.11-13 regarding analysis methodologies.

TABLE 4.11-2
BASIC FREEWAY SEGMENT ANALYSIS – INTERSTATE 15 – BASELINE CONDITIONS

Direction	Mainline Segment	Lanes	Volume[a]			Density[b]			LOS		
			AM	PM	SAT	AM	PM	SAT	AM	PM	SAT
Southbound	North of Nichols Road	3	2,813	3,760	3,328	15.3	20.6	18.2	B	C	C
	Nichols Road to Central Avenue (SR 74)	3	2,823	3,821	3,359	15.4	20.9	18.3	B	C	C
	Central Avenue (SR 74) to North Main Street	3	3,429	4,211	3,841	18.5	22.9	20.8	C	C	C
	North Main Street to Railroad Canyon Road	3	3,687	4,320	3,927	19.8	23.6	21.3	C	C	C
	South of Railroad Canyon Rd	3	3,625	3,580	3,327	19.4	19.5	18.2	C	C	C
Northbound	North of Nichols Road	3	4,429	4,666	4,332	24.6	26.2	24.0	C	D	C
	Nichols Road to Central Avenue (SR 74)	3	4,470	4,753	4,388	24.9	26.9	24.3	C	D	C
	Central Avenue (SR 74) to North Main Street	3	4,859	5,439	4,956	27.3	32.3	28.2	D	D	D
	North Main Street to Railroad Canyon Road	3	5,193	5,697	5,090	30.0	35.2	29.1	D	E	D
	South of Railroad Canyon Rd	3	4,204	5,598	4,509	23.2	34.1	25.0	C	D	C

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

a Directional volumes based on current PeMS data. Truck percentages are consistent with available Caltrans data.

b Density is measured by passenger cars per mile per lane (pc/mi/ln).

SOURCE: Urban Crossroads, 2015

The Riverside County Transportation Commission (RCTC) has long-range plans in place to construct a carpool (high-occupancy vehicle) lane for both northbound and southbound directions of flow on the I-15 Freeway. The high-occupancy vehicle lanes would extend from the I-15/I-215 interchange to Central Avenue (SR 74). Additionally, two tolled express lanes and one mixed-flow lane serving northbound and southbound directions of travel are also proposed to be from Central Avenue (SR 74) to the SR 60 freeway. While planned, no date of completion is known.

4.11.2 Regulatory Setting

State

California Department of Transportation

The California Department of Transportation (Caltrans) has jurisdiction over state highways and sets maximum load limits for trucks and safety requirements for oversized vehicles that operate on highways. The project is located in the portion of Riverside County under the jurisdiction of Caltrans District 8. The following Caltrans regulations apply to potential transportation and traffic impacts of the project:

California Vehicle Code (CVC), Division 15, Chapters 1 through 5 (Size, Weight, and Load). Includes regulations pertaining to licensing, size, weight, and load of vehicles operated on highways.

California Street and Highway Code, Sections 660-711, 670-695. Requires permits from Caltrans for any roadway encroachment during truck transportation and delivery, includes regulations for the care and protection of State and County highways and provisions for the issuance of written permits, and requires permits for any load that exceeds Caltrans weight, length, or width standards for public roadways.

Local

Lake Elsinore General Plan

The policies, goals, and implementation measures in the Lake Elsinore General Plan Circulation Element for traffic and transportation that are applicable to the project are provided below. The Lake Elsinore General Plan contains additional policies, goals, and implementation measures that are more general in nature and are not specific to a particular development. Therefore, they are not listed below, but all policies, goals, and implementation measures in the Lake Elsinore General Plan are incorporated by reference. Level of service standards for different areas of the City are described below under Threshold of Significance.

Congestion Management Program

The purpose of the State-mandated Congestion Management Program (CMP) is to monitor roadway congestion and assess the overall performance of the region's transportation system. Based upon this assessment, the CMP contains specific strategies and improvements to reduce traffic congestion and improve the performance of a multi-modal transportation system. Examples of strategies include increased emphasis on public transportation and rideshare programs, mitigating the impacts of new development, and better coordinating land use and transportation planning decisions.

Based on the approval of Proposition 111 in 1990, regulations require the preparation, implementation, and annual updating of a CMP in each of California's urbanized counties. One required element of the CMP is a process to evaluate the transportation and traffic impacts of large projects on the regional transportation system. That process is undertaken by local agencies,

project applicants, and traffic consultants through a transportation impact report usually conducted as part of the California Environmental Quality Act (CEQA) project review process. Authority for local land use decisions including project approvals and any required mitigation remains the responsibility of local jurisdictions.

The Riverside County Transportation Commission (RCTC) monitors the CMP roadway network system to minimize LOS deficiencies. Within the project study area, the I-15 Freeway and Central Avenue (SR 74) are recognized as key transportation facilities within the CMP system. Although Caltrans utilizes LOS D as their stated threshold, RCTC has adopted LOS E as the minimum standard for intersections and segments along the CMP System of Highways and Roadways. However, for the purposes of this traffic impact analysis, LOS D has been considered to be the limit of acceptable traffic operations for the I-15 Freeway mainline segments and ramp junctions and for intersections along Central Avenue (SR 74).

Western Riverside County Transportation Uniform Mitigation Fee Program

The Western Riverside Transportation Uniform Mitigation Fee (TUMF) Program funds large regional infrastructure improvements, i.e., interchanges, major regional roadways, etc. The Western Riverside Council of Governments (WRCOG) is designated as the program administrator for the TUMF program. As administrator, WRCOG receives all fees generated from the TUMF collected by the local jurisdictions. WRCOG invests, accounts for, and expends the funds in accordance with the TUMF ordinance, the administrative plan, and applicable state laws. In the proposed project area, improvements to SR 74 to be developed as a six-lane roadway would be partially funded by the TUMF program. The proposed project will be required to contribute to its fair share of TUMF fees.

4.11.3 Thresholds of Significance

Significance Criteria

According to Appendix G of the State CEQA Guidelines, the proposed project could have a significant impact with respect to transportation and traffic if it would:

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit.
- Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.
- 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.

- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).
- Result in inadequate emergency access.
- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

Topics Not Discussed in Detail in the Draft EIR

As determined in the Initial Study/Notice of Preparation (Appendix A), implementation of the proposed project would not have an impact on air traffic patterns, would not substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment), would not result in inadequate emergency access, and would not conflict with adopted alternative transportation policies. Therefore, these issue areas will not be discussed further in the EIR.

Thresholds of Significance

City of Lake Elsinore

Consistent with the Riverside County General Plan Policy C 2.1, the City of Lake Elsinore requires that City roadways and intersections maintain the a target level of service of LOS C. As an exception, LOS D may be allowed in Community Development areas at intersections of any combination of Secondary Highways, Major Highways, Arterial Highways, Urban Arterial Highways, Expressways or conventional State Highways. LOS E may be allowed in designated Community Centers to the extent that it would support transit-oriented development and pedestrian communities. The proposed project's study area is identified as being located within a Community Development area on the Riverside County Integrated Project (RCIP) General Plan land use map. As such, LOS D is considered acceptable at any intersection within the City of Lake Elsinore because all of the study area intersections are classified as Secondary Highways or a higher classification within a Community Development area.

County of Riverside

Riverside County General Plan Policy C 2.1 states that the County will maintain the following County-wide target level of service (LOS): LOS C on all County-maintained roads and conventional State Highways, except LOS D may be allowed in Community Development areas at intersections of any combination of Secondary Highways, Major Highways, Arterial Highways, Urban Arterial Highways, Expressways or conventional State Highways. LOS E may be allowed in designated Community Centers to the extent that it would support transit-oriented development and pedestrian communities. The proposed project's study area is identified as being located within a Community Development area on the Riverside County Integrated Project (RCIP) General Plan land use map. As such, LOS D is considered acceptable at any intersection within the County of Riverside because all of the study area intersections are classified as Secondary Highways or a higher classification within a Community Development area.

Caltrans

Regarding Caltrans' ramp-to-arterial intersections and other Caltrans-maintained facilities, the published Caltrans traffic study guidelines (December 2002) states, "Caltrans endeavors to maintain a target LOS at the transition between LOS C and LOS D on State highway facilities, however, Caltrans acknowledges that this may not be always feasible and recommends that the lead agency consult with Caltrans to determine the appropriate target LOS."

Caltrans has worked with the County of Riverside and local jurisdictions such as the City of Lake Elsinore to establish a local threshold for freeway-to-arterial interchange intersections. Consistent with City's stated threshold, LOS D is considered to be the limit of acceptable traffic operations during the peak hour at the freeway-to-arterial interchange intersections maintained by Caltrans.

In an effort to more directly link land use, transportation and air quality and promote reasonable growth, the County of Riverside adopted a Congestion Management Plan (CMP) on March 10, 2010. The Riverside County Transportation Commission (RCTC) monitors the CMP roadway network system to minimize LOS deficiencies. Within the project study area, the I-15 Freeway and Central Avenue (SR 74) are recognized as key transportation facilities within the CMP system. Although Caltrans utilizes LOS D as their stated threshold, RCTC has adopted LOS E as the minimum standard for intersections and segments along the CMP System of Highways and Roadways. However, for the purposes of this traffic impact analysis, LOS D has been considered to be the limit of acceptable traffic operations for the I-15 Freeway mainline segments and ramp junctions and for intersections along Central Avenue (SR 74).

Thresholds of Significance with Prevailing Unacceptable LOS

For the baseline plus project impact analysis scenario, a significant project-related impact would occur at a study intersection if the addition of project-generated trips degrade the peak-hour level of service from an acceptable level of service (i.e., LOS D or better) to an unacceptable level of service (i.e., LOS E or worse). In addition, a significant project-related impact would occur if the project-generated trips worsen an already unacceptable level of service grade by the following values:

- Pre-Project LOS E: an increase of 2.0 seconds or more caused by the project
- Pre-Project LOS F: an increase of 1.0 seconds or more caused by the project

For the Near-Term Cumulative and Long-Term Cumulative impact analysis scenarios, a significant cumulative impact would occur if the project would add trips to a study intersection that is projected to operate at an unacceptable level of service.

4.11.4 Methodology

Intersection Capacity/Level of Service Analysis

Traffic operations of roadway facilities are described using the term Level of Service (LOS).[3] LOS is a qualitative description of traffic flow based on several factors such as speed, travel time, delay, and freedom to maneuver. Six levels are typically defined ranging from LOS A, representing completely free-flow conditions, to LOS F, representing breakdown in flow resulting in stop-and-go conditions. LOS E represents operations at or near capacity. The definitions of LOS for interrupted traffic flow (flow-restrained by the existence of traffic signals and other traffic control devices) differ slightly depending on the type of traffic control. The Highway Capacity Manual (HCM) methodology expresses the LOS at an intersection in terms of delay time for the various intersection approaches (Transportation Research Board, 2000). The HCM uses different procedures depending on the type of intersection control.

Signalized Intersections

The City of Lake Elsinore requires signalized intersection operations analysis based on the methodology described in the HCM (Chapter 16). Intersection LOS operations are based on an intersection's average control delay, which includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. LOS is directly related to the average control delay per vehicle and is correlated to a LOS designation as described in **Table 4.11-3**.

TABLE 4.11-3
SIGNALIZED INTERSECTION LEVEL OF SERVICE DEFINITIONS

LOS	Level of Service Description	Average Control Delay (Seconds)
A	Operations with very low delay occurring with favorable progression and/or short cycle length.	0 to 10.00
B	Operations with low delay occurring with good progression and/or short cycle lengths.	10.01 to 20.00
C	Operations with average delays resulting from fair progression and/or longer cycle lengths. Individual cycle failures begin to appear.	20.01 to 35.00
D	Operations with longer delays due to a combination of unfavorable progression, long cycle lengths, or high V/C ratios. Many vehicles stop and individual cycle failures are noticeable.	35.01 to 55.00
E	Operations with high delay values indicating poor progression, long cycle lengths, and high V/C ratios. Individual cycle failures are frequent occurrences. This is considered to be the limit of acceptable delay.	55.01 to 80.00
F	Operation with delays unacceptable to most drivers occurring due to over saturation, poor progression, or very long cycle lengths.	80.01 and up

SOURCE: Transportation Research Board, 2000 Highway Capacity Manual, Chapter 16

[3] A change to the approach to determining the significance of traffic impacts in CEQA documents is currently under review. Senate Bill 732 (SB 743) was passed in 2013, but the CEQA Guidelines have not been amended to include SB 743 as of this date, and technical implementation guidelines are expected in 2016. As a result, the provisions of SB 743 are not used in this analysis.

Per the Caltrans Guide for the Preparation of Traffic Impact Studies, the traffic capacity analysis software program Synchro was used to analyze signalized intersections under Caltrans' jurisdiction, which include interchange to arterial ramps (i.e., I-15 ramps at Nichols Road, Central Avenue (SR 74), North Main Street, and Railroad Canyon Road). Non-Caltrans study intersections within the City of Lake Elsinore have been analyzed using the Traffix software program.

Unsignalized Intersections

The City of Lake Elsinore requires the operations of unsignalized intersections be evaluated using the methodology described in the HCM (Chapter 17). At side-street stop-controlled intersections, LOS is calculated for each controlled (side street) movement and for the left turn movement from the major street. For all-way stop controlled intersections, LOS is computed for the intersection as a whole. All unsignalized study area intersections were analyzed using the Traffix software. The LOS rating is based on the weighted average control delay expressed in seconds per vehicle (see **Table 4.11-4**).

TABLE 4.11-4
UNSIGNALIZED INTERSECTION LEVEL OF SERVICE (LOS) THRESHOLDS

LOS	Level of Service Description	Average Control Per Vehicle (Seconds)
A	Little or no delay	0 to 10.00
B	Short traffic delays	10.01 to 15.00
C	Average traffic delays	15.01 to 25.00
D	Long traffic delays	25.01 to 35.00
E	Very long traffic delays.	35.01 to 50.00
F	Extreme traffic delays with intersection capacity exceeded.	> 50.00

SOURCE: Transportation Research Board, 2000 Highway Capacity Manual, Chapter 17

Freeway Mainline Segment Analysis

The freeway system in the study area, from north to south of Nichols Road, Central Avenue, North Main Street, and Railroad Canyon Road, has been broken into segments defined by the freeway-to-arterial interchange locations. The freeway segments have been evaluated based upon peak-hour directional volumes. The freeway segment analysis is based on the methodology described in Chapter 23 of the HCM and performed using HCS+ software. The performance measure to calculate LOS preferred by Caltrans is density, which is expressed in terms of passenger cars per mile per lane. **Table 4.11-5** illustrates the freeway segment LOS thresholds for each density range utilized for this analysis.

Freeway Merge/Diverge Ramp Junction Analysis

The freeway system in the study area has been broken into segments defined by freeway-to-arterial interchange locations resulting in 16 on- and off-ramp locations. Although the HCM indicates the influence area for a merge/diverge junction is 1,500 feet, the analysis presented in this traffic study has been performed at all ramp locations with respect to the nearest on- or off-ramp at each interchange in an effort to be consistent with Caltrans guidance.

The merge/diverge analysis is based on the HCM analysis method and performed using HCS+ software. The measure of effectiveness (density, reported in passenger car/mile/lane) is calculated based on the number of travel lanes, number of lanes at the on and off ramps both at the analysis junction and at upstream and downstream locations (if applicable) and acceleration/ deceleration lengths at each merge/diverge point. **Table 4.11-6** presents the merge/diverge area level of service thresholds for each density range utilized for this analysis.

TABLE 4.11-5
FREEWAY MAINLINE LEVEL OF SERVICE (LOS) THRESHOLDS

LOS	Level of Service Description	Density Range (pc/mi/ln)[1]
A	Free-flow operations in which vehicles are relatively unimpeded in their ability to maneuver within the traffic stream. Effects of incidents are easily absorbed.	0.0 – 11.00
B	Relative free-flow operations in which vehicle maneuvers within the traffic stream are slightly restricted. Effects of minor incidents are easily absorbed.	11.1 – 18.0
C	Travel is still at relative free-flow speeds, but freedom to maneuver within the traffic stream is noticeably restricted. Minor incidents may be absorbed, but local deterioration in service will be substantial. Queues begin to form behind significant blockages.	18.1 – 26.0
D	Speeds begin to decline slightly and flows and densities begin to increase more quickly. Freedom to maneuver is noticeably limited. Minor incidents can be expected to create queuing as the traffic stream has little space to absorb disruptions.	26.1 – 35.0
E	Operation at capacity. Vehicles are closely spaced with little room to maneuver. Any disruption in the traffic stream can establish a disruption wave that propagates throughout the upstream traffic flow. Any incident can be expected to produce a serious disruption in traffic flow and extensive queuing.	35.1 – 45.0
F	Breakdown in vehicle flow.	> 45.0

1. pc/mi/ln = passenger cars per mile per lane

SOURCE: Transportation Research Board, 2000 Highway Capacity Manual, Chapter 23

TABLE 4.11-6
FREEWAY MERGE AND DIVERGE LEVEL OF SERVICE (LOS) THRESHOLDS

LOS	Density Range (pc/mi/ln)[1]
A	≤10.0
B	10.0 – 20.0
C	20.0 – 28.0
D	28.0 – 35.0
E	>35.0
F	Demand Exceeds Capacity

1. pc/mi/ln = passenger cars per mile per lane

SOURCE: Transportation Research Board, 2000 Highway Capacity Manual, Chapter 25

Traffic Signal Warrant Analysis

The term "signal warrants" refers to the list of established criteria used by Caltrans and other public agencies to quantitatively justify or ascertain the potential need for installation of a traffic signal at an unsignalized intersection. This analysis uses the signal warrant criteria presented in the latest edition of the Federal Highway Administration's (FHWA) Manual on Uniform Traffic Control Devices (MUTCD), as amended by the 2012 California MUTCD (CA MUTCD), for all study area intersections. Both the FHWA's MUTCD and the 2012 CA MUTCD indicate that the installation of a traffic signal should be considered if one or more of the signal warrants are met. Specifically, this analysis utilizes the Peak Hour Volume-based Warrant 3 as the appropriate representative traffic signal warrant analysis. Warrant 3 is appropriate to use because it provides specialized warrant criteria for intersections with rural characteristics (e.g., located in communities with populations of less than 10,000 people or with adjacent major streets operating above 40 miles per hour). For the purposes of this study, the speed limit was the basis for determining whether Urban or Rural warrants were used for a given intersection.

4.11.5 Impact Analysis

Impact 4.11-1: Would the project's construction-related traffic impacts conflict with a plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system?

Traffic operations during the proposed construction phase of the project potentially could result in traffic impacts related to vehicle trips generated by construction employees, and trucks exporting and importing materials and transporting equipment. It has been assumed that construction activity would occur between 7:00 AM and 7:00 PM.

Employee Trips

Employee trips are estimated based on the number of employees estimated to be on-site throughout the various stages of construction. Each employee is assumed to drive 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, hence the majority of employees would arrive and depart from the site outside of the peak commute traffic periods (i.e., 7:00 AM – 9:00 AM and 4:00 PM – 6:00 PM). Each employee is assumed to drive to and from the site alone each day. Parking for employees and non-employee vehicles could be accommodated through the construction of a portion of the proposed parking lot for the project.

Export and Import of Materials and Heavy Equipment

Construction of the proposed project would require the export and import of construction materials from and to the site. The export/import materials will be transported via 15-cubic yard capacity dump trucks. Export of construction materials is anticipated to consist of the exportation of excavated soil from the site. Import of construction materials is anticipated to consist of raw building materials, concrete, asphalt, etc.

Heavy equipment to be utilized on-site during construction include, but is not limited to: flat beds, dozers, scrapers, graders, track hoes, dump trucks, forklifts, cranes, cement trucks, pavers, rollers, water trucks, rolling container trucks and bobcats. Heavy equipment will be delivered and removed from the site throughout the construction phase. 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.

In order to minimize the impact of construction truck traffic to the surrounding roadway network, the City-required traffic control plan would stipulate that trucks utilize the most direct route between the site and I-15 via Central Avenue (SR 74). It is anticipated that the construction staging would be located off Central Avenue. Import and export of soil and related materials may utilize Central Avenue (SR 74) or Main Street depending on the location origin and destination of the soil and related materials. Further, although subject to review of a traffic control plan for the proposed project, it is expected that trucks would travel on area roadways during off-peak traffic hours in order to minimize traffic impacts.

Given the temporary nature of construction, the construction work hours being such that workers would not travel during the peak traffic hours, truck trips being spread over the course of the work day, and the requirement for a City-approved traffic control plan, the project's construction-related traffic impacts would not conflict with a plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, and the impacts associated with construction of the project would be considered less-than-significant.

Mitigation Measures: None required.

Significance after Mitigation: Less-than-significant.

Impact 4.11-2: Would development of the project conflict with a plan, ordinance or policy establishing measures of effectiveness (level of service standards) for the performance of the circulation system, or conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Project Trip Generation

Trip generation represents the amount of traffic that is both attracted to (inbound to) and produced by (outbound from) a development. The trip generation rates are based upon data collected by the Institute of Transportation Engineers (ITE) for the proposed land uses in the recently published Trip Generation Manual (ITE, 2012).

Pass-by trips are defined as intermediate stops on the way from an origin to a primary trip destination without a route diversion. Pass-by trips are attracted from traffic passing the site on an adjacent roadway that offers direct access to the generator. These types of trips are most-often associated with retail uses, such as a fast-food restaurants with a drive-thru window (part of the proposed project), and pass-by percentages from the ITE *Trip Generation Handbook* (ITE, 2004) were applied. The ITE Handbook also provides pass-by percentages for free-standing discount superstore (part of the proposed project), but no pass-by trip reductions were taken for that latter component of the project so as to not understate potential project impacts.

Internal capture is a percentage reduction that can be applied to the trip generation estimates for individual land uses to account for trips internal to the site. In other words, trips may be made between individual retail uses on-site and can be made either by walking or using internal roadways without using external streets. As the trip generation for the site was conservatively estimated based on individual land uses as opposed to the overall ITE Shopping Center rate, an internal capture reduction of 10 percent was applied to recognize the interactions that would occur between the various complementary land uses. For example, patrons of the free-standing discount superstore may also visit the specialty retail or fast food restaurants without leaving the site and are therefore considered as vehicle trips that are internal to the site. A 10 percent internal capture reduction was applied although the ITE Trip Generation Handbook indicates an internal capture percentage between retail-to-retail land uses of 20 to 29 percent.

As shown in **Table 4.11-7**, the proposed project is estimated to generate about 11,723 daily vehicular trips, with 595 trips generated during the weekday AM peak hour, 829 trips generated during the weekday PM peak hour, and 1,204 trips during the midday Saturday peak hour.[4]

[4] The proposed Project's alternative site plan (development of a 154,487 sq.-ft. Walmart Supercenter (with a 3,090 sq.-ft. Garden Center), two fast-food restaurants with drive-thru windows totaling 6,800 sq. ft., and a gas station/convenience store/car wash with 16 pump station) is estimated to generate about 9,543 weekday trips per day, 472 weekday AM peak hour trips, 801 weekday PM peak hour trips, and 1,091 Saturday Midday peak hour trips, i.e., fewer trips than the proposed Project. In order to not understate potential Project impacts, the traffic analysis focused on the higher trip-generating proposed Project.

Baseline Plus Project

Intersection Operations Analysis

Figure 4.11-2a shows baseline plus project ADT and **Figure 4.11-2b** and **Table 4.11-8** lists the weekday AM, weekday PM, and Saturday peak hour LOS at the 32 study intersections for the baseline plus project traffic conditions, and shows that implementation of the project would have a significant impact at six of the study intersections based upon LOS and threshold of significance standards, as described above. The improvements described in the mitigation measures identified below (see page 4.11-36) would reduce the project's impacts to less-than-significant levels. However, as discussed below, the timing of construction of the improvements in many cases is uncertain as it will take time to accumulative the funding necessary for the improvements. In addition, some of the improvements would be within the jurisdiction of other public agencies which the City does not control. Thus, in some cases, significant impact could exist even though the applicant for this particular project has made a contribution towards the improvement and satisfied its obligation with regard to the measures. For those reasons, without successful implementation of the improvements identified in the mitigation measures, the proposed project could result in exceedances of the Thresholds of Significance described above.

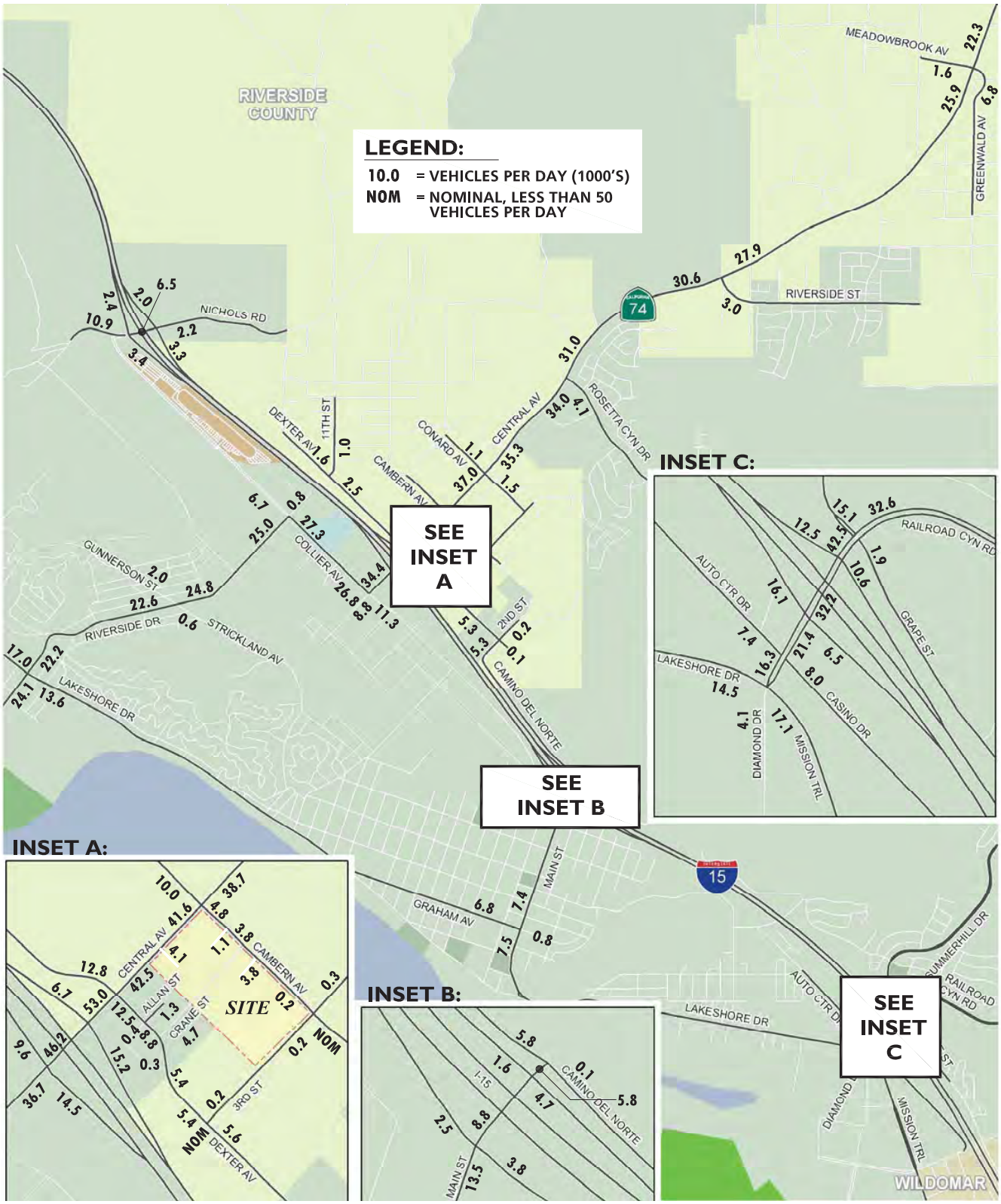
As shown below in Table 4.11-8, the addition of project-generated traffic would cause the average delay at East Lakeshore Drive / Diamond Drive (Intersection #3) to increase during the AM, PM and Saturday mid-day peak hours by more than the City's 1.0-second threshold of significance for intersections operating at LOS F without the project. The improvements described in Mitigation Measure TRA-1 would reduce impacts to less-than-significant. The mitigation measures requires the project applicant to fund its fair share of the improvements. The intersection is currently identified in the TIF for improvement. In addition to paying its fair share, the applicant will also pay the required TIF. However, it will take time to assemble the necessary funds to implement the improvement. Thus, even though the applicant will help to fund these improvements, this Draft EIR assumes that the significant impact will occur until such time as the improvements are completed.

TABLE 4.11-7
PROJECT TRIP GENERATION SUMMARY

			Weekday AM Peak Hour			Weekday PM Peak Hour				Saturday Mid-Day Peak Hour		
Land Use	**Quantity**	**Units[1]**	**In**	**Out**	**Total**	**In**	**Out**	**Total**	**Weekday Daily**	**In**	**Out**	**Total**
Free-standing Discount Superstore ITE Code 813	154.487	TSF	161	125	286	329	343	672	7,840	436	436	871
	Internal Trip Reduction (10%)		-13	-13	-26	-33	-33	-66	-784	-44	-44	-88
Subtotal			*148*	*112*	*260*	*296*	*310*	*606*	*7,056*	*392*	*392*	*783*
Specialty Retail ITE Code 820/826	4.600	TSF	3	2	4	5	7	12	204	5	7	12
	Internal Trip Reduction (10%)		0	0	0	-1	-1	-2	-20	-1	-1	-2
Subtotal			*3*	*0*	*4*	*4*	*6*	*10*	*184*	*4*	*6*	*10*
Fast Food without Drive-Thru ITE Code 933	4.600	TSF	121	81	202	61	59	120	3,294	123	128	251
	Internal Trip Reduction (10%)		-8	-8	-16	-6	-6	-12	-329	-12	-12	-24
Subtotal			113	73	186	55	53	108	2,965	111	116	227
Fast-food with Drive –Thru ITE Code 934	6.800	TSF	157	151	309	115	107	222	3,374	205	197	401
	Internal Trip Reduction (10%)		-15	-15	-30	-11	-11	-22	-337	-20	-20	-40
Pass-by Trip Reduction (49% AM; 50% PM/Daily)[2]			-67	-67	-134	-48	-48	-96	-1,518	-88	-88	-177
Subtotal			76	69	145	57	48	104	1,518	96	88	185
TOTAL TRIPS			339	256	595	412	417	829	11,723	602	602	1,204

[1] TSF=Thousand Square Feet
[2] Pass-by reduction percentages are from the ITE Trip Generation Handbook (3rd Edition, 2014): Tables F:31 and F.32

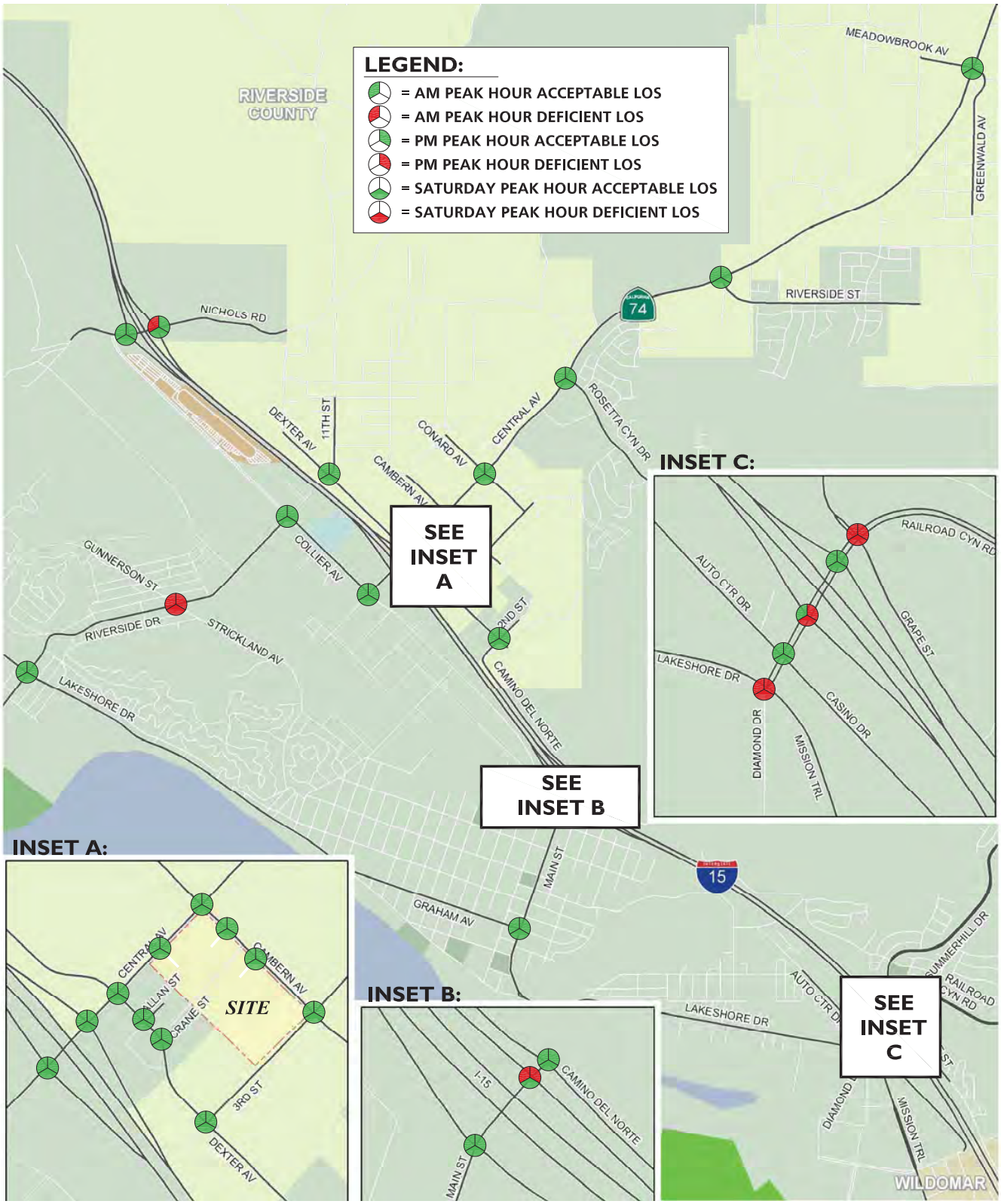
SOURCE: Urban Crossroads, 2015, using ITE Trip Generation Manual, (9th Edition, 2012).



