

# ***DRAFT ENVIRONMENTAL IMPACT REPORT***

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## ***The Commons at Quartz Hill***

***Prepared for:***  
**City of Lancaster**

***Prepared By:***



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Environmental Planning and Research

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## I. INTRODUCTION/SUMMARY

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### A. INTRODUCTION

#### **Purpose of the EIR**

The purpose of this Environmental Impact Report (EIR) is to inform the decision makers and general public of the potential environmental impacts resulting from the proposed Commons at Quartz Hill project (proposed project), a commercial/retail complex at the northwest corner of 60<sup>th</sup> Street West and Avenue L, in the City of Lancaster, California. The project applicant is: Lancaster West 60<sup>th</sup> LLC, 1801 Avenue of the Stars, Suite 920, Los Angeles, CA 90067. A detailed description of the proposed project is contained in Section II, Project Description, of this EIR.

The proposed project will require approval of certain discretionary actions by the City of Lancaster and other governmental agencies, as set forth in Section II.E, Discretionary Actions. Therefore, the proposed project is subject to environmental review requirements under the California Environmental Quality Act (CEQA). For purposes of complying with CEQA, the City of Lancaster is the Lead Agency.

As described in Section 15121(a) and 15362 of the CEQA Guidelines, an EIR is an informational document which will inform public agency decision makers and the public of the significant environmental effects of a project, identify possible ways to minimize any significant effects, and describe reasonable alternatives to the project. Therefore, the purpose of this EIR is to focus the discussion on those potential effects on the environment of the proposed project which the Lead Agency has determined are or may be significant. In addition, feasible mitigation measures are recommended, when applicable, that could reduce or avoid significant environmental impacts.

This EIR was prepared in accordance with Section 15151 of the State CEQA Guidelines, which defines the 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.*

## **EIR Process**

### ***Notice of Preparation/Scoping Meeting***

In compliance with Sections 15082 and 15375 of the State CEQA Guidelines, a Notice of Preparation (NOP) was prepared by the City of Lancaster Planning Department and distributed to the State Clearinghouse, Office of Planning and Research, Trustee and Responsible Agencies and other interested parties on June 4, 2007 and was circulated for a period of 30 days. However, an error was discovered on the NOP and it was therefore republished on June 14, 2007 and was circulated for 30 days. The NOP comment period ended July 17, 2007. The NOP was also provided to property owners located within 500 feet of the project site. Public scoping meetings were held on June 14, 2007, and June 19, 2007. Appendix A to this EIR contains a copy of the NOP and Appendix B to this EIR contains the written responses to the NOPs that were received by the City. See Section C. below for a specific list of concerns raised in response to the NOP, as well as where in the Draft EIR these concerns are addressed.

### ***Environmental Issues to be Analyzed in the EIR***

Based on public comments in response to the NOP and a review of environmental issues by the City of Lancaster Planning Department, this EIR analyzes the following impact areas:

- Aesthetics
- Agricultural Resources
- Air Quality
- Biological Resources
- Cultural Resources
- Geology and Soils
- Hazards and Hazardous Materials
- Hydrology and Water Quality
- Land Use and Planning
- Noise
- Population and Housing
- Public Services

- Transportation and Traffic
- Utilities and Service Systems

### ***Environmental Review Process***

The Draft EIR will be circulated for review and comment by the public and other interested parties, agencies, and organizations for a period of 45 days. During the 45-day review period, a hearing will be held before the Planning Commission to take comments on the Draft EIR. After completion of the 45-day review period, a Final EIR will be prepared that responds to comments on the Draft EIR submitted during the review period and modifies the Draft EIR as required. Public hearings on the proposed project will be held after completion of the Final EIR. The City will make the Final EIR available to agencies and the public prior to considering certification of the EIR. Notice of the time and location will be published prior to the public hearing date. All comments or questions about the Draft EIR should be addressed to:

Jocelyn Swain, Associate Planner, Environmental  
City of Lancaster  
Planning Department  
44933 Fern Avenue  
Lancaster, CA 93534

Phone: (661) 723-6249  
Fax: (661) 723-5926  
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### **Organization of the Draft EIR**

The Draft EIR is organized into eight sections as follows:

Section I (Introduction and Summary): This section provides an introduction to the environmental review process and a summary of the project description, alternatives, environmental impacts, and mitigation measures.

Section II (Project Description): A complete description of the proposed project including project location, project site characteristics, project characteristics, project objectives, and required discretionary actions is presented.

Section III (Environmental Setting): An overview of the environmental setting of the proposed project is provided including a description of existing and surrounding land uses, and a list of related projects.

Section IV (Environmental Impact Analysis): The Environmental Impact Analysis section is the primary focus of this EIR. Separate discussions are provided to address the potential environmental effects of the proposed project. Each environmental issue contains a discussion of existing conditions, an assessment

and discussion of the significance of the impacts associated with the proposed project, mitigation measures, cumulative impacts, and the level of impact significance after mitigation.

Section V (General Impact Categories): This section provides a summary of significant and unavoidable impacts of the proposed project, a discussion of potential growth inducing effects, and an explanation of the significant irreversible environmental changes.

Section VI (Alternatives to the Proposed Project): This section includes an analysis of a range of reasonable alternatives to the proposed project. The range of alternatives selected is based on their ability to feasibly attain most of the basic objectives of the project and alternatives that would avoid or substantially lessen any of the significant effects of the project.

Section VII (Preparers of the EIR and Persons Consulted): This section presents a list of City and consultant team members that contributed to the preparation of the EIR.

Section VIII (Acronyms and Abbreviations): This section presents a list of acronyms and abbreviations used through out the document.

## **B. PROPOSED PROJECT**

The proposed project would re-designate and rezone the property, and develop a commercial shopping center on the project site. The City of Lancaster General Plan designates the project site as Urban Residential (UR) and the zoning code designates the project site as Single-Family Residential, minimum lot size 7,000 square feet (R-7,000) and minimum lot size 10,000 square feet (R-10,000). The project site is currently undeveloped. A site-specific project description is provided below.

### ***Proposed Project***

The proposed project would include a general plan amendment and zone change to re-designate the project site from UR to Commercial (C) and rezone the project site from R-7,000 and R-10,000 to Commercial Planned Development (CPD). The project site is approximately 40 acres. Development on the project site would include approximately 344,550 square feet of commercial retail and restaurant facilities. The two anchor tenants would be located on the west side of the project site. The inline retail structure and anchors would be oriented toward 60<sup>th</sup> Street West, pad buildings along the perimeter of the project site would front 60<sup>th</sup> Street West and wrap the corner to Avenue L, surface parking would be provided at the interior of the site. The only known tenant at this time for the project is a Wal-Mart Supercenter. Development on the project site would include 1,728 parking spaces, and access to the development would be provided via both 60<sup>th</sup> Street West and Avenue L. The project site would include three driveway entrances along Avenue L and three driveways along 60<sup>th</sup> Street West. In addition, a proposed roadway Avenue K-12, to the north, would provide additional access with two driveways. No demolition would occur, as the project site is currently undeveloped.

The proposed Wal-Mart Supercenter would consist of all appurtenant structures and facilities and would offer general retail merchandise and groceries, including, alcohol for off-site consumption, pool chemicals, petroleum products, pesticides, and paint products. The proposed Wal-Mart Supercenter store may include a pharmacy, a vision care center, a food service center, a photo studio, a photo finishing center, a banking center, an arcade, a garden center, outdoor sale facilities, outside container storage facilities, and rooftop proprietary satellite communication facilities, and is proposed to operate 24 hours per day.

### C. AREAS OF CONTROVERSY

Concerns raised in letters submitted to the Planning Department in response to the NOP include (but are not limited to) the following:

- **Aesthetics** – Concerns were raised regarding the potential impacts to views of and beyond the project site from homes in the vicinity of the project. Concerns were also raised about the proposed building heights, signage, lighting and glare associated with proposed uses. Visual compatibility between residential and commercial uses and impacts on the “small town feel” of the area. These issues are addressed in Section IV.B (Aesthetics) of this Draft EIR.
- **Air Quality** – Concerns were raised regarding the potential impact of the proposed project’s construction-related and operational air emissions on the existing ambient air environment, including construction-related dust, chemical emissions and the effects on adjacent residences and schools. Odors at the project site from the commercial uses, including restaurants, were also a concern. These issues are addressed in Section IV.D (Air Quality) of this Draft EIR.
- **Biological Resources** – Concerns were raised regarding the potential impacts to wildlife species (white owls). This issue is addressed in Section IV.E (Biological Resources) of this Draft EIR.
- **Hazards and Hazardous Materials** – Concerns were raised regarding the potential for rodents associated with the commercial developments, particularly relating to waste from the proposed Wal-Mart Supercenter. This issue is addressed in Section IV.H (Hazards and Hazardous Materials) of this Draft EIR.
- **Hydrology and Water Quality** – Concerns were raised regarding the potential for the proposed project to contribute to flooding. Concern was raised over the increase in impervious surface as it pertains to groundwater recharge. Concerns about run-off from parking lots and improperly stored chemicals impacting water quality. These issues are addressed in Section IV.I (Hydrology and Water Quality) of this Draft EIR.
- **Land Use** – Concerns were raised about whether the proposed project would preclude the use of the project site for public facilities in the future. It was stated that the change in zoning