SOURCE: Urban Crossroads

Lake Elsinore Walmart Supercenter Project EIR . 130767

Figure 4.11-2a
Existing Plus Project
Average Daily Traffic (ADT)



SOURCE: Urban Crossroads

Figure 4.11-2b
Summary of Peak Hour Intersection LOS
for Existing Plus Project Conditions

TABLE 4.11-8
INTERSECTION ANALYSIS FOR BASELINE PLUS PROJECT CONDITIONS

			Baseline						Baseline Plus Project						
			Delay (sec)[1]			Level of Service			Delay (sec)[1]			Level of Service			
Intersection		Traffic Control[2]	AM	PM	Sat	AM	PM	Sat	AM	PM	Sat	AM	PM	Sat	Impact?
1.	Lakeshore Dr/ Riverside Dr (SR 74)	TS	41.3	43.7	43.5	D	D	D	41.8	44.6	44.9	D	D	D	No
2.	W Graham Av./ North Main St	AWS	9.0	11.8	10.4	A	B	B	9.3	12.4	11.0	A	B	B	No
3.	East Lakeshore Dr./ Diamond Dr	TS	147.6	204.9	229.2	F	F	F	149.2	207.2	266.2	F	F	F	**Yes**
4.	Gunnerson St/ Riverside Dr (SR 74)	CSS	47.0	141.9	156.3	E	F	F	68.4	368.1	318.8	F	F	F	**Yes**
5.	Collier Av./ Riverside Dr. (SR 74)	TS	12.4	43.7	20.1	B	B	C	13.5	19.6	24.9	B	B	C	No
6.	Collier Av./ Central Av. (SR 74)	TS	37.9	35.8	33.2	D	D	C	37.8	35.7	33.5	D	D	C	No
7.	Auto Center Dr/ Diamond Dr.	TS	22.8	23.8	23.8	C	C	C	22.8	23.8	24.6	C	C	C	No
8.	I-15 SB Ramps/ Nichols Rd	AWS	10.1	9.7	9.2	B	A	A	10.2	9.8	9.4	B	A	A	No
9.	I-15 SB Ramps/ Central Av. (SB-74)	TS	24.5	31.6	25.1	C	C	C	26.6	38.0	30.1	C	D	C	No
10.	I-15 SB Ramps/ North Main St	CSS	12.9	13.9	10.5	B	B	B	13.3	14.6	11.0	B	B	B	No
11.	I-15 SB Ramps/ Railroad Canyon Rd	TS	50.1	96.1	63.7	D	F	E	52.0	102.9	70.2	D	F	E	**Yes**
12.	I-15 NB Ramps/ Nichols Rd	CSS	40.1	30.2	19.0	E	D	C	46.7	33.7	20.3	E	D	C	**Yes**
13.	I-15 NB Ramps/ Central Av. (SR 74)	TS	20.8	23.7	21.4	C	C	C	22.3	26.1	24.4	C	C	C	No
14.	I-15 NB Ramps/ North Main St	CSS	57.7	52.9	15.9	F	F	C	82.4	80.9	19.1	F	F	C	**Yes**
15.	I-15 NB Ramps/ Railroad Canyon Rd	TS	36.1	46.6	28.4	D	D	C	36.1	47.3	29.1	D	D	C	No
16.	Dexter Av/11th St	CSS	9.9	9.4	9.4	A	A	A	10.1	9.6	9.7	B	A	A	No
17.	Dexter Av/ Central Av (SR 74)	TS	32.3	33.4	33.9	C	C	C	32.6	34.5	35.2	C	C	D	No
18.	Dexter Av/Allan St	CSS	10.4	11.1	10.0	B	B	A	9.6	11.2	10.9	A	B	B	No
19.	Dexter Av/ Crane St (SR 74)	CSS	10.0	11.9	9.8	B	B	A	11.7	20.6	15.5	B	C	C	No
20.	Dexter Av/3rd St	CSS	10.1	10.2	9.4	B	B	A	10.3	10.5	9.8	B	B	A	No
21.	Dexter Av/2nd St	AWS	8.6	8.7	8.0	A	A	A	9.1	9.2	8.6	A	A	A	No
22.	Camino del Norte/ North Main St	CSS	10.2	10.5	9.8	B	B	A	10.6	11.0	10.5	B	B	B	No
23.	Summerhill Dr/ Railroad Canyon Rd	TS	92.5	146.1	94.5	F	F	F	95.0	150.5	98.7	F	F	F	**Yes**
24.	Driveway 1/ Central Av (SR 74)	CSS	*Does not currently exist (Project Driveway)*						10.6	12.8	14.1	B	B	B	No
25.	Cambern Av/ Central Av (SR 74)	TS	16.9	23.8	25.9	B	C	C	20.7	32.8	46.2	C	C	D	No

TABLE 4.11-8
INTERSECTION ANALYSIS FOR BASELINE PLUS PROJECT CONDITIONS

Intersection	Traffic Control[2]	Baseline						Baseline Plus Project						Impact?
		Delay (sec)[1]			Level of Service			Delay (sec)[1]			Level of Service			
		AM	PM	Sat	AM	PM	Sat	AM	PM	Sat	AM	PM	Sat	
26. Cambern Av/ Driveway 2	CSS	*Does not currently exist (Project Driveway)*						0.0	0.0	0.0	A	A	A	No
27. Cambern Av/ Driveway 3	CSS	*Does not currently exist (Project Driveway)*						9.3	9.9	10.8	A	A	B	No
28. Cambern Av/ 3rd St	AWS	6.8	6.9	6.9	A	A	A	6.8	6.9	6.9	A	A	A	No
29. Conard Av/ Central Av (SR 74)	TS	18.1	22.3	18.8	B	C	B	18.8	23.2	19.3	B	C	B	No
30. Rosetta Canyon Dr/ Central Av (SR 74)	TS	18.6	16.5	15.0	B	B	B	19.6	16.8	15.4	B	B	B	No
31. Riverside St/ Central Av (SR 74)	TS	13.4	14.5	12.7	B	B	B	13.6	14.8	13.0	B	B	B	No
32. Greenwald Av/ Central Av (SR 74)	TS	21.8	22.5	21.7	C	C	C	21.8	22.6	21.9	C	C	C	No

1. Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all-way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.
2. CSS=Cross-street stop; AWS=All-Way Stop; TS= Traffic Signal

SOURCE*: Urban Crossroads, 2015*

As shown in Table 4.11-8, the addition of project-generated traffic would cause the average delay at Gunnerson Street / Riverside Drive (SR 74) (Intersection #4) to increase during the AM peak hour by more than the City's 2.0-second threshold of significance for intersections operating at LOS E without the project, and to increase during the PM and Saturday mid-day peak hours by more than the City's 1.0-second threshold of significance for intersections operating at LOS F without the project. The improvements described in Mitigation Measure TRA-2 would reduce impacts to less-than-significant. The mitigation measure requires the project applicant to fund its fair share of the improvements. The proposed traffic signal is currently not identified in the TIF. The City plans to add the traffic signal to the TIF in the next TIF update. The applicant will pay both the fair share payment and the TIF payment. However, it will take time to assemble the necessary funds to install the traffic signal. In addition, because Caltrans has jurisdiction over the intersection, the City cannot guarantee that the improvement will be made. Thus, even though the applicant will help to fund these improvements, this Draft EIR assumes that the significant impact will occur until such time as the improvements are completed.

As shown in Table 4.11-8, the addition of project-generated traffic would cause the average delay at I-15 Southbound Ramps / Railroad Canyon Road (Intersection #11) to increase during the PM peak hour by more than the City's 1.0-second threshold of significance for intersections operating at LOS F without the project, and to increase during the Saturday mid-day peak hour by more than the City's 2.0-second threshold of significance for intersections operating at LOS E without

the project. The improvement described in Mitigation Measure TRA-3 would reduce impacts to less-than-significant.

As shown in Table 4.11-8, the addition of project-generated traffic would cause the average delay at I-15 Northbound Ramps / Nichols Road (Intersection #12) to increase during the AM peak hour by more than the City's 2.0-second threshold of significance for intersections operating at LOS E without the project. The improvements described in Mitigation Measure TRA-4 would reduce impacts to less-than-significant. The mitigation measure requires the project applicant to fund its fair share of the improvements. It will take time to assemble the necessary funds to install the traffic signal. In addition, because Caltrans has jurisdiction over the intersection, the City cannot guarantee that the improvement will be made. Thus, even though the applicant will help to fund these improvements, this Draft EIR assumes that the significant impact will occur until such time as the improvements are completed.

As shown in Table 4.11-8, the addition of project-generated traffic would cause the average delay at I-15 Northbound Ramps / North Main Street (Intersection #14) to increase during the AM and PM peak hour by more than the City's 1.0-second threshold of significance for intersections operating at LOS F without the project. The improvements described in Mitigation Measure TRA-5 would reduce impacts to less-than-significant. The mitigation measures requires the project applicant to fund its fair share of the improvements. The proposed traffic signal is currently not identified in the TIF. However, the City plans to add the traffic signal to the TIF in the next TIF update. The fair share payment will be in addition to the payment of the TIF. It will take time to assemble the necessary funds to install the traffic signal. In addition, because Caltrans has jurisdiction over the intersection, the City cannot guarantee that the improvement will be made. Thus, even though the applicant will help to fund these improvements, this Draft EIR assumes that the significant impact will occur until such time as the improvements are completed.

As shown in Table 4.11-8, the addition of project-generated traffic would cause the average delay at Summerhill Drive / Railroad Canyon Road (Intersection #23) to increase during the AM, PM and Saturday mid-day peak hours by more than the City's 1.0-second threshold of significance for intersections operating at LOS F without the project. The improvement described in Mitigation Measure TRA-6 would reduce impacts to less-than-significant. The mitigation measures requires the project applicant to fund its fair share of the improvements. The intersection is currently identified in the TIF for improvement. The applicant will pay the required TIF. However, it will take time to assemble the necessary funds to implement the improvement. Thus, even though the applicant will help to fund these improvements, this Draft EIR assumes that the significant impact will occur until such time as the improvements are completed.

Table 4.11-9 shows the levels of service at the above-described six intersections after implementation of the improvements identified in Mitigation Measures TRA-1 through TRA-6.

TABLE 4.11-9
INTERSECTION ANALYSIS FOR MITIGATED BASELINE PLUS PROJECT CONDITIONS

Intersection	Traffic Control[1]	Baseline Plus Project						Baseline Plus Project – Mitigated					
		Delay (sec)			Level of Service			Delay (sec)			Level of Service		
		AM	PM	Sat	AM	PM	Sat	AM	PM	Sat	AM	PM	Sat
3. East Lakeshore Dr./ Diamond Dr	TS MM TRA-1	149.2	207.2	266.2	F	F	F	38.1	55.0	97.5	D	D	F
4. Gunnerson St/ Riverside Dr (SR 74)	CSS/TS MM TRA-2	68.4	368.1	318.8	F	F	F	6.4	7.8	8.5	A	A	A
11. I-15 SB Ramps/ Railroad Canyon Rd	TS MM TRA-3	52.0	102.9	70.2	D	F	E	37.5	36.4	38.4	D	D	D
12. I-15 NB Ramps/ Nichols Rd	CSS/TS MM TRA-4	46.7	33.7	20.3	E	D	C	23.1	26.0	26.3	C	C	C
14. I-15 NB Ramps/ North Main St	CSS/TS MM TRA-5	82.4	80.9	19.1	F	F	C	24.3	29.8	28.5	C	C	C
23. Summerhill Dr/ Railroad Canyon Rd	TS MM TRA-6	95.0	150.5	98.7	F	F	F	79.7	108.0	71.5	E	F	E

1. CSS=Cross-street stop; TS= Traffic Signal

SOURCE*: Urban Crossroads, 2015*

Basic Freeway Segment Analysis

As shown on **Table 4.11-10** (included in this Draft EIR at the request of Caltrans), I-15 study segments would operate acceptably (i.e., LOS D or better) during the peak hours for baseline plus project traffic conditions, with the exception of the I-15 Freeway northbound segment between North Main Street and Railroad Canyon Road, which currently operates at LOS E during the PM peak hour under Baseline conditions.

Freeway Merge/Diverge Analysis

As shown in **Table 4.11-11** (included in this Draft EIR at the request of Caltrans), the I-15 ramp merge and diverge areas in the study area would operate at an acceptable service level (i.e., LOS D or better) during the peak hours for baseline plus project traffic conditions, with the exception of the following locations:

- Northbound, Off-Ramp at Central Avenue (SR 74) – LOS E, PM and Saturday peak hours
- Northbound, Off-Ramp at North Main Street – LOS E, PM peak hour
- Northbound, On-Ramp at Railroad Canyon Road – LOS E, AM and PM peak hours
- Northbound, Off -Ramp at Railroad Canyon Road – LOS E, PM peak hour

TABLE 4.11-10
I-15 FREEWAY SEGMENT ANALYSIS –BASELINE PLUS PROJECT CONDITIONS

Direction	Mainline Segment	Lanes	Baseline						Baseline Plus Project					
			Density[1]			Level of Service			Density[1]			Level of Service		
			AM	PM	SAT	AM	PM	SAT	AM	PM	SAT	AM	PM	SAT
Southbound	North of Nichols Road	3	15.3	20.6	18.2	B	C	C	15.6	20.8	18.6	B	C	C
	Nichols Road to Central Avenue (SR 74)	3	15.4	20.9	18.3	B	C	C	15.7	21.3	18.9	B	C	C
	Central Avenue (SR 74) to North Main Street	3	18.5	22.9	20.8	C	C	C	18.8	23.6	21.6	C	C	C
	North Main Street to Railroad Canyon Road	3	19.8	23.6	21.3	C	C	C	20.2	24.3	22.1	C	C	C
	South of Railroad Canyon Road	3	19.4	19.5	18.2	C	C	C	19.6	19.8	18.6	C	C	C
Northbound	North of Nichols Road	3	24.6	26.2	24.0	C	D	C	24.8	26.7	24.6	C	D	C
	Nichols Road to Central Avenue (SR 74)	3	24.9	26.9	24.3	C	D	C	25.1	27.3	25.0	C	D	C
	Central Avenue (SR 74) to North Main Street	3	27.3	32.3	28.2	D	D	D	27.9	33.4	29.2	D	D	D
	North Main Street to Railroad Canyon Road	3	30.0	**35.2**	29.1	D	E	D	30.8	**36.4**	30.4	D	E	D
	South of Railroad Canyon Road	3	23.2	34.1	25.0	C	D	C	23.4	34.6	25.5	C	D	C

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).
Density is measured by passenger cars per mile per lane (pc/mi/ln).

SOURCE: Urban Crossroads, 2015.

TABLE 4.11-11
I-15 FREEWAY RAMP JUNCTION MERGE/DIVERGE ANALYSIS –BASELINE PLUS PROJECT CONDITIONS

Direction	Ramp or Segment	Lanes on Freeway	Baseline						Baseline Plus Project					
			AM Peak		PM Peak		Saturday Peak		AM Peak		PM Peak		Saturday Peak	
			Density[1]	LOS	Density[1]	LOS	Density[1]	LOS	Density[1]	LOS	Density[1]	LOS	Density[1]	LOS
Southbound	Off-Ramp at Nichols Road	3	21.4	C	26.8	C	24.4	C	21.7	C	27.0	C	24.9	C
	On-Ramp at Nichols Road	3	19.5	B	24.7	C	22.2	C	19.8	B	35.2	C	22.9	C
	Off-Ramp at Central Avenue (SR 74)	3	22.2	C	28.2	D	25.5	C	22.7	C	28.7	D	26.3	C
	On-Ramp at Central Avenue (SR 74)	3	24.6	C	28.9	D	26.9	C	25.1	C	29.7	D	28.0	D
	Off-Ramp at Main Street	3	25.1	C	29.5	D	27.5	C	25.4	C	30.1	D	28.3	D
	On-Ramp at Main Street	3	23.6	C	27.1	C	24.7	C	23.9	C	27.5	C	25.3	C
	Off-Ramp at Railroad Canyon Road	3	27.8	C	32.2	D	30.0	D	28.2	D	32.7	D	30.9	D
	On-Ramp at Railroad Canyon Road	3	23.6	C	23.0	C	21.8	C	23.7	C	23.2	C	22.2	C
Northbound	On-Ramp at Nichols Road	3	24.7	C	26.0	C	24.2	C	24.9	C	26.3	C	24.7	C
	Off-Ramp at Nichols Road	3	30.3	D	31.8	D	30.0	D	30.5	D	32.1	D	30.5	D
	On-Ramp at Central Avenue (SR 74)	3	26.5	C	27.8	C	26.0	C	26.9	C	28.5	D	27.0	C
	Off-Ramp at Central Avenue (SR 74)	3	33.5	D	36.5	E	34.4	D	34.0	D	37.2	E	35.2	E
	On-Ramp at Main Street	3	29.3	D	32.5	D	30.0	D	29.8	D	33.0	D	30.6	D
	Off-Ramp at Main Street	3	34.2	D	36.3	E	33.5	D	34.5	D	36.7	E	34.1	D
	On-Ramp at Railroad Canyon Road	3	35.3	E	36.2	E	33.6	D	35.8	E	36.9	E	34.6	D
	Off-Ramp at Railroad Canyon Road	3	29.6	D	36.4	E	31.0	D	29.8	D	36.6	E	31.4	D

[1] Density is measured by passenger cars per mile per lane (pc/mi/ln).

SOURCE: Urban Crossroads, 2015

4.11.6 Cumulative Impacts

Near-Term Cumulative (Opening Year 2016) Traffic Analysis

Near-Term Cumulative (Opening Year 2016) Without Project Traffic Volume Forecasts include Baseline traffic volumes plus an ambient growth factor of 6.12% plus traffic from pending and approved but not yet constructed known development projects in the area. The lane configurations and traffic controls assumed to be in place for Near-Term Cumulative (Opening Year 2016) conditions are consistent with baseline and baseline plus project conditions (i.e., with the project site access driveways being constructed as part of the proposed project). Long-Term Cumulative (General Plan Buildout Post-2035) conditions are discussed later in this section (under Impact 4.11-3).

Intersection Operations Analysis

Level of service calculations were conducted for the study intersections to evaluate their operations under Near-Term Cumulative (Opening Year 2016) conditions with existing roadway and intersection geometrics. The intersection analysis results are summarized in **Table 4.11-12**, which indicates that the following two intersections are anticipated to experience unacceptable LOS (i.e., LOS E or worse) during one or more peak hours for Near-Term Cumulative (Opening Year 2016) Without Project traffic conditions in addition to the six intersections previously identified under Baseline traffic conditions:

1. Lakeshore Drive / Riverside Drive (SR 74) – LOS E, PM and Saturday peak hours
15. I-15 Northbound Ramps / Railroad Canyon Road – LOS E, PM peak hour

As shown on Table 4.11-12, the addition of project traffic is not anticipated to result in any additional deficient intersections in addition to the eight identified for Near-Term Cumulative (Opening Year 2016) without project traffic conditions. However, the proposed project would increase traffic volumes at those intersections, which would contribute to significant impacts. The implementation of the traffic improvements identified in the mitigation measures identified below (see page 4.11-36) would reduce the project's impacts to less-than-significant levels. However, as discussed below, the timing of construction of the improvements in many cases is uncertain as it will take time to accumulative the funding necessary for the improvements. In addition, some of the improvements would be within the jurisdiction of other public agencies which the City does not control. Thus, in some cases, significant impact could exist even though the applicant for this particular project has made a contribution towards the improvement and satisfied its obligation with regard to the measures. For those reasons, without successful implementation of the improvements identified in the mitigation measures, the proposed project would result in exceedances of the Thresholds of Significance described above.

The addition of project-generated traffic would contribute to unacceptable LOS E conditions at Lakeshore Drive / Riverside Drive (SR 74) (Intersection #1) during the PM and Saturday mid-day peak hours. The improvements described in Mitigation Measure TRA-7 would reduce impacts to less-than-significant. The mitigation measure requires the project applicant to fund its fair share

of the improvements. The proposed additional westbound through lane is currently not identified in the TIF. The City plans to add the lane to the TIF in the next TIF update. It will take time to

TABLE 4.11-12
INTERSECTION ANALYSIS FOR NEAR-TERM CUMULATIVE (OPENING YEAR 2016) CONDITIONS

		Near-Term Cumulative (Opening Year 2016) Without Project						Near-Term Cumulative (Opening Year 2016) With Project						
		Delay[1](sec.)			Level of Service			Delay[1](sec.)			Level of Service			
Intersection	Traffic Control[2]	AM	PM	Sat	AM	PM	Sat	AM	PM	Sat	AM	PM	Sat	Impact?
1. Lakeshore Dr/ Riverside Dr (SR 74)	TS	46.9	63.5	61.5	D	E	E	47.9	66.1	65.4	D	E	E	**Yes**
2. W Graham Av./ N Main St	AWS	9.5	13.2	11.3	A	B	B	9.8	14.4	12.2	A	B	B	No
3. E Lakeshore Dr./ Diamond Dr	TS	175.1	>200	>200	F	F	F	176.2	>200	>200	F	F	F	**Yes**
4. Gunnerson St/ Riverside Dr (SR 74)	CSS	>100	>100	>100	F	F	F	>100	>100	>100	F	F	F	**Yes**
5. Collier Av./ Riverside D. (SR 74)	TS	16.0	27.9	35.4	B	C	D	17.1	33.8	48.0	B	C	D	No
6. Collier Av./ Central Av. (SR 74)	TS	36.7	37.7	33.8	D	D	C	37.6	38.8	36.0	D	D	D	No
7. Auto Center Dr/ Diamond Dr.	TS	24.8	27.1	30.1	C	C	C	24.9	27.2	30.7	C	C	C	No
8. I-15 SB Ramps/ Nichols Rd	AWS	12.9	12.3	11.2	B	B	B	13.0	12.6	11.5	B	B	B	No
9. I-15 SB Ramps/ Central Av. (SB-74)	TS	25.9	32.6	26.0	C	C	C	27.9	41.6	31.4	C	D	C	No
10. I-15 SB Ramps/ N Main St	CSS	14.2	15.5	11.4	B	C	B	14.7	16.4	12.1	B	C	B	No
11. I-15 SB Ramps/ Railroad Canyon Rd	TS	58.1	105.1	76.8	E	F	E	60.2	111.9	85.6	E	F	F	**Yes**
12. I-15 NB Ramps/ Nichols Rd	CSS	>100	>100	38.5	F	F	E	>100	>100	45.7	F	F	E	**Yes**
13. I-15 NB Ramps/ Central Av. (SR 74)	TS	24.9	29.7	25.2	C	C	C	27.7	35.5	31.5	C	D	C	No
14. I-15 NB Ramps/ N Main St	CSS	>100	>100	21.8	F	F	C	>100	>100	28.7	F	F	D	**Yes**
15. I-15 Ramps/ Railroad Canyon Rd	TS	36.1	56.4	31.8	D	E	C	36.7	57.1	32.3	D	E	C	**Yes**
16. Dexter Av/11th St	CSS	10.2	10.0	9.7	B	A	A	10.5	10.3	10.1	B	B	B	No
17. Dexter Av/ Central Av (SR 74)	TS	34.0	34.9	36.1	C	C	D	36.2	36.2	37.4	D	D	D	No
18. Dexter Av/Allan St	CSS	11.6	13.3	10.2	B	B	B	12.5	12.5	11.1	B	B	B	No
19. Dexter Av/ Crane St (SR 74)	CSS	11.4	14.2	10.5	B	B	B	33.5	33.5	18.2	D	D	C	No
20. Dexter Av/3rd St	CSS	12.9	13.4	10.9	B	B	B	14.0	14.0	11.5	B	B	B	No
21. Dexter Av/2nd St	AWS	9.4	9.4	8.3	A	A	A	10.1	10.0	9.0	B	B	A	No
22. Camino del Norte/ N Main St	CSS	11.7	11.5	10.7	B	B	B	12.4	12.2	11.6	B	B	B	No
23. Summerhill Dr/ Railroad Canyon Rd	TS	123.5	172.1	109.7	F	F	F	126.0	176.5	114.7	F	F	F	**Yes**

TABLE 4.11-12
INTERSECTION ANALYSIS FOR NEAR-TERM CUMULATIVE (OPENING YEAR 2016) CONDITIONS

		Near-Term Cumulative (Opening Year 2016) Without Project						Near-Term Cumulative (Opening Year 2016) With Project						
		Delay[1](sec.)			Level of Service			Delay[1](sec.)			Level of Service			
Intersection	Traffic Control[2]	AM	PM	Sat	AM	PM	Sat	AM	PM	Sat	AM	PM	Sat	Impact?
24. Driveway 1/ Central Av (SR 74)	CSS	*Intersection Does Not Exist*						10.9	12.1	14.5	B	B	B	No
25. Cambern Av/ Central Av (SR 74)	TS	19.8	27.3	28.1	B	C	C	23.5	40.1	43.8	C	D	D	No
26. Cambern Av/ Driveway 2	CSS	*Intersection Does Not Exist*						0.0	0.0	0.0	A	A	A	No
27. Cambern Av/ Driveway 3	CSS	*Intersection Does Not Exist*						9.4	9.9	11.5	A	A	B	No
28. Cambern Av/3rd St	AWS	6.8	7.0	6.9	A	A	A	6.8	7.0	6.9	A	A	A	No
29. Conard Av/ Central Av (SR 74)	TS	23.6	25.1	19.8	C	C	B	24.5	26.6	20.5	C	C	C	No
30. Rosetta Canyon Dr/ Central Av (SR 74)	TS	21.4	17.4	15.7	C	B	B	21.9	17.6	16.1	C	B	B	No
31. Riverside St/ Central Av (SR 74)	TS	14.0	15.6	13.4	B	B	B	14.1	15.8	13.6	B	B	B	No
32. Greenwald Av/ Central Av (SR 74)	TS	22.6	23.4	22.5	C	C	C	22.6	23.4	22.6	C	C	C	No

1. Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all-way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.
2. CSS=Cross-street stop; AWS=All-Way Stop; TS= Traffic Signal

SOURCE*: Urban Crossroads, 2015*

assemble the necessary funds to construct the lane. In addition, because Caltrans has jurisdiction over the intersection, the City cannot guarantee that the improvement will be made. Thus, even though the applicant will help to fund these improvements, this Draft EIR assumes that the significant impact will occur until such time as the improvements are completed.

The addition of project-generated traffic would contribute to unacceptable LOS F conditions at East Lakeshore Drive / Diamond Drive (Intersection #3) during the AM, PM and Saturday mid-day peak hours. The improvements described in Mitigation Measure TRA-8 (in addition to Mitigation Measure TRA-1) would reduce impacts to less-than-significant. The mitigation measure requires the project applicant to fund its fair share of the improvements. The subject intersection is currently identified for improvement in the TIF. The applicant will also pay the TIF. It will take time to assemble the necessary funds to install the lane improvements and signal modification. Thus, even though the applicant will help to fund these improvements, this Draft EIR assumes that the significant impact will occur until such time as the improvements are completed.

The addition of project-generated traffic would contribute to unacceptable LOS E conditions at Gunnerson Street / Riverside Drive (SR 74) (Intersection #4) to increase during the AM peak hour, and to unacceptable LOS F conditions during the PM and Saturday mid-day peak hours. The improvements described in Mitigation Measure TRA-9 (in addition to Mitigation Measure TRA-2) would reduce impacts to less-than-significant. The mitigation measures require the project applicant to fund its fair share of the improvements. A portion of the improvements are currently identified in the TUMF. The applicant will also pay the TUMF. It will take time to assemble the necessary funds to install the traffic signal (Mitigation Measure TRA-2). In addition, because Caltrans has jurisdiction over the intersection, the City cannot guarantee that the improvement will be made. Thus, even though the applicant will help to fund these improvements, this Draft EIR assumes that the significant impact will occur until such time as the improvements are completed.

The addition of project-generated traffic would contribute to unacceptable LOS F conditions at I-15 Southbound Ramps / Railroad Canyon Road (Intersection #11) during the PM peak hour, and to unacceptable LOS E conditions during the AM and Saturday mid-day peak hours. The improvements described in Mitigation Measure TRA-3 would reduce impacts to less-than-significant.

The addition of project-generated traffic would contribute to unacceptable LOS E conditions at I-15 Northbound Ramps / Nichols Road (Intersection #12) during the AM peak hour. The improvements described in Mitigation Measure TRA-4 would reduce impacts to less-than-significant. The mitigation measure requires the project applicant to fund its fair share of the improvements. The intersection is currently identified in the TIF. The applicant will pay the TIF. It will take time to assemble the necessary funds to install the traffic signal. In addition, because Caltrans has jurisdiction over the intersection, the City cannot guarantee that the improvement will be made. Thus, even though the applicant will help to fund these improvements, this Draft EIR assumes that the significant impact will occur until such time as the improvements are completed.

The addition of project-generated traffic would contribute to unacceptable LOS F conditions at I-15 Northbound Ramps / North Main Street (Intersection #14) during the AM and PM peak hours. The improvements described in Mitigation Measure TRA-5 would reduce impacts to less-than-significant. The mitigation measure requires the project applicant to fund its fair share of the improvements. The proposed traffic signal is currently not identified in the TIF. The City plans to add the traffic signal to the TIF in the next TIF update. It will take time to assemble the necessary funds to install the traffic signal. In addition, because Caltrans has jurisdiction over the intersection, the City cannot guarantee that the improvement will be made. Thus, even though the applicant will help to fund these improvements, this Draft EIR assumes that the significant impact will occur until such time as the improvements are completed.

The addition of project-generated traffic would contribute to unacceptable LOS E conditions at I-15 Northbound Ramps / Railroad Canyon Road (Intersection #15). The improvements described in Mitigation Measure TRA-10 would reduce impacts to less-than-significant. The same intersection improvements are currently identified in the TIF for improvement. The applicant will

pay the required TIF. In addition, the mitigation measure requires the project applicant to fund its fair share of the improvements. It may take time to assemble the necessary funds to install the traffic signal. In addition, because Caltrans has jurisdiction over the intersection, the City cannot guarantee that the improvement will be made. Thus, even though the applicant will help to fund these improvements, this Draft EIR assumes that the significant impact will occur until such time as the improvements are completed.

The addition of project-generated traffic would contribute to unacceptable LOS F conditions at Summerhill Drive / Railroad Canyon Road (Intersection #23) during the AM, PM and Saturday mid-day peak hours. The improvements described in Mitigation Measure TRA-6 would reduce impacts to less-than-significant. The intersection is currently identified in the TIF for improvement. The applicant will pay the required TIF. However, it will take time to assemble the necessary funds to implement the improvement. Thus, even though the applicant will help to fund these improvements, this Draft EIR assumes that the significant impact will occur until such time as the improvements are completed.

Table 4.11-13 shows the levels of service at the above-described seven intersections after implementation of the improvements identified in Mitigation Measures TRA-1 through TRA-10.

TABLE 4.11-13
INTERSECTION ANALYSIS FOR MITIGATED NEAR-TERM CUMULATIVE (OPENING YEAR 2016) PLUS PROJECT CONDITIONS

		Near-Term Cumulative (Opening Year 2016) Plus Project						Near-Term Cumulative (Opening Year 2016) Plus Project – Mitigated					
		Delay (sec)			Level of Service			Delay (sec)			Level of Service		
Intersection	Traffic Control[1]	AM	PM	Sat	AM	PM	Sat	AM	PM	Sat	AM	PM	Sat
1. Lakeshore Dr/ Riverside Dr (SR 74)	TS MM TRA-7	47.9	66.1	65.4	D	E	E	41.1	45.7	43.7	D	D	D
3. E Lakeshore Dr./ Diamond Dr	TS MM TRA-1 MM TRA-8	176.2	271.9	336.4	F	F	F	47.6	39.6	52.2	D	D	D
4. Gunnerson St/ Riverside Dr (SR 74)	CSS/TS MM TRA-2 MM TRA-9	255.6	1,363	1,292	F	F	F	12.6	12.7	13.3	B	B	B
11. I-15 SB Ramps/ Railroad Canyon Rd	TS MM TRA-3[2]	60.2	111.9	85.6	E	F	F	47.8	46.1	41.7	D	D	D
12. I-15 NB Ramps/ Nichols Rd	CSS/TS MM TRA-4	233.9	149.3	45.7	F	F	E	25.5	25.8	25.9	C	C	C
14. I-15 NB Ramps/ N Main St	CSS/TS MM TRA-5	217.3	214.9	28.7	F	F	D	26.1	31.1	28.6	C	C	C
15. I-15 NB Ramps/ Railroad Canyon Rd	TS MM TRA-10	36.7	57,1	32,3	D	E	C	33.0	53.9	46.3	C	D	D
23. Summerhill Dr/ Railroad Canyon Rd	TS MM TRA-6	126.0	176.5	114.7	F	F	F	52.0	53.4	40.1	D	D	D

1. CSS=Cross-street stop; TS= Traffic Signal

SOURCE*: Urban Crossroads, 2015*

Basic Freeway Segment Analysis

As shown on **Table 4.11-14** (included in this Draft EIR at the request of Caltrans), I-15 Freeway segments analyzed for this study were found to operate at an acceptable LOS (i.e., LOS D or better) during the peak hours for Near-Term Cumulative (Opening Year 2016) Without Project traffic conditions with the exception of the northbound segment between North Main Street and Railroad Canyon Road, and the northbound segment south of Railroad Canyon Road (both of which would operate at LOS E during the PM peak hour). The northbound segment south of Railroad Canyon Road between Central Avenue (SR 74) and Main Street is anticipated to degrade from LOS D to LOS E during the PM peak hour with the addition of project traffic.

Freeway Merge/Diverge Analysis

Ramp merge and diverge operations on I-15 in the project area were evaluated for Near-Term Cumulative (Opening Year 2016) Without and With Project conditions, and the results of this analysis are presented in **Table 4.11-15** (included in this Draft EIR at the request of Caltrans). As shown in the table, the ramp merge and diverge areas are anticipated to operate at LOS D or better for Near-Term Cumulative (Opening Year 2016) Without Project traffic conditions, with the exception of the following locations:

- Northbound, Off-Ramp at Central Avenue (SR 74) – LOS E, AM, PM, and Saturday peak hours
- Northbound, Off-Ramp at North Main Street – LOS E, AM and PM peak hours
- Northbound, On-Ramp at Railroad Canyon Road – LOS E, AM and PM peak hours
- Northbound, Off -Ramp at Railroad Canyon Road – LOS E, PM peak hour

There are no additional freeway ramp junctions anticipated to operate at unacceptable LOS with the addition of project traffic, in addition to those previously identified for Near-Term Cumulative (Opening Year 2016) Without Project traffic conditions.

TABLE 4.11-14
BASIC FREEWAY SEGMENT ANALYSIS – NEAR-TERM CUMULATIVE (OPENING YEAR 2016) CONDITIONS

Direction	Mainline Segment	Lanes[1]	Near-Term Cumulative (Opening Year 2016) Without Project						Near-Term Cumulative (Opening Year 2016) With Project					
			Density[2]			Level of Service			Density[2]			Level of Service		
			AM	PM	SAT	AM	PM	SAT	AM	PM	SAT	AM	PM	SAT
Southbound	North of Nichols Road	3	16.3	22.4	19.7	B	C	C	16.6	22.7	20.1	B	C	C
	Nichols Road to Central Avenue (SR 74)	3	16.3	22.6	19.7	B	C	C	16.6	23.1	20.4	B	C	C
	Central Avenue (SR 74) to North Main Street	3	19.4	25.0	22.3	C	C	C	19.6	25.6	23.2	C	C	C
	North Main Street to Railroad Canyon Road	3	20.7	25.6	22.7	C	C	C	21.1	26.3	23.6	C	D	C
	South of Railroad Canyon Road	3	20.2	21.1	19.2	C	C	C	20.4	21.3	19.6	C	C	C
Northbound	North of Nichols Road	3	26.3	27.3	24.8	D	D	C	26.6	27.8	25.3	D	D	C
	Nichols Road to Central Avenue (SR 74)	3	26.5	27.7	24.9	D	D	C	26.9	28.3	25.7	D	D	C
	Central Avenue (SR 74) to North Main Street	3	29.8	34.0	29.7	D	D	D	30.5	**35.2**	30.8	D	E	D
	North Main Street to Railroad Canyon Road	3	33.1	37.2	30.6	D	E	D	33.9	**38.5**	32.0	D	E	D
	South of Railroad Canyon Road	3	24.8	**35.2**	25.7	C	E	C	25.0	**35.8**	26.2	C	E	D

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).
1 Number of lanes are in the specified direction and is based on existing conditions.
2 Density is measured by passenger cars per mile per lane (pc/mi/ln).

SOURCE: Urban Crossroads, 2015.