- requested by the proposed project would be incompatible with the existing residential zone of the site and surrounding residential and school uses, and that quality of life and property value would be decreased with such a zone change. Concerns were also raised about the increase in density that would result from the proposed land use, and the potential for alcohol and gun sales at the proposed use. Residents were concerned with access between the adjacent residential neighborhoods and the proposed commercial area. These issues are addressed in Section IV.J (Land Use and Planning) of this Draft EIR.
- **Noise** – Concerns were raised regarding the potential for the proposed project to cause increased noise levels during the construction and operation of the project, including noise from increased traffic and operation of the proposed project in a residential area. Noise levels at adjacent residences and school would also be affected. These issues are addressed in Section IV.K (Noise) of this Draft EIR.
  - **Public Services** – Concerns were raised regarding the potential for the proposed project to result in increased crime rates at and around the project site due to the type of uses proposed. Concerns were also raised that the increase in population would place increased demand on public services. In addition, concern over decreased response time for emergency vehicles due to increased traffic was raised. Many concerns were raised about the proposed project attracting crime and jeopardizing the safety of nearby students and residents. A park was suggested as a better use for the project site. These issues are addressed in Section IV.M (Public Services) of this Draft EIR.
  - **Population and Housing** – Concerns were raised regarding the increased use by employees and customers on the project site and associated traffic, noise, and crime. These issues are addressed in their respective sections of this Draft EIR.
  - **Traffic and Parking** – Concerns were raised regarding the potential for the proposed project to impact traffic and parking in the project area. Traffic related to Quartz Hill High School, is a particular concern, including peak school traffic hours. Additionally, questions were raised regarding intersection effects, access to the project site, and required road improvements. Concern was raised over the safety of students walking to and from school. Also concern was raised with regards to traffic impacts on nearby residents' ability to access and leave their homes. These issues are addressed in Section IV.N (Traffic and Transportation) of this Draft EIR.
  - **Utilities and Service Systems** – Concerns were raised regarding the potential for the proposed project to consume more water than the existing water supply system would allow. Solid waste generation, maintenance, and collection were also issues of concern. These issues are addressed in Section IV.O (Utilities and Service Systems) of this Draft EIR.

## **D. ISSUES TO BE RESOLVED**

Issues to be resolved include whether or how to mitigate potentially significant environmental impacts from the proposed project, and whether one of the alternatives should be approved rather than the proposed project.

## **E. ALTERNATIVES**

This Draft EIR considers a range of alternatives to the proposed project to provide informed decision-making in accordance with Section 15126.6 of the State CEQA Guidelines. The alternatives analyzed in this Draft EIR include: Alternative 1: No Project Alternative; Alternative 2: Existing Zoning Alternative; and Alternative 3: Reduced Commercial Density Alternative.

### **Alternative 1: No Project Alternative**

The No Project Alternative is the circumstance under which the project does not proceed. The CEQA Guidelines (Section 15126.6(e)) provide that the “no project” analysis shall discuss the existing conditions at the time the Notice of Preparation is published, as well as what would be reasonably expected to occur in the foreseeable future if the project is not approved based on current plans and consistent with available infrastructure and community services.

Under the No Project Alternative, the project site would continue to remain vacant and undeveloped. This alternative also assumes the development of the related projects.

### **Alternative 2: Existing Zoning Alternative**

Under the Existing Zoning Alternative, the project site would be developed with approximately 197 single-family residences in accordance with the existing R-7,000 and R-10,000 zoning of the project site.

### **Alternative 3: Reduced Commercial Density Alternative**

Under the Reduced Commercial Density Alternative, a proportionately smaller project would be constructed when compared to the proposed project. Specifically, this alternative would construct a 241,185 square foot development (a 30% reduction compared to the proposed project) similar to the proposed project, but without big box anchor tenants. All other aspects of the project remain unchanged.

## **F. ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES**

Table I-1 summarizes the various environmental impacts associated with the construction and operation of the proposed project. Mitigation measures are recommended for potentially significant environmental impacts, and the level of impact significance after mitigation is also identified.