TABLE 4.11-15
I-15 FREEWAY RAMP JUNCTION MERGE/DIVERGE ANALYSIS FOR NEAR-TERM CUMULATIVE (OPENING YEAR 2016) CONDITIONS

Direction	Ramp	Lanes on Freeway[1]	Near-Term Cumulative (Opening Year 2016) Without Project						Near-Term Cumulative (Opening Year 2016) With Project					
			AM Peak		PM Peak		Saturday Peak		AM Peak		PM Peak		Saturday Peak	
			Density[1]	LOS	Density[1]	LOS	Density[1]	LOS	Density[1]	LOS	Density[1]	LOS	Density[1]	LOS
Southbound	Off-Ramp at Nichols Road	3	22.6	C	28.5	D	26.0	C	22.9	C	28.8	D	26.4	C
	On-Ramp at Nichols Road	3	20.4	C	26.5	C	23.8	C	20.8	C	27.0	C	24.5	C
	Off-Ramp at Central Avenue (SR 74)	3	23.2	C	29.9	D	27.0	C	23.8	C	30.5	D	27.9	C
	On-Ramp at Central Avenue (SR 74)	3	25.6	C	30.7	D	28.4	D	26.1	C	31.5	D	29.6	D
	Off-Ramp at Main Street	3	26.1	C	31.1	D	28.8	D	26.3	C	31.6	D	29.6	D
	On-Ramp at Main Street	3	24.5	C	28.7	D	26.0	C	24.8	C	29.1	D	26.7	C
	Off-Ramp at Railroad Canyon Road	3	28.9	D	33.8	D	31.5	D	29.2	D	34.4	D	32.4	D
	On-Ramp at Railroad Canyon Road	3	24.6	C	24.6	C	23.0	C	24.8	C	24.9	C	23.4	C
Northbound	On-Ramp at Nichols Road	3	26.1	C	26.9	C	25.0	C	26.4	C	27.2	C	25.6	C
	Off-Ramp at Nichols Road	3	31.6	D	32.4	D	30.5	D	31.8	D	32.8	D	31.1	D
	On-Ramp at Central Avenue (SR 74)	3	28.0	C	28.8	D	26.6	C	28.4	D	29.4	D	27.6	C
	Off-Ramp at Central Avenue (SR 74)	3	35.1	E	37.4	E	35.4	E	35.6	E	38.0	E	36.2	E
	On-Ramp at Main Street	3	31.0	D	33.4	D	31.0	D	31.4	D	33.9	D	31.6	D
	Off-Ramp at Main Street	3	35.6	E	37.0	E	34.2	D	35.9	E	37.5	E	34.9	D
	On-Ramp at Railroad Canyon Road	3	37.2	E	37.3	E	34.9	D	37.7	E	38.0	E	35.8	E
	Off-Ramp at Railroad Canyon Road	3	30.9	D	36.9	E	31.6	D	31.1	D	37.1	E	32.0	D

[1] Density is measured by passenger cars per mile per lane (pc/mi/ln).

SOURCE: Urban Crossroads, 2015

Baseline plus Project Mitigation

Mitigation Measure TRA-1: The applicant for the proposed project shall contribute its fair share towards the modification of the traffic signal including permissive left-turn phasing at the intersection of East Lakeshore Drive / Diamond Drive.

Mitigation Measure TRA-2: The applicant for the proposed project shall contribute its fair share towards the installation of a traffic signal at the intersection of Gunnerson Street / Riverside Drive, and to implement permissive left-turn phasing on all approaches.

Mitigation Measure TRA-3: The applicant for the proposed project shall pay for the restriping the existing eastbound right turn lane as a third shared through-right turn lane at the intersection of I-15 Southbound Ramps/Railroad Canyon Road.

Mitigation Measure TRA-4: The applicant for the proposed project shall contribute its fair share towards the installation of a traffic signal at the intersection of I-15 Northbound Ramps / Nichols Road.

Mitigation Measure TRA-5: The applicant for the proposed project shall contribute its fair share towards the installation of a traffic signal at the intersection of I-15 Northbound Ramps / North Main Street.

Mitigation Measure TRA-6: The applicant for the proposed project shall pay its required Traffic Impact Fee ("TIF"), which fee program includes funding for improvements to the Summerhill Drive / Railroad Canyon Road intersection. One alternative for improving the operation of this intersection is to restripe the northbound approach at the intersection of Summerhill Drive / Railroad Canyon Road to provide a separate right turn lane, and modify the traffic signal and implement overlap phasing for the northbound and eastbound right turn lanes. The City is currently studying additional alternatives for improving the function of this intersection as part of the interchange improvements due to the close proximity.

Near-Term Cumulative (Opening Year 2016) Mitigation

Mitigation Measure TRA-7: The applicant for the proposed project shall pay its required TIF, as well as the required Western Riverside County Transportation Uniform Mitigation Fee (TUMF), which fee programs include funding for the construction of a 2nd westbound through lane at the intersection of Lakeshore Drive / Riverside Drive (SR 74).

Mitigation Measure TRA-8: The applicant for the proposed project shall contribute its fair share towards the construction of a second southbound left turn lane at intersection of East Lakeshore Drive / Diamond Drive and associated signal modifications.

Mitigation Measure TRA-9: The applicant for the proposed project shall contribute its fair share to the construction of a left turn lane and a second through lane on the eastbound approach, at the intersection of Gunnerson Street / Riverside Drive, construction of a left turn lane and a second through lane on the westbound approach, and modification of the traffic signal to provide protected left-turn phasing for the eastbound and westbound approaches.

Mitigation Measure TRA-10: The applicant for the proposed project shall contribute its fair share towards the construction of a left turn lane on the northbound approach at the intersection of I-15 Northbound Ramps and Railroad Canyon Road.

As previously noted, in addition to the fair share payments referenced above, the project applicant shall participate in the funding of off-site improvements, including traffic signs that are needed to serve traffic conditions through the payment of TUMF, and the City of Lake Elsinore TIF. 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.

Significance after Mitigation: As stated above, while mitigation will be imposed, and the identified improvement can reduce the impacts to less than significant, it is unknown when all of the required funding for the improvements outlined above will be acquired. In addition, with many of the subject improvements, Caltrans would be required to issue permits and approvals. Therefore, the City cannot control the completion and timing of the measures. For this reason, the Draft EIR assumes that the impacts will remain significant unless and until the improvements outlined above are completed.

Long-Term Cumulative (General Plan Buildout Post-2035) Traffic Analysis

Impact 4.11-3: Would development of the project, in combination with other reasonably foreseeable development, conflict with a plan, ordinance or policy establishing measures of effectiveness (level of service standards) for the performance of the circulation system, or conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Similar to Near-Term Cumulative (Opening Year 2016) conditions, the lane configurations and traffic controls assumed to be in place for Long-Term Cumulative (General Plan Buildout Post-2035) conditions is consistent with those described previously in the existing setting, with the exception of the following:

- Long-Term Cumulative (General Plan Buildout Post-2035) with project traffic conditions assumes the re-configured interchanges at the I-15 Freeway and Central Avenue (SR 74) and Railroad Canyon Road (see Exhibits 7-1 and 7-2 of the TIA in Appendix J of this EIR. The proposed interchange designs utilized are consistent with the draft geometric approval drawings for the respective interchanges. It should also be noted that volumes for Long-Term Cumulative (General Plan Buildout Post-2035) with project conditions assumes a circulation network consistent with the City of Lake Elsinore General Plan Circulation Element. As such, volumes along Railroad Canyon Road, Mission Trail and Lakeshore Drive may have decreased from Near-Term Cumulative (Opening Year 2016) traffic conditions because additional parallel routes are utilized. The improvements shown on Exhibits 7-1 and 7-2 have been assumed only for “with improvements” conditions, as the “without improvement” operations analysis assumes baseline intersection controls and

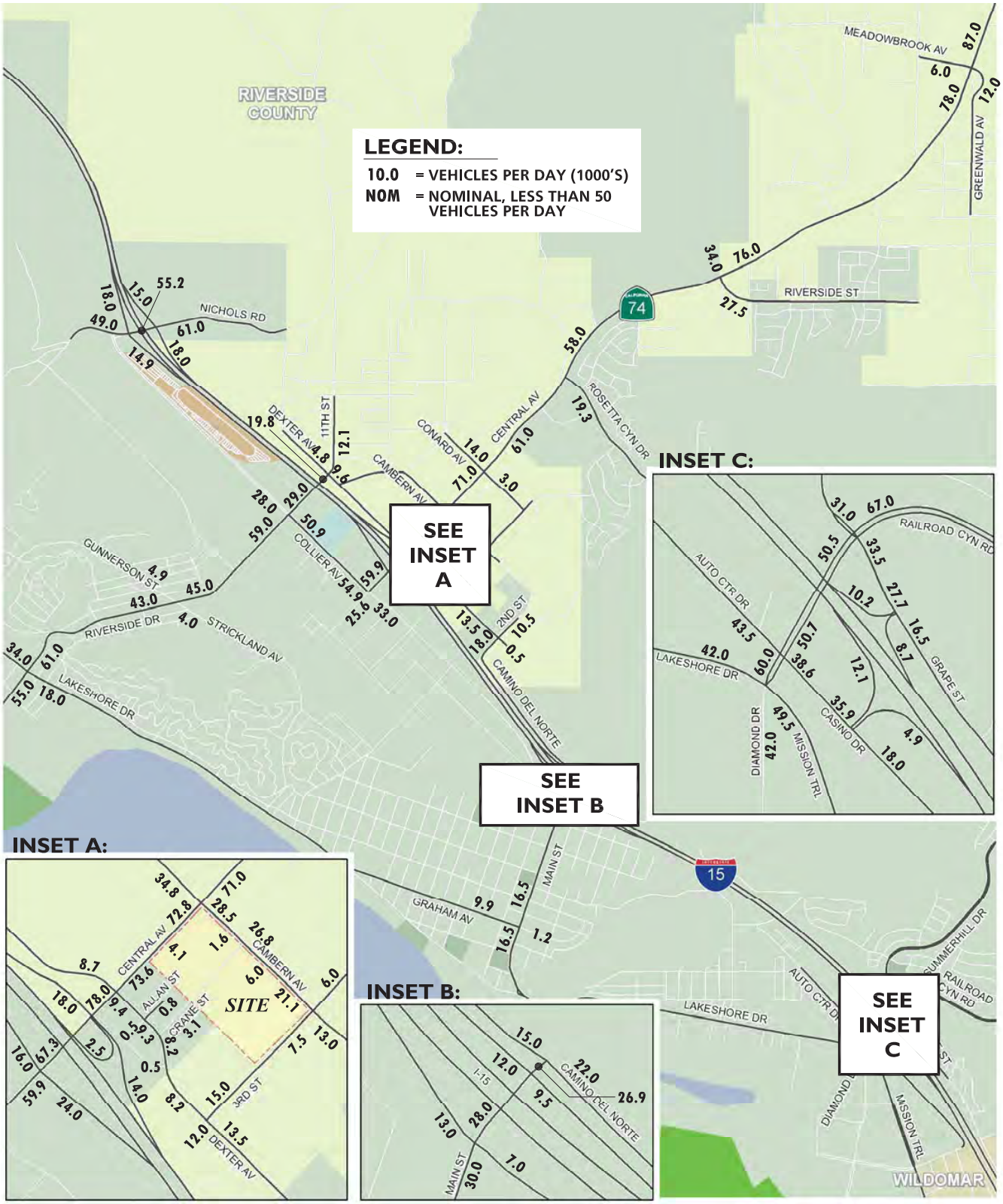
lane geometries. **Figure 4.11-3a** depicts the Long-Term Cumulative (General Plan Buildout Post-2035) with Project Average Daily Traffic (ADT).

- Future improvements to the I-15 Freeway and Central Avenue (SR 74) interchange include restricting the access at Dexter Avenue to right-in/right out only via the construction of a raised median along Central Avenue (SR 74) through the intersection at Dexter Avenue. As noted above, the improvements shown on Exhibit 7-1 have been assumed only for "with improvement" conditions, as the "without improvement" operations analysis assumes existing intersection controls and lane geometries.
- At project driveways and those facilities assumed to be constructed by the proposed project to provide site access are also assumed to be in place for Long-Term Cumulative (General Plan Buildout Post-2035) with project conditions only (e.g., intersection turn lane improvements at the project driveways).

Intersection Operations Analysis

Level of service calculations were conducted for the study intersections to evaluate their operations under Long-Term Cumulative (General Plan Buildout Post-2035) without and with Project conditions with existing roadway and intersection geometrics. The intersection analysis results are shown on **Figure 4.11-3b** and summarized in **Table 4.11-16**, which indicates that 25 of the 32 study area intersections would experience unacceptable LOS (i.e., LOS E or LOS F) during one or more of the peak hours under With Project conditions. While the addition of project traffic would not result in changes to the 2035 Without Project intersection LOS, the proposed project would contribute to significant cumulative impacts, as described below. The mitigation measures identified below (see page 4.11-55) would reduce the project's impacts to less-than-significant levels. However, as discussed below, the timing of construction of the improvements in many cases is uncertain as it will take time to accumulative the funding necessary for the improvements. In addition, some of the improvements would be within the jurisdiction of other public agencies which the City does not control. Thus, in some cases, significant impact could exist even though the applicant for this particular project has made a contribution towards the improvement and satisfied its obligation with regard to the measures. For those reasons, without successful implementation of improvements identified in the mitigation measures, the proposed project could result in exceedances of the Thresholds of Significance described above .

At intersection Lakeshore Drive / Riverside Drive (SR 74) (#1) – addition of project-generated traffic would contribute to LOS F conditions during the AM, PM and Saturday mid-day peak hours. Implementation of the improvements described in Mitigation Measure TRA-11 would reduce impacts to less-than-significant.

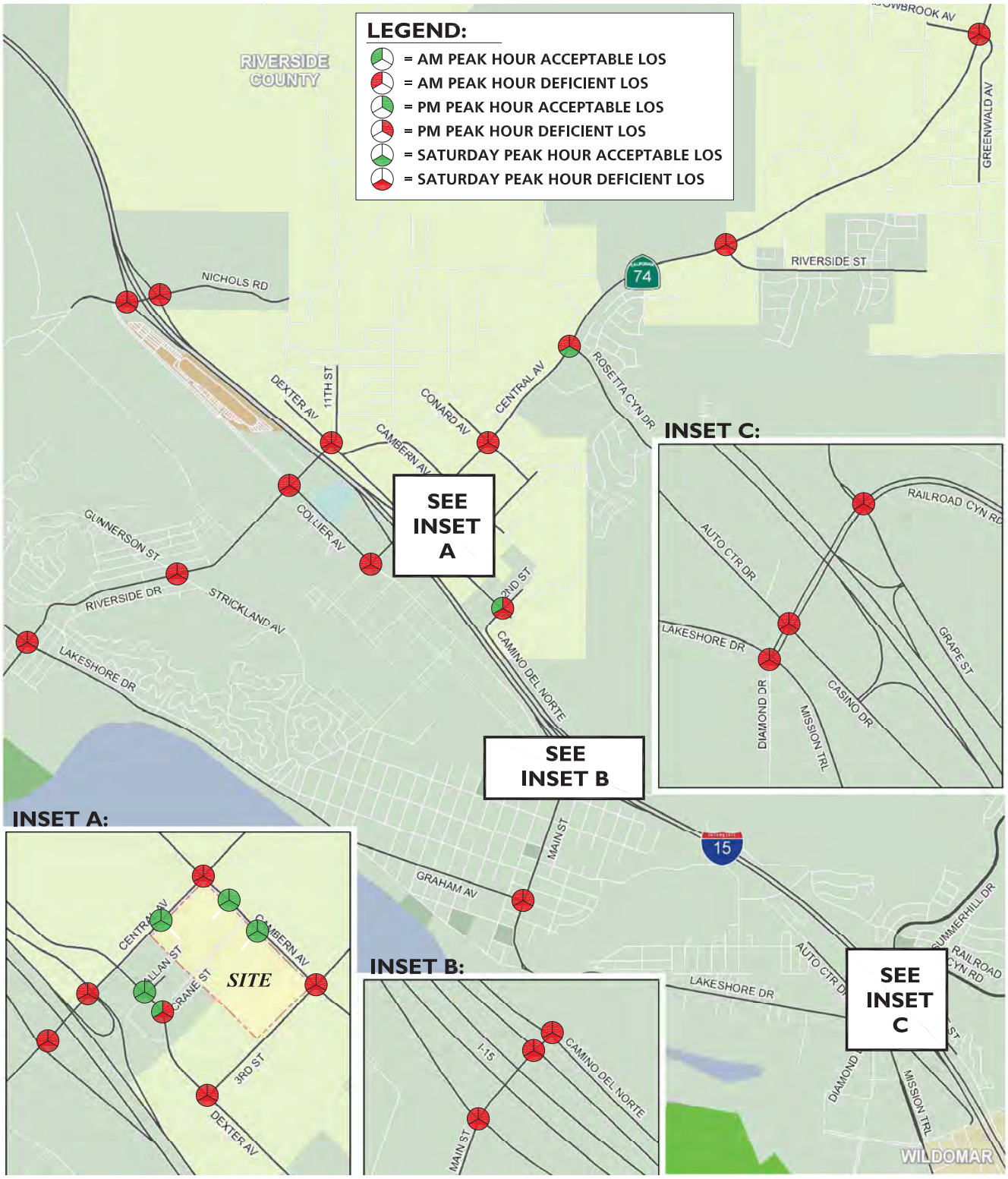


SOURCE: Urban Crossroads

Lake Elsinore Walmart Supercenter Project EIR . 130767

Figure 4.11-3a

General Plan Buildout (Post-2035) with Project Average Daily Traffic (ADT)



SOURCE: Urban Crossroads

Lake Elsinore Walmart Supercenter Project EIR . 130767

Figure 4.11-3b

Summary of Peak Hour Intersection LOS for General Plan Buildout (Post-2035) with Project Conditions

TABLE 4.11-16
INTERSECTION ANALYSIS FOR LONG-TERM CUMULATIVE (GENERAL PLAN BUILDOUT POST-2035) CONDITIONS

Intersection	Traffic Control[2]	Long-Term Cumulative (General Plan Buildout Plan Post-2035) Without Project						Long-Term Cumulative (General Plan Buildout Post-2035) With Project						
		Delay[1](sec.)			Level of Service			Delay[1](sec.)			Level of Service			
		AM	PM	Sat	AM	PM	Sat	AM	PM	Sat	AM	PM	Sat	Impact?
1. Lakeshore Dr/ Riverside Dr (SR 74)	TS	>200	>200	>200	F	F	F	>200	>200	>200	F	F	F	Yes
2. W Graham Av./ N Main St	AWS	49.7	>100	>100	F	F	F	57.0	>100	>100	F	F	F	Yes
3. E Lakeshore Dr./ Diamond Dr	TS	>200	>200	>200	F	F	F	>200	>200	>200	F	F	F	Yes
4. Gunnerson St/ Riverside Dr (SR 74)	CSS	>100	>100	>100	F	F	F	>100	>100	>100	F	F	F	Yes
5. Collier Av./ Riverside D. (SR 74)	TS	>200	>200	>200	F	F	F	>200	>200	>200	F	F	F	Yes
6. Collier Av./ Central Av. (SR 74)	TS	71.2	>200	>200	F	F	F	77.2	>200	>200	F	F	F	Yes
7. Auto Center Dr/ Diamond Dr.	TS	>200	>200	>200	F	F	F	>200	>200	>200	F	F	F	Yes
8. I-15 SB Ramps/ Nichols Rd	AWS	>100	>100	>100	F	F	F	>100	>100	>100	F	F	F	Yes
9. I-15 SB Ramps/ Central Av. (SB-74)	TS	>200	>200	>200	F	F	F	>200	>200	>200	F	F	F	Yes
10. I-15 SB Ramps/ N Main St	CSS	>100	>100	>100	F	F	F	>100	>100	>100	F	F	F	Yes
11. I-15 SB Ramps/ Railroad Canyon Rd	TS	*Not Applicable*						*Not Applicable*						
12. I-15 NB Ramps/ Nichols Rd	CSS	>100	>100	>100	F	F	F	>100	>100	>100	F	F	F	Yes
13. I-15 NB Ramps/ Central Av. (SR 74)	TS	116.2	131.4	80.9	F	F	F	135.0	148.9	117.1	F	F	F	Yes
14. I-15 NB Ramps/ N Main St	CSS	>100	>100	>100	F	F	F	>100	>100	>100	F	F	F	Yes
15. I-15 Ramps/ Railroad Canyon Rd	TS	*Not Applicable*						*Not Applicable*						
16. Dexter Av/11th St	CSS	>100	>100	>100	F	F	F	>100	>100	>100	F	F	F	Yes
17. Dexter Av/ Central Av (SR 74)	TS	*Not Applicable*						*Not Applicable*						
18. Dexter Av/Allan St	CSS	13.2	18.8	16.5	B	C	C	12.0	14.5	12.0	B	B	B	No
19. Dexter Av/ Crane St (SR 74)	CSS	17.1	29.1	18.6	C	D	C	22.9	>100	70.8	C	F	F	Yes
20. Dexter Av/3rd St	CSS	>100	>100	>100	F	F	F	>100	>100	>100	F	F	F	Yes
21. Dexter Av/2nd St	AWS	22.3	>100	>100	C	F	F	25.4	>100	>100	D	F	F	Yes
22. Camino del Norte/ N Main St	CSS	>100	>100	>100	F	F	F	>100	>100	>100	F	F	F	Yes
23. Summerhill Dr/ Railroad Canyon Rd	TS	>200	>200	>200	F	F	F	>200	>200	>200	F	F	F	Yes
24. Driveway 1/ Central Av (SR 74)	CSS	*Intersection Does Not Exist*						11.2	12.2	11.9	B	B	B	No
25. Cambern Av/ Central Av (SR 74)	TS	>200	>200	>200	F	F	F	>200	>200	>200	F	F	F	Yes

TABLE 4.11-16
INTERSECTION ANALYSIS FOR LONG-TERM CUMULATIVE (GENERAL PLAN BUILDOUT POST-2035) CONDITIONS

Intersection	Traffic Control[2]	Long-Term Cumulative (General Plan Buildout Plan Post-2035) Without Project						Long-Term Cumulative (General Plan Buildout Post-2035) With Project						
		Delay[1](sec.)			Level of Service			Delay[1](sec.)			Level of Service			
		AM	PM	Sat	AM	PM	Sat	AM	PM	Sat	AM	PM	Sat	Impact?
26. Cambern Av/Driveway 2	CSS	*Intersection Does Not Exist*						0.0	0.0	0.0	A	A	A	No
27. Cambern Av/Driveway 3	CSS	*Intersection Does Not Exist*						9.4	13.5	18.7	A	B	B	No
28. Cambern Av/3rd St	AWS	>100	>100	>100	F	F	F	>100	>100	>100	F	F	F	Yes
29. Conard Av/ Central Av (SR 74)	TS	104.5	>200	128.2	F	F	F	111.0	>200	142.6	F	F	F	Yes
30. Rosetta Canyon Dr/ Central Av (SR 74)	TS	58.2	109.4	38.4	E	F	D	62.7	112.1	41.7	E	F	D	Yes
31. Riverside St/ Central Av (SR 74)	TS	>200	>200	>200	F	F	F	>200	>200	>200	F	F	F	Yes
32. Greenwald Av/ Central Av (SR 74)	TS	>200	>200	128.5	F	F	F	>200	>200	135.4	F	F	F	Yes

1. Per the 2000 Highway Capacity Manual, overall average intersection delay and level of service are shown for intersections with a traffic signal or all-way stop control. For intersections with cross street stop control, the delay and level of service for the worst individual movement (or movements sharing a single lane) are shown.
2. CSS=Cross-street stop; AWS=All-Way Stop; TS= Traffic Signal

SOURCE*: Urban Crossroads, 2015*

At intersection W. Graham Avenue/North Main Street (SR 74) (#2) – addition of project-generated traffic would contribute to LOS F conditions during the AM, PM and Saturday mid-day peak hours. Implementation of the improvements described in Mitigation Measure TRA-12 would reduce impacts to less-than-significant. Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. However, it will take time to assemble the necessary funds to implement the improvement. In addition, because Caltrans has jurisdiction over the intersection, the City cannot guarantee that the improvement will be made. Thus, even though the applicant will help to fund these improvements, this Draft EIR assumes that the significant impact will occur until such time as the improvements are completed.

At intersection East Lakeshore Drive/Diamond Drive (#3) – addition of project-generated traffic would contribute to LOS F conditions during the AM, PM and Saturday mid-day peak hours. Implementation of the improvements described in Mitigation Measure TRA-13 would reduce impacts to less-than-significant. Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute

its fair share toward installation of these improvements prior to the issuance of building permits. However, it will take time to assemble the necessary funds to implement the improvement. Thus, even though the applicant will help to fund these improvements, this Draft EIR assumes that the significant impact will occur until such time as the improvements are completed.

At intersection Gunnerson Street / Riverside Drive (SR 74) (#4) – addition of project-generated traffic would contribute to LOS F conditions during the AM, PM and Saturday mid-day peak hours. Implementation of the improvements described in Mitigation Measure TRA-9 (in addition to Mitigation Measure TRA-2) would reduce impacts to less-than-significant. However, it will take time to assemble the necessary funds to implement the improvement. In addition, because Caltrans has jurisdiction over the intersection, the City cannot guarantee that the improvement will be made. Thus, even though the applicant will help to fund these improvements, this Draft EIR assumes that the significant impact will occur until such time as the improvements are completed.

At intersection Collier Avenue / Riverside Drive (SR 74) (#5) – addition of project-generated traffic would contribute to LOS F conditions during the AM, PM and Saturday mid-day peak hours. Implementation of the improvements described in Mitigation Measure TRA-14 would reduce impacts to less-than-significant. Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. However, it will take time to assemble the necessary funds to implement the improvement. In addition, because Caltrans has jurisdiction over the intersection, the City cannot guarantee that the improvement will be made. Thus, even though the applicant will help to fund these improvements, this Draft EIR assumes that the significant impact will occur until such time as the improvements are completed.

At intersection Collier Avenue / Central Avenue (SR 74) (#6) – addition of project-generated traffic would contribute to LOS F conditions during the AM, PM and Saturday mid-day peak hours. Implementation of the improvements described in Mitigation Measure TRA-15 would reduce impacts to less-than-significant. Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. However, it will take time to assemble the necessary funds to implement the improvement. In addition, because Caltrans has jurisdiction over the intersection, the City cannot guarantee that the improvement will be made. Thus, even though the applicant will help to fund these improvements, this Draft EIR assumes that the significant impact will occur until such time as the improvements are completed.

At intersection Auto Center Drive / Diamond Drive (#7) – Addition of project-generated traffic would contribute to LOS F conditions during the AM, PM and Saturday mid-day peak hours.

Implementation of the improvements described in Mitigation Measure TRA-16 would reduce impacts to less-than-significant. Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. However, it will take time to assemble the necessary funds to implement the improvement. Thus, even though the applicant will help to fund these improvements, this Draft EIR assumes that the significant impact will occur until such time as the improvements are completed.

At intersection I-15 Southbound Ramps/Nichols Road (#8) – Addition of project-generated traffic would contribute to LOS F conditions during the AM, PM and Saturday mid-day peak hours. Implementation of the improvements described in Mitigation Measure TRA-17 would reduce impacts to less-than-significant. Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. However, it will take time to assemble the necessary funds to implement the improvement. In addition, because Caltrans has jurisdiction over the intersection, the City cannot guarantee that the improvement will be made. Thus, even though the applicant will help to fund these improvements, this Draft EIR assumes that the significant impact will occur until such time as the improvements are completed.

At intersection I-15 Southbound Ramps / Central Avenue (SR 74) (#9) – addition of project-generated traffic would contribute to LOS F conditions during the AM, PM and Saturday mid-day peak hours. Implementation of the improvements described in Mitigation Measure TRA-18 would reduce impacts to less-than-significant. Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. However, it will take time to assemble the necessary funds to implement the improvement. In addition, because Caltrans has jurisdiction over the intersection, the City cannot guarantee that the improvement will be made. Thus, even though the applicant will help to fund these improvements, this Draft EIR assumes that the significant impact will occur until such time as the improvements are completed.

At intersection I-15 Southbound Ramps / North Main Street (#10) – addition of project-generated traffic would contribute to LOS F conditions during the AM, PM and Saturday mid-day peak hours. Implementation of Mitigation Measure TRA-19 would reduce impacts to less-than-significant. Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not

covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. However, it will take time to assemble the necessary funds to implement the improvement. In addition, because Caltrans has jurisdiction over the intersection, the City cannot guarantee that the improvement will be made. Thus, even though the applicant will help to fund these improvements, this Draft EIR assumes that the significant impact will occur until such time as the improvements are completed.

At intersection I-15 Southbound Ramps/Railroad Canyon Road (#11) – this intersection was not analyzed for both Long-term Cumulative (General Plan Buildout Post-2035) Without and With Project traffic conditions due to the proposed new interchange design. However, if the existing diamond interchange remains, it is anticipated it would operate at unacceptable LOS during the peak hours. As such, this impact is considered potentially significant. Addition of project-generated traffic would contribute to unacceptable LOS conditions. Implementation of the improvements described in Mitigation Measure TRA-20 would reduce impacts to less-than-significant. Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. However, it will take time to assemble the necessary funds to implement the improvement. In addition, because Caltrans has jurisdiction over the intersection, the City cannot guarantee that the improvement will be made. Thus, even though the applicant will help to fund these improvements, this Draft EIR assumes that the significant impact will occur until such time as the improvements are completed.

At intersection I-15 Northbound Ramps/Nichols Road (#12) – addition of project-generated traffic would contribute to LOS F conditions during the AM, PM and Saturday mid-day peak hours. Implementation of the improvements described in Mitigation Measure TRA-21 would reduce impacts to less-than-significant. Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. However, it will take time to assemble the necessary funds to implement the improvement. In addition, because Caltrans has jurisdiction over the intersection, the City cannot guarantee that the improvement will be made. Thus, even though the applicant will help to fund these improvements, this Draft EIR assumes that the significant impact will occur until such time as the improvements are completed.

At intersection I-15 Northbound Ramps / Central Avenue (SR 74) (#13) – addition of project-generated traffic would contribute to LOS F conditions during the AM, PM and Saturday mid-day peak hours. Implementation of the improvements described in Mitigation Measure TRA-22 would reduce impacts to less-than-significant. Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of

the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. However, it will take time to assemble the necessary funds to implement the improvement. In addition, because Caltrans has jurisdiction over the intersection, the City cannot guarantee that the improvement will be made. Thus, even though the applicant will help to fund these improvements, this Draft EIR assumes that the significant impact will occur until such time as the improvements are completed.

At intersection I-15 Northbound Ramps/North Main Street (#14) – Addition of project-generated traffic would contribute to LOS F conditions during the AM, PM and Saturday mid-day peak hours. Implementation of the improvements described in Mitigation Measure TRA-23 would reduce impacts to less-than-significant. Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. However, it will take time to assemble the necessary funds to implement the improvement. In addition, because Caltrans has jurisdiction over the intersection, the City cannot guarantee that the improvement will be made. Thus, even though the applicant will help to fund these improvements, this Draft EIR assumes that the significant impact will occur until such time as the improvements are completed.

At intersection I-15 Northbound Ramps/Railroad Canyon Road (#15) – this intersection was not analyzed for both Long-term Cumulative (General Plan Buildout Post-2035) Without and With Project traffic conditions due to the proposed new interchange design. However, if the existing diamond interchange remains, it is anticipated it would operate at unacceptable LOS during the peak hours. As such, this impact is considered potentially significant. Addition of project-generated traffic would contribute to unacceptable LOS conditions. Implementation of the improvements described in Mitigation Measure TRA-24 would reduce impacts to less-than-significant. Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. However, it will take time to assemble the necessary funds to implement the improvement. In addition, because Caltrans has jurisdiction over the intersection, the City cannot guarantee that the improvement will be made. Thus, even though the applicant will help to fund these improvements, this Draft EIR assumes that the significant impact will occur until such time as the improvements are completed.

At intersection Dexter Avenue / 11th Street (#16) – addition of project-generated traffic would contribute to LOS F conditions during the AM, PM and Saturday mid-day peak hours. Implementation of the improvements described in Mitigation Measure TRA-25 would reduce impacts to less-than-significant. Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its

contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. However, it will take time to assemble the necessary funds to implement the improvement. Thus, even though the applicant will help to fund these improvements, this Draft EIR assumes that the significant impact will occur until such time as the improvements are completed.

At intersection Dexter Avenue/Central Avenue (SR 74) (#17) – this intersection was not analyzed for both Long-term Cumulative (General Plan Buildout Post-2035) Without and With Project traffic conditions due to the proposed access restriction to right-in/right-out only. However, if the existing full-access intersection remains, it is anticipated it would operate at unacceptable LOS during the peak hours. As such, this impact is considered potentially significant. Addition of project-generated traffic would contribute to unacceptable LOS conditions. Implementation of the improvements described in Mitigation Measure TRA-26 would reduce impacts to less-than-significant. Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. However, it will take time to assemble the necessary funds to implement the improvement. In addition, because Caltrans has jurisdiction over the intersection, the City cannot guarantee that the improvement will be made. Thus, even though the applicant will help to fund these improvements, this Draft EIR assumes that the significant impact will occur until such time as the improvements are completed.

As shown in Table 4.11-16 above, at intersection Dexter Avenue / Crane Street (#19) – addition of project-generated traffic would cause the level of service to degrade from an acceptable LOS D or better to an unacceptable LOS F during the PM and Saturday mid-day peak hours. Implementation of the improvements described in Mitigation Measure TRA-28 would reduce impacts to less-than-significant. The applicant shall be required to install the stop control measures deemed necessary by the City Engineer as described in the measure. Prior to the issuance of a building permit, the applicant shall pay its fair share toward installation traffic signal pursuant to the formula described in Mitigation Measure TRA-28. A signal may be warranted before there is sufficient funding for the signal. It will take time to assemble the necessary funds to implement the traffic signal, if it does become warranted. Thus, even though the applicant will help to fund these improvements, this Draft EIR assumes that the significant impact will occur until such time as the improvements are completed.

At intersection Dexter Avenue / 3rd Street (#20) – Addition of project-generated traffic would contribute to LOS F conditions during the AM, PM and Saturday mid-day peak hours. Implementation of the improvements described in Mitigation Measure TRA-29 would reduce impacts to less-than-significant. Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute

its fair share toward installation of these improvements prior to the issuance of building permits. However, it will take time to assemble the necessary funds to implement the improvement. Thus, even though the applicant will help to fund these improvements, this Draft EIR assumes that the significant impact will occur until such time as the improvements are completed.

At intersection Dexter Avenue / 2nd Street (#21) – addition of project-generated traffic would contribute to LOS F conditions during the PM and Saturday mid-day peak hours. Implementation of the improvements described in Mitigation Measure TRA-30 would reduce impacts to less-than-significant. Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. However, it will take time to assemble the necessary funds to implement the improvement. Thus, even though the applicant will help to fund these improvements, this Draft EIR assumes that the significant impact will occur until such time as the improvements are completed.

At intersection Camino del Norte / North Main Street (#22) – addition of project-generated traffic would contribute to LOS F conditions during the AM, PM and Saturday mid-day peak hours. Implementation of the improvements described in Mitigation Measure TRA-31 would reduce impacts to less-than-significant. Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. However, it will take time to assemble the necessary funds to implement the improvement. Thus, even though the applicant will help to fund these improvements, this Draft EIR assumes that the significant impact will occur until such time as the improvements are completed.

At intersection Summerhill Drive / Railroad Canyon Road (#23) – Addition of project-generated traffic would contribute to LOS F conditions during the AM, PM and Saturday mid-day peak hours. Implementation of the improvements described in Mitigation Measure TRA-32 would reduce impacts to less-than-significant. Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. However, it will take time to assemble the necessary funds to implement the improvement. Thus, even though the applicant will help to fund these improvements, this Draft EIR assumes that the significant impact will occur until such time as the improvements are completed.

At intersection Cambern Avenue / Central Avenue (SR 74) (#25) – Addition of project-generated traffic would contribute to LOS F conditions during the AM, PM and Saturday mid-day peak hours. Implementation of the improvements described in Mitigation Measure TRA-33 would

reduce impacts to less-than-significant. Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. However, it will take time to assemble the necessary funds to implement the improvement. In addition, because Caltrans has jurisdiction over the intersection, the City cannot guarantee that the improvement will be made. Thus, even though the applicant will help to fund these improvements, this Draft EIR assumes that the significant impact will occur until such time as the improvements are completed.

At intersection Cambern Avenue / 3rd Street (#28) – Addition of project-generated traffic would contribute to LOS F conditions during the AM, PM and Saturday mid-day peak hours. Implementation of the improvements described in Mitigation Measure TRA-34 would reduce impacts to less-than-significant. Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. However, it will take time to assemble the necessary funds to implement the improvement. Thus, even though the applicant will help to fund these improvements, this Draft EIR assumes that the significant impact will occur until such time as the improvements are completed.

At intersection Conard Avenue / Central Avenue (SR 74) (#29) – addition of project-generated traffic would contribute to LOS F conditions during the AM, PM and Saturday mid-day peak hours. Implementation of the improvements described in Mitigation Measure TRA-35 would reduce impacts to less- than-significant. Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. However, it will take time to assemble the necessary funds to implement the improvement. In addition, because Caltrans has jurisdiction over the intersection, the City cannot guarantee that the improvement will be made. Thus, even though the applicant will help to fund these improvements, this Draft EIR assumes that the significant impact will occur until such time as the improvements are completed.

At intersection Rosetta Canyon Drive / Central Avenue (SR 74) (#30) – Addition of project-generated traffic would contribute to LOS E conditions during the AM peak hour and to LOS F conditions during the PM peak hour. Implementation of the improvements described in Mitigation Measure TRA-36 would reduce impacts to less-than-significant. Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall

contribute its fair share toward installation of these improvements prior to the issuance of building permits. However, it will take time to assemble the necessary funds to implement the improvement. In addition, because Caltrans has jurisdiction over the intersection, the City cannot guarantee that the improvement will be made. Thus, even though the applicant will help to fund these improvements, this Draft EIR assumes that the significant impact will occur until such time as the improvements are completed.

At intersection Riverside Street / Central Avenue (SR 74) (#31) – addition of project-generated traffic would contribute to LOS F conditions during the AM, PM and Saturday mid-day peak hours. Implementation of the improvements described in Mitigation Measure TRA-37 would reduce impacts to less-than-significant. Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. However, it will take time to assemble the necessary funds to implement the improvement. In addition, because Caltrans has jurisdiction over the intersection, the City cannot guarantee that the improvement will be made. Thus, even though the applicant will help to fund these improvements, this Draft EIR assumes that the significant impact will occur until such time as the improvements are completed.

At intersection Greenwald Avenue / Central Avenue (SR 74) (#32) – addition of project-generated traffic would contribute to LOS F conditions during the AM, PM and Saturday mid-day peak hours. Implementation of the improvements described in Mitigation Measure TRA-38 would reduce impacts to less-than-significant. Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits. However, it will take time to assemble the necessary funds to implement the improvement. In addition, because Caltrans has jurisdiction over the intersection, the City cannot guarantee that the improvement will be made. Thus, even though the applicant will help to fund these improvements, this Draft EIR assumes that the significant impact will occur until such time as the improvements are completed.

Table 4.11-17 shows the levels of service at the above-described seven intersections after implementation of the improvements identified in Mitigation Measures TRA-11 through TRA-38.

TABLE 4.11-17
INTERSECTION ANALYSIS FOR MITIGATED LONG-TERM CUMULATIVE (GENERAL PLAN BUILDOUT – POST 2035) PLUS PROJECT CONDITIONS

		Long-Term Cumulative (General Plan Buildout – Post 2035) Plus Project						Long-Term Cumulative (General Plan Buildout – Post 2035) Plus Project – Mitigated					
		Delay (sec)			Level of Service			Delay (sec)			Level of Service		
Intersection	Traffic Control[1]	AM	PM	Sat	AM	PM	Sat	AM	PM	Sat	AM	PM	Sat
1. Lakeshore Dr/ Riverside Dr (SR 74)	TS MM TRA-11	>200	>200	>200	F	F	F	50.0	48.6	37.8	D	D	D
2. W Graham Av./ N Main St	AWS/TS MM TRA-12	57.0	>100	>100	F	F	F	25.3	36.4	30.6	C	D	C
3. E Lakeshore Dr./ Diamond Dr	TS MM TRA-13	>200	>200	>200	F	F	F	43.6	53.8	53.6	D	D	D
4. Gunnerson St/ Riverside Dr (SR 74)	CSS/TS MM TRA-2 MM TRA-9	>100	>100	>100	F	F	F	22.3	32.4	22.6	C	C	C
5. Collier Av./ Riverside D. (SR 74)	TS MM TRA-14	>200	>200	>200	F	F	F	34.1	53.8	54	C	D	D
6. Collier Av./ Central Av. (SR 74)	TS MM TRA-15	77.2	>200	>200	F	F	F	32.6	51.2	47.8	C	D	D
7. Auto Center Dr/ Diamond Dr.	TS MM TRA-16	>200	>200	>200	F	F	F	50.8	53.8	49.8	D	D	D
8. I-15 SB Ramps/ Nichols Rd	AWS MM TRA-17	>100	>100	>100	F	F	F	30.5	40.4	32.2	C	D	C
9. I-15 SB Ramps/ Central Av. (SR 74)	TS MM TRA-18	>200	>200	>200	F	F	F	47.4	47.6	37.4	D	D	D
10. I-15 SB Ramps/ N Main St	CSS MM TRA-19	>100	>100	>100	F	F	F	27.0	41.1	31.5	C	D	C
12. I-15 NB Ramps/ Nichols Rd	CSS MM TRA-21	>100	>100	>100	F	F	F	31.8	35.5	27.6	C	D	C
13. I-15 NB Ramps/ Central Av. (SR 74)	TS MM TRA-22	135.0	148.9	117.1	F	F	F	27.8	31.9	22.3	C	C	C
14. I-15 NB Ramps/ N Main St	CSS MM TRA-23	>100	>100	>100	F	F	F	53.9	34.9	30.0	D	C	C
16. Dexter Av/11th St	CSS/TS MM TRA-25	>100	>100	>100	F	F	F	19.0	22.3	21.4	B	C	C
19. Dexter Av/ Crane St (SR 74)	CSS/TS MM TRA-28	22.9	>100	70.8	C	F	F	16.8	22.5	24.8	B	C	C
20. Dexter Av/3rd St	CSS/TS MM TRA-29	>100	>100	>100	F	F	F	23.9	39.9	37.6	C	D	D
21. Dexter Av/2nd St	AWS/TS MM TRA-30	25.4	>100	>100	D	F	F	23.2	28.6	44.1	C	C	D
22. Camino del Norte/ N Main St	CSS/TS MM TRA-31	>100	>100	>100	F	F	F	24.6	25.3	30.0	C	C	C
23. Summerhill Dr/ Railroad Canyon Rd	TS MM TRA-32	>200	>200	>200	F	F	F	35.2	46.5	48.4	C	D	D
25. Cambern Av/ Central Av (SR 74)	TS MM TRA-33	>200	>200	>200	F	F	F	54.4	48.8	54.6	D	D	D

TABLE 4.11-17
INTERSECTION ANALYSIS FOR MITIGATED LONG-TERM CUMULATIVE (GENERAL PLAN BUILDOUT – POST 2035) PLUS PROJECT CONDITIONS

		Long-Term Cumulative (General Plan Buildout – Post 2035) Plus Project						Long-Term Cumulative (General Plan Buildout – Post 2035) Plus Project – Mitigated					
		Delay (sec)			Level of Service			Delay (sec)			Level of Service		
Intersection	Traffic Control[1]	AM	PM	Sat	AM	PM	Sat	AM	PM	Sat	AM	PM	Sat
28. Cambern Av/3rd St	AWS/TS MM TRA-34	>100	>100	>100	F	F	F	31.1	35.3	38.7	C	D	D
29. Conard Av/ Central Av (SR 74)	TS MM TRA-35	111.0	>200	142.6	F	F	F	17.1	20.9	24.4	B	C	C
30. Rosetta Canyon Dr/ Central Av (SR 74)	TS MM TRA-36	62.7	112.1	41.7	E	F	D	22.1	36.8	20.5	C	D	C
31. Riverside St/ Central Av (SR 74)	TS MM TRA-37	>200	>200	>200	F	F	F	43.1	52.6	36.8	D	D	D
32. Greenwald Av/ Central Av (SR 74)	TS MM TRA-38	>200	>200	135.4	F	F	F	34.7	49.1	29.0	C	D	C

1. CSS=Cross-street stop; AWS=All-Way stop; TS=Traffic Signal

SOURCE: *Urban Crossroads, 2015*

Basic Freeway Segment Analysis

As shown on **Table 4.11-18** (included in this Draft EIR at the request of Caltrans), I-15 Freeway segments analyzed for this study were found to operate at an acceptable LOS (i.e., LOS D or better) during the peak hours for Long-Term Cumulative (General Plan Buildout Post-2035) Without Project and With Project traffic conditions with the exception of the following:

- Southbound, north pf Nichols Road – LOS F, PM peak hour; LOS E, Saturday peak hour
- Southbound, Nichols Road to Central Avenue (SR 74) – LOS F, PM peak hour
- Southbound, Central Avenue (SR 74) to North Main Street – LOS F, PM peak hour; LOS , Saturday peak hour
- Southbound, North Main Street to Railroad Canyon Road – LOS E, PM peak hour
- Northbound, north of Nichols Road – LOS E, AM and PM peak hours
- Northbound, Nichols Road to Central Avenue (SR 74) – LOS F, AM peak hour
- Northbound, Central Avenue (SR 74) to North Main Street – LOS F, AM peak hour; LOS E, PM peak hour
- Northbound, North Main Street to Railroad Canyon Road – LOS F, AM peak hour; LOS E, PM peak hour
- Northbound, south of Railroad Canyon Road – LOS F, AM peak hour; LOS E, PM peak hour

TABLE 4.11-18
BASIC FREEWAY SEGMENT ANALYSIS – LONG-TERM CUMULATIVE (GENERAL PLAN BUILDOUT POST-2035) CONDITIONS

Direction	Mainline Segment	Lanes[1]	Long-Term Cumulative (General Plan Buildout Post-2035) Without Project						Long-Term Cumulative (General Plan Buildout Post-2035) With Project					
			Density[2]			Level of Service			Density[2]			Level of Service		
			AM	PM	SAT	AM	PM	SAT	AM	PM	SAT	AM	PM	SAT
Southbound	North of Nichols Road	3	23.6	- -	35.8	C	F	E	23.8	- -	37.0	C	F	E
	Nichols Road to Central Avenue (SR 74)	3	22.7	- -	32.8	C	F	D	23.1	- -	34.1	C	F	D
	Central Avenue (SR 74) to North Main Street	3	23.1	- -	35.3	C	F	E	23.5	- -	37.1	C	F	E
	North Main Street to Railroad Canyon Road	3	21.5	38.5	32.0	C	E	D	21.7	39.5	33.5	C	E	D
	South of Railroad Canyon Road	3	20.4	33.7	29.3	C	D	D	20.6	34.3	30.0	C	D	D
Northbound	North of Nichols Road	3	44.5	36.2	31.3	E	E	D	- -	37.1	32.2	F	E	D
	Nichols Road to Central Avenue (SR 74)	3	- -	34.1	26.9	F	D	D	- -	35.1	27.8	F	E	D
	Central Avenue (SR 74) to North Main Street	3	- -	42.1	30.4	F	E	D	- -	43.9	31.8	F	E	D
	North Main Street to Railroad Canyon Road	3	- -	38.6	29.8	F	E	D	- -	40.1	30.9	F	E	D
	South of Railroad Canyon Road	3	- -	36.3	24.4	F	E	C	- -	37.0	24.9	F	E	C

BOLD = LOS does not meet the applicable jurisdictional requirements (i.e., unacceptable LOS).
1 Number of lanes are in the specified direction and is based on existing conditions.
2 Density is measured by passenger cars per mile per lane (pc/mi/ln).

SOURCE: Urban Crossroads, 2015.

TABLE 4.11-19
I-15 FREEWAY RAMP JUNCTION MERGE/DIVERGE ANALYSIS FOR LONG-TERM CUMULATIVE (GENERAL PLAN BUILDOUT POST-2035) CONDITIONS

Direction	Ramp	Lanes on Freeway[1]	Long-Term Cumulative (General Plan Buildout Post-2035) Without Project						Long-Term Cumulative (General Plan Buildout Post-2035) With Project					
			AM Peak		PM Peak		Saturday Peak		AM Peak		PM Peak		Saturday Peak	
			Density[1]	LOS	Density[1]	LOS	Density[1]	LOS	Density[1]	LOS	Density[1]	LOS	Density[1]	LOS
Southbound	Off-Ramp at Nichols Road	3	31.4	D	42.9	F	38.3	E	31.5	D	43.5	F	38.5	E
	On-Ramp at Nichols Road	3	29.0	D	41.0	F	36.2	E	29.3	D	41.5	F	36.8	E
	Off-Ramp at Central Avenue (SR 74)	3	31.6	D	41.3	F	37.0	E	32.2	D	42.1	F	37.7	E
	On-Ramp at Central Avenue (SR 74)	3	30.4	D	42.2	F	37.9	E	30.9	D	43.0	F	39.0	E
	Off-Ramp at Main Street	3	31.0	D	42.3	F	37.2	E	31.3	D	43.3	F	37.8	E
	On-Ramp at Main Street	3	26.1	C	36.1	E	32.8	D	26.4	C	36.6	E	33.6	D
	Off-Ramp at Railroad Canyon Road	3	29.4	D	38.6	E	36.1	E	29.6	D	38.9	E	36.9	E
	On-Ramp at Railroad Canyon Road	3	24.2	C	33.5	D	31.1	D	24.3	C	33.8	D	31.5	D
Northbound	On-Ramp at Nichols Road	3	37.4	E	35.0	E	32.4	D	37.6	E	35.4	E	32.9	D
	Off-Ramp at Nichols Road	3	41.4	F	36.9	E	32.5	D	41.9	F	37.2	E	33.1	D
	On-Ramp at Central Avenue (SR 74)	3	37.4	F	34.9	D	30.4	D	37.8	F	35.6	E	31.3	D
	Off-Ramp at Central Avenue (SR 74)	3	49.4	F	41.5	F	37.2	E	50.2	F	42.1	F	38.2	E
	On-Ramp at Main Street	3	46.0	F	38.9	E	32.8	D	46.7	F	39.3	E	33.4	D
	Off-Ramp at Main Street	3	49.8	E	37.9	E	34.1	D	50.6	F	38.5	E	34.7	D
	On-Ramp at Railroad Canyon Road	3	45.8	F	37.6	E	34.1	D	46.5	F	38.3	F	35.0	E
	Off-Ramp at Railroad Canyon Road	3	43.2	F	36.9	E	30.4	D	43.6	F	37.1	E	30.8	D

1 Density is measured by passenger cars per mile per lane (pc/mi/ln).

SOURCE: Urban Crossroads, 2015

Freeway Merge/Diverge Analysis

Ramp merge and diverge operations on I-15 in the project area were evaluated for Long-Term Cumulative (General Plan Buildout Post-2035) Without and With project conditions, and the results of this analysis are presented in **Table 4.11-19** (included in this Draft EIR at the request of Caltrans). As shown in the table, the ramp merge and diverge areas are anticipated to operate at LOS D or better for Long-Term Cumulative (General Plan Buildout Post-2035) Without Project traffic conditions, with the exception of the following locations:

- Southbound, Off- and On-Ramps at Nichols Road – LOS F, PM peak hour; LOS E, Saturday peak hour
- Southbound, Off- and On-Ramp at Central Avenue (SR 74) – LOS F, PM peak hour, LOS E, Saturday peak hour
- Southbound, Off-Ramp at North Main Street – LOS F, PM peak hour; LOS E, Saturday peak hour
- Southbound, On-Ramp at North Main Street – LOS E, PM peak hour
- Southbound, Off-Ramp at Railroad Canyon Road – LOS E, PM and Saturday peak hours
- Northbound, On-Ramp at Nichols Road – LOS E, AM and PM peak hours
- Northbound, Off-Ramp at Nichols Road – LOS F, AM peak hour; LOS E, PM peak hour
- Northbound, On-Ramp at Central Avenue (SR 74) – LOS F, AM peak hour
- Northbound, Off-Ramp at Central Avenue (SR 74) – LOS F, AM and PM Peak hours; LOS E, Saturday peak hour
- Northbound, On- and Off-Ramp at North Main Street – LOS F, AM peak hour; LOS E, PM peak hour
- Northbound, On- and Off-Ramp at Railroad Canyon Road – LOS F, AM peak hour; LOS E, PM peak hour

There are no additional freeway ramp junctions anticipated to operate at unacceptable LOS with the addition of project traffic, in addition to those previously identified for Long-Term Cumulative (General Plan Buildout Post-2035) Without Project traffic conditions.

Long-Term Cumulative (Post-2035) Mitigation

Mitigation Measure TRA-11: The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of Lakeshore Drive/Riverside Drive (SR 74) are as follows:

- A 3rd and 4th westbound through lanes, and modify the traffic signal to implement overlap phasing on the right turn lane.
- A 2nd northbound left turn lane and a right turn lane.
- A 2nd southbound left turn lane and a 3rd through lane. Modify the traffic signal to implement overlap phasing on the right turn lane.

- A 2nd eastbound left turn lane and a 3rd through lane. Modify the traffic signal to implement overlap phasing on the right turn lane.

Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits.

Mitigation Measure TRA-12: The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of W. Graham Avenue/North Main Street (SR 74) are as follows:

- Install Traffic Signal
- Construct an eastbound left turn lane.
- Construct a westbound left turn lane.

Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits.

Mitigation Measure TRA-13: The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of East Lakeshore Drive/Diamond Drive are as follows:

- A 3rd westbound through lanes, two right-turn lanes, and modify the traffic signal to implement overlap phasing on the right turn lanes.
- A 2nd northbound left turn lane, 3rd through lane and 2nd right turn lane, and modify the traffic signal to implement overlap phasing on the right turn lanes.
- A 3rd southbound through lane and a right turn lane, and modify the traffic signal to implement overlap phasing on the right turn lane.
- A 2nd eastbound left turn lane and a right turn lane.

Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits.

Mitigation Measure TRA-14: The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of Collier Avenue / Riverside Drive (SR 74) are as follows:

- Two westbound left turn lanes, a 2nd and 3rd through lanes and a right turn lane.
- A 2nd northbound left turn lane, 2nd through lane and a right turn lane, and modify the traffic signal to implement overlap phasing on the right turn lane.
- A 2nd southbound left turn lane and a 2nd through lane, and modify the traffic signal to implement overlap phasing on the right turn lane.
- Two eastbound left turn lanes, a 2nd and 3rd through lanes and a free-right turn lane.

Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits.

Mitigation Measure TRA-15: The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of Collier Avenue / Central Avenue (SR 74) are as follows:

- A 2nd westbound through lane and a free-right turn lane.
- A 2nd northbound through lane and a 2nd right turn lane with overlap signal phasing.
- A 3rd southbound left turn lane.
- A 3rd eastbound through lane and a right turn lane, and modify the traffic signal to implement overlap phasing on the right turn lane.

Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits.

Mitigation Measure TRA-16: The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of Auto Center Drive / Diamond Drive are as follows:

- A 3rd westbound through lane and a right turn lane, and modify the traffic signal to implement overlap phasing on the right turn lane.
- A 2nd northbound left turn lane and two northbound right turn lanes, and modify the traffic signal to implement overlap phasing on the right turn lanes.
- A 2nd southbound left turn lane and two right turn lanes, and modify the traffic signal to implement overlap phasing on the right turn lanes.
- A 2nd eastbound left turn lane and a right turn lane, and modify the traffic signal to implement overlap phasing on the right turn lane.

Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits.

Mitigation Measure TRA-17: The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of I-15 Southbound Ramps/Nichols Road are as follows:

- A 2nd westbound left turn lane and the 2nd and 3rd through lanes.
- Two southbound left turn lanes and a right turn lane and restripe the southbound left-through-right turn lane as a 2nd right turn lane.
- A 2nd and 3rd eastbound through lanes.

Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits.

Mitigation Measure TRA-18: The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of I-15 Southbound Ramps / Central Avenue (SR 74) are as follows:

- New Interchange Design (loop on-ramp at I-15 Southbound Ramps).
- A 2nd southbound left turn lane, and restripe the shared left-through-right turn lane as a left turn lane, and 1st and 2nd right turn lane.
- A 3rd eastbound through lane and 2nd right turn lane.

Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits.

Mitigation Measure TRA-19: The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of I-15 Southbound Ramps / North Main Street are as follows:

- Construct a 2nd westbound left turn lane and a 2nd through lane.
- Construct a southbound left turn lane.
- Construct a 2nd eastbound through lane and a right turn lane.

Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits.

Mitigation Measure TRA-20: The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of I-15 Southbound Ramps / Railroad Canyon Road are as follows:

- New Interchange Design (ramps on frontage road).
- Install a traffic signal.
- Construct a northbound right turn lane.
- Construct 2 southbound left turn lanes and a 2nd through lane.
- Construct a westbound left turn lane and 2 right turn lanes.

The City and/or Caltrans may ultimately design alternative improvements at this intersection that would mitigate the impacts to the same or to a greater degree than the improvements outlined above ("alternative improvements"). Prior to the issuance of a building permit, if the above improvements or the alternative improvements or alternative improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits.

Mitigation Measure TRA-21: The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of I-15 Northbound Ramps/Nichols Road are as follows:

- A 2nd and 3rd westbound through lanes and a right turn lane.
- A northbound left turn lane and a right turn lane and restripe the shared left-through-right turn lane as a 2nd right turn lane.
- A 2nd eastbound left turn lane and the 2nd and 3rd through lanes.

The City and/or Caltrans may ultimately design alternative improvements at this intersection that would mitigate the impacts to the same or to a greater degree than the improvements outlined above ("alternative improvements"). Prior to the issuance of a building permit, if the above improvements or the alternative improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements or the alternative improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits.

Mitigation Measure TRA-22: The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of I-15 Northbound Ramps / Central Avenue (SR 74):

- New Interchange Design (loop on-ramp at I-15 Northbound Ramps).
- A northbound left turn lane and restripe the left-through-right turn lane as a 2nd right turn lane.
- An eastbound right turn lane.

The City and/or Caltrans may ultimately design alternative improvements at this intersection that would mitigate the impacts to the same or to a greater degree than the improvements outlined above ("alternative improvements"). Prior to the issuance of a building permit, if the above improvements or the alternative improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements or alternative improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits.

Mitigation Measure TRA-23: The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of I-15 Northbound Ramps/North Main Street are as follows:

- A 2nd westbound through lane and a right turn lane.
- A northbound left turn lane and a right turn lane.
- A 2nd eastbound left turn lane and a 2nd through lane.

The City and/or Caltrans may ultimately design alternative improvements at this intersection that would mitigate the impacts to the same or to a greater degree than the improvements outlined above ("alternative improvements"). Prior to the issuance of a building permit, if the above improvements or alternative improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements or alternative improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits.

Mitigation Measure TRA-24: The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of I-15 Northbound Ramps / Railroad Canyon Road (Grape Street) if the existing diamond interchange remains are as follows:

- New Interchange Design (ramps on frontage roads).
- Install a traffic signal.
- Construct a northbound left turn lane.
- Construct a southbound free-right turn lane.

- Construct two eastbound left turn lanes and a right turn lane.

The City and/or Caltrans may ultimately design alternative improvements at this intersection that would mitigate the impacts to the same or to a greater degree than the improvements outlined above ("alternative improvements"). Prior to the issuance of a building permit, if the above improvements or alternative improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements or alternative improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits.

Mitigation Measure TRA-25: The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of Dexter Avenue / 11th Street are as follows

- Install a traffic signal.
- Construct a westbound left turn lane and a 2nd through lane.
- Construct a northbound left turn lane.
- Construct a southbound left turn lane.
- Construct an eastbound left turn lane, 2nd through lane and a right turn lane with overlap signal phasing.

Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits.

Mitigation Measure TRA-26: If the Central Avenue (SR 74)/Dexter Avenue intersection has remained a full access intersection, the roadway improvements necessary to address the 2035 cumulative traffic conditions at that intersection are as follows:

- Redesign the intersection to include a raised median to prohibit left terms onto Dexter Avenue.

The City and/or Caltrans may ultimately design alternative improvements at this intersection that would mitigate the impacts to the same or to a greater degree than the improvements outlined above ("alternative improvements"). Prior to the issuance of a building permit, if the above improvements or alternative improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that the above improvements or alternative improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits.

Mitigation Measure TRA-27: The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of Dexter Avenue/Allan Street are as follows:

- The installation of a traffic signal at this location is not feasible do to the close proximity of intersection of Dexter Avenue and Central Avenue (SR-74.) Therefore the applicant shall be responsible for geometric improvement at this intersection, including a raised median or its equivalent, which will ensure that the intersection remains limited to a right-in, right out intersection.

The timing of this improvement shall be determined by the City Engineer. To the extent there are future projects along Allen Street that will add traffic to this intersection, the City will require those projects to contribute proportionally to the cost of the improvements.

Mitigation Measure TRA-28: The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of Dexter Avenue/Crane Street are as follows:

- The recommended installation of a traffic signal at this location is not a preferred measure for the City due to the location of the intersection and the City's desire to maintain future traffic flows on Dexter Avenue. However, such installation may be necessary in the future, based upon traffic levels and turn movement. In the interim, the applicant shall be responsible for the installation of stop control measures deemed appropriate by the City Engineer. These measures may include a 4-way stop, if requested by the City Engineer. In addition, prior to the issuance of a building permit, the applicant shall pay its fair share cost of the installation of a traffic signal. The fair share shall be based on the project's highest number of peak hour left turns at the intersection, compared to those associated with the existing and future development along both sides of the portion of Crane Street east of Dexter Avenue.

Mitigation Measure TRA-29: The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of Dexter Avenue/3rd Street include the following:

- Install a traffic signal
- Construct a westbound left turn lane.
- Construct a northbound left turn lane.
- Construct a southbound left turn lane.
- Construct an eastbound left turn lane.

The City may ultimately design alternative improvements at this intersection that would mitigate the impacts to the same or to a greater degree than the improvements outlined above ("alternative improvements"). Prior to the issuance of a building permit, if the above improvements or alternative improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements or alternative improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits.

Mitigation Measure TRA-30: The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of Dexter Avenue / 2nd Street are as follows:

- Install a traffic signal.
- Construct a westbound left turn lane.
- Construct a northbound left turn lane and a right turn lane with overlap signal phasing.
- Construct a southbound left turn lane.
- Construct an eastbound left turn lane, 2nd through lane and a right turn lane with overlap signal phasing.

Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits.

Mitigation Measure TRA-31: The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of Camino del Norte / North Main Street are as follows:

- Install a traffic signal.
- Construct two northbound left turn lanes.
- Construct a southbound right turn lane with overlap signal phasing.
- Implement overlap signal phasing on the eastbound right turn lane.

Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits.

Mitigation Measure TRA-32: The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of Summerhill Drive/Railroad Canyon Road are as follows:

- Two westbound right turn lanes, and modify the traffic signal to implement overlap signal phasing on the right turn lanes.
- A 2nd northbound right turn lane.
- A 2nd southbound left turn lane and a 2nd right turn lane with overlap signal phasing.

Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that the above improvements are not covered by

the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits.

Mitigation Measure TRA-33: The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of Cambern Avenue / Central Avenue (SR 74) are as follows:

- A 2nd westbound left turn lane and 3rd through lane, and modify the traffic signal to implement overlap phasing on the right turn lane.
- A 2nd northbound left turn lane and right turn lane, and modify the traffic signal to implement overlap phasing on the right turn lane.
- Two southbound left turn lanes and a 2nd through lane, and modify the traffic signal to implement overlap phasing on the right turn lane.
- A 3rd eastbound through lane and a right turn lane, and modify the traffic signal to implement overlap phasing on the right turn lane.

Prior to the issuance of a building permit, the applicant shall be required to dedicate the right-of-way necessary for the above improvements. In addition, prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits.

Mitigation Measure TRA-34: The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of Cambern Avenue / 3rd Street are as follows:

- Install a traffic signal.
- Construct a westbound left turn lane and right turn lane.
- Construct a northbound left turn lane and a 2nd through lane.
- Construct a southbound left turn lane, a 2nd through lane, and a right turn lane.
- Construct a 2nd eastbound left turn lane.

Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that any of the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits.

Mitigation Measure TRA-35: The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of Conard Avenue / Central Avenue (SR 74) are as follows:

- A 3rd and 4th westbound through lanes and a right turn lane.
- A southbound left turn lane and a right turn lane, and modify the traffic signal to implement overlap phasing on the right turn lane.
- A 2nd eastbound left turn lane, a 3rd and 4th through lanes and a right turn lane.

Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits.

Mitigation Measure TRA-36: The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of Rosetta Canyon Drive / Central Avenue (SR 74) are as follows:

- A 2nd westbound left turn lane and the 3rd and 4th through lanes.
- A 2nd northbound left turn lane, and modify the traffic signal to implement overlap phasing on the right turn lane.
- A 4th eastbound through lane and a right turn lane, and modify the traffic signal to implement overlap phasing on the right turn lane.

Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits.

Mitigation Measure TRA-37: The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of Riverside Street / Central Avenue (SR 74) are as follows:

- A 2nd westbound left turn lane, a 3rd and 4th through lanes and a right turn lane, and modify the traffic signal to implement overlap phasing on the right turn lane.
- Two northbound through lanes.
- Two southbound left turn lanes, two through lanes and a right turn lane.
- Two eastbound left turn lanes, a 3rd and 4th through lanes and a right turn lane, and modify the traffic signal to implement overlap phasing on the right turn lane.

Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits.

Mitigation Measure TRA-38: The roadway improvements necessary to address the 2035 cumulative traffic conditions at the intersection of Greenwald Avenue / Central Avenue (SR 74) area as follows:

- A 2nd westbound left turn lane, a 3rd through lane and a right turn lane.
- A northbound right turn lane, and modify the traffic signal to implement overlap phasing on the right turn lane.
- A southbound right turn lane.
- A 2nd eastbound left turn lane and a 3rd through lane, and modify the traffic signal to implement overlap phasing on the right turn lane.

Prior to the issuance of a building permit, if the above improvements are covered by the TIF and/or the TUMF in effect, the applicant shall pay its contribution for these improvements through its payment of those fees. To the extent that the above improvements are not covered by the TIF and/or TUMF, the applicant shall contribute its fair share toward installation of these improvements prior to the issuance of building permits.

In addition to the fair share payments referenced above, the project applicant shall participate in the funding of off-site improvements, including traffic signals that are needed to serve traffic conditions through the payment of TUMF, and the City of Lake Elsinore Traffic Impact Fees (TIF). 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 have been identified as being included as part of TUMF funding program, City TIF funding program or fair share contribution.

Significance after Mitigation: As stated above, while mitigation will be imposed, and the identified improvement can reduce the impacts to less than significant, it is unknown when all of the required funding for the improvements outlined above will be completed. In addition, with many of the subject improvements, Caltrans would be required to issue permits and approvals. Therefore, the City cannot control the completion and timing of the measures. For this reason, the Draft EIR assumes that the impacts will remain significant unless and until the improvements outlined above are completed.

Congestion Management Program Evaluation

Impact 4.11-4: Would the project conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways?

Interstate 15 and State Route 74 (Central Avenue) are recognized as key transportation facilities within the study area that are designated as part of the Riverside County Congestion Management Program (CMP). The Riverside County Transportation Commission (RCTC) has adopted LOS E as the minimum standard for intersections and segments along the CMP system of Highways and Roadways. However, for the purposes of this traffic impact analysis, LOS D is considered to be

the limit of acceptable traffic operations for the I-15 Freeway mainline segments and ramp junctions and for intersections along Central Avenue (SR 74). The proposed project's impacts (conflicts with the RCTC's CMP) are described under Impact 4.11-2 (Baseline and Near-Term Cumulative conditions) and Impact 4.11-3 (Long-Term Cumulative conditions) as significant. Mitigation measures are identified that would reduce those impacts to less-than-significant levels if implemented.

Mitigation Measures: TRA-1 through TRA-38

Significance after Mitigation: As stated above, while mitigation will be imposed, and the identified improvement can reduce the impacts to less than significant, it is unknown when all of the required funding for the improvements outlined above will be completed. In addition, with many of the subject improvements, Caltrans would be required to issue permits and approvals. Therefore, the City cannot control the completion and timing of the measures. For this reason, the Draft EIR assumes that the impacts will remain significant unless and until the improvements outlined above are completed.

References – Transportation and Traffic

California Department of Transportation (Caltrans), *Manual on Uniform Traffic Control Devices,* 2014.

City of Lake Elsinore, Chapter 2 Community Form, *City of Lake Elsinore General Plan*, December 13, 2011.

Riverside Transit Agency (RTA), Maps and Schedules, effective May 10, 2015,

Transportation Research Board (TRB), *Highway Capacity Manual*, 2000.

4.12 Urban Decay

This section of the Draft Environmental Impact Report (EIR) evaluates potential economic impacts associated with the implementation of the proposed project. This section evaluates the extent to which the proposed project could have competitive impacts on existing retail facilities in the trade area potentially resulting in urban decay. This section also considers cumulative impacts, taking into account the impacts from other planned and proposed retail projects in the trade area. The Urban Decay Study for the Lake Elsinore Walmart, prepared by The Natelson Dale Group, Inc. (TNDG) and dated June, 2015 (Urban Decay Study) was prepared to assess the proposed project's potential to result in urban decay as defined below. The Urban Decay Study is located in Appendix K of this EIR. Urban Decay conditions documented in the 2013 vacant buildings survey have not substantially changed as there are no signs of additional deferred maintenance, graffiti or boarded windows and doors, beyond the conditions described in the 2013 survey.[1]

4.12.1 Environmental Setting

Overview of Urban Decay

The economic analysis is used to determine, in accordance with the California Environmntal Quality Act (CEQA), the proposed project's potential to create Urban Decay through project implementation. Urban decay is generally defined as substantial physical deterioration, due to store closures and long-term vacancies in existing shopping centers, that impairs the health, safety, and welfare of the surrounding community. Physical deterioration includes, but is not limited to, abandoned buildings and commercial sites in disrepair, boarded doors and windows, long-term unauthorized use of properties and parking lots, extensive graffiti on structures, dumping of refuse, or overturned dumpsters on properties, dead trees and landscaping, extensive litter, uncontrolled plant overgrowth, and homeless encampments. CEQA does not trigger an automatic presumption that urban decay would occur as a result of other business closures. However, store closures can lead to conditions of urban decay.

Trade Areas

According to the International Council of Shopping Centers (ICSC) a community center similar in scale and scope to the proposed project would typically have a trade area of 3 to 6 miles. To be analytically conservative, the analysis evaluates a smaller trade area for potential market support for the proposed project (TNDG, 2015)[2]. A customized polygon was developed as the proposed project trade area starting with a conservative 3-mile radius of the project area as an initial reference point. The polygon takes into account natural traffic barriers (e.g., major roads and

1 Personal communication with Fred Lopez, City of Lake Elsinore Code Enforcement Supervisor on 08-19-15.

2 A smaller trade area than that recommended by the ICSC provides a conservative approach for estimating retail demand in that it potentially excludes demand from some residents that may patronize the proposed project. That is, by only including the demand from residents that live closer to the project than the standard 3.0 to 6.0 mile radius (as recommended by the ICSC), the analysis provides a "conservative" estimate of the trade area's potential retail demand.

highways) and the locations of existing competitive shopping centers. The trade area boundaries are defined as follows:

Western Boundary – The western boundary extends approximately to Riverside County line in the Cleveland National Forest. For the most part, the effective boundary is Grand Avenue, given that there is little developed land beyond this street, outside of a nominal amount of residential and commercial development along the Ortega Highway [State Route 74 (SR 74)]. Grand Avenue is approximately 3.6 miles from the project site.