**Table I-1  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
<b>AESTHETICS</b>		
<p><b><i>Visual Character and Quality</i></b></p> <p>The implementation of the proposed project would substantially change the existing character of the site from an undeveloped parcel to an urban use with retail buildings and surface parking facilities. The City of Lancaster General Plan Land Use designation for the project site is currently Urban Residential (UR). The proposed project includes a request for a General Plan Amendment to re-designate the project site as Commercial (C). See Section IV.J, Land Use Planning, for a full discussion of the project site’s land use issues. However, even absent the granting of a General Plan Amendment, the City of Lancaster General Plan presently envisions the transformation of the site from the current undeveloped condition to urban uses. Further, the surrounding area is in transition with intensification of rural or undeveloped land to suburban and urban uses. For reasons stated, the project would have a less than significant impact with regard to visual character.</p> <p><b><i>Views and View Corridors</i></b></p> <p>The proposed project would not result in the obstruction of any permanent, public scenic views. Pedestrians and motorists traveling in vehicles would have a temporary, passing view of the proposed project from public vantage points such as Avenue L and 60<sup>th</sup> Street West, as the vantage point would be constantly changing. As such,</p>	<p>The following mitigation measures will be implemented to reduce potential light and glare impacts to less than significant levels.</p> <p><b>Night Lighting</b></p> <p>B-1 The project applicant shall submit a Lighting Mitigation Plan that incorporates reduction of night lighting “spill” onto adjacent parcels to the City of Lancaster for review and approval. The approved Lighting Mitigation Plan shall be installed to the satisfaction of the City of Lancaster.</p> <p>B-2 The height of the proposed on-site light standards shall be of such height as not to create a nuisance to the adjacent neighbors.</p> <p>B-3 Entrance and all forms of exterior lighting shall focus illumination downward and into the project site. A combination of shielding, screening, and directing the lighting away from off-site areas shall be utilized to minimize "spill-over" effects onto adjacent roadways, properties and open space areas.</p>	<p>Less than significant impact.</p>

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
<p>the proposed project would not obstruct any scenic views from permanent, public vantage points. Long-range views of the San Gabriel Mountains to the south and southwest would not be substantially altered. Considering the distance of the mountains from the project site, which is approximately seven miles, long-range views from the surrounding area would still be available above and around the proposed development. Therefore, impacts relative to public scenic views would be less than significant.</p> <p><b>Light and Glare</b></p> <p>The proposed project would introduce new sources of glare to the project site. Development of the proposed project would include architectural features and facades that have a low level of reflectivity to reduce the possibility of impacts associated with glare. Overall, the building materials used would not be expected to cause glare that would be visually inconsistent with surrounding land uses, or to result in a substantial increase in glare that would affect nearby sensitive uses. However, the proposed project would create reflective sources where none currently exist, and would provide large areas for parking which would increase the amount of glare on the project site. Further, nighttime illumination of signs could generate glare. Thus, impacts associated with glare (both daytime and nighttime) would be potentially significant.</p> <p><b>Shade and Shadow</b></p> <p>Although Quartz Hill High School, which is considered a sensitive</p>	<p>B-4 Exterior lighting shall be the lowest intensity necessary for security and safety purposes, while still adhering to the recommended levels of the Illuminating Engineering Society of North America.</p> <p>B-5 In order to minimize illumination wash onto adjacent areas, parking lot lighting shall utilize non-glare fixtures directed downward onto the project site.</p> <p>B-6 Parking lot lights shall be oriented to minimize off-site impacts (i.e., the maximum candlepower shall be aimed away from the off-site viewer).</p> <p>B-7 Atmospheric light pollution shall be minimized by utilizing street lighting fixtures that cut-off light directed to the sky.</p> <p>B-8 The use of exterior uplighting fixtures for building facades and trees shall be prohibited.</p> <p>B-9 Use of "glowing" fixtures that would be visible from existing communities or public roads shall be prohibited. A glowing fixture is a lantern style fixture, or any fixture that allows light through its vertical components</p> <p>B-10 Only downlighting for exterior-building</p>	

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
<p>use, is located south of the project site, the minimal height of the proposed structures coupled with the distance from the school create a situation where shade or shadow would not affect the school buildings or any athletic or recreational areas. Therefore, impacts related to shade and shadow would be less than significant.</p>	<p>mounted fixtures shall be permitted.</p> <p>B-11 The adverse effects of night-lighting shall be mitigated by provision of one or more of the following: (1) low-elevation lighting poles and (2) shielding by internal silvering of the globe or external opaque reflectors.</p> <p>B-12 Exterior lighting fixtures that cut-off light directed to the sky shall be installed to minimize atmospheric light pollution, reflected heat and daytime glare.</p> <p><b>Glare</b></p> <p>B-13 Expansive areas of highly reflective materials, such as mirrored glass, shall not be permitted.</p> <p>B-14 The proposed buildings shall incorporate non-reflective exterior building materials (such as plaster and masonry) in their design. Any glass to be incorporated into the façade of the building shall be either of low-reflectivity, or accompanied by a non-glare coating.</p> <p>B-15 All roofs shall be surfaced with non-reflective materials.</p>	