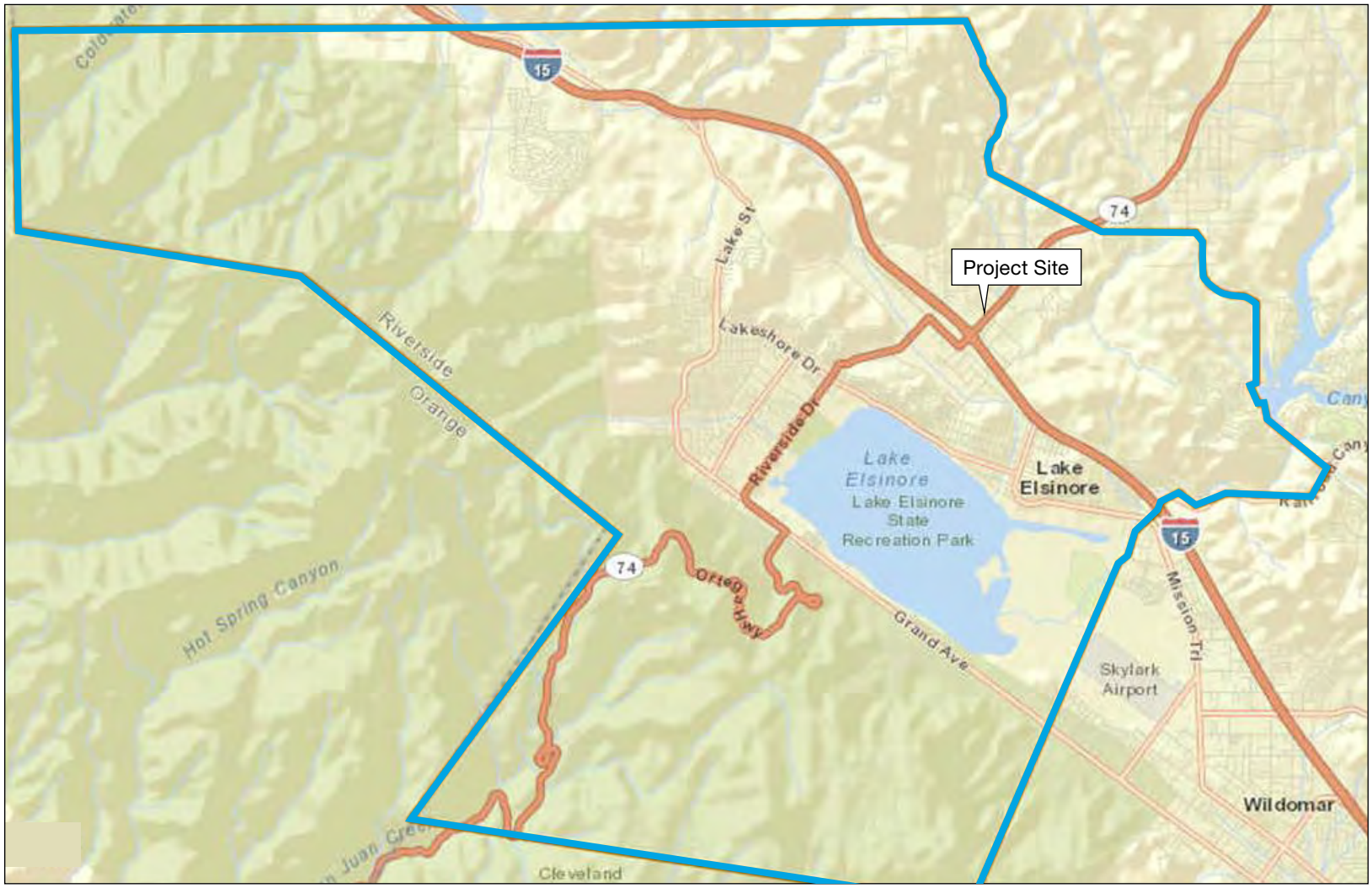
Eastern Boundary – The eastern boundary starts approximately at the intersection of Railroad Canyon Road and Canyon Hills Road. It extends further along the western boundary of the City of Canyon Lake to Greenwald Avenue/Riverside Street. Finally, at its most northern section, it runs along El Toro Road to the northern boundary. The eastern boundary is approximately 3.0 to 3.5 miles from the proposed project.

Southern Boundary – The southern boundary starts at SR-74, just south of Tenaja Truck Trail. It extends further in the northerly direction along Stoneman Street to Railroad Canyon road until it reaches the Railroad Canyon Road/Canyon Hills Road intersection (the approximate start of the western boundary). Similar to the western boundary, the relevant western section of the boundary is primarily Grand Avenue, given that there is little developed land beyond this street. The most relevant section of the boundary is Railroad Canyon Road, which includes the majority of developed area along the entire boundary. This relevant portion of the southern boundary is approximately 3 miles from the project site.

Northern Boundary – At El Toro Road, the northern boundary reaches as far north as the intersection of Glen Eden Road and Interstate 15 (I-15). The boundary extends further west to the Riverside County line in the Cleveland National Forest. The northern boundary is approximately 3.6 miles from the proposed project site.

The trade area design takes into account the locations of existing competitive shopping centers, along with the location of an additional proposed Walmart Supercenter, the primary reason for the selection of the southern boundary. Railroad Canyon Road[3] represents the approximate midpoint between the proposed project and an approved Walmart Supercenter in the City of Wildomar. The Wildomar Supercenter would be developed for development near the I-15/Bundy Canyon Road intersection, east of I-15. Railroad Canyon Road is the approximate midpoint between the two proposed stores, residents living north of the border would be more likely to shop at the proposed Lake Elsinore Supercenter, while residents living south of the border would prefer to shop at the Wildomar Supercenter. Thus, as discussed in the urban decay study for the proposed Wildomar store, this street also functions as the northern boundary for that proposed store. **Figure 4.12-1** illustrates Lake Elsinore retail trade area boundaries.

[3] The most relevant section of the southern trade area boundary is Railroad Canyon Road, which includes most of the developed area around the southern border.



Lake Elsinore Retail Trade Area Boundaries

SOURCE: The Natelson Dale Group, Inc.

Figure 4.12-1
Lake Elsinore Retail
Trade Area Boundaries

Overview of Existing Retail Market in Trade Area

The Urban Decay study included a comprehensive inventory of all existing retail tenants and vacancies in the trade area. The detailed inventory is provided in Appendix K of this EIR, a summary is provided below in **Table 4.12-1**. Note that the summary shown in Table 4.12-1 excludes the Lake Elsinore Outlets, a 369,000 square foot (SF) outlet shopping center strategically located at Nichols Road and I-15 in the City of Lake Elsinore. This outlet center is excluded from the inventory and the analysis because the outlet center trade area is significantly larger than the trade area for the proposed project.[4]

TABLE 4.12-1
INVENTORY OF EXISTING RETAIL DEVELOPMENT LAKE ELSINORE RETAIL TRADE AREA

	Square Feet	
Retail Inventory	**Total (Unadjusted)**	**Effective[a]**
Clothing and Clothing Accessories	45,656	32,763
General Merchandise	304,816	225,946
Home Furnishings and Appliances	41,084	37,867
Specialty/Other	191,450	159,753
Food and Beverage	306,448	222,008
Food Service and Drinking	245,160	194,436
Bldg. Materials & Garden Equip. & Supplies	126,006	122,153
Auto Parts	52,206	28,831
Gasoline Stations	32,763	25,431
Services Space	327,763	227,534
Vacant Space	164,927	117,045
Grand Total	**1,838,279**	**1,393,767**

[a] See discussion above for discount factor applied to existing retail development along Railroad Canyon Road
[b] Does not include square feet of Lake Elsinore Outlets

SOURCE: TNDG

As noted above, the primary delineator of the southern boundary – Railroad Canyon Road – essentially functions as the dividing line between the trade area for the proposed project and the trade area for the planned Wildomar Walmart Supercenter. Given that this street represents the approximate midpoint between the two proposed Supercenters, all retail development along the north and south sides of this street has been included in the retail inventory. However, to account for the fact that this retail development is also supported by residents who live south of this boundary, the analysis discounts the square footage of this space along Railroad Canyon Road by 50 percent. The rationale for this discount factor is that southern boundary also functions as the northern boundary for the Wildomar store's trade area[5]. Thus, it is reasonable to assume that 50

4 According to the ICSC, an outlet mall has a trade area radius of up to 75 miles. Further, the outlet shopping center format is positioned to attract visitors' retail expenditures.
5 See Economic Impact Report prepared for proposed Wildomar Walmart Supercenter.

percent of this space is supported by residents in the Lake Elsinore trade area, while the remaining 50 percent of this space is supported by residents in the Wildomar trade area. There is approximately 889,024 "unadjusted" SF of retail development surrounding this boundary (see Appendix K, Table B-2 for a list of these shopping centers and stores). Based on the discount factor discussed above, the 889,024 SF of space along this border has the equivalent impact of 444,512 SF of existing retail space in a more central portion of the trade area[6].

The total inventory of "effective" competitive retail space in the trade area is estimated at approximately 1.39 million SF, as shown in Table 4.12-1.[7] Most of the trade area's retail space includes neighborhood and community-scale facilities focused on the shopping needs of local residents. The overall retail vacancy rate in the trade area is estimated at 8.4 percent, which is within the range (5percent to 10percent) generally considered to be reflective of a healthy retail market[8]. In addition, this vacancy rate is below the current (3rd Quarter, 2013) 10.5 percent national vacancy rate for strip, neighborhood and community shopping centers, as estimated by REIS, the nation's leading provider of commercial real estate information.[9]

It should be noted that TNDG identified two shopping centers with relatively high vacancy rates.[10] These existing centers are highlighted below:

- The Lake Elsinore Town Center (≈ 180,000 SF), located on the northwest corner of Malaga Road and Mission Trail in Lake Elsinore, has an estimated 27percent vacancy rate.
- The Lake Elsinore Valley Center (≈ 75,000 SF), located on the southwest corner of Lakeshore Drive and Railroad Canyon Road in Lake Elsinore, has an estimated 31percent vacancy rate.

None of the buildings, within the significant vacancies identified above, currently exhibit urban decay conditions (this finding is documented in the photographs provided in Appendix K of this EIR). At the time of the photo survey (November 2013), none of the buildings exhibited visible signs of significant deterioration of structures and/or their surroundings; there were no significant indications of deferred maintenance; none had graffiti; none had boarded-up windows; and there were no indications of landscape neglect (weeds, brown grass, etc.). In addition, property owners are currently actively marketing all of these vacant spaces to prospective tenants. This provides a strong indication that the property owners consider these centers to be fully viable properties. The breakdown of the existing retail inventory by category is summarized on Table 4.12-1.

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6 This 444,512 SF of effective retail space is also accounted for in the Wildomar Economic Impact Report, (prepared under separate cover and not included in this Draft EIR). Thus, the two economic impact reports, combined, account for the total amount of developed retail space along Railroad Canyon Road.

7 The table also shows the unadjusted inventory of retail space in the trade area, which is approximately 1.84 million SF.

8 "Real Estate Principles: A Value Approach, 3rd Ed., 2010, Ling and Archer." According to the standard real estate textbook used in real estate courses at both undergraduate and graduate levels, the natural vacancy rate, for purposes of estimating potential gross income, for apartment, office, and retail properties is 5percent to 15percent. The textbook indicates that this is the typical vacancy rate when the market is in equilibrium.

9 See http://journalrecord.com/2013/10/10/blog-slow-but-steady-growth-for-national-market/. Accessed on 10/22/2013.

10 Potentially problematic shopping centers include those with a minimum gross leasable area (GLA) of 50,000 SF and a 20percent or higher vacancy rate.

There is an existing Walmart store is located within Lake Elsinore at 31700 Grape Street. This store could potentially close at the time the proposed project opens.

4.12.2 Regulatory Setting

State

California State Health and Safety Code

While not directly related to CEQA, California State Health and Safety Code Sections 33031(a) and 33031(b) define economic and physical conditions that constitute blight.

33031(a) Physical conditions that constitute blight include:

- Buildings in which it is unsafe or unhealthy for persons to live or work. These conditions may be caused by serious building code violations, serious dilapidation and deterioration caused by long-term neglect, construction that is vulnerable to serious damage from seismic or geologic hazards, and faulty or inadequate water or sewer utilities.
- Conditions that prevent or substantially hinder the viable use or capacity of buildings or lots. These conditions may be caused by buildings of substandard, defective, or obsolete design or construction given the present General Plan, zoning, or other development standards.
- Adjacent or nearby incompatible land uses that prevent the development of those parcels or other portions of the project area.
- The existence of subdivided lots that are in multiple ownership and whose physical development has been impaired by their irregular shapes and inadequate sizes, given present General Plan and zoning standards and present market conditions.

33031(b) Economic conditions that constitute blight include:

- Depreciated or stagnant property values.
- Impaired property values, due in significant part, to hazardous wastes on property where the agency may be eligible to use its authority as specified in Article 12.5 (commencing with Section 33459).
- Abnormally high business vacancies, abnormally low lease rates, or an abnormally high number of abandoned buildings.
- A serious lack of necessary commercial facilities that are normally found in neighborhoods, including grocery stores, drug stores, and banks and other lending institutions.
- A high crime rate that constitutes a serious threat to the public safety and welfare.

California Environmental Quality Act

Pursuant to Section 15131(b) of the State CEQA Guidelines, a project's economic impacts on a community are considered significant only if they can be tied to direct physical changes in the market area (i.e., physical deterioration of existing retail centers/facilities).

4.12.3 Thresholds of Significance

Per Section 15131(b) of the State CEQA Guidelines, a project's economic impacts on a community are considered significant only if they can be tied to direct physical changes in the market area (i.e. physical deterioration of existing retail centers/facilities). For purposes of this analysis, the project market impacts would be significant enough to create a lasting physical change in the market area if:

- Diversion of sales from existing retail facilities is severe enough to result in business closings.
- Business closures are significant enough in scale (i.e. in terms of the total square footage affected and/or the loss of key "anchor" tenants) to affect the long-term viability of existing shopping centers or districts, or to inhibit reuse of existing vacant structures, subsequently resulting in urban decay.

4.12.4 Methodology

For purposes of estimating impacts in the relevant retail sales categories, this analysis considers a trade area that includes the majority of the City of Lake Elsinore, in addition to surrounding unincorporated areas of Riverside County. The analysis projects total resident purchasing power within this trade area, and uses this projection of total demand as the basis for determining the extent to which the proposed project could be supported in the market area without negatively impacting existing businesses. The study methodology includes the following major steps:

1. Estimate the current potential demand for retail sales in the trade area, based on existing demographics.
2. Estimate the portion of total trade area demand that could realistically be "captured" by retail facilities in the trade area, based on an evaluation of the amounts and locations of competitive retail facilities outside of the evaluated trade area.
3. Forecast future (14-year) growth in the amount of supportable retail sales, based on projected increases in the trade area's resident population.
4. Forecast future growth in retail sales by individual retail category.
5. Estimate supermarket demand by determining the portion of total food store sales captured by supermarkets (versus other types of food stores such as convenience markets).
6. Estimate net supermarket demand after accounting for the capture of available demand by the proposed grocery component of the Walmart Supercenter.

7. Evaluate the impact of the project on average sales per square foot levels at the existing supermarkets in the trade area.

For the non-grocery retail categories, the potential impacts are expressed in terms of the SF of existing businesses that could potentially be displaced by the proposed project. For the grocery category, in addition to evaluating the potential square footage displacement, this analysis evaluates direct potential sales impacts (in terms of dollars per SF) to existing supermarkets in the trade area. This additional level of analysis for supermarkets is possible because the universe of supermarkets in the trade area is a manageable number (there are seven supermarkets in the trade area). Thus, it is possible to estimate the existing aggregate and average sales of these supermarkets, based on data from the California State Board of Equalization (SBOE) and Trade Dimensions International, Inc., a market research firm of The Nielsen Company. In-depth technical descriptions with respect to Retail Demand Analysis Methodologies used are provided in Section III of the TNDG report, which is Appendix K of this EIR.

4.12.5 Impact Analysis

Impact 4.12-1: Would the project create a diversion of sales from existing retail facilities severe enough to result in business closings?

General Merchandise, Apparel, Furniture/Appliances and Other / Specialty Sales

The proposed project would result in a net increase of 130,145 SF of retail space devoted to General Merchandise, Apparel, Furniture/Appliances and Other/Specialty (GAFO[11]) sales. This total includes the non-grocery portion (120,945 SF) of the proposed Walmart Supercenter and the potential specialty retail space proposed for development at out lot 1.

The demand analysis indicates year 2013 market support for $174.1 million in GAFO retail sales in the trade area. The $174.1 million in market demand translates into approximately 696,272 SF of GAFO retail space that could be currently supported in the trade area. Based on estimates from the field survey completed by TNDG, there is approximately 456,328 “effective” SF of existing GAFO space in the trade area. Thus, TNDG estimates that the trade area could currently support approximately 239,944 SF of additional GAFO space over and above the existing inventory.

Within the trade area, potential demand for new retail space in the GAFO retail categories is projected to grow to approximately 291,447 SF by opening year 2017[12] (the proposed project’s assumed opening date); 352,284 SF by 2021; 393,216 SF by 2023; and 481,415 by 2027. See **Table 4.12-2**, for the projection of supportable SF within GAFO retail categories from 2013 to 2027.

[11] “GAFO” is a retail industry acronym for the General Merchandise, Apparel, Furniture and Other/Specialty retail categories. The GAFO categories generally correspond to the merchandise mix of a discount department store such as Walmart.

[12] Note the opening year used for the Traffic Impact Analysis is 2017 and the opening year used in the Urban Decay Study is 2016.

The proposed project would result in a maximum net increase of 130,145 SF of GAFO retail space. Given that this space is well within the level of residual market support for GAFO space in the trade area, the GAFO components of the proposed project would not have significant competitive impacts on existing stores in the trade area. Therefore, the impact of GAFO retail components of the proposed project would be less-than-significant.

TABLE 4.12-2
POTENTIAL DEMAND FOR NEW GAFO RETAIL SPACE
LAKE ELSINORE RETAIL TRADE AREA IN SQUARE FEET (ALL NUMBERS ARE CUMULATIVE)

Retail Category	2013	2017	2019	2021	2023	2025	2027
GAFO[a]	239,944	291,447	352,284	393,216	436,216	436,227	481,415

[a] GAFO = General Merchandise, Apparel, Furniture/Appliances, and Other/Specialty

SOURCE: TNDG

Impacts of Proposed Grocery Component

The proposed project's grocery component would total 39,155 SF (30,596 SF of grocery sales area plus 8,559 SF of grocery support space). The proposed project's grocery space would generate levels equivalent to the national average for grocery sales in Walmart stores of approximately $475 per SF (gross area) (from 2013 to 2027), or total grocery sales of approximate $18.6 million.[13]

The trade area currently has seven supermarkets totaling approximately 173,208 "effective" SF.[14] Appendix K of this EIR provides a list of the supermarket centers that includes the stores' square footages and distances to the proposed project. The demand analysis indicates that there is base year (year 2013) demand to support average supermarket sales volumes in the trade area of $497 per SF at the seven existing supermarkets. In comparison, the industry median for supermarkets is approximately $473 per SF nationally and $418 in the Western United States. Thus, supermarkets in the trade area currently, on average, have the potential to generate sales volumes which are above the Western regional median and the national median.

Total demand for supermarket sales in the trade area is projected to increase from approximately $86.1 million in 2013 to approximately $92.5 million in 2017, the assumed opening date of the

[13] Based on data from Progressive Grocer's 2012 Super 50 publication, the national average sales volumes for Walmart grocery space is approximately $607.33 per square foot of sales area. Based on the floor area configuration for the grocery component of the proposed Supercenter, the estimated grocery sales area is equal to approximately 78.1percent of the grocery component's gross building space (assuming the canopy area and sales area function as the overall sales area). Thus, the sales volume for the gross building area of the store's grocery component is estimated at $475 per square foot ($607.33 x 78.1percent).

[14] Grocery stores with a minimum of 10,000 SF of building space are considered supermarkets for purposes of this analysis. Regarding the project's potential to adversely impact non-traditional markets, such as convenience stores, ethnic or specialty markets, and smaller neighborhood grocery stores (which are often below this 10,000 SF threshold), in the experience of TNDG, these outlets do not tend to compete with traditional supermarkets, and therefore are unlikely to experience lost sales to the project. As shown in Appendix K of this EIR, the square footages for four of the seven stores' are discounted by 50percent, given their location along the Railroad Canyon Road southern border.

proposed project. By 2027, total demand for supermarket sales in the trade area is projected to reach approximately $115.9 million (all projections are given in 2013 constant dollars).[15] **Table 4.12-3**, below, evaluates the impact of the proposed project's grocery sales in terms of the potential reduction in the sales per SF volume at the existing supermarkets in the trade area.

TABLE 4.12-3
POTENTIAL SALES IMPACTS TO EXISTING SUPERMARKETS GROCERY COMPONENT OF PROPOSED WALMART LAKE ELSINORE RETAIL TRADE AREA

Description	2013	2017	2019	2021	2023	2025	2027
Total Food Sales Demand	122,983	132,080	136,877	142,826	150,055	157,652	165,634
Estimated Supermarket Share	70%	70%	70%	70%	70%	70%	70%
Total Potential Sales	$86,088	$92,456	$95,814	$99,978	$105,039	$110,356	$115,944
--Walmart store[a]	$0	$(18,599)	$(18,599)	$(18,599)	$(18,599)	$(18,599)	$(18,599)
Net Demand Available to Support Existing Supermarkets	$86,088	$73,857	$77,215	$81,379	$86,440	$91,757	$97,345
Existing Supermarket Sq. Ft.	173,208	173,208	173,208	173,208	173,208	173,208	173,208
Potential Sales per Square Foot Existing Supermarkets	**$497**	**$426**	**$446**	**$470**	**$499**	**$530**	**$562**

[a] Sales per square foot (gross area) assumptions: $475. Typically, new retail stores operate below average sales volumes in the first few years after opening, and then reach stabilized sales volume levels after being open for a few years. However, in order to remain analytically conservative (i.e., to depict the maximum potential impact), it is assumed that store would reach its full sales potential (based on the chain-wide average) in year 1.

SOURCE: TNDG; Progressive Grocer, The Super 50, April 2012.

Table 4.12-3 suggests that the development of the proposed project would initially cause potential average sales volumes at the seven existing supermarkets to decrease from the current level of $497 per SF to approximately $426 per SF. Although this represents a reduction in the potential sales volume per SF for existing stores, the potential average sales level of $426 per SF in year 2017 is unlikely to be low enough to cause the closure of any of the trade area's existing supermarkets. At $426 per SF, potential sales volumes would still be above the Western regional median ($418) and about 90 percent of the national median ($473). In addition, due to continued population growth in the trade area, the projected sales impacts to existing supermarkets would only be temporary and would be partially offset by growth in retail demand. As shown in Table 4.12-3, potential sales volumes would reach $446 per SF in 2019, just two years after the proposed project's projected opening date. This projected sales volume is above the Western Regional median figure ($418) and 90 percent of the estimated base year amount ($436). Further, in 2023, just six years after the projected start date, projected potential sales volumes would reach $499 per SF, which is above the current estimate of $497. Therefore, potential adverse impacts for the grocery component of the proposed project with respect to urban decay would be less-than-significant.

[15] See Tables III-1 to III-8 and III-13 in Section III of Appendix K of this EIR for the derivation of this estimate of market support for supermarket sales, along with the projections of growth in demand for supermarket sales.

Impact of Proposed Restaurant Space

The proposed project would include 6,800 SF of restaurant space. The demand analysis indicates in 2013 potential market support for $64.3 million in restaurant sales in the trade area. The $64.3 million in market demand translates into approximately 214,432 SF of restaurant space that could be currently supported in the trade area. Based on estimates from the field survey completed, there is approximately 194,436 SF of existing restaurant space in the trade area. Thus, the trade area could currently support approximately 19,996 SF of additional restaurant space over and above the existing inventory.

Potential demand for new restaurant space in the trade area is projected to grow to 35,857 SF by 2017 (the assumed opening date for the proposed project), 54,593 SF by 2021 and 94,362 SF by 2027. See **Table 4.12-4**, below, for the projection of supportable SF within the Food Service and Drinking retail category from 2013 to 2027.

The proposed project's restaurant retail space, totaling 6,800 SF, would be within the envelope of available demand for new space, and is not likely to result in the closure of existing restaurants. Therefore, the potential for the proposed project to result in urban decay related to restaurants would be less-than-significant.

TABLE 4.12-4
POTENTIAL DEMAND FOR NEW RESTAURANT RETAIL SPACE
LAKE ELSINORE RETAIL TRADE AREA IN SQUARE FEET (ALL NUMBERS ARE CUMULATIVE)

Retail Category	2013	2017	2019	2021	2023	2025	2027
Food Service & Drinking	19,996	35,857	44,221	54,593	67,199	80,445	94,362

SOURCE: TNDG

Impacts of Proposed Gasoline Station/Convenience Store

As described in the Project Description, if out lot 1 is not developed with the proposed 9,310 SF of specialty retail space, it would be developed with a gasoline station/car wash and a 3,100-SF convenience store.

According to the most recent data from the SBOE, gasoline stations in California generate approximately $5.5 million in annual sales on average. This figure is calculated by dividing total annual taxable sales ($55,210,075,637) by the number of permits in the state (9,958).[16]

Demand for service station sales is projected to increase by $6.5 million between 2013 and 2017. Thus, the growth in the market over the next five years would be more than sufficient to support the sales of a typical gasoline station in California. See **Table 4.12-5**, below, for the projection of the demand for service station sales from 2013 to 2027.

[16] The data are for year 2011, the most recent year for which full-year data are available.

TABLE 4.12-5
POTENTIAL DEMAND FOR GASOLINE STATION SALES
LAKE ELSINORE RETAIL TRADE AREA IN THOUSANDS OF CONSTANT DOLLARS

Retail Category	2013	2017	2019	2021	2023	2025	2027
Gasoline stations	$88,295	$94,827	$98,271	$102,541	$107,732	$113,186	$118,917

SOURCE: TNDG

The growth in demand for gasoline sales from 2013 to 2017 would be more than sufficient to support the likely sales at a potential gas station/convenience store. As shown, the proposed gasoline station/convenience store would not have significant competitive impacts on existing gasoline stations/convenience stores in the trade area. Thus, potential sales impacts to existing service stations are expected to be less- than-significant with respect to urban decay.

Potential Reuse of Existing Lake Elsinore Walmart Site

Given that Walmart is proposing to develop two new Supercenters that are both approximately three miles from the existing Lake Elsinore store, there is a potential for the existing Walmart store to close at the time the project opens or thereafter. In addition to the proposed project evaluated in this analysis, there is a Supercenter planned for development in Wildomar near the I-15 and Bundy Canyon Road.[17] Given that the existing Walmart store is at the midpoint between the two proposed Supercenters, it is reasonable to assume that a potential closure would be equally attributable to the two new proposed Supercenters.[18] In fact, Walmart is currently anticipating closing the existing Lake Elsinore store upon opening of the proposed project.

As shown below on **Table 4.12-6**, the potential demand would be more than sufficient by 2017 (i.e., the assumed opening date of the proposed project) to support some type of retail reuse of the existing store, even after accounting for the demand that would be absorbed by the proposed store.

Although the market demand analysis indicates there would be sufficient retail demand to support some type of retail reuse of the existing Walmart store immediately after it closes, no specific tenants have been identified that could potentially re-tenant the site. In addition, Appendix K of this EIR highlights some caveats that could potentially delay retail reuse of the existing Walmart store. Notably, Walmart has an internal department which focuses on the sale of "excess" property. This department expends efforts to advertise and sell all "excess" existing buildings so that buildings are reoccupied. In order to ensure the site does not fall into a state of disrepair

17 See the Urban Decay study for the proposed Wildomar store, which is also prepared by TNDG.

18 The existing Lake Elsinore Walmart store is located at the southeast corner of Railroad Canyon Road and Grape Street. The store's total square footage (126,390) is discounted by 50 percent, due to its location on the southern periphery of the trade area. Thus the store's "effective" square footage – for purposes of calculating supportable demand in the trade area – is approximately 63,195. The same rationale applies to attributing a potential closure jointly to the two proposed Supercenters. If the existing store were to close, approximately 50 percent of its individual trade area would be served by the proposed Supercenter evaluated in this analysis, while the remaining 50 percent would be served by the Wildomar Supercenter.

while a new tenant is sought, the City will require the applicant to adhere to site maintenance conditions of approval.

TABLE 4.12-6
POTENTIAL DEMAND FOR NEW NON-GROCERY RETAILSPACE (EXPRESSED IN SQUARE FEET) ACCOUNTING FOR POTENTIAL REUSE OF EXISTING STORE

Retail Category	2013	2017	2019	2021	2023	2025	2027
GAFO	239,944	291,447	318,607	352,284	393,216	436,227	481,415
Food Service and Drinking	19,996	35,857	44,221	54,593	67,199	80,445	94,362
Bldg. Matrl./Garden Equip./Supplies	33,625	45,148	51,225	58,759	67,917	77,540	87,650
Auto Parts	31,255	35,699	38,043	40,949	44,482	48,193	52,093
Services Space @ 10 percent of Total Space	36,091	45,350	50,233	56,287	63,646	71,378	79,502
Total	**360,911**	**453,501**	**502,329**	**562,872**	**636,460**	**713,783**	**795,022**
Proposed Project (non-grocery)		(120,945)	(120, 945)	(120,945)	(120, 945)	(120,945)	(120, 945)
Demand for New Space	360,911	332,556	381,384	441,927	515,515	592,838	674,077
Added Demand Resulting from Potential Vacancy*		63,195	63,195	63,195	63,195	63,195	63,195
TOTAL	**360,911**	**395,751**	**444,579**	**505,122**	**505,710**	**656,033**	**737,271**

NOTE: Totals may not sum due to rounding

[a] Effective SF of existing Walmart store. Given the existing store's location on the southern periphery of the trade area boundary, its total square footage (126,390) is discounted by 50 percent to provide an estimate of the "effective" SF of competitive space.

SOURCE: TNDG

Mitigation Measures: None required.

Significance after Mitigation: Less-than-significant.

4.12.6 Cumulative Impacts

Where the above sections examine potential impacts strictly related to the proposed project, this section evaluates the cumulative impacts to the market based on all known planned and pending retail development/reuse projects in the trade area. **Table 4.12-7** provides a list of these planned and pending projects, including the projects' square footages and current status. As shown below, the planned and pending projects in the trade area total approximately 1.65 million SF, with 1.61 million SF of non-grocery space and 39,155 SF of potential grocery space.

TABLE 4.12-7
PLANNED AND PENDING RETAIL PROJECTS
LAKE ELSINORE RETAIL TRADE AREA

	Retail Square feet			
Project	**Non-Grocery**	**Grocery**	**Total**	**Status**
Proposed Project* Central Ave/Cambern Ave Lake Elsinore 92532	127,745	39,155	166,900	Under Review
Spyglass Ranch East of N Main St/Camino Del Norte Lake Elsinore 92532	145,000		145,000	Approved
Watersedge SW of I-15; Lakeshore Dr/Diamond Dr Lake Elsinore 92530	86,000		86,000	Approved
Diamond Specific Plan Diamond Dr, btw Lakeshore Dr and Malaga Rd Lake Elsinore 92530	236,000		236,000	Approved
John Laing Homes (Phase 2) West of I-15/Mission Trail, south of Lakeshore Dr Lake Elsinore 92530	58,500		58,500	Approved
Alberhill Ridge (Tract 35001) NW portion of City, South of I-15 Lake Elsinore 92530	679,000		679,000	Approved
Family Dollar Store NWC Riverside Dr/Walnut Dr Lake Elsinore 92530	8,320		8,320	Pending
Fisherman's Wharf Lakeshore Dr, btw Wilson Way and Bushman Ave Lake Elsinore 92530	12,748		12,748	Proposed
Lakeshore Town Center Near E Lakeshore Dr/S Main St Lake Elsinore 92530	237,400		237,400	Proposed
Wake Rider Resort Near Grand Ave/Riverside Dr Lake Elsinore 92530	11,350		11,350	Pending
Golden Corral Restaurant Central Ave/I-15 Lake Elsinore 92530	7,798		7,798	Pending
Circle K Gas Station Riverside Dr/Joy St Lake Elsinore 92530	N/A	N/A	N/A	Pending
Total	**1,610,461**	**39,155**	**1,649,616**	

SOURCE: TNDG

As shown above, most of the proposed retail space is at the preliminary conceptual stage, with only the proposed project and a few relatively smaller projects (Family Dollar, Golden Corral, and Circle K) having leasing commitments from proposed tenants. For example, besides the proposed project evaluated in this analysis, many of the remaining projects are part of Specific Plan studies that have included retail space as part of conceptual development plans. In addition, others have entitlements that may expire in the future (e.g., the Alberhill Ridge project was

approved 25 years ago in 1988). Finally, the Fisherman's Wharf and Lakeshore Town Center proposed projects have not yet submitted applications to the City for development. Nevertheless, consistent with CEQA requirements, the analysis makes the conservative (i.e., worst case) assumption that all known planned and pending projects will ultimately be developed within the time period evaluated in this analysis.

Non-Grocery/Non-Gasoline Categories

Demand for new retail space (non-grocery) in the trade area is projected to reach approximately 360,911 SF in 2017 and 795,022 SF by 2027. See **Table 4.12-8**, below, for a breakdown of supportable SF by retail category from 2013 to 2027.

TABLE 4.12-8
DEMAND FOR NEW RETAIL SPACE BY RETAIL CATEGORY (NON-GROCERY) LAKE ELSINORE RETAIL TRADE AREA

Retail Category	2013	2017	2021	2025	2027
GAFO	239,944	291,447	352,284	436,227	481,415
Food Service and Drinking	19,996	35,857	54,593	80,445	94,362
Building Materials / Garden Equipment / Supplies	33,625	45,148	58,759	77,540	87,650
Auto Parts	31,255	35,699	40,949	48,193	52,093
Total	**36,091**	**45,350**	**562,872**	**713,783**	**795,022**
Square Feet Absorbed by Planned and Pending Projects		**(1,610,461)**	**(1,610,461)**	**(1,610,461)**	**(1,610,461)**
Net Demand	**360,911**	**0**	**0**	**0**	**0**

SOURCE: TNDG

Based on the potential demand for new non-grocery retail space (as shown on Table 4.12-8 above, and based on detailed analysis and data provided), the total SF of planned and pending projects in the trade area (as shown on Table 4.12-7) would be well over the level of retail demand through 2027. Thus, if all of the pending projects were developed by 2027, the market would be substantially overbuilt.

A more likely cumulative scenario is that retail market conditions would result in a more gradual buildout of planned retail development, such that the pace of retail development would more closely follow the growth in retail demand. Under a more gradual (market-driven) buildout scenario, there is less potential for overbuilt conditions to occur, and consequently a reduced potential for building vacancies and urban decay to follow. Specifically, the following factors are highly likely to mitigate against the development of a significantly overbuilt retail market.

Probability of development. As noted above, the majority of the projects evaluated in this analysis are part of Specific Plan studies that have included retail space as part of conceptual development plans. These potential retail sites would be developed only if and when future demand dictates, which assumption is consistent with existing industry customs and practice. In

addition, although some of these projects have specific zoning approved for retail uses, they still may require project site plans or other entitlements required for retail development. Finally, some of the projects are only proposed and have not yet submitted applications to the City for development of these sites.

Market area distinction. Evaluating the aggregate SF proposed in the trade area implicitly assumes that the planned and pending projects' market areas are identical to the market area for the Lake Elsinore Walmart Supercenter project. However, the planned and pending projects in Table 4.12-7 will have their own distinct market areas, which only partially overlap with the trade area evaluated in this analysis.[19] As such, these projects would not be limited to the same "pool" of demand projected in this analysis.

Projected supply increases are typically linked to population growth. The supply of planned retail SF in the trade area greatly exceeds the amount of population growth projected for the area. Given that population growth largely fuels the demand for new retail space, it is unlikely that all of the proposed projects will be developed as initially proposed. For instance, as individual project proponents advance further along in the planning process, some projects will be scaled back, some will decide to change the overall development mix (e.g., substituting office space for retail space), while others will be completely dropped.

First-in-line-phenomenon. In markets expected to experience above-average population growth, such as Lake Elsinore and surrounding area, project proponents often attempt to get projects moving along in the entitlement process much earlier than warranted by market demand. By getting their projects "first-in-line", developers hope to obtain commitments from major national chain retailers before other projects are proposed and entitled. As these key retailers commit to specific projects, other proposed projects, which were likely attempting to attract many of the same tenants, will reevaluate their development plans. In some cases, they will drop development plans altogether; in others, they will shift development proposals to non-retail uses.

Automatic market corrections. Ultimately, the planned projects will go forward only when retailers commit to locating at the project. In the event that the market becomes saturated with key retailers, major national retailers will choose not locate at some of the proposed projects in the trade area. Without commitments from key anchor tenants, developers will be unable to fill inline and other non-anchor space in their projects. Moreover, without pre-leasing commitments from retailers, many developers will be unable to obtain development financing for their projects.[20] In this case, major retailers' site selection criteria will act as an automatic correction to an oversupply of retail space. Thus, without commitments from key retailers, developers will have to revisit their development proposals and consider alternative uses, other than retail space, for their project sites.

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19 This does not apply to the John Laing Homes (Phase 2) and the Diamond Specific Plan projects. The square feet of these two proposed projects is discounted by 50percent, consistent with the approach in this analysis of discounting retail space along Railroad Canyon Road by 50percent.

20 See Commercial Property Faces Crisis, Wall Street Journal, Mach 26, 2009.

Supermarket Category

Besides the proposed grocery component of the Walmart Supercenter, there are no other known planned and/or pending supermarket projects in the trade area. Thus, there would be no cumulative impacts in the supermarket category above and beyond the project-specific impacts summarized above.

Gasoline Station Category

As shown on Table 4.12-7, a Circle K gasoline station is proposed for development at the intersection of Riverside Drive and Joy Street in the City of Lake Elsinore. Combined, the gas station/convenience store outlet option (proposed project) and the cumulative project would total approximately $11.0 million in annual sales.[21] Growth in demand for service station sales is projected to increase by $6.5 million between 2013 and 2017, indicating that the market would be slightly overbuilt in the gasoline stations category if both projects were built by 2017. However, these potential sales impacts would not be severe enough to cause the closure of any gasoline station in the trade area. Based on the figures discussed above, assuming both gasoline stations are built in this timeframe, excess sales over demand would be approximately $4.5 million in 2017 ($11.0 million - $6.5 million = $4.5 million). However, as a share of total service station demand in 2017, this would equal less than 5percent of total trade area demand in 2017 ($94.8 million, see Table 4.12-5). Moreover, these potential sales impacts would be temporary, as continued growth in the market would be more than sufficient to support sales of both gasoline stations by 2020.[22]

As discussed above, potentially significant economic impacts are projected under cumulative conditions if all of the planned and pending projects were to be developed by 2027. As described in the previous section, it is extremely unlikely that the planned and/or pending projects will developed during this time frame. However, even in the unlikely event that these projects are developed by 2027, it is currently not possible to identify which (non-grocery) retail categories could possibly become overbuilt, or to identify existing businesses in those categories which might be forced to close if the potential retail components of these projects are ultimately developed. As previously noted, most of the planned and/or pending projects identified on Table 4.12-7 are at the preliminary conceptual stage without commitments from specific retail tenants. Therefore, any attempt to identify specific vacancies which might possibly result, or to determine the potential for physical deterioration or urban decay, would be speculative in this context. For purposes of evaluating CEQA impacts, it is not required or valid to engage in speculative analysis.

A more likely cumulative scenario is that retail market conditions would result in a more gradual buildout of planned retail development, such that the pace of retail development would more closely follow the growth in retail demand. Under this scenario, there is less potential for overbuilt conditions to occur, and consequently a reduced potential for building vacancies and urban decay to follow. But again, any attempt to identify businesses which might be affected

[21] Average sales are estimated to be $5.5 million per gasoline station, according to sales data from the SBOE.
[22] As shown on Table 4.12-5, growth in service station demand would reach close to $10.0 million in 2019 and $14.2 million in 2021. Thus, incremental demand for new service station sales would reach approximately $12.1 million by 2020.

under this scenario, if any, whose closure might ultimately result in urban decay would be speculative, and therefore would not be required under CEQA.

Retail Reuse of Existing Walmart Store

The retail demand analysis indicates there would be sufficient demand, under project-specific conditions, to support some type of retail reuse of the existing Walmart store. In addition, the store is in a favorable location (can accommodate the Walmart Supercenter), with good freeway access and visibility (two key site criteria for many retailers), along with being next to a strong concentration of retail development on the west side of I-15. However, based on previous studies, the relative success in reusing closed Walmart stores for other retail uses represents a "mixed bag" of sorts, with some successfully reconfigured for other retail stores while others have remained vacant for several years. Specifically, TNDG has either prepared urban decay studies, or is aware of other examples, where simultaneous store openings and closings, as shown in **Table 4.12-9**, in the following California cities involved the simultaneous closing of an existing Walmart store and the development of a Walmart Supercenter combining general merchandise and grocery sales.

It should also be noted that along with potential retail reuse options, the existing Walmart building would also be a candidate for some type of adaptive reuse, including uses ranging from a recreational facility (e.g., bowling alley, ice rink, fitness center) to institutional uses (e.g., government office facility, library, church) to office/service type uses (e.g., call centers). There are numerous examples of vacant "big box" stores being converted for these types of uses.[23]

TABLE 4.12-9
REUSE STATUS FOR CLOSED WALMART STORES

City	Reuse Status
La Quinta	Reused as Kohl's
Palmdale	Reused as Burlington Coat Factory and Factory 2U
Palm Springs	Cathedral City Walmart closed; building was reoccupied by a 99 Cents Only store; remaining portion of store is still vacant.
Hanford	Still vacant; purchased by multiple real estate investment firms (2006 and 2010); was considered by Lowe's for a store site at one time; recently purchased (July 2013)
San Jacinto[a]	Hemet Walmart closed; purchased by Latham Management and Counseling Service in November 2008; preliminary plans call for a medical plaza featuring a cardiac care center and outpatient facilities
Gilroy	Reused as Sergins RV Store
Bakersfield (White Lane)	Reused as Fallas Discount Store

[a] Hemet store closed when the San Jacinto store opened

SOURCE: TDNG; information from City staff members

[23] For example, 24-Hour Fitness has opened up fitness clubs in vacant big box stores in a number of markets.

However, even if the new property owners of the existing store are unable to attract replacement tenant(s) for the Walmart store, the closure of the Walmart store would not necessarily result in long-term physical impacts to the Lake Elsinore City Center shopping center. Without the existing Walmart store, the center would still function as a well-tenanted neighborhood-scale shopping center anchored by the existing Vons store, with it accounting for approximately 44percent of the remaining center space. According to the ICSC, supermarket anchors typically account for 30percent to 50percent of total space in neighborhood centers.[24]

Mitigation Measures: None required.

Significance after Mitigation: Less-than-significant.

References

Urban Decay Study for Lake Elsinore Walmart, Prepared for City of Lake Elsinore, Prepared by The Natelson Dale Group, Inc., 2015.

[24] ICSC, 2011. U.S. Shopping-Center Classification and Characteristics.

4.13 Utilities and Service Systems

This section of the Draft Environmental Impact Report (EIR) evaluates the existing utilities and service systems environment in the project vicinity, identify potential significant impacts created by the project, and recommend mitigation measures to reduce the significance of impacts.

4.13.1 Environmental Setting

A portion of the project site was annexed by the City of Lake Elsinore (City) as part of the 3rd Street Annexation in 2012. Where applicable, information in this chapter is based on the Plan of Services for the 3rd Street Annexation area, as well as the City of Lake Elsinore General Plan EIR**.**

Water Supply Service

The City is provided water service by the Elsinore Valley Municipal Water District (EVMWD). EVMWD's service area is broken into two divisions, the Elsinore Division and the Temescal Division. The project site is located within the Elsinore Division, an approximately 96-square-mile area. The Elsinore Division has 39,000 service accounts (EVMWD, 2011). EVMWD has issued a Stage 4a drought notice, which requires all water customers to comply with restricted water use rules and includes fines for non-compliance.

Water Supply

Potable water supplies consist of imported water from the Metropolitan Water District (Metropolitan), local surface water from Canyon Lake, and local groundwater from the Elsinore Basin. Metropolitan has access to groundwater from Elsinore Basin, Coldwater Basin, San Bernardino Bunker Hill Basin, Rialto- Colton and Riverside-North Basin. Imported water supply is purchased from the Metropolitan via EMWD and Western Municipal Water District (General Plan, 2011).

EVMWD also produces recycled water sourced from tertiary-treated wastewater from the Regional Water Reclamation Facility (WRF), Railroad Canyon WRF, and Horsethief WRF. Recycled water is used to irrigate parks, street medians, golf courses, and wildlife habitat and provide lake stabilization (General Plan, 2011). EVMWD does not currently provide recycled water to people in the Regional WRF service area in which the project is located (EVMWD, 2011). However, it is the goal of EVMWD to build additional lines and expand recycled water services in order to free up water for residential uses in addition to irrigation and maintaining lake levels (General Plan, 2011). **Table 4.13-1** below, shows the existing and project normal year water supply in the EVMWD service area.

TABLE 4.13-1
EVMWD EXISTING AND PROJECTED WATER SUPPLY – NORMAL YEAR (AFY)

Source	2010	2015	2020	2025	2030
Metropolitan	35,200	48,100	48,100	48,100	48,100
Supplier-produced groundwater(1)	2,978	6,750	6,750	6,750	6,750
Supplier-produced surface water from Canyon Lake	4,900	4,900	4,900	4,900	4,900
Recycled Water	449	1,014	1,905	2,430	2,430
Lake Replenishment and Discharge to Temescal Wash	8,401	8,401	8,401	8,401	8,401
TOTAL	**51,928**	**69,165**	**70,056**	**70,581**	**70,581**

(1) Assumes that groundwater pumping in the Elsinore and the Coldwater Basins will not exceed the natural recharge in the basins (natural recharge in the Elsinore Basin is 5,500 acre-feet/yr (AFY) while natural recharge in the Coldwater Basin is 1,250 (AFY).
(2) Assumes that all recycled water produced at EVMWD's Regional Plant is used for replenishment of water levels in Lake Elsinore and discharged along Temescal Wash for environmental enhancement.

SOURCE: EVWMD, 2011

Water Demand

EVMWD has a normalized average annual potable demand of approximately 32,000 acre-ft/yr. EVMWD also has non-potable (recycled) water customers in the Canyon Hills, Canyon Lake, and Horsethief Canyon regions. Existing recycled water use for irrigation is approximately 450 (AFY). Under existing conditions, recycled water is also used for maintaining lake levels in Lake Elsinore and is discharged to Temescal Wash for environmental enhancement. **Table 4.13-2** below shows the existing and projected normal year water demand in the EVMWD service area. Additionally, **Table 4.13-3** shows the difference between current and projected supply and demand.

TABLE 4.13-2:
EVMWD EXISTING AND PROJECTED WATER DEMAND--NORMAL YEAR (AFY)

Source	2010	2015	2020	2025	2030
Single Family	13,829	20,159	21,836	23,728	25,498
Multi-family	772	1,312	1,449	1,603	1,747
Commercial	517	945	1,052	1,173	1,285
Industrial	1,526	2,401	2,627	2,881	3,120
Institutional/governmental	320	660	744	838	926
Landscape	4,865	7,220	7,839	8,538	9,192
Agriculture	2,316	2,170	2,170	2,170	2,170
Wholesale	505	501	542	588	631
Other	1,333	1,924	2,081	2,258	2,424
Additional water uses and losses	13,450	14,015	14,906	15,431	15,431
TOTAL	**39,287**	**51,306**	**55,244**	**59,208**	**62,426**

SOURCE: EVWMD, 2011

TABLE 4.13-3
SUPPLY AND DEMAND COMPARISON—NORMAL YEAR (AFY)

Source	2010	2015	2020	2025	2030
Supply totals	51,928	69,165	70,056	70,581	70,581
Demand totals	39,287	51,306	55,244	59,208	62,426
Difference	12,641	17,858	14,812	11,373	8,155

SOURCE: EVWMD, 2011

Wastewater and Sewer

The proposed project would also receive wastewater treatment service from EVMWD. EVMWD provides sewer service for the City of Lake Elsinore, as well as the cities of Canyon Lake and Wildomar, portions of the city of Murrieta, and unincorporated portions of Riverside County (General Plan, 2011). EVMWD operates three WRFs (Regional, Railroad Canyon and Horsethief). In addition, flow in the southern part of EVMWD's service area is treated at the Santa Rosa WRF operated by the Rancho California Water District (RCWD). These four treatment plants serve four major service areas within the wastewater collection system. The main infrastructure in each system consists of trunk sewers, lift stations and force mains. As discussed above, the project site is located in the Regional WRF service area (EVMWD, 2011).

The Regional WRF has a current maximum capacity of eight million gallons per day (mgd). The wastewater effluent is treated with tertiary treatment and phosphorus removal to Title 22 requirements and then discharged to Temescal Wash and/or Lake Elsinore. Based on data provided by EVMWD, the annual average flow at the Regional WRF in 2010 was six mgd. It is likely that an expansion of the Regional WRF will occur to address future growth upping the maximum treatment capacity from eight to 16.7 mgd. Expansions are also expected for the Horsethief and Railroad Canyon WRFs, increasing total maximum treatment capacity within the service area from 23.2 mgd to 34.4 mgd (EVMWD, 2011).

Table 4-13.4 depicts existing and projected total wastewater treatment demand for in EVMWD's entire service area.

TABLE 4.13-4
EXISTING AND PROJECTED WASTEWATER DEMAND (AFY)

Type of Wastewater	2010	2015	2020	2025	2030
Wastewater collected and treated in the service area	8,400	16,890	20,238	22,915	25,166

SOURCE: EVWMD, 2011

Solid Waste

Solid waste generally refers to garbage, refuse, biosolids, and other discarded solid materials that come from residential, industrial, and commercial activities. Construction, demolition, and inert wastes are also classified as solid waste. Such wastes include nonhazardous building materials such as asphalt, concrete, brick, drywall, fencing, metal, packing materials, pallets, pipe, and wood. The general waste classifications used for California waste management units, facilities, and disposal sites are outlined below. Nonhazardous solid waste consists of organic and nonorganic solid, semi-solid, and liquid wastes, including garbage, trash, refuse, paper, rubbish, ashes, industrial wastes, demolition and construction wastes, abandoned vehicles and parts thereof, discarded home and industrial appliances, manure, vegetable or animal solid and semi-solid wastes, and other discarded waste, provided that such wastes do not contain hazardous materials or soluble pollutants in concentrations that would exceed applicable water quality objectives or cause a degradation of waters of the state.

California state law regulates the types of waste that can be disposed of at the different classes of landfills. Class I landfills may accept hazardous and nonhazardous wastes. Class II landfills may accept designated and nonhazardous waste, and Class III landfills may accept nonhazardous wastes.

Lake Elsinore is responsible for meeting the California Integrated Waste Management Act of 1989 (AB 939). AB 939 required cities and counties to reduce the amount of solid waste being sent to landfills by 50 percent by January 1, 2000. It also required cities and counties to prepare solid waste planning documents. These documents include the Source Reduction and Recycling Element (SRRE), the Household Hazardous Waste Element (HHWE), and the Nondisposal Facility Element (NDFE). All three of these documents, as well as the Integrated Waste Management Plan, approved February 1998 by the California Integrated Waste Management Board (now California Department of Resources Recycling and Recovery or CalRecycle), have been approved for Lake Elsinore. The Kern County Integrated Waste Management Plan is the long-range planning document for landfill facilities.

Construction and demolition (C&D) waste is heavy, inert material. This material creates significant problems when disposed of in landfills. Because C&D waste is heavier than paper and plastic, it is more difficult for counties and cities to reduce the tonnage of disposed waste. For this reason, C&D waste has been specifically targeted by the State of California for diversion from the waste stream. Projects that generate C&D waste should emphasize deconstruction and diversion planning rather than demolition. Deconstruction is the planned, organized dismantling of a prior construction project, which allows maximum use of the deconstructed materials for recycling in other construction projects and sends a minimum amount of the deconstruction material to landfills.

CR&R Incorporated (CR&R) is a privately operated company under contract with the City of Lake Elsinore to provide solid waste collection and disposal services to the City. CR&R has the option of hauling residential waste to any permitted waste facility in Riverside County (i.e., transfer station or landfill). Transfer stations can process waste prior to disposal at landfills.

CR&R is one of Southern California's largest waste management companies and serves more than 2.5 million people throughout Orange, Los Angeles, San Bernardino, Imperial and Riverside counties. CR&R recycles over 120,000 tons of materials each year (CR&R, 2015).

4.13.2 Regulatory Setting

Federal

Clean Water Act

The Clean Water Act (CWA), as amended by the Water Quality Act of 1987, is the major federal legislation governing water quality. The objective of the CWA is "to restore and maintain the chemical, physical, and biological integrity of the Nation's waters." Important applicable sections of the CWA are as follows:

- Section 301 prohibits the discharge of any pollutant by any person, except as in compliance with Sections 302, 306, 307, 318, 402, and 404 of the CWA. Sections 303 and 304 provide for water quality standards, criteria, and guidelines.
- Section 401 requires an applicant for any federal permit that proposes an activity which may result in a discharge to "waters of the United States" to obtain certification from the State that the discharge will comply with other provisions of the Act. Certification is provided by the Regional Water Quality Control Boards (RWQCB).
- Section 402 establishes the National Pollution Discharge Elimination System (NPDES) a permitting system for the discharge of any pollutant (except for dredge or fill material) into waters of the United States. This permit program is administered by the RWQCB. Section 404 establishes a permit program for the discharge of dredge or fill material into waters of the United States. This permit program is administered by United States Army Core of Engineers (USACE).

State

California Porter Cologne Water Quality Control Act

The State of California's Porter-Cologne Water Quality Control Act (California Water Code Section 13000, et seq.) provides the basis for water quality regulation within California. The Act requires a "Report of Waste Discharge" for any discharge of waste (liquid, solid, or otherwise) to land or surface waters that may impair a beneficial use of surface or groundwater of the State. Waste discharge requirements (WDR) resulting from the Report are issued by the RWQCB. In practice, these requirements are typically integrated with the NPDES permitting process.

The State Water Control Board (SWCB) carries out its water quality protection authority through the adoption of specific Water Quality Control Plans (Basin Plans). These plans establish water quality standards for particular bodies of water. California water quality standards are composed of three parts: the designation of beneficial uses of water, water quality objectives to protect those uses, and implementation programs designed to achieve and maintain compliance with the water quality objectives.

The Santa Ana RWQCB is responsible for the Basin Plan that covers this portion of Riverside County including the project site. The RWQCB implements management plans to modify and adopt standards under provisions set forth in section 303(c) of the Federal CWA and California Water Code (Division 7, Section 13240). Under Section 303(d) of the 1972 CWA, the State is required to develop a list of waters with segments that do not meet water quality standards.

California Water Code Section 10910-10915

California Water Code Section 10910 through 10915 requires that a Water Supply Assessment (WSA) be prepared for any project with the following characteristics:

- A residential development of more than 500 dwelling units
- A shopping center or business establishment employing more than 1,000 persons or having more than 500,000 SF of floor space
- A commercial office building employing more than 1,000 persons or having more than 250,000 SF of floor space
- A proposed hotel or motel, or both, having more than 500 rooms
- An industrial, manufacturing, or processing plant, or industrial park planned to house more than 1,000 persons, occupying more than 40 acres of land, or having more than 650,000 SF of floor area
- A mixed-use project that includes one or more of the projects specified above, and a project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500-dwelling-unit project

The proposed project does not meet any of the aforementioned requirements, and therefore would not require the preparation of a WSA.

California Urban Water Management Planning Act

The Urban Water Management Planning Act (California Water Code §10610-10656) requires that all urban water suppliers prepare urban water management plans and update them every five years.

California Integrated Waste Management Act of 1989

The California Integrated Waste Management Act of 1989 (AB 939) redefined solid waste management in terms of both objectives and planning responsibilities for local jurisdictions and the State. The Act was adopted in an effort to reduce the volume and toxicity of solid waste that is land filled and incinerated by requiring local governments to prepare and implement plans to improve the management of waste resources. AB 939 required each of the cities and unincorporated portions of the counties to divert a minimum of 25 percent of the solid waste sent to landfills by 1995 and 50 percent by the year 2000. To attain goals for reductions in disposal, AB 939 established a planning hierarchy using new integrated solid waste management practices. These practices include source reduction, recycling and composting, and environmentally safe landfill disposal and transformation. Other state statutes pertaining to solid waste include

compliance with the California Solid Waste Reuse and Recycling Act of 1991 (AB 1327), which requires adequate areas for collecting and loading recyclable materials within a project site.

Governor Brown Executive Order B-29-15

Governor Brown issued Executive Order B-29-15 on April 25, 2015. Among the many water conservation requirements that it mandates, the Executive Order requires that a 25% reduction in urban potable urban water use be achieved, as compared to 2013 water use levels, on a statewide basis. The Executive Order expires February 28, 2016, although it can be extended depending on future drought conditions. Each of the 411 California urban water districts has been assigned a specific water reduction target to help to achieve the overall statewide water use reduction goal. Elsinore Valley Water District's potable urban water use reduction target is 28%.

Local

Elsinore Valley Municipal Water District Urban Water Management Plan

The most recent EVMWD Urban Water Management Plan (UWMP) was adopted on June 9, 2011 in accordance with the California Urban Water Management Planning Act. The UWMP discusses the legislative foundation behind the UWMP, a description of the EVMWD water supply system and its service area, the estimated and projected water demands and supplies, water supply reliability and water shortage contingency planning and demand management measures.

EVMWD has implemented a mandatory use ordinance which requires all new customers to use recycled water for areas in which facilities exist. In order to encourage the use of recycled water, EVMWD currently offers recycled water at rates lower than potable water to customers willing to convert from potable water to recycled water. As result, recycled water demands are expected to increase by approximately 22 percent by 2025 (EVMWD, 2011).

Lake Elsinore Municipal Code – Title 16, Chapter 16.34, Chapter 16.52 and Chapter 16.52

Section 16.34.040 in Chapter 16.34 (Requirements for building permit issuance) requires that prior to the issuance of a building permit, utilities such as water and sewer, when requiring extensions to serve any parcel to be developed, shall be constructed by the owner's licensed contractor and that parcels shall be deemed served by City water and sewer if the distance in feet from the closest property line to the facility to be extended shall be 200 times the number of lots to be developed.

4.13.3 Thresholds of Significance

According to Appendix G of the California Environmental Quality Act (CEQA) Guidelines, the proposed project could have a potentially significant impact with respect to utilities and service systems if it would:

- Conflict with wastewater treatment requirements of the applicable Regional Water Quality Control Board.

- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.
- Require or result in the construction of new stormwater drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects.
- Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.
- Result in a determination by the wastewater treatment provider that would serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.
- Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.
- Comply with federal, state, and local statutes and regulations related to solid waste.

As determined in the Initial Study/Notice of Preparation (Appendix A), implementation of the proposed project would not result in impacts related to confliction with wastewater treatment requirements, construction of new water or wastewater treatment facilities or expansion of existing facilities, adequate wastewater treatment capacity, sufficient landfill capacity, and compliance with statutes related to solid waste. These impacts will not be discussed further in the EIR.

4.13.4 Methodology

The evaluation of impacts of the projects is based on professional judgment, analysis of the City's land use policies, and significance criteria established in Appendix G of the State CEQA Guidelines, which the County has determined appropriate for the EIR.

4.13.5 Impact Analysis

Impact 4.13-1: Would the project require or result in the construction of new stormwater drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects?

There are two alternative drainage improvement scenarios for the project site. Alternative A is the City's area drainage improvement plan that is currently being designed and is anticipated to be in place prior to project construction. Alternative B is the project applicant's interim, on-site drainage facilities that would be constructed should the City's drainage improvement not be completed prior to project construction. Should the Alternative B on-site drainage solution be required, it will only remain operational until such time as the Alternative A drainage improvements are completed. Details for both drainage improvement alternatives are documented in Section 4.7.5.

The proposed project is located within an area designated as Flood Zone X. The City is in the process of preparing an area hydrology plan (Area Hydrology Plan) for the 3rd Street area in consultation with the Riverside County Flood Control District and Water Conservation District (RCFCWCD) and Caltrans. The City has identified a preferred alignment for the Area Hydrology Plan as shown in Figure 4.7.4. Under this plan, stormwater would be conveyed from the existing earthen channel located at Cambern Avenue and directed south on Cambern Avenue, and then west on 3rd Street, under Interstate 15 (1-15), and into an earthen/rip-rap channel, which would connect to the existing 3rd Street channel and into Temescal Wash. The proposed Area Hydrology Plan would include installation of a permanent drainage system (including an inlet structure, storm drains, curbs and gutters, catch basins, and an open channel) to capture and direct run-off from the project area. Storm drains composed of reinforced concrete pipe (RCP) would range in size from 84 inches in Cambern Avenue and 72 inches and 48 inches in 3rd Street. A steel-jacketed 36-inch RCP will be jack and bored under I-15 and connect the proposed 378-foot long, 70-foot-wide earthen trapezoidal channel. The proposed regional drainage plan will also capture off-site drainage that currently flows onto the project site and convey it into the proposed area-wide drainage system. The environmental impacts associated with the City's Area Hydrology Plan will be evaluated in a separate CEQA document.

If the Area Hydrology Plan is not adopted by the City by the time the proposed project is constructed, then the proposed project design would be designed to accommodate increased flows on the southern boundary of the Walmart Supercenter the site in accordance with Figure 3-7. The alternative storm drainage project design would include conveyance of stormwater flows from Cambern Avenue through a storm drain structure with varying widths into an on-site approximately 72-foot-wide stormwater detention basin/open channel, which would be located along the southern boundary of the project site adjacent to 3rd Street.

The proposed project would include the development on-site of drainage facilities to accommodate on-site flows. The facilities would be constructed to handle 64.07 cubic feet per second (cfs) of runoff during the 100-year event compared to 36 cfs under existing conditions. The facilities would be developed within the project footprint, and no additional areas of disturbance would be required. The proposed project would not require or result in the construction of new stormwater drainage facilities, or expansion of existing facilities, the construction of which could cause significant environmental effects. The on-site alternative drainage plan would not create a need to expand drainage facilities and would have less-than-significant impacts to existing facilities. A detailed discussion regarding hydrology is contained in Section 4.7

Mitigation Measures: None required.

Significance after Mitigation: Less-than-significant.

Impact 4.13-2: Would the project have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?

As previously discussed, the proposed project would be served by the EVMWD. Currently, service is provided to the project vicinity via a 12-inch main in Cambern or 8-inch main in 3rd Street. The estimated construction water demand is 12,000 gpd for 40 days, totaling 480,000 gallons or 1.5 acre feet. The operational water demand is approximately 3,300 gpd domestic and 5,380 gpd irrigation for a total of approximately 9.7 acre-feet per year. This would represent an increase in existing water demand compared to existing site conditions. Currently, there is no regular water usage at the site.

The Walmart Supercenter store would install high-efficiency urinals that use only one-eighth (1/8) gallon of water per flush. This fixture reduces water use by 87 percent compared to the conventional one gallon per flush urinal. The 1/8-gallon urinal also requires less maintenance than waterless urinals. All restroom sinks would use sensor-activated one-half (1/2) gallon per minute high-efficiency faucets. During use, water flows through turbines built into the faucets to generate the electricity needed to operate the motion sensors. Water efficient restroom toilets would be employed in the Walmart Supercenter restrooms. The fixture uses 20 percent less water compared to mandated EPA Standards of 1.6 gallon per flush fixtures. The toilets use built-in water turbines to generate the power required to activate the flush mechanism, which is energy efficient because it saves energy and material by eliminating electrical conduits required to power automatic flush valve sensors. Additionally, the proposed project's parking lot would include low-impact development (LID) design features such as stormwater retention bio cells in the northern area of the parking lot.

The proposed project is consistent with the site's designated zoning (General Commercial and Commercial Mixed Use). The demand associated with those land uses has been accounted for in the EVMWD water demand projections listed above, which are based on General Plan buildout. Based on a comparison of projected supply and demand, there would be sufficient water supplies to meet demand through the year 2030. As shown above, the proposed project would consume approximately 9.7 acre-feet of water annually. As discussed above, the proposed project is located within the EVMWD's Elsinore Division. EVMWD supplies approximately 23,820 acre-feet of water annually to the Elsinore Division. The proposed project's annual water demand represents 0.03 percent of EVMWD's total annual water supply to the Elsinore Division, and EVMWD has verified that it has adequate capacity to serve the site. Appendix L contains the project's Water Supply Evaluation and Will-Serve letter.

Forecasts for EVMWD's long-range water supply project a demand of 2.3 million acre-feet of imported water its member agencies in 2020. Based on existing water supplies, EVMWD has indicated that it will be able to meet 100 percent of its member agencies demands over the next 20 years in average and wet years, over the next 15 years in multiple dry years, and over the next 10 years in single dry years (EVMWD, 2011). With the addition of future-planned water supplies, EVMWD will be able to meet 100 percent of demand over the next 20 years, even under a repeat

of the worst drought, while providing a 15 to 20 percent reserve supply and making sufficient water deliveries for the replenishment of local and regional storage.

The project has also received a will-serve letter from EVMWD dated August 13, 2015 verifying the project will be provided water supply and wastewater treatment services. Therefore, the project site would not require new or expanded entitlements; impacts would be less-than-significant.

Mitigation Measures: None required.

Significance after Mitigation: Less-than-significant.

4.13.6 Cumulative Impacts

The EVMWD service area is considered the cumulative area to be affected. The proposed project could result in a cumulative impact on water supplies since the project represents a new water demand in the project area. However, the proposed project would be consistent with the General Plan Land Use Plan, which designates the project site as General Commercial and Commercial Mixed Use. In order to support water saving high-efficiency technology, the proposed project would implement the project design features described above. Furthermore, the proposed project would not represent maximum allowable buildout of the site, as it would be well below the maximum Floor Area Ratio[1] of 0.40 for General Commercial land uses and 0.80 for Commercial Mixed Use. Furthermore, EVMWD plans to optimize recycled water use within the service area, which would help meet an increase in water demand without requiring more imported supplies. Therefore, the project would result in less-than-significant impacts.

Mitigation Measures: None required.

Significance after Mitigation: Less-than-significant.

References

CR&R, http://www.crrwasteservices.com/about/about_main.htm accessed on March 11, 2015.

Elsinore Valley Municipal Water District (EVMWD), Elsinore Valley Municipal Water District Urban Water Management Plan, July 2011, http://www.water.ca.gov/urbanwatermanagement/2010uwmps/Elsinore%20Valley%20Municipal%20Water%20District/EVMWD%20UWMP%202010_Final.pdf, accessed on March 25, 2014.

City of Lake Elsinore, *City of Lake Elsinore General Plan Update Annotated Recirculated Draft EIR*, August 2011, Revised December 2011.

[1] A floor area ratio is the numerical value obtained by dividing the gross building square footage on a lot by the net square footage of the lot. The total site acreage is 17.66. The actual building space would total 4.65 acres (Option B), resulting in a floor to area ratio of 0.26, well below the maximum.

CHAPTER 5
Other CEQA Considerations

This chapter presents the evaluation of other types of environmental impacts required by CEQA that are not covered within the other chapters of this EIR. The other CEQA considerations include environmental effects that were found not to be significant, significant irreversible environmental changes that would be caused by the project, growth-inducing impacts, and significant and unavoidable adverse impacts.

5.1 Effects That Were Found Not To Be Significant

The City of Lake Elsinore, through the Initial Study (IS) process, determined the proposed project has the potential to cause or result in significant environmental impacts, and warranted further analysis, public review, and disclosure through the preparation of an EIR. The IS and associated EIR Notice of Preparation (NOP), dated May 2014, were forwarded to the California Office of Planning and Research, State Clearinghouse (SCH), and circulated for public review and comment. The State Clearinghouse established the public comment period for the IS/NOP as May 28, 2014 through June 26, 2014. The assigned State Clearinghouse reference for the Project is SCH No. 2014011014. The IS, NOP, and NOP responses are presented at Appendix A of this EIR

The following discussion summarizes the environmental impacts that were determined in the IS/NOP and public review processes to pose no potentially significant impacts. Specific issues considered to pose no potentially significant impacts were not substantively discussed within the body of this EIR. Please refer also to related discussions and analyses presented within the IS, EIR Appendix A.

Aesthetics

The project area is located in Viewshed 11 described in the General Plan as consisting mainly of residential and commercial land uses, in which the proposed project would be consistent. The General Plan identifies vantage points, generally around the Lake Elsinore. Lake Elsinore is located 1.5 miles southwest of the project site and therefore, is not visible from the project site or roadways; thus, the project would not alter existing views of the Lake Elsinore. The Santa Ana Mountains and Cleveland National Forest are located roughly 4 miles northwest, west, and southwest of the project site; as a result, the proposed project would not affect off-site views of these areas. Therefore, implementation of the proposed project is not anticipated to result in a substantial adverse effect to viewsheds or landscaped viewshed units of scenic vistas and no impact would occur.

Agriculture and Forest Resources

The project site is not under a Williamson Contract (CDOC, 2012a) and is not designated as Prime Farmland, Unique Farmland or Farmland of Statewide Importance (CDOC, 2012b). The project site does not contain forested or timber land. A portion of the project site contains Farmland of Local Importance but is not used for agricultural cultivation. No active agricultural operations currently exist on-site. The project site has been designated for commercial and mixed-use commercial development under the City of Lake Elsinore General Plan, and has existing zoning designations of General Commercial (C-2) and Commercial Mixed Use (CMU). Additionally, land adjacent to the project site does not contain agricultural or forest resources and is zoned for such uses. As the project site does not contain agricultural or forest resources and would not result in the conversion of off-site agricultural or forest resources, there would be no impact for this issue area.

Biological Resources

The project site does not contain any federally protected wetlands as defined by Section 404 of the Clean Water Act, and impacts related to wetlands would not occur from implementation of the proposed project. As noted above, the project site may contain potentially jurisdictional waters of the state; however no federally protected waters exist or would be affected by the proposed project.

According to the MSHCP there are no documented terrestrial migration corridors in the vicinity of the project site. Furthermore, the project site is within a moderately developed portion of the City of Lake Elsinore and it is not anticipated that the project site is used for migration, movement or dispersal of wildlife. Project construction and operation would remove some foraging habitat for common reptile, avian, and mammal species, including the eucalyptus grove and non-native grassland on-site; however, these habitat types are wide-spread throughout the region and development of the project site is not anticipated to impede wildlife movement.

The City of Lake Elsinore has a palm tree preservation program in place. The purpose of the program is for the protection of the City's plant life heritage for the benefit of all citizens in Lake Elsinore. The City recognizes the value of significant palm trees within the City of Lake Elsinore as natural aesthetic resources, which help define the history and character of the City. All residents who wish to remove a palm tree that exceeds five feet in height measured from the ground at the base of the trunk to the base of the crown must obtain a palm tree removal permit prior to removal of the tree. No palm trees occur within the project limits and no other local policies or ordinances protecting biological resources apply to the project.

Cultural Resources

The project site is a vacant parcel that contains non-native grasses, a row of mature eucalyptus trees, and gravel covered ground. The project site does not contain any existing structures or historic resources, and the project site is not located adjacent to or in the vicinity of any historic

sites, which are shown on Figure 3.2-2 of the City's General Plan EIR. Additionally, the General Plan EIR states the 3rd Street Annexation area (that includes a portion of the project site), does not contain any previously identified historical resources. Therefore, development and operation of the retail center on the project site would not cause a substantial adverse change in the significance of a historical resource.

Geology, Soils, and Seismicity

There are no known active faults crossing the project site and the project site is not located in or immediately adjacent to an Alquist-Priolo Earthquake Fault Zone. The nearest known active or potentially active fault is the Elsinore (Glen Ivy) Fault, located about 3.2 miles west of the project site. Therefore, the potential for fault rupture at the project site is considered low and impacts would be less than significant.

Landslides are large movements of the underlying ground that include rock falls, shallow slumping and sliding of soil, and deep rotational or transitional movement of soil or rock. No state landslide data is currently available for the Lake Elsinore Quadrangle, in which the project is located (CDOC, 2007). The project site is relatively flat with gentle slopes descending from north to the south, with site elevations ranging from approximately 1,317 feet above mean sea level (amsl) in the northern portion of the site to about 1,298 feet amsl in the southern portion. The project site is not located in close proximity to hills or mountains and does not contain steep slopes. Therefore, the risk for landslides onsite is very low, and impacts would be less than significant.

Expansive soils are soils that exhibit moderate to high shrink/swell potential and may cause damage to components, including underground utilities, pipelines, foundations, and infrastructure. Expansion index testing indicated that the near surface sandy lean clay soils found onsite have a low expansion potential (Greenburg, 2011). Therefore, impacts related to expansive soils would be less than significant.