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
<b>AGRICULTURE</b>		
<p><b><i>Conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance</i></b></p> <p>According to the California Department of Conservation, Farmland Mapping and Monitoring Program, the project site is classified as urban and built-up land, and other land. Therefore, the project site would not convert prime farmland, unique farmland, or farmland of statewide importance to a non-agricultural use, and no significant impact would occur.</p> <p><b><i>Conflict with Existing Zoning or a Williamson Act Contract</i></b></p> <p>As discussed in Section III, Environmental Setting of this EIR, the General Plan designates the project site as Urban Residential (UR). The site has a corresponding R-7,000 and R-10,000 zone classification. Therefore, the City has already planned for the eventual conversion of the site from rural to urban uses. The project site is also not subject to a Williamson Act contract. Therefore, no impact would occur.</p> <p><b><i>Other changes in the existing environment which could result in conversion of farmland to non-agricultural use</i></b></p> <p>The proposed project would be constructed on a site within the City of Lancaster that has been planned for conversion from agriculture to urban uses. In addition, surrounding uses consist of residential and institutional uses. No agricultural uses are located near the</p>	<p>No mitigation measures required.</p>	<p>Less than significant impact</p>

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
project site. Therefore, there would be no unanticipated actions that could cause other land in the vicinity of the project site to convert from agriculture to non-agriculture uses, and no significant impact would occur.		
<b>AIR QUALITY</b>		
<p><i><b>Air Quality Plan Consistency</b></i></p> <p>Although the proposed project has not been accounted for in the City’s General Plan, the development of the proposed commercial use on the project sites would serve to reduce vehicle emissions in the City by providing retail facilities to serve the local community. In addition, the proposed project would also serve to generate employment opportunities for the local area. As indicated in the City’s General Plan, the City has become a commuter community, with long commutes recognized as being a source of additional air pollutants. Thus, although development of the proposed project would not be consistent with the growth projected in the City’s General Plan, it would not conflict with or obstruct implementation of the <i>2004 Ozone Attainment Plan</i>. Therefore, this impact would be less-than-significant.</p> <p><i><b>Construction Impacts</b></i></p> <p><i>Construction Period Emissions- Mass Daily Emissions</i></p> <p>Three basic types of activities are expected to generate construction-related emissions at the project site as a result of</p>	<p><b>Construction Mitigation</b></p> <p><i>Code Required Measures</i></p> <p>The following measures are required pursuant to AVAQMD Rule 403:</p> <ul style="list-style-type: none"> <li>D-1. Apply approved non-toxic chemical soil stabilizers according to manufacturer’s specification to all inactive construction areas (previously graded areas inactive for four days or more).</li> <li>D-2. Apply chemical soil stabilizers according to manufacturers’ specifications to all unpaved parking or staging areas or unpaved road surfaces.</li> <li>D-3. Water active grading sites at least three times daily.</li> <li>D-4. Enclose, cover, water three times daily, or apply approved soil binders to exposed piles</li> </ul>	Less than significant impact.

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
<p>implementation of the proposed project. The first activity would involve the grading of the project site to accommodate the proposed buildings. Secondly, the proposed retail buildings would be constructed. Finally, the site would be paved and architectural coatings would be applied. Emissions of NO<sub>x</sub> during the grading phase would exceed the mass emission thresholds recommended by the AVAQMD. Therefore, this impact would be considered potentially significant. In addition, none of the remaining ambient air quality standards would be exceeded during construction.</p> <p><i>Construction Period Emissions – Localized Emissions of CO, NO<sub>x</sub>, PM<sub>10</sub>, PM<sub>2.5</sub></i></p> <p>The NO<sub>x</sub> 1-hour threshold would be exceeded by approximately 0.05 ppm, this would result in a potentially significant impact. In addition, none of the remaining ambient air quality standards would be exceeded during construction.</p> <p><b>Operational Impacts</b></p> <p><i>Operational Emissions – Mass Annual Emissions</i></p> <p>Operational emissions generated by both stationary and mobile sources would result from normal day-to-day activities on the project site after occupation. Annual emissions of CO and PM<sub>10</sub> from operational activities would exceed the thresholds set by AVAQMD. Therefore, based on the AVAQMD thresholds, impacts from operational emissions would constitute a significant impact. However, the thresholds set by the AVAQMD do not</p>	<p>(i.e., gravel, sand, and dirt) according to manufacturers’ specifications.</p> <p>D-5. Replace ground cover in disturbed areas as quickly as possible.</p> <p>D-6. Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour (mph).</p> <p>D-7. Provide temporary wind fencing consisting of 3- to 5-foot barriers with 50 percent or less porosity along the perimeter of sites that have been cleared or are being graded.</p> <p>D-8. Sweep streets at the end of the day if visible soil material is carried over to adjacent roads.</p> <p>D-9. Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip.</p> <p>D-10. Enforce traffic speed limits of 10 mph or less on all unpaved roads</p> <p><i>Project Specific</i></p>	