The project would connect to a public sewer system. No septic systems are proposed, and thus there would be no impact in regard to having soils incapable of supporting proposed septic systems.

Hazards and Hazardous Materials

The proposed project would involve the transport of fuels, lubricants, and various other liquids needed for operation of construction equipment at the project site and would be transported to the construction site on an as-needed basis by equipment service trucks. Materials hazardous to humans, wildlife, and sensitive environments would be present during project construction. These materials include diesel fuel, gasoline, equipment fluids, concrete, cleaning solutions and solvents, lubricant oils, adhesives, human waste, and chemical toilets. The potential exists for direct impacts to human health and the environment from accidental spills of small amounts of hazardous materials from construction equipment during construction.

Additionally, the project would sell products that may be considered hazardous materials. These include pool chemicals, ammunition, paints, thinners, cleaning solvents, fertilizers, pesticides, motor oil, and other gardening, home improvement and automotive substances. With existing regulations governing the proposed projects hazardous materials, impacts during construction would be less than significant.

A regulatory agency database search for the project area was performed using the California State Water Resources Control Board (SWRCB) GeoTracker and the California Department of Toxic Substances Control (DTSC) Envirostor databases (SWRCB, 2013a; DTSC, 2013) in addition to review of other hazardous site lists maintained by the state (California Environmental Protection Agency, 2013). At this time neither the project site nor surrounding properties posed significant environmental concerns which would prevent development of the project site with commercial uses. The databases search regulatory agency lists for sites with a documented release of hazardous materials or petroleum products. Regulatory agency lists included in the database search were: Federal Superfund (EPA National Priorities List); State Response; Voluntary Cleanup; Landfill Disposal Sites; Military Sites, Leaking Underground Storage Tank (LUST) Sites; and other sites. The search of available environmental records revealed that the proposed subject property is not listed in any of the databases reviewed as having environmental concerns. Additionally, within the vicinity of the project site there are no sites which would currently present concerns to development of the project site. Geotracker, for example, identified two LUST sites located approximately 400 feet southwest of the project sites; however, these sites are closed cases of soil groundwater contamination which were resolved in June 2010 and January 2011. Therefore, the proposed project is not anticipated to 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.

The nearest school is located 2.45 miles east of the project site. The proposed project is a commercial development that would sell products that may be considered hazardous materials. These include pool chemicals, ammunition, paints, thinners, cleaning solvents, fertilizers, pesticides, motor oil, and other gardening, home improvement and automotive substances. As the project site is not located within one-quarter mile of an existing or proposed school and does not involve hazards to nearby schools.

A Phase I Environmental Site Assessment was conducted for the subject property by Cornerstone Earth Group (Cornerstone) in 2011. Observed hazardous materials related to vehicle maintenance included mainly new and used lubricants, antifreeze and other automotive-related products. Asbestos-containing materials (ACM) were identified during a hazardous building materials survey. The ACM were associated with the mobile homes and consisted of roof penetration mastics on the roofs of the four mobile homes surveyed, and roof shingles on one of the mobile homes (Cornerstone, 2011). It should be noted that this assessment was conducted when mobile homes were still present on-site. The mobile homes have since been demolished and the project site is now vacant. The search of available environmental records revealed that the proposed subject property is not listed in any of the databases reviewed as having environmental concerns and is not located on any hazardous materials site as designated by Government Code § 6592.5. Based upon the previous Phase I, as well as a review of federal, state, and local environmental

databases, neither the project site nor the surrounding area presents hazardous conditions for development of the project site.

The project site is located approximately 4.8 miles northwest of Skylark Field, a small private airport in the City of Lake Elsinore. The project site is located outside of the Influence Area of this airport as shown in Figure 5 of the Elsinore Area Plan, "Skylark Airport Influence Policy Area" (RCTLMA, 2014). No other private or public airports are located in the immediate project vicinity. Given the distance to the airport, intervening land uses, and relatively small scale of aviation operations of Skylark Field, the project would have no potential to expose employees and visitors of the project site to excessive aircraft-related noise. The proposed project does not present a safety hazard with respect to airports. Therefore, the project would not result in a safety hazard for people residing or working in the project area.

The proposed project would not interfere with any adopted emergency response or evacuation plan. The project does not propose any changes to the City's Emergency Preparedness Plan or the Riverside County Operational Area Multi-Jurisdictional Local Hazard Mitigation Plan. All applicable local and state regulatory standards for adequate emergency access will be met. The project would provide vehicle access from Central Avenue, Dexter Avenue, Cambern Avenue and truck access from Cambern Avenue and 3rd Street. All project access points are proposed to be full-access, with the exception of the driveway on Central Avenue, which is proposed for right-in/right-out access only. The proposed project would also have access to Dexter Avenue via Allan Street and Crane Street. Development is required to comply with emergency vehicle access requirements (e.g., street width and turnaround requirements) in the 2010 CBC, including the Fire Code. Further, the City Engineer and the City Fire Department would review the improvements to the existing roadways to ensure that adequate emergency access or emergency response would be maintained. Therefore, the project would not impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan. Impacts related to emergency access and evacuation would be less than significant.

The project would involve the construction of new structures onsite and could expose more people and additional development to potentially significant hazards from wildfires. The southeastern portion of project site is located within a CAL FIRE State Responsibility area within the Moderate Fire Hazard Severity Zone (CAL FIRE, 2007). However, the General Plan identifies the project site as being within a moderate fire hazard zone, which indicates that with prevention strategies and response programs, this risk can be reduced. The Lake Elsinore Local Hazard Mitigation Plan includes various policies including on-going brush clearance, low fuel landscaping, fire resistant building techniques, and creation of fuel modification zones around development to address the risk of wildfire (City of Lake Elsinore, 2012). The proposed project would remove the eucalyptus grove onsite and the City Engineer and Fire Department would review the proposed development to ensure that adequate fire protection measures are implemented consistent with the 2010 CBC, thereby lowering the threat of hazards from wildfires. As a result, impacts involving wildland fires would be less than significant.

Hydrology and Water Quality

The project site is not located within a 100-year flood zone (defined as a flood with a 1 percent annual chance of occurrence), as defined by the Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM) No. 03035C2029G. The proposed project does not include and would not place housing within a 100-year flood zone. The proposed project would not place structures or other facilities associated with the commercial development within a 100-year flood zone. Therefore, no impacts associated with a 100-year flood zone would occur.

The project is not protected from flooding by a dam or levee, or by any other flood control structure, the failure of which could cause harm. Thus, the project would not result in an impact related to these issues.

The project is located inland and at an elevation of at least 1,300 feet amsl; therefore, the project area would not be affected by tsunami. The project is not located immediately adjacent to a lake or other large water body, and therefore would not be affected by seiche. Finally, the project is located within a small watershed of limited area. Although the watershed has moderate topographic relief and some areas of light vegetation cover, the watershed is not large enough to generate a mudflow of sufficient size to cause harm or damage to property. Thus, there would be no impact for these issues.

Land Use and Planning

The proposed project would develop commercial uses within an area that is designated for general commercial and mixed commercial use by the City of Lake Elsinore General Plan. The project is not within a Specific Plan. The project must undergo City review and ultimately must be consistent with existing City policy to be adopted or propose an amendment to existing City policies. Thus, the project is not anticipated to conflict with any applicable land use plan, policy, or regulation and this impact is considered less than significant.

Mineral Resources

The project site is within a Mineral Resource Zone 3a (MRZ-3a) as delineated by the California Geological Survey (1991). The MRZ-3a designation indicates that a known mineral deposit of an undetermined significance is present on the site. There are no active mines located onsite. An area of disturbed soil on the northern portion of the site, as depicted in historic aerial photographs, may have been an exploratory pit associated with larger off-site clay mining operations. The Elsinore Clay Company and International Pipe and Ceramics Corporation owned two of the site parcels between 1947 and 1977; however, manufacturing activities do not appear to have been conducted onsite (Cornerstone, 2011). Based on a search in the USGS Mineral Resources Database, Morton Clay Deposit is located a few hundred feet northeast of the project site's northern corner at Central Avenue and Cambern Avenue and was a past producer of clay. Evans Shafts is located about 350 feet northeast of the project site and was a past producer of clay. Sedco Pit is located just over 4 miles southeast of the project site, which currently produces non-

metallic crushed stone (US-Mining, 2013). As stated above, previous records indicate the area has already been explored for mineral resource value, yet it was never converted into a functioning mine or excavation area, which indicates that resources are not of value. In addition, the project site has been designated for general commercial and mixed use. Therefore, the project would not result in the significant loss of a valuable or locally important mineral resource as designated on a City plan, and significant impacts to mineral resources would not result from the proposed project.

Noise

The project site is located approximately 4.8 miles northwest of Skylark Field, a small private airport in the City of Lake Elsinore. The project site is located outside of the Influence Area of this airport, as shown in Figure 5 of the Elsinore Area Plan, "Skylark Airport Influence Policy Area" (RCTLMA, 2014). No other private or public airports are located in the immediate project vicinity. Given the distance to the airport, intervening land uses, and relatively small scale of aviation operations of Skylark Field, the project's potential to expose employees and visitors of the project site to excessive aircraft-related noise would not occur.

Population and Housing

The project does not propose new residential development and would not directly contribute to population growth within the City. The project is proposed at this location in order to service customers from existing demand in the project vicinity, and to provide access to the new retail center via the existing roadway system including I-15 and Central Avenue (SR-74). The project site has been planned and zoned for general commercial development. Further, the project site is located within an urbanized area that contains similar retail center uses and is already served by water and sewer utilities, and other infrastructure. The project would not include the extension of City infrastructure that could spur indirect growth that could induce substantial population growth.

Employment generated by the project may contribute to nominal population growth; however, project-related employment demands would likely be filled by the existing persons within the City and neighboring communities. The unemployment rate in December 2013 was 8.8 percent in Lake Elsinore and 8.0 percent in Wildomar, which is lower than the three previous years. The City provides a healthy labor force to meet the project's employment demands locally. Therefore, the project is not anticipated to draw a significant number of employees from outside of the City and adjacent areas, which would relocate to work at the new retail center. Therefore, the project's potential to induce substantial growth directly or indirectly is considered less than significant.

The proposed project would not result in the direct displacement of existing housing or people, since the proposed project is a commercial development on vacant land. Therefore, the project would have no impact with respect to these issues.

Public Services

The proposed project would not develop residential uses and thus would not increase direct school enrollment within the Lake Elsinore Unified School District (LEUSD). Indirect impacts to schools could occur if the employees of the proposed retail center relocate to be closer to work and if they have children that would attend school. The unemployment rate in the Cities of Lake Elsinore and Wildomar provide an ample labor force that would be able to meet the project's employment demands locally. Therefore, the project is not anticipated to draw a significant number of employees from outside of the City that would relocate to the City, and generate new students at local schools. As a result, the potential for this secondary effect to result in the need for new or physically altered school facilities would be less than significant. Furthermore, the project, like all commercial projects, would be required to pay school impact fees as levied by the LEUSD, which would provide funding for school facilities. Impacts related to school facilities would be less than significant.

The proposed project would not develop residential uses and thus would not increase direct park uses within Lake Elsinore. Indirect impacts to parks could occur if the employees of the proposed retail center relocate to be closer to work and utilize local parks. Also, secondary impacts to park facilities from commercial development would be the occasional use of a park during a lunch or dinner break. As is consistent with all commercial projects, the proposed retail center project would be required to pay park fees to the City for the purpose of establishing, improving and maintaining park land within the City. Overall, development and operation of the retail center would not result in the increase in use of park facilities that would be substantial, such that new or physically altered park facilities would be needed. Therefore, project impacts related to parks are less than significant.

The proposed project would not develop residential uses and thus would not directly increase City population. Potentially limited indirect increases to public facilities from the increase in employees from the project could result; however, similar to the previous discussion above, secondary impacts to library facilities from commercial development would be the occasional use of a proximate library during a lunch or dinner break. As a result, the potential for the project to result in substantial adverse physical impacts associated with new or physically altered governmental facilities, or the need for new or physically altered governmental facilities is considered less than significant.

Recreation

The project does not propose elements (e.g., residential development) that would result in substantial increased demands for neighborhood or regional parks or other recreational facilities. Further, project related employment demands are expected to be largely filled by existing residents or neighboring communities. As such, the proposed project's potential to result in increased demands on neighborhood or regional parks or other recreational facilities is considered less than significant. Indirect impacts to parks could occur if the employees of the proposed retail center relocate to be closer to work and utilize local parks. Also, secondary impacts to park

facilities from commercial development would be the occasional use of a park during a lunch or dinner break. As is consistent with all commercial projects, the proposed retail center project would be required to pay park fees to the City for the purpose of establishing, improving and maintaining park land within the City. Overall, development and operation of the retail center would not result in the increase in use of park facilities that would be substantial, such that new or physically altered park facilities would be needed. Therefore, project impacts related to parks are less than significant.

The construction of recreational facilities is not included in the proposed project, nor will the project require the construction or expansion of recreational facilities. Neither project construction nor operations are anticipated to negatively impact any surrounding recreational facilities. As previously stated, the project would pay $0.10 per square foot of enclosed space in order to establish, improve and maintain park land within the City. The project would not otherwise require the construction or expansion of recreational facilities and thus would have less than significant impacts.

Traffic and Transportation

The project does not include any components related to air traffic. As described previously, the project site is located approximately 4.8 miles northwest of Skylark Field and outside of the Influence Area of this airport. There are no other private or public airports located in the immediate project vicinity, and impacts related to air traffic patterns would not occur from implementation of the retail center project.

The project would include an onsite circulation system, ingress and egress from adjacent streets and development, and would improve adjacent streets to the project site. The proposed circulation system, including all sight distance design requirements, number of access points, and pedestrian and bicycle facilities would comply with City codes, policies and standards, and would be reviewed and approved by the City's Public Works and Traffic Engineering staff. The circulation would be free of sharp curves, dangerous intersections, and uses that are inconsistent with the proposed retail center uses. Although the proposed project would increase traffic volumes in the project vicinity, the project would not include any hazardous traffic features. As a result, impacts related to hazards due to a design feature or incompatible use would be less than significant.

The project would develop a retail center on a site that is currently vacant and surrounded by existing streets. City standard development reviews by the City's planning, traffic engineering, and fire department staff (via contract with Riverside County Fire Department) would ensure that adequate emergency access would be provided with development of the project. As a result, project impacts related to inadequate emergency access would be less than significant.

The retail center project does not present elements or aspects that would conflict with adopted alternative transportation policies. Development of the retail center includes connections to all of the adjacent street systems and installation of 34 bicycle racks on the project site. In addition, the Riverside Transit Agency (RTA) currently provides bus service that travels by the project site. RTA Route 22 travels along Central Avenue past the project site. The proposed project would

include relocation of the existing bus stop along Central Avenue, approximately 200 feet from its current location. The proposed project would provide for use of this existing route by providing a bus turnout on Central Avenue (SR-74). Therefore, the project would not conflict with adopted policies supporting alternative transportation, and impacts would be less than significant.

Utilities

Wastewater service to the project site would be provided by EVMWD via existing lines along streets that are adjacent to the project site. EVMWD provides wastewater and reclaimed water service to the Cities of Lake Elsinore, Canyon Lake, Wildomar, portions of the City of Murrieta and unincorporated portions of Riverside County. Project-generated wastewater would be typical of commercial/retail sources, and would not require treatment beyond that provided by existing and programmed EVMWD facilities. Wastewater flows from the project site would be collected and conveyed to the existing sewer line on Crane Street and sewer line on 3rdStreet. Wastewater treatment demands of the proposed project can be accommodated within the scope of existing/programmed EVMWD facilities and would not cause or result in exceedance of wastewater treatment requirements. The project proponent would be required to pay for utility rates and connection fees to reduce the impacts from increased demands to wastewater services to a less than significant level. Construction of new lines or expansion of existing lines is not proposed as there is sufficient capacity to support the proposed project. Therefore, impacts would be less than significant.

Chapter 14.12 of the City Municipal Code requires that project construction divert a minimum of 50 percent of construction and demolition debris. Following construction, the project would be served by CR&R, the City's trash hauler. Each business would be provided with a three cubic yard commercial container, with regular weekly service from Monday through Saturday. CR&R also provides a 3- or 4-yard bin for collection as part of their Mixed Use Recycling Program upon request. They also provide glass recycling, electronic waste, bulky items, and special event waste pickup upon request (CR&R, 2014). Waste produced on-site would be hauled to a materials recovery facility, transfer facility or landfill in Riverside County. The Riverside County Waste Management Department manages the landfills used by the City of Lake Elsinore. The landfills typically used by the City of Lake Elsinore are the El Sobrante, Badlands and Lamb Canyon Landfills (City of Lake Elsinore, 2011). The El Sobrante Landfill is the closest to the project site, located approximately 9.5 miles northwest at 10910 Dawson Canyon Road in the City of Corona. The El Sobrante, Badlands and Lamb Canyon Landfills based on current planning efforts and permitted daily capacity have anticipated closure dates of 2045, 2024, and 2021 respectively (CalRecycle, 2013). Both the Badlands Landfill and the Lamb Canyon Landfill also have room for potential expansion (City of Lake Elsinore, 2011). As the amount of solid waste generated by the project is anticipated to be accommodated by these existing landfills and overall solid waste would be reduced by the provision of recycling and green waste collection, impacts from the project would be less than significant.

5.2 Significant Unavoidable Adverse Environmental Impacts

An EIR must identify any significant environmental effects that would result from the Project. (Public Resources Code, §21100(b)(2)(B).) The significant environmental impacts of the proposed project are summarized below.

Air Quality

The proposed project would not be consistent with the AQMP since it would result in the development of a more intense land use. Therefore, the project would conflict with, or obstruct, implementation of the AQMP and this impact would be significant.

The proposed project is anticipated to exceed the thresholds of significance established by the SCAQMD for emissions of VOCs and NOx even with the incorporation of all feasible Mitigation Measures emissions of VOC and NOx will not be reduced to below significance levels. Therefore, the proposed project would result in a significant impact for VOCs and NOx for project-related regional operational emissions.

Operational emissions associated with the proposed project would exceed the SCAQMD's thresholds of significance for VOC and NOx even with the implementation of Mitigation Measures. The proposed project could conflict with SCAQMD's air quality planning efforts for nonattainment pollutants and would result in a cumulatively considerable net increase in nonattainment pollutants during operations, specifically for ozone precursors VOC and NOx. Therefore, cumulative impacts associated with operational emissions would be significant and unavoidable.

Noise

Implementation of the proposed project would result in the use of mobile construction equipment at the project site which would result in noise levels that exceed the City's noise standard of 60 dBA L_{max} at single-family residential uses for construction activities occurring for more than 10 days, despite implementation of mitigation. Construction noise impacts of the project would be significant and unavoidable.

Transportation and Traffic

Implementation of the project would increase traffic volumes at the intersections identified in Section 4.11 of the Draft EIR, which would contribute to significant impacts. Please refer to Section 4.11 for a listing of significantly impacted intersections. Although mitigation will be imposed, and the identified improvement can reduce the impacts to less-than-significant in many cases, it is unknown when all of the required funding for the identified improvements will be completed. In addition, Caltrans would be required to issue permits and approvals for improvements within their right of way. Therefore, the City cannot control the completion and

timing of the measures, and thus the Draft Environmental Impact Report (EIR) assumes that these impacts will remain significant unless and until the improvements are complete.

Development of the project, in combination with other reasonably foreseeable development, could conflict with level of service standards for the local circulation system. Although mitigation will be imposed, and the identified improvement can reduce the impacts to less than significant, it is unknown when all of the required funding for the improvements will be completed. In addition, Caltrans would be required to issue permits and approvals. Therefore, the City cannot control the completion and timing of the measures, therefore, the Draft EIR assumes that the impacts will remain significant unless and until the improvements are complete.

Similarly, development of the project could conflict with the local applicable congestion management program. While mitigation will be imposed, and although the identified improvement can reduce the impacts to less than significant, it is unknown when all of the required funding for the improvements outlined above will be completed. In addition, with many of the improvements, Caltrans would be required to issue permits and approvals. Therefore, the City cannot control the completion and timing of the measures and the Draft EIR assumes that the impacts will remain significant unless and until the improvements outlined above are completed.

5.3 Growth-Inducing Impacts

This section evaluates the potential for the proposed project to affect "economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment" (CEQA Guidelines, 15126.2[d]). There are two types of growth-inducing impacts a project may have, direct and indirect. To assess the potential for growth-inducing impacts, the Project characteristics that may encourage and facilitate activities that individually or cumulatively may affect the environment must be evaluated.

Direct growth-inducing impacts occur when the development of a project imposes new burdens on community that directly induces population growth or the construction of additional developments in the same area of the Project, thereby triggering related growth-associated impacts. Included in this analysis are projects that would remove physical obstacles to population growth (such as a new road into an undeveloped area or a wastewater treatment plant that could allow more construction in the service area). Construction of these types of infrastructure projects cannot be considered isolated from the development they trigger. In contrast, projects that physically remove obstacles to growth and projects that indirectly induce growth are those which may provide a catalyst for future unrelated development in an area (such as a new residential community that requires additional commercial uses to support residents).

Implementation of the proposed project would result in growth inducement indirectly through the construction of the project. The proposed project does not require new public service facilities, potable water will be supplied by the EVMWD, development of the project area was envisioned for the project when the WQMP was prepared and would not facilitate growth inducement not already envisioned to be needed to accommodate planned future growth. Additionally, the proposed project would not require any new roadways in the project vicinity. The proposed

project does not require an amendment to the Lake Elsinore General Plan nor require a zone change. Therefore, while it is recognized that the proposed project will induce growth in the vicinity, such growth is in concurrence with the City's planned growth policies and will not result in any potentially significant growth-inducing impacts.[

5.4 Energy Conservation

Public Resources Code (PRC) Section 21100(b)(3) and CEQA Guidelines Section 15126.4 require EIRs to describe, where relevant, the wasteful, inefficient, and unnecessary consumption of energy caused by a project. Appendix F of the CEQA Guidelines, is an advisory document that assists EIR preparers in determining whether a project would result in the inefficient, wasteful, and unnecessary consumption of energy. Appendix F states that when relevant to a project, an environmental impact report should consider: "Energy consuming equipment and processes which will be used during construction, operation and/or removal of the project. If appropriate, this discussion should consider the energy intensiveness of materials and equipment required for the project." (Guidelines, app F, subd. (II)(A)(1)). Further, Appendix F notes an EIR should consider whether the project involves "Unavoidable Adverse Effect" such as "wasteful, inefficient and unnecessary consumption of energy during the project construction, operation maintenance and/or removal that cannot be feasibly mitigated." (Id. At subd. (II)(F).) For the reasons set forth below, this EIR concludes that the proposed project would not result in the wasteful, inefficient, and unnecessary consumption of energy, would not cause the need for additional natural gas or energy-producing facilities, and, therefore, would not create a significant impact on energy resources.

Regulatory Setting

Federal

Energy Policy and Conservation Act

The Energy Policy Act of 1975 was established in response to the oil crisis of 1973, which increased oil prices due to a shortage of reserves. The Act required that all vehicles sold in the U.S. to meet certain fuel economy goals. Since 1990, the fuel economy standard for new passenger cars has been 27.5 miles per gallon. Since 1996, the fuel economy standard for new light trucks (gross vehicle weight of 8,500 pounds or less) has been 20.7 miles per gallon. Heavy-duty vehicles (i.e., vehicles and trucks over 8,500 pounds gross vehicle weight) are not subject to fuel economy standards. This Act indirectly applies to the project due to its requirements for increased fuel economy standards particularly for the construction equipment to be used.

Energy Policy Act of 2005

Energy Policy Act of 2005 seeks to reduce reliance on non-renewable energy resources and provide incentives to reduce current demand on these resources. For example, under the Act, consumers and businesses can attain federal tax credits for purchasing fuel-efficient appliances and products, buying hybrid vehicles, building energy efficient buildings, and improving the energy efficiency of residential and commercial buildings. Additionally, tax credits are available

for the installation of qualified fuel cells, stationary microturbine power plants, and solar power equipment.

State

Integrated Energy Policy Report

In 2002, the California State Legislature passed Senate Bill 1389 which requires the CEC biannually to prepare an integrated energy policy report that assesses trends in electricity, natural gas, and transportation fuels and recommends policies "to conserve resources; protect the environment; ensure reliable, secure, and diverse energy supplies; enhance the state's economy; and protect public health and safety" (CEC, 2010). The report calls for the state to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the report identifies several strategies, including assistance to public agencies and fleet operators in implementing incentive programs for Zero Emission Vehicles and their infrastructure needs, and encouragement of urban designs that reduce vehicle miles traveled and accommodate pedestrian and bicycle access.

The 2012 Integrated Energy Policy Report Update focuses on the electricity and natural gas demand forecast for 2012 to 2022; the outlook for and trends in the natural gas market; the potential for increased development of combined heat and power facilities; an assessment of electricity infrastructure needed in Southern California to provide sufficient and reliable power; and suggested actions to support renewable development and help California meet its Renewables Portfolio Standard target of 33 percent renewable electricity by 2020 (CEC, 2012b).

California Energy Code

Title 24, Part 6 of the California Code of Regulations is the California Energy Code, a section of the California Building Code (CBC) that includes standards mandating energy conservation measures in new construction for heating, cooling, ventilation, water heating, and lighting. Since its establishment in 1977, these standards (along with standards for energy efficiency in appliances) have contributed to a reduction in electricity and natural gas usage and costs in California. The California Energy Commission produces, and the California Building Standards Commission subsequently adopts updates to these standards every three years to incorporate new energy efficiency technologies. The current 2013 California Energy Code went into effect on January 1, 2014. The CBC is implemented through the local planning and permit process.

Local

Lake Elsinore Climate Action Plan

The following energy measures are established in the Lake Elsinore Climate Action Plan and may be applicable to the project.

Measure E-1.1: Tree Planting Program. Through the development review process, require new development to plant at minimum one 15-gallon evergreen, umbrella-form tree per 30 linear feet of boundary length near buildings, per the Municipal Code Section 17.124.080. Trees shall be planted in strategic locations around buildings or to shade pavement in parking areas.

Measure E-1.2: Cool Roof Requirements. Amend the City Municipal Code to require new non-residential development to use roofing materials having solar reflectance, thermal emittance or Solar Reflectance Index (SRI) 3 consistent with CalGreen Tier 1 values (Table A5.106.11.2.1), and implement through conditions of approval.

Measure E-1.3: Energy Efficient Building Standards. Adopt an ordinance requiring that all new construction exceed the California Energy Code requirements, based on the 2008 Energy Efficiency Standards by 15 percent (consistent with CalGreen Tier 1), through either the performance based or prescriptive approach described in the California Green Building Code; implement through conditions of approval. Alternately, a solar photovoltaic system and/or solar water heating may be used to assist in meeting all or a portion of the 15 percent requirement.

Energy Requirements of the Project

Short-term construction and long-term operational energy consumption are discussed below.

Short-Term Construction

On May 11, 2004, the U.S. EPA announced a comprehensive rule to reduce emissions from nonroad diesel engines by integrating engine and fuel controls as a system to gain the greatest emission reductions. Engine manufacturers would produce engines with advanced emission-control technologies. Exhaust emissions from these engines will decrease by more than 90 percent. The new emission standards apply to diesel engines used in most construction, agricultural, industrial, and airport equipment. This rule sets emission standards for different sizes of nonroad engines.

During project construction, approximately 66,165 gallons of diesel and 12,613 gallons of gasoline during the 12-month construction period would be used.[1] In 2012, over 2.6 billion gallons of diesel and 14.6 billion gallons of gasoline were consumed in California (BOE, 2013a, 2013b). The project's construction-related diesel and gasoline consumption would be minimal, representing 0.0025 and 0.0001 percent, respectively, of these statewide totals. There are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in other parts of the State. In addition, , the proposed project is relatively level grade and would not include excessive grading during construction. Therefore, it is expected that construction fuel consumption associated with the project would not be inefficient, wasteful, or unnecessary.

Long-Term Operations

Transportation Energy Demand

As described in Chapter 11, Transportation and Traffic, the proposed project is estimated to generate a total of approximately 11,723 daily vehicular trips, with 595 trips generated during the

[1] These numbers are derived from the GHG CalEEMod run output numbers of total CO_2 MT/yr and multiplied by factor assumptions for diesel (10.15 KgCO2/gallon) and gasoline (8.91 KgCO2/gallon) to calculate total diesel (gallons) and total gasoline (gallons).

weekday AM peak hour, 829 trips generated during the weekday PM peak hour, and 1,204 trips during the midday Saturday peak hour.[2]

As described in Section 4.12, Urban Decay, the proposed project would primarily serve customers living in the Lake Elsinore area. However, many of the project's customers currently shop at the existing Walmart store.[3] Therefore, the diversion of these trips to the project site would not result in a substantial change in overall fuel consumption in Lake Elsinore and would not be inefficient, wasteful, or unnecessary.

Building Energy Demand

Southern California Edison (SCE) and SoCalGas would provide service to the project site to meet project electrical needs.

Electrical service in the project area is provided by SCE. SCE provides electricity to approximately 15 million people, 5,000 large businesses, and 280,000 small businesses throughout its 50,000-square-mile service area, which includes 180 cities across 15 counties in central coastal and southern California (SCE, 2015).

SCE produces and purchases its energy from a mix of conventional and renewable generating sources. **Table 5-1** shows the electric power mix that was delivered to SCE's retail customers in 2011.

TABLE 5-1
ELECTRIC POWER MIX DELIVERED TO SCE RETAIL CUSTOMERS IN 2013

Power Source	Percent (%) of Total Power Mix Delivered
Natural Gas	28
Nuclear	6
Coal	6
Large Hydroelectric	4
Other Fossil Fuels	0
Unspecified Sources	34
Eligible Renewables (19%):	
Geothermal	9
Wind	10
Biomass and Waste	1
Small Hydroelectric	1
Solar	1

SOURCE: SCE, 2013

[2] The proposed project's alternative site plan (development of a 154,487 SF. Walmart Supercenter (with a 3,090 SF Garden Center), two fast-food restaurants with drive-thru windows totaling 6,800 SF, and a gas station/convenience store/car wash with 16-pump station) is estimated to generate about 9,543 weekday trips per day, 472 weekday AM peak hour trips, 801 weekday PM peak hour trips, and 1,091 Saturday midday peak hour trips, i.e., fewer trips than the proposed project. In order to not understate potential project impacts, the traffic analysis focused on the higher trip-generating proposed project.

[3] There is an existing Walmart store located within Lake Elsinore at 31700 Grape Street. This store could potentially close at the time the proposed project opens.

Natural gas services to the project area would be provided by SoCalGas. SoCalGas has sufficient capacity to meet the demand of its customers (CPUC, 2001). SoCalGas can receive and deliver 3,500 Million Cubic Feet per Day (MMcfd), which is 111 percent of its average 2000 demand with additional available capacity of about 230 MMcfd (CPUC, 2001).

The proposed project would promote building energy efficiency through compliance with energy efficiency standards and the building design features listed below and in Chapter 3, Project Description:

Lighting

- All lighting in the store would consist of T-8 fluorescent lamps and electronic ballasts and all exterior building signage and many refrigerated food cases would be illuminated with light emitting diodes (LEDs), which are up to 52 percent more energy efficient, generate less heat than fluorescent lights and contain no mercury or lead.

- The Walmart Supercenter store would include a daylight harvesting system, which provides electronic continuous dimming ballasts, skylights and computer controlled daylight sensors that monitor the amount of natural light available. During periods of higher natural daylight, the system dims or turns off the store lights if they are not needed, thereby reducing energy use. Dimming and turning off building lights also helps eliminate unnecessary heat in the building.

Dehumidification

- The Walmart Supercenter store would include a dehumidifying system that allows the store to be operated at a higher temperature, use less energy, and allow the air conditioning and refrigeration systems to operate at maximum efficiency.

White Roof

- The Walmart Supercenter store would utilize a white membrane roof instead of the typical darker colored roof materials employed in commercial construction. The white membrane roof would reduce building energy consumption by reducing the heat island effect, as compared to buildings utilizing darker roofing colors.

Central Energy Management System

- Walmart employs a centralized energy management system (EMS) to monitor and control the heating, air conditioning, refrigeration and lighting systems for all stores from Walmart's corporate headquarters in Bentonville, Arkansas. The EMS enables Walmart to constantly monitor and control the store's energy use, analyze refrigeration temperatures, observe HVAC and lighting performance, and adjust system levels from a central location 24 hours per day, 7 days per week. Energy use for the entire store would be monitored and controlled in this manner.

Water Conservation

- The toilets utilize built-in water turbines to generate the power required to activate the flush mechanism, which is energy efficient because it saves energy and material by eliminating electrical conduits required to power automatic flush valve sensors.

Recycled Building Materials

- Construction of the Walmart Supercenter store would use steel containing approximately 90 to 98 percent recycled structural steel, which utilizes less energy in the mining and manufacturing process than does new steel. All of the plastic baseboards and much of the plastic shelving included in the expansion area would be composed of recycled plastic.

Collectively, these design features would ensure that the proposed project would not result in the inefficient, unnecessary, or wasteful consumption of energy.

CHAPTER 6
Alternatives

6.1 Introduction

This section addresses alternatives to the proposed project, describes the rationale for their evaluation in the Draft Environmental Impact Report (EIR), evaluates the potential environmental impacts associated with each alternative, and compares the relative impacts of each alternative to those of the proposed project. In addition, this section analyzes the extent to which each alternative meets the project's objectives identified in Chapter 3, *Project Description*.

The California Environmental Quality Act (CEQA) requires that an EIR consider a reasonable range of feasible alternatives (State CEQA Guidelines, Section 15126.6(a)). According to the State CEQA Guidelines, alternatives should be those that would attain most of the basic project objectives and avoid or substantially lessen one or more significant effects of the project (State CEQA Guidelines, Section 15126.6). The "range of alternatives" is governed by the "rule of reason," which requires the EIR to set forth only those alternatives necessary to permit an informed and reasoned choice by the lead agency and to foster meaningful public participation (State CEQA Guidelines, Section 15126.6(f)).

CEQA also requires the feasibility of alternatives be considered. Section 15126.6(f)(1) states that among the factors that may be taken into account in determining feasibility are: site suitability; economic viability; availability of infrastructure; general plan consistency; other plans and regulatory limitations; jurisdictional boundaries; and (when evaluating alternative project locations) whether the proponent can reasonably acquire, control, or otherwise have access to an alternative site. Furthermore, an EIR need not consider an alternative whose effects could not be reasonably identified, whose implementation is remote or speculative, or that would not achieve the basic project objectives.

The alternatives addressed in this EIR were identified in consideration of the following factors:

- The extent to which the alternative could avoid or substantially lessen the identified significant environmental effects of the proposed project
- The extent to which the alternative could accomplish basic objectives of the proposed project
- The feasibility of the alternative
- The requirement of the State CEQA Guidelines to consider a "no project" alternative

Pursuant to CEQA, the no project alternative evaluation assumes that the proposed project is not approved and that the existing conditions at the time of the Notice of Preparation was published remain, which could reasonably be expected to occur in the foreseeable future if the proposed project were not approved (Section 15126.6(e)(3)(c)).

6.2 Project Objectives

The following project objectives have been established; they serve as a basis for comparing the alternatives, and for the evaluation of associated environmental impacts:

- Develop a new major retail and commercial center along major roadways and within close proximity to the Interstate 15 (I-15) / SR-74 interchange in order to facilitate regional public access and take advantage of the high-visibility site to regional travelers.
- Develop the vacant unused parcels comprising the project site for retail-commercial uses, consistent with the existing general plan land use and zoning designations, in a manner that fully uses their development potential.
- Develop a new major retail and commercial center which takes advantage of existing infrastructure.
- Develop a project that will provide local employment opportunities and that will provide economic benefits to the community and the City.
- Develop a new retail center with sustainable project features that reduces project impacts on the environment.
- Develop full-scale grocery use to serve the needs of the local residents.
- Develop a cohesive shopping center that allows shoppers to complete multiple shopping opportunities in one stop thereby reducing the number of traffic trips.