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
<p>account for the size of the project nor the services it provides. Therefore, the proposed project is actually expected to decrease total vehicle miles traveled throughout the city, thereby reducing the regional impacts from operations to a less than significant impact.</p> <p><i>Operational Emissions – Localized Emissions of CO, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub></i></p> <p>The average daily emissions associated with stationary and area sources, and motor vehicles operating within the project site have the potential to generate localized emissions of CO, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. Localized emissions of PM<sub>10</sub> and PM<sub>2.5</sub> from operational activities would exceed the thresholds set by AVAQMD thus resulting in a potentially significant impact.</p> <p><i>Local CO Concentrations</i></p> <p>Motor vehicles are the primary source of pollutants in the project vicinity. Future CO concentrations near the study intersections would not exceed national or State ambient air quality standards. Therefore, CO hotspots would not occur near these intersections in the future with operation of the proposed project. Therefore, impacts related to local CO concentrations at these intersections would be less than significant.</p> <p><i>Operational Emissions – Toxic Air Contaminants</i></p> <p>Diesel particulate emissions, a known toxic air contaminant, would</p>	<p>The following mitigation measures are recommended in addition to the required AVAQMD Rule 403 measures listed above to further reduce the construction emissions associated with the proposed project.</p> <p>D-11. The project applicant shall require in the construction specifications for the proposed project that construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, are turned off when not in use for an extended period of time (i.e., 5 minutes or longer). The contract specifications shall be reviewed by the City prior to the issuance of permits.</p> <p>D-12. The project applicant shall require in the construction specifications for the proposed project that construction operations rely on the electricity infrastructure surrounding the construction site rather than electrical generators powered by internal combustion engines to the extent feasible. The contract specifications shall be reviewed by the City prior to the issuance of permits.</p> <p>D-13. The project applicant shall be required to use off-road equipment with a diesel oxidation catalyst to reduce emissions of NO<sub>x</sub> by 25%</p>	

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
<p>occur from heavy-duty diesel delivery trucks associated with the project site.</p> <p>A Health Risk Assessment was conducted by Kleinfelder West, Inc. (see Appendix D) to evaluate the impacts of annual average diesel exhaust emissions from vehicular sources (specifically heavy-duty, diesel delivery trucks). The inhalation cancer risk at the closest exposed individual resident is 3 in one million and the chronic non-cancer hazard index (HI) at this receptor is &lt;0.01. The inhalation cancer risk and chronic non-cancer HI at the nearest individual worker and the nearest sensitive receptor (students at Quartz Hill High School) were 0.2 in one million and &lt;0.01 respectively.</p> <p>The AVAQMD CEQA guidelines specify that a project is significant if it exposes sensitive receptors to substantial pollutant concentrations, including those resulting in a cancer risk greater than or equal to 10 in a million; and/or a HI (noncancerous) greater than or equal to 1. The inhalation cancer risk at the maximum exposed sensitive receptor is 3 in a million. This is below the AVAQMD CEQA significance threshold of 10 in a million. The chronic non-cancer HI at the maximum exposed sensitive receptor is &lt;0.01. This is below the AVAQMD CEQA significance threshold of 1.</p> <p><b>Greenhouse Gas Emissions</b></p> <p>The project would be consistent with all feasible and applicable strategies to reduce greenhouse gas emissions in California.</p>	<p>to mitigate impacts from NOx during the grading phase.</p> <p>D-14. Architectural coatings with a VOC content of 50 g/liter or less shall be used to mitigate impacts from VOCs during the paving/architectural coatings phase.</p> <p><b>Cumulative GHG Emission Impacts</b></p> <p>D-15. The proposed project shall follow the guidelines and regulations outlined by AB 32 and the 2006 CAT Report Strategies.</p>	

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
<p>Therefore, the impact of the proposed project would be less than significant.</p> <p><b>Odors</b></p> <p>Odors are typically associated with industrial projects involving the use of chemicals, solvents, petroleum products, and other strong-smelling elements used in manufacturing processes, as well as sewage treatment facilities and landfills. As the proposed project involves no elements related to these types of activities, no odors are anticipated.</p> <p>During the construction phase, paving of the project sites would entail the application of asphalt that would produce discernible odors typical of most construction sites. Such odors would be a temporary source of nuisance to residents located adjacent to the project sites, but because they are temporary and intermittent in nature, would not be considered a significant environmental impact.</p> <p>Odors related to any potential kitchen use may result. However, these odors would be considered consistent with odors generated in the vicinity due to existing residents and restaurants in the area and would be result in a less than significant impact. Therefore, impacts associated with objectionable odors would be less than significant.</p>		
<b>BIOLOGICAL RESOURCES</b>		
<b>Special Status Wildlife Species</b>	E-1 A qualified wildlife biologist shall conduct a pre-construction nesting bird survey no more	Less than significant impact.

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
<p>Three sensitive reptile species and seven sensitive bird species were determined as having a low potential to occur on the proposed project site, as it only supports limited areas of marginally suitable habitat due to heavy disturbance both on-site and off-site. Therefore, potential impacts to these species are considered to be less than significant.</p> <p>Swainson's hawk is considered to have a moderate potential to occur on-site. The proposed project may result in significant impacts to nesting Swainson's hawk, if present on or adjacent to the site. Therefore, a potentially significant impact could occur to Swainson's hawk with project implementation.</p> <p>The development of the proposed project site would remove approximately 36 acres of potential raptor foraging habitat, including potential foraging habitat for Swainson's hawk. However, given the mobility of these species, and the disturbed and isolated nature of the site, the loss of the existing foraging habitat onsite is considered to be less than significant.</p> <p>Although focused surveys for burrowing owls were negative, the proposed project site contains several potentially suitable burrows, which although currently unoccupied, could be colonized by burrowing owls in the region prior to site construction. The removal of occupied burrowing owl burrows during vegetation removal and grading associated with site development would be considered a significant impact.</p>	<p>than 5 days prior to initiation of grading to provide confirmation on presence or absence of active nests in the vicinity (at least 300 feet around the proposed project site). If active nests are encountered, species-specific measures shall be prepared by a qualified biologist in consultation with the CDFG and implemented to prevent abandonment of the active nest. At a minimum, grading in the vicinity of the nest shall be deferred until the young birds have fledged. A minimum exclusion buffer of 100 feet shall be maintained during construction, depending on the species and location. The perimeter of the nest-setback zone shall be fenced or adequately demarcated with staked flagging at 20-foot intervals, and construction personnel and activities restricted from the area. A survey report by the qualified biologist verifying that (1) no active nests are present, or (2) that the young have fledged, shall be submitted to the City prior to initiation of grading in the nest-setback zone. The qualified biologist shall serve as a construction monitor during those periods when construction activities will occur near active nest areas to ensure that no inadvertent impacts on these nests will occur.</p>	

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
<p><b><i>Special Status Plant Species and Sensitive Plant Communities</i></b></p> <p>As discussed above, special status plant species are either not expected or are considered to have a low potential to be present on-site, due to the general disturbed and degraded conditions of the site and vegetation and/or the lack of specific habitat requirements for the special status plants known from the region. In addition, none of the plant communities on-site are considered to be sensitive. The development of the proposed project is not anticipated to impact sensitive plants or communities and therefore would be a less than significant impact.</p> <p><b><i>Jurisdictional Features</i></b></p> <p>The proposed project may impact the offsite active constructed drainage located along the outside western boundary of the proposed project site. Grading activities associated with project development may impact portions of, or the entire length of, the drainage. The removal, grading, or disturbance of any portion of the offsite active constructed drainage may be considered a significant impact.</p> <p><b><i>Wildlife Movement or Native Wildlife Nurseries</i></b></p> <p>The proposed project site is surrounded to the north, south and east by suburban development and, therefore, lacks connectivity to nearby natural habitats. Although several vacant parcels are located north of West Avenue L and west of 60<sup>th</sup> Street West, there are no large contiguous natural or open space areas to the north, south or</p>	<p>E-2 In order to avoid adverse impacts to burrowing owl, a pre-construction survey for burrowing owls shall be performed on the project site within 30 days prior to ground disturbance. The survey shall be performed according to accepted burrowing owl survey protocols by a qualified biologist. The results of the survey shall be reported to CDFG and the City of Lancaster prior to ground disturbance. If any burrowing owls are found on-site during the pre-construction surveys, passive relocation of the owls shall be completed outside of the nesting season according to California Burrowing Owl Consortium guidelines; a report shall be prepared by a qualified biologist following any passive relocation efforts documenting the methods and results of the relocation activities. All ground disturbance associated with site development and construction shall be postponed until passive relocation efforts have been completed and the associated report has been submitted to CDFG.</p> <p>E-3 If development activities will result in impacts to the off-site active constructed drainage (such as during development of more detailed grading plans), the applicant shall apply for and receive the following regulatory permits (or</p>	