6.3 Alternatives Considered but Eliminated

Alternatives may be eliminated from detailed consideration in an EIR if they fail to meet most of the project objectives, are infeasible, or do not avoid or substantially reduce any significant environmental effects (State CEQA Guidelines, Section 115126.6(c)). Alternatives that are remote or speculative, or the effects of which cannot be reasonably predicted, also do not need to be considered (State CEQA Guidelines, Section 151269f)(3)). As allowed by CEQA, the lead agency may make an initial determination as to which alternatives are feasible and warrant further consideration and which are infeasible (State CEQA Guidelines, Section 15125.6(f)(3)). Accordingly, expansion of the existing Walmart was analyzed and determined to not be a feasible alternative. The existing Walmart store is located in the City of Lake Elsinore, within a shopping center at the southeast corner of Interstate 15 and Railroad Canyon Road and gains access directly from Grape Street. The shopping center is situated on a hill that is bounded by Railroad Canyon Road on the north and east and Grape Street on the west. Due to the restricted size of the existing property, including large slopes down to Railroad Canyon Road, the buildable portion for the site cannot be expanded to accommodate the proposed project and still meet the demand of the Lake Elsinore Market area.

6.4 Alternatives Selected for Analysis

Pursuant to Section 15126.6(e)(2) of the State CEQA Guidelines, the EIR is required to:

> […] discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time the environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services.

Therefore, the no-project alternative has been included for evaluation along with two other alternatives to the proposed project. These alternatives have been selected because they would either reduce project-related impacts or describe what would be reasonably expected to occur in the foreseeable future on the project site, and were selected for further analysis representing a reasonable range of alternatives that would be feasible from a development perspective. These alternatives include:

- **Alternative 1: No Project/No Build.** Under this alternative, no development would occur on the project site, although the project site has General Plan Land Use designations of C-2 (General Commercial) and CMU (Commercial Mixed Use) and zoning of General Commercial and Commercial Mixed Use. Under Alternative 1, the project site would remain vacant and undeveloped, although it is expected that it would be developed at some time in the future consistent with the underlying general plan and zoning designations. The specific alternative development options at the project site in the foreseeable future are too speculative.
- **Alternative 2: Walmart Supercenter with Gas Station.** Under this alternative the Walmart Supercenter would be developed, and an outlot (Pad 1) would be developed with a gas station and car wash. The total building area square footage would be 157,587 SF or four percent of the total building area square footage. One outlot would include a gas station with 16 fueling stations, an approximately 3,100 SF convenience store and a drive-through car wash. The two outlots that would not be developed under this alternative would remain in its existing unimproved condition.
- **Alternative 3: Walmart Supercenter Only.** Under this alternative, all of the outlots would be eliminated and only the Walmart Supercenter would be developed. Thus, the total square footage of the developed project site would be 154,487 SF. The three outlots that would not be developed under this alternative would remain in its existing unimproved condition.

6.5 Alternative 1: No Project/No Build Alternative

The No Project/No Build Alternative assumes that the proposed project is not developed. The project site would remain in its current condition and would remain vacant.

The No Project/No Build Alternative is consistent with Section 15126.6(e) of the State CEQA Guidelines, and evaluates the existing conditions of the project site at the time the NOP was published, as well as what could occur in the foreseeable future if the proposed project were not approved. In this case, the project site is a vacant and available property absent any significant environmental or physical constraints. Further, the project site is fully served by directly available utilities and supporting public services. The project site is accessible by existing regional and local roadways. Areas around the project site are developed with residential and commercial uses.

The City General Plan Land Use Map designates the project site as General Commercial and Commercial Mixed Use. The *Land Use* chapter describes that the General Commercial land use designation provides for retail, services, restaurants, professional and administrative offices, hotels and motels, mixed-use projects, public and quasi-public uses, and similar and compatible uses. The FAR shall not exceed 0.40. The Commercial Mixed Use General Plan Land Use is intended for a mix of residential and non-residential uses within a single proposed development area, with an emphasis on retail, service, civic, and professional office uses. The floor area ratio (FAR) for non-residential uses is 0.80:1 and a minimum of 50% of the total floor area shall be commercial uses.

Given the project site's General Commercial and Commercial Mixed-Use General Plan Land Use designations; availability of infrastructure/services, lack of environmental or physical constraints; and proximity of urban development, it is unlikely that the project site would remain vacant or in a "No Build" condition indefinitely.

Failure to proceed with the proposed project would likely not result in preservation of existing environmental conditions, and the practical result of the project's non-approval would be the development of another type or configuration of retail or commercial uses within the project site. Nonetheless, in order to be conservative, the No Project/No Build Alternative assumes the site remains vacant.

Environmental Analysis

The No Project/No Build Alternative would maintain the undeveloped/vacant character of the project site and no changes would occur. If the project site would be developed, the likely alternative is that the site would be built out as another type of commercial development that is consistent with the current General Plan and zoning designations.

Under the No Project Alternative, all of the proposed project's significant and unavoidable impacts would be avoided, and its potentially significant impacts would not occur.

While the No Project Alternative would avoid all of the proposed project's significant unavoidable impacts and have less impact on all environmental issue areas. This alternative would not advance any of the project objectives. Furthermore, this alternative would not realize the project benefits of increased commercial retail opportunities, additional employment opportunities, and new tax revenues.

6.6 Alternative 2: Walmart Supercenter with Gas Station

Under this alternative the Walmart Supercenter would be developed and an outlot would be developed with a gas station and associated car wash. The total building square footage would be 157,587 SF. The outlot (Pad 1) would include a gas station with 16 fueling stations, an approximately 3,100 SF convenience store and a drive-through car wash. The project would not develop the two outlots designated for restaurant uses.

Environmental Analysis

Aesthetics

The proposed project was found to have less-than-significant impacts on the existing visual character or quality of the site and its surroundings, and would introduce new sources of light and glare.

Alternative 2 would result in development of the site with a Walmart Supercenter building, including a seasonal outdoor garden center, a gas station with a convenience store and an associated drive-through car wash. The Walmart Supercenter would not be reduced in size from the proposed project. Similar to the proposed project, this alternative would change the visual character of the site by adding a commercial building and gas station; however, the overall development including building mass and scale, and surface parking would be similar to the proposed project and compatible with the nearby commercial development to the northwest and southwest. Additionally, because of the removal of two outlots, this Alternative would include less light and glare due to a reduction in commercial buildings. However, the visual change in character and site quality from the existing project site condition to that of Alternative 2 would result in similar impacts as the proposed project.

Air Quality

This Alternative would develop a total of 157,587 building SF, including the Walmart Supercenter and gas station. From a construction emissions perspective, this Alternative would not include as much grading, paving, and trenching as the proposed project and would have a lower level of construction building intensity. From an operational emissions perspective, this alternative would generate fewer daily trips relative to the proposed project, due to the removal of the two restaurants. This would result in fewer emissions of criteria pollutants on a daily basis.

The proposed project would result in NOx emissions of 148.33 in 2015 (the most intense construction year). Alternative 2 would result in reduced NOx emissions because there would be less development intensity at the project site during construction. However, even under Alternative 2, the entire site would be graded. Additionally, the emissions of localized impacts, including odor, under the proposed project all resulted in a less-than-significant impact. As Alternative 2 reduces the amount of onsite uses and emissions, these impacts would only be further reduced and would therefore result in less-than-significant impacts.

Biological Resources

Development activities associated with the proposed project were found to have the potential to adversely affect special-status species, though these effects were determined to be less-than-significant with mitigation. Other biological resources impacts were found to be less-than-significant.

This alternative would result in an amount of ground disturbance and tree removal that is similar to that of the proposed project. As such, this alternative would implement mitigation for special-status species similar to that of the proposed project. Therefore, this alternative would have similar biological resource impacts to the proposed project.

Cultural Resources

Alternative 2 would not develop the outlots with restaurant land uses. However, the potential to impact unknown archaeological and/or paleontological resources would still remain, and previously undiscovered artifacts or fossils could be uncovered during excavation or construction activities related to development of this Alternative. Therefore, Alternative 2 could adversely affect archaeological or paleontological resources, similar to the proposed project, which would be reduced to a less-than-significant level with implementation of mitigation measures. Therefore, impacts related to cultural resources would be similar to the impacts of the proposed project, and would be less-than-significant with mitigation.

Geology and Soils

Under Alternative 2, development of the project site would have similar effects related to geology, soils, and seismicity as the proposed project. Alternative 2 would result in fewer buildings and structures when compared to the proposed project, which in turn would result in less exposure of people to seismic hazards. However, both Alternative 2 and the proposed project would still expose similar areas to erosion during construction and would expose additional people and structures to earthquake hazards compared to existing conditions. Therefore, Alternative 2 would result in similar impacts related to geology, soils, and seismicity.

Greenhouse Gas Emissions

Thus, the temporary short-term construction pollutant emissions that would be generated under Alternative 2 would be slightly less than the proposed project because two of the three outlots would not be developed and less construction equipment would be required. However, even under Alternative 2, the entire site would be graded. Given that the restaurant land uses would be eliminated from the project, mobile emissions sources during project operation would be reduced. Under Alternative 2, GHG emissions of the proposed project would be reduced. Implementation of Mitigation Measures AQ2 and AQ-3 would reduce energy and water consumption, similar to the proposed project. GHG emission impacts related to construction from Alternative 2 would be similar to the proposed project, and less-than-significant with implementation of mitigation measures.

Hydrology and Water Quality

Although Alternative 2 would reduce some construction activities from the proposed project, due to the removal of the two restaurant outlots, Alternative 2 would still result in similar construction impacts compared to the proposed project because this alternative would still involve ground disturbing activities and soil impacts would occur. Similar to the proposed project, Alternative 2 would be required to implement water quality BMPs that would treat water discharging from the site. Thus, construction related hydrology and water quality impacts from Alternative 2 would be similar to those of the proposed project.

From an operational perspective, pollutants generated under Alternative 2 from commercial/retail uses would also be similar to the proposed project and would also be required to implement water quality BMPs and LID measures that would improve water quality discharging from the site similar to the proposed project; thus water quality from an operational perspective would be similar to the proposed project under Alternative 2.

Because development of two outlots would not occur, the total amount of impervious area would be reduced by this Alternative, which would lessen the severity of impacts to water quality and drainage. The proposed project was determined to have less-than-significant impacts to groundwater supplies. Alternative would result in similar impacts and would have the same stormwater collection and conveyance options as the proposed project.

Land Use

Alternative 2 would develop a 154,487 SF Walmart Supercenter including a seasonal garden center, and a gas station and an associated carwash. This alternative is similar to the proposed project and would have similar impacts associated with land use and planning.

Noise

Similar to the proposed project, Alternative 2 would result in short-term construction-related noise impacts due to substantial temporary increases of the ambient noise levels in the project vicinity. While this Alternative would decrease the commercial space developed at the project site, it is anticipated that construction-related noise levels generated during a peak day at the site would be similar to those generated by the proposed project. As such, similar to the proposed project, implementation of Mitigation Measures NOI-1 and NOI-2 would be required to reduce construction noise levels. However, because of the reduced development under this alternative, the overall duration of the construction activities would be shorter than the proposed project. Nevertheless, construction noise impacts under Alternative 2 would similar the proposed project.

In addition, because the construction equipment used during a peak construction day under this alternative would the same as those used by the proposed project, impacts associated with vibration during construction activities would be similar.

With respect to operational noise levels, increases in ambient noise levels would occur from the on-site noise sources (i.e., dock activities, a trash compactor, roof-top air conditioning units, shopping cart carousels, parking lot vehicle movements, and car wash activities) and project-

generated traffic on the local roadway system. However, because the proposed project would result in less-than-significant operational noises, a reduction of the same on-site uses would also result in a less-than-significant impacts. Therefore, operational noise impacts related to Alternative 2 would be the same as the proposed project.

Public Services

The proposed project would not have the potential to adversely impact police or fire protection services.

Alternative 2 would reduce the commercial space developed in the project area by removing the two outlots dedicated restaurant uses. Because implementation of this alternative would result in less developed building space and patrons than the proposed project, it would have a reduced demand for fire and police protection services. Therefore, impacts from Alternative 2 related to public services would be reduced the proposed project.

Transportation and Traffic

As described in Section 4.11, *Transportation and Traffic*, six intersections currently operate at LOS E or worse during the peak hours. These include the intersections of East Lakeshore Drive / Diamond Drive, I-15 Southbound Ramps / Railroad Canyon Road, I-15 Northbound Ramps / Nichols Road, and Summerhill Drive / Railroad Canyon Road. The addition of project-generated traffic would cause the average delay to increase during the peak hour by more than the City's threshold of significance. Under the proposed project, even with the implementation of mitigation measures impacts would remain significant and unavoidable.

Alternative 2 would decrease the amount of commercial space developed in the project area by four percent compared to the proposed project. This would result in a total building area of 157,587 SF. This alternative would also reduce daily trips by 342 trips. However, even with the trip reduction impacts would remain significant and unavoidable.

Urban Decay

Alternative 2 would develop a 154,487 SF Walmart Supercenter, a gas station and a convenience store (3,100 SF). This Alternative would not develop 6,800 SF relative to the proposed project, which is a six percent reduction in area. However, this Alternative is not anticipated to change the size/scope of the proposed Walmart Supercenter. As a result, this Alternative would be expected to generate similar sales as the proposed project's capture of sales from competing retailers. Based on the Urban Decay Analysis for the proposed project, competing grocery stores and retail centers would not close as a direct or indirect result of the development of this Alternative, and urban decay would not be a foreseeable consequence. Therefore, this Alternative would have urban decay impacts similar to the proposed project.

Utilities and Service Systems

The proposed project would not significantly impact stormwater drainage facilities or water supplies.

Alternative 2 would include the development of the Walmart Supercenter with develop of a gas station and convenience store within an outlot. Areas within the project site not utilized for retail or parking space would remain undeveloped**.** The reduction of six percent would be expected to result in less consumption of water, and less generation of wastewater and solid waste. Thus, this Alternative would demand fewer resources and generate less effluent, which would lessen impacts. This Alternative would result in less-than-significant impacts on utilities similar to the proposed project.

Conclusion

Compared to the proposed project Alternative 2 would reduce impacts to construction noise and traffic; however, impacts would remain significant and unavoidable. Less-than-significant impacts related to aesthetics, biological resources, cultural resources, geology and soils, GHG emissions, hydrology and water quality, land use and planning, operational noise, public services, and urban decay would be similar under Alternative 3 as compared to the proposed project.

Impacts related to air quality, construction noise and traffic would be reduced under the Alternative compared to the proposed project; however, impacts would remain significant and unavoidable. Therefore, the Reduced Project Alternative would reduce, but not eliminate the significant and unavoidable impacts that would result from the proposed project.

6.7 Alternative 3: Walmart Supercenter Standalone

Under the Walmart Supercenter Standalone Alternative all of the outlots would be eliminated from the project development. The total building square footage would be 154,487 SF. This alternative would eliminate all development of the outlots.

Environmental Analysis

Aesthetics

The proposed project was found to have less-than-significant impacts on the existing visual character of the project site and its surroundings, and would introduce new sources of substantial light and glare.

Alternative 3 would result in development of one Walmart Supercenter building with a seasonal outdoor garden center. The Walmart Supercenter would not be smaller in size (154,487 SF); however, the outlots would not be developed with commercial buildings. Similar to the proposed project, this alternative would change the visual character of the site by adding a commercial building; however, the overall scale and massing and surface parking of the Walmart Supercenter would be similar to the surrounding development. Additionally, this Alternative would add less light and glare to the project site and surrounding vicinity. However, the visual change in character and site quality from the existing project site condition to that of the Alternative 3 would result in similar impacts as the proposed project.

Air Quality

Alternative 3 would develop a 154,487 SF Walmart Supercenter. From a construction emissions perspective, this Alternative would not include as much, paving and trenching as the proposed project and would have a lower level of construction intensity. From an operational emissions perspective, this alternative would generate fewer daily trips relative to the proposed project development that includes outlots, resulting in fewer emissions of criteria pollutants on a daily basis. However, this alternative would still result in significant emission.

The proposed project would result in NOx emissions of 148.33 in 2015 (the most intense construction year). Alternative 3 would result in reduced NOx emissions because there would be no development of the outlots at the project site. Additionally, the emissions of localized impacts, including odor, under the proposed project all resulted in a less-than-significant impact. As Alternative 3 reduces the amount of on-site uses and emissions, these impacts would only be further reduced and would therefore result in less-than- significant impacts.

Biological Resources

Development activities associated with the proposed project were found to be less-than-significant with mitigation on special status species. Other impacts were found to be less-than-significant.

Alternative 3 would result in similar ground disturbing activities and would still require tree removals. As such, similar to the proposed project this Alternative would be required to implement mitigation for special-status species. Therefore, this Alternative would have biological resources impacts similar to the proposed project.

Cultural Resources

Alternative 3 would require less ground disturbing activities than the proposed project, due to the outlot development areas remaining undisturbed. Nevertheless, the potential to impact unknown archaeological and/or paleontological resources would still remain under Alternative 3, and previously undiscovered artifacts or fossils could be uncovered during excavation or construction activities. Therefore, this alternative could adversely affect archaeological or paleontological resources, such as the proposed project, which would be reduced to a less-than-significant level with implementation of mitigation measures. Therefore, under Alternative 3, impacts related to cultural resources would be similar to the impacts of the proposed project.

Geology and Soils

Under Alternative 3, development of the project site would have similar effects related to geology, soils, and seismicity as the proposed project. Alternative 3 would result in fewer building structures when compared to the proposed project, which in turn would result in less exposure of people to seismic hazards. However, both the proposed project and Alternative 3 would require ground disturbing activities and expose large areas to erosion during construction and would expose additional people and structures to earthquake hazards compared to existing

conditions. Therefore, Alternative 3 would result in similar but reduced effects related to geology, soils, and seismicity.

Greenhouse Gas Emissions

GHG emission impacts related to construction from Alternative 3 would be slightly less than to the proposed project, due to the reduced construction area. However, as the amount of retail and restaurant square footage would be six percent less under the Alternative 3, the GHG emissions of the proposed project would be reduced. Moreover, mobile emissions sources generated from the restaurant trips would be eliminated. Thus, the temporary short-term construction pollutant emissions generated under Alternative 3 would be less than the proposed project. Similar to the proposed project, implementation of Mitigation Measures AQ-2 and AQ-3, would reduce energy and water consumption related to project development. Alternative 3 would have reduced impacts compared to than the proposed project related to GHG emissions.

Hydrology and Water Quality

Although Alternative 3 would develop a smaller project footprint (six percent less that the proposed project), overall it would still require similar construction activities and would result in similar construction impacts compared to the proposed project. As a result the Alternative 3 would also be require to implement water quality BMPs that would improve water quality discharging from the site,. Therefore, construction impacts related hydrology and water quality from Alternative 3 would be similar to those of the proposed project.

Under Alternative 3 there would be less impervious surface areas due to the reduced development footprint, which would lessen the severity of impacts to water quality and drainage. Pollutants generated under the Alternative 3 from commercial/retail uses would be similar to the proposed project and would also be required to implement operational water quality BMPs and LID measures that would improve water quality discharging from the site similar to the proposed project. Thus, operational water quality impacts \would be reduced but similar under Alternative 3 compared to the proposed project.

Land Use

Alternative 3 would develop a 154,487 SF Walmart Supercenter including a seasonal garden center. Nevertheless, this alternative is similar to the proposed project and would have similar impacts associated with land use and planning.

Noise

Similar to the proposed project, the Alternative 3 would result in short-term construction-related noise impacts due to a substantial temporary increase in the ambient noise levels at the project site. While this alternative would reduce the commercial space developed at the project site by nine percent, it is anticipated that construction-related noise levels generated during a peak day at the site would be similar to those generated by the proposed project on a peak construction day. As such, similar to the proposed project, implementation of Mitigation Measures NOI-1 and NOI-2 would be required to reduce construction noise. However, because of the reduced development

under this alternative, the overall duration of the construction activities would be shorter than that for the proposed project. Consequently, construction noise impacts under the Alternative 3 would be reduced compared to the proposed project due to its shorter construction duration. However, because the construction equipment used during a peak construction day under this Alternative would the same as those used by the proposed project, impacts associated with vibration during construction activities would be similar to the proposed project.

With respect to operational noise levels, similar to the proposed project, increases in ambient noise levels would occur from the on-site noise sources (i.e., dock activities, a trash compactor, roof-top air conditioning units, shopping cart carousels, and parking lot vehicle movements) and project-generated traffic on the local roadway system. Because the proposed project would result in less-than-significant operational noises, a reduction of the same on-site uses would also result in a less-than-significant impact. Therefore, operational noise impacts related to the Alternative 3 would be the similar but reduced from those of the proposed project.

Public Services

The proposed project would not have the potential to adversely impact police or fire protection services. Alternative 3 would reduce the developed area at the site by six percent compared to the proposed project. This would result in a total of 154,487 SF of commercial retail space. Because implementation of this Alternative would result in a less building space and patrons than the proposed project, it would reduce the demand for fire and police protection. Therefore, impacts from the Alternative 3 related to public services would be reduced from the proposed project.

Transportation and Traffic

As described in Section 4.11, *Transportation and Traffic*, six intersections currently operate at LOS E or worse during the peak hours. These include the intersections of East Lakeshore Drive / Diamond Drive, I-15 Southbound Ramps / Railroad Canyon Road, I-15 Northbound Ramps / Nichols Road, and Summerhill Drive / Railroad Canyon Road. The addition of project-generated traffic would cause the average delay to increase during the peak hour by more than the City's threshold of significance. Under the proposed project, even with the implementation of mitigation measures impacts would remain significant and unavoidable.

Alternative 3 would reduce the amount of developed building at the project site by six percent compared to the proposed project. This alternative would also reduce daily trips by 4,851 trips. Nevertheless, even with the overall trip reduction traffic impacts would remain significant and unavoidable.

Urban Decay

Alternative 3 would only develop a 154,487 SF Walmart Supercenter, which is a six percent reduction of developed commercial buildings at the project site. However, this Alternative is not anticipated to change the size/scope of the proposed Walmart Supercenter. As a result, this Alternative would still be expected to generate similar sales as the proposed project's capture of sales from competing retailers. Based on the Urban Decay Analysis for the proposed project, competing grocery stores and retail centers would not close as a direct or indirect result of the

development of this Alternative, and urban decay would not be a foreseeable consequence. Therefore, this Alternative would have similar urban decay impacts to the proposed project.

Utilities and Service Systems

The proposed project would not significantly impact stormwater drainage facilities or water supplies. Alternative 3 would include the development of the Walmart Supercenter without development of the outlots for commercial/retail uses. The percent reduced project would result in a reduced consumption of water and would generate less wastewater and solid waste. Thus, this Alternative would result in a reduced demand for resources and generate less effluent and water, reducing thereby reducing impacts of the proposed project. This Alternative would result in reduced impacts on utilities similar from the proposed project.

Conclusion

Table 6-1 summarizes the impacts of the alternatives in comparison to the proposed project and **Table 6-2** summarizes the alternatives ability to meet the established project objectives. Compared to the proposed project the Walmart Supercenter Only Alternative would reduce impacts from the proposed project to air quality, construction noise and traffic. Less-than-significant impacts related to aesthetics, biological resources, cultural resources, geology and soils, GHG emissions, hydrology and water quality, land use and planning, operational noise, public services, and urban decay would be similar under Alternative 3 as compared to the proposed project.

Impacts related to air quality, construction noise and traffic would be reduced under the Alternative 3 compared to the proposed project; however, impacts would remain significant and unavoidable. Therefore, the Alternative 3 would reduce, but not eliminate the significant and unavoidable impacts that would result from the proposed project.

6.8 Environmentally Superior Alternative

The Environmentally Superior Alternative would be the No Project/No Build Alternative because no construction activities and no new commercial land uses would occur. The project site would remain undeveloped and significant air quality impacts that would occur by implementation of the proposed project would not occur.

However, State CEQA Guidelines Section 15126.6(e)(2) states:

> The "no project" analysis shall discuss the existing conditions at the time the notice of preparation is published, or if no notice of preparation is published, at the time environmental analysis is commenced, as well as what would be reasonably expected to occur in the foreseeable future if the project were not approved, based on current plans and consistent with available infrastructure and community services. <u>If the environmentally superior alternative is the "no project" alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives</u> [<u>Underline</u> added.]

Therefore, pursuant to CEQA, because the No Project/No Build Alternative has been identified as the Environmentally Superior Alternative under CEQA, the Environmentally Superior Alternative (Alternative 3) among the other alternatives would be that the Walmart Supercenter Standalone Only Alternative would involve reduction of the proposed project by nine percent. The Walmart Supercenter Standalone Only Alternative (Alternative 3) would develop a 154,487 SF Walmart Supercenter with seasonal garden center.

As previously analyzed, activity related to the Walmart Supercenter Standalone Only Alternative (Alternative 3) would be less and, consequently, the overall impacts from implementation of this alternative would be less than those of the proposed project. However, the Walmart Supercenter Standalone Only Alternative (Alternative 3) would not reduce significant unavoidable air quality, construction noise and traffic impacts to a less-than-significant level. Therefore, the Walmart Supercenter Standalone Alternative (Alternative 3) would result in the same significant and unavoidable impacts that would result from the proposed project.

CEQA does not require the lead agency (City of Lake Elsinore) to approve the environmentally superior alternative. Conversely, CEQA requires that an EIR consider a reasonable range of feasible alternatives (State CEQA Guidelines, Section 15126.6(a)) and then the lead agency may elect to approve the project or any of the analyzed alternatives; in addition, the lead agency may also elect not to approve the project or any of its alternatives. This alternatives analysis has been prepared for the City to consider environmentally superior alternatives and also determine whether the benefits of the project or its alternatives outweigh the potential environmental impacts.

TABLE 6-1
SUMMARY OF IMPACTS OF ALTERNATIVES COMPARED TO THE PROPOSED PROJECT

EIR Section/ Environmental Topic	Proposed Project	Alternative 1: No Project / No Build	Alternative 2: Reduced Project	Alternative 3: Walmart Standalone Only Alternative
4.1 Aesthetics	Less than Significant	Less	Similar	Similar
4.2 Air Quality	Significant and Unavoidable	Less	Less, but still Significant and Unavoidable	Less, but still Significant and Unavoidable
4.3 Biological Resources	Less than Significant with Mitigation	Less	Similar	Similar
4.4 Cultural Resources	Less than Significant with Mitigation	Less	Similar	Similar
4.5 Energy	Less than Significant	Less	Similar	Similar
4.6 Geology and Soils	Less than Significant	Less	Similar	Similar
4.7 Greenhouse Gasses	Less than Significant	Less	Less	Less
4.8 Hydrology / Water Quality	Less than Significant	Less	Less	Less
4.9 Land Use	Less than Significant	Less	Less	Less
4.10 Noise	Less than Significant with Mitigation	Less	Less, but still Significant and Unavoidable	Less, but still Significant and Unavoidable
4.11 Public Services	Less than Significant	Less	Less	Less
4.12 Transportation and Traffic	Less than Significant with Mitigation	Less	Less, but still significant and unavoidable	Less, but still significant and unavoidable.
4.13 Urban Decay	Less than Significant	Less	Similar	Similar
4.14 Utilities and Service Systems	Less than Significant	Less	Similar	Similar

TABLE 6-2
ABILITY TO MEET OBJECTIVES

Objectives	Proposed Project	No Project / No Build	Reduced Project	Walmart Standalone
Develop a new major retail and commercial center along major roadways and within close proximity to the Interstate 15 (I-15) / SR-74 interchange in order to facilitate regional public access and take advantage of the high-visibility site to regional travelers.	Yes	No	Yes	Yes
Develop the vacant unused parcels comprising the project site for retail-commercial uses, consistent with the existing general plan land use and zoning designations, in a manner that fully utilize their development potential.	Yes	No	No	No
Develop a new major retail and commercial center which takes advantage of existing infrastructure.	Yes	No	Yes	No
Develop a project that will provide local employment opportunities and that will provide economic benefits to the community and the City.	Yes	No	Yes	Yes
Develop a new retail center with sustainable project features that reduces project impacts on the environment.	No	No	Yes	Yes
Develop full-scale grocery use to serve the needs of the local residents.	Yes	No	Yes	Yes
Develop a cohesive shopping center that allows shoppers to complete multiple shopping opportunities in one stop thereby reducing the number of traffic trips.	Yes	No	No	No

CHAPTER 7
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Urban Decay Study

Roger Dale

CHAPTER 8
Acronyms

AB	Assembly Bill
ADT	average daily traffic
AFY	Acre-feet per year
Amsl	Above mean sea leve
ANSI	American National Standards Institute
APN's	Assessor's Parcel Numbers
AQMP	Air Quality Management Plan
ASCE	American Society of Civil Engineers
B.P.	Before Present
BAAQMD	Bay Area Air Quality Management District
Basin	South Coast Air Basin
BAT	Best Available Technology
BAU	Business-As-Usual
BCT	Best Control Technology
BMP	Best Management Practices
C&D	Construction and Demolition
C&D	Construction and Demolition
CA MUTCD	California Manual on Uniform Traffic Control Devices
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
Cal/EPA	California Environmental Protection Agency
CalEEMod	California Emissions Estimator Model
CalFire	California Department of Forestry and Fire Protection
CALGreen	California Green Building Standards Code
Caltrans	California Department of Transportation
Calveno	California Vehicle Noise Emission Levels
CAP	Climate Action Plan
CARB	California Air Resources Board
CAT	Climate Action Team
CBC	California Building Code
CCAA	California Clean Air Act
CCAT	California Climate Action Team
CDD	Community Development Director

CDFW	California Department of Fish and Wildlife
CDOC	California Department of Conservation
CEQA	California Environmental Quality Act
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
Cfs	cubic feet per second
CGS	California Geological Survey
CH_4	methane
City	City of Lake Elsinore
CMP	Congestion Management Plan
CMU	Commercial Mixed Use
CNDDB	California Natural Diversity Database
CNPPA	California Native Plant Protection Act
CNPS	California Native Plant Society
CO	Carbon Monoxide
CO_2	carbon dioxide
CO_2e	carbon dioxide equivalents
CR&R	CR&R Incorporated
CRPR	California Rare Plant Rank
CVC	California Vehicle Code
CWA	Clean Water Act
DAMP	Drainage Area Management Plan
dB	decibels
dBA	A-weighted decibels
DHS	Department of Health Services
Diesel PM	Particulate matter from diesel fueled engines
DNL	Day-Night Sound Level
DOF	Development Impact Fees
EIC	Eastern Information Center
EIR	Environmental Impact Report
EMS	Energy Management System
EPA	Environmental Protection Agency
EVWMD	Elsinore Valley Municipal Water District
FAR	floor area ratio
FEMA	Federal Emergency Management Agency
FESA	Federal Endangered Species Act
FHWA	Federal Highway Administration
FICON	Federal Interagency Committee on Noise
FRP	Fiber Reinforced Plastic
FTA	Federal Transit Administration

GAFO	General Merchandise, Apparel, Furniture/Appliances and Other/Specialty
GC	general commercial
GHG	greenhouse gas emissions
GIS	geographic information system
GPS	Geographic Positioning System
GWP	global warming potentials
HANS	Habitat Evaluation and Acquisition Negotiation Strategy
HAPs	Hazardous Air Pollutants
HCFs	hydrofluorocarbons
HCM	Highway Capacity Manual
HCOC	hydrologic conditions of concern
HCP	Habitat Conservation Plan
HETs	High Efficiency Toilets
HHWE	Household Hazardous Waste Element
HVAC	Heating Ventilation and Air Conditioning
Hz	hertz
IA	Implementing Agreement
IBC	International Building Code
IPCC	Intergovernmental Panel on Climate Change
ITE	Institute of Transportation Engineers
L_{50}	median noise level
LCFS	low carbon fuel standard
LEDs	Light Emitting Diodes
LEMC	Lake Elsinore Municipal Code
LEMSAR	Lake Elsinore Marine Search and Rescue
LEMWD	Lake Elsinore Municipal Water District
LEPD	Lake Elsinore Police Department
LID	Low impact development
LIPs	Local Implementation Plans
L_{max}	maximum noise levels
LOS	Level of Service
LST	Localized Significance Thresholds
M	Richter magnitude
MATES IV	Multiple Air Toxics Exposure Study
MBTA	Migratory Bird Treaty Act
MDD	maximum day conditions
MEP	maximum extent practicable
Metropolitan	Metropolitan Water District of Southern California
Mgd	million gallons per day
MLD	Most Likely Descendant
MMT	million metric tons

MPOs	metropolitan planning organizations
MS4	Municipal Separate Storm Sewer System
MSHCP	Multiple Species Habitat Conservation Plan
msl	mean sea level
MT	one metric ton
MUTCD	Manual on Uniform Traffic Control Devices
Mw	Moment Magnitude
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 Program
NDFE	Nondisposal Facility Element
NEHRP	National Earthquake Hazards Reduction Program
NELs	numeric action levels
NEPSSA	Narrow Endemic Plant Species Survey Area
NH_3	Ammonia
NHMLAC	National History Museum of Los Angeles County
NHPA	National Historic Preservation Act
NO	Nitrogen Oxide
NO_2	Nitrogen Dioxide
NOP	Notice of Preparation
NOx	Oxides of Nitrogen
NPDES	National Pollutant Discharge Elimination System
NRP	Non-Reinforced Thermoplastic Panel
NWI	National Wetland Inventory
OEHHA	Office of Environmental Health Hazard Assessment
OHP	Office of Historic Preservation
OHWM	ordinary high water mark
OPR	Office of Planning and Research
OSHA	Office of Safety and Health Administration
PCEs	Passenger Car Equivalents
PFCs	perfluorocarbons
PL	Potential Liquefaction Hazard
PM_{10}	Respirable particulate matter with an aerodynamic diameter of 10 micrometers or less
$PM_{2.5}$	Respirable particulate matter with an aerodynamic diameter of 10 micrometers or less
Ppm	Parts per million
PPV	peak particle velocity
QCB	Quino Checkerspot Butterfly
RCFCD	Riverside County Flood Control District
RCFCWCD	Riverside County Flood Control District and Water Conservation District

RCFD	Riverside County Fire Department
RCIP	Riverside County Integrated Project
RCLIS	Riverside County Land Information System
RCNM	Roadway Construction Noise Model
RCTC	Riverside County Transportation Commission
REMEL	Reference Energy Mean Emission Level
RMS	root mean square
ROGs	Reactive Organic Gases
ROWD	report of waste discharge
RTA	Riverside Transit Agency
RTP	regional transportation plan
RWQCB	Regional Water Quality Control Board
SAR	Second Assessment Report
SBOE	State Board of Equalization
SCAQMD	South Coast Air Quality Management District
SCEDC	Southern California Earthquake Data Center
SCS	sustainable communities strategies
SDC	Seismic Design Category
SF	Square Feet
SF_6	sulfur hexafluoride
SHP	State Historic Preservation Officer
SIP	State Implementation Plan
SLF	Sacred Lands File
SO_2	Sulfur Dioxide
SO_3	Sulfur Trioxide
SOI	sphere of influence
SO_x	Sulfur Oxide
SR	State Route
SRA	Source Receptor Area
SRRE	Source Reduction and Recycling Element
STC	sound transmission class
SWCB	State Water Control Board
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	Toxic Air Contaminants
The Protocol	Transportation project-Level Carbon Monoxide Protocol
TIA	Transportation Impact Analysis
TMDL	Total Maximum Daily Loads
TNDL	The Natelson Dale Group
TUMF	Transportation Uniform Mitigation Fee
UCERF3	Uniform California Earthquake Rupture Forecast

Ug/m^3	Micrograms per cubic meter
UNFCCC	United Nations Framework Convention on Climate Change
USACE	United States Army Corps of Engineers
USDA	United States Department of Agriculture
USFWS	United States Fish and Wildlife Service
USGS	United States Geologic Survey
UWMP	Urban Water Management Plan
VdB	decibel notation
VMT	Vehicle Miles Traveled
VOC	Volatile Organic Compounds
WDR	water discharge requirements
WQMP	water quality management plan
WRCOG	Western Riverside Council of Governments
WRF	Regional Water Reclamation Facility
WSA	Water Supply Assessment