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
<p>east of the proposed project site; therefore, the site would not be used as a movement or migration corridor for wildlife to use while traveling between two high quality habitat areas. Additionally, the proposed project site is currently fenced with chainlink fence, dominated with ruderal and non-native vegetation and is regularly disturbed; therefore, the existing habitat conditions are unlikely for wildlife species to use as a movement or migration corridor or as a native nursery site. Therefore, the proposed project is not expected to impact wildlife movement, migration corridors, or native nursery sites.</p> <p><b><i>Conflict with Local Policies or Ordinances</i></b></p> <p>The City of Lancaster does not have an ordinance specifically protecting tree species; therefore, the non-native trees on-site are not protected by local ordinances. In addition, those General Plan policies protecting sensitive species have already been addressed under <i>Special Status Species</i> above. Therefore, the proposed project would have no impacts regarding conflicts with local policies or ordinances.</p> <p><b><i>Conflict with Conservation Plans</i></b></p> <p>Although a draft of the West Mojave Plan has been prepared that would eventually cover lands within the City of Lancaster, this plan has not yet been approved by regulatory agencies and currently only covers lands owned by the Bureau of Land Management. Therefore, the project would not result in impacts regarding conflicts with</p>	<p>exemptions) prior to grading near the off-site active constructed drainage:</p> <ul style="list-style-type: none"> <li>• A Streambed Alteration Agreement from CDFG (Section 1600 permit)</li> <li>• A Notice of Intent to receive coverage under the Lahontan RWQCB’s General Permit R6T-2003-0004 for minor streambed alteration projects where the Corps does not have jurisdiction. (However, if the Corps does assert jurisdiction over the offsite active constructed drainage, then the applicant should apply for an application to the RWQCB for Water Quality Certification under Section 401 of the Clean Water Act).</li> </ul> <p>Mitigation shall include construction measures including Best Management Practices for erosion control, as well as compensatory measures such as restoration of the drainage to the pre-existing condition (or better) and installation of riparian or wetland vegetation at a 1:1 ratio to removed vegetation. These measures, if not included as permit requirements, shall be enforced by the City and</p>	

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
conservation plans.	shall conform to a mitigation plan to be prepared by the applicant and approved by the City prior to receiving grading permit approvals for the project. The mitigation plan shall include methods for implementation as well as monitoring methods, performance criteria, and contingency measures in case of mitigation failure.	
<b>CULTURAL RESOURCES</b>		
<p><b><i>Historical Resources</i></b></p> <p>As discussed above, the project site is a currently vacant and undeveloped open field with no standing structures. One concrete foundation and presumably associated historic and modern debris were observed during the Cultural Resources survey; however, there were no indications that the foundations were more than 50 years old and the refuse scatter consisted of mixed historic and modern debris. The foundation has since been removed from the project site. Therefore, neither the foundation nor the trash scatter is considered a historic resource, and the proposed project would have no impact with respect to historical resources.</p> <p><b><i>Archaeological Resources</i></b></p> <p>According to the records search conducted by the South Central Coastal Information Center, there are no identified prehistoric or archaeological sites, prehistoric isolates, historic archaeological</p>	<p>Impacts with respect to archaeological and paleontological resources and human remains would be potentially significant. Therefore, the following mitigation measure is recommended to reduce the potentially significant impacts to less than significant levels.</p> <p>F-1 All contractors and subcontractors shall be informed about the potential for archaeological and paleontological discoveries during construction, and all construction personnel should be informed on the appropriate responses to such discoveries. The information will include a description of the kinds of cultural resources that might be encountered during construction and the steps to be taken if such a find is unearthed.</p>	Less than significant impact.

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
<p>sites, or historic isolates within the boundaries of the project site. However, the majority of the project site has never been developed, although it was subject to the planting of row crops, and it is difficult to know what lies beneath the ground surface. Additionally, as discussed above, there are five archaeological sites and three isolated artifacts within a one-mile radius of the project site. There is a possibility that impacts to archaeological resources could occur during excavation activities for the proposed project. Therefore, impacts to archaeological resources are potentially significant.</p> <p><b><i>Paleontological Resources</i></b></p> <p>No evidence of paleontological resources on the project site has been discovered, and excavation on site and development of the project site is not anticipated to affect paleontological resources. However, the majority of the project site has never been developed and it is difficult to know what lies beneath the ground surface. There is a possibility that impacts to paleontological resources could occur during excavation activities for the proposed project. Therefore, impacts to paleontological resources are potentially significant.</p> <p><b><i>Human Remains</i></b></p> <p>According to the NAHC there are no sacred lands or other Native American cultural resources in the project area. There is a possibility that impacts to human remains could occur during</p>	<p>If buried or concealed cultural resources are discovered during excavation, construction, or related development work, all such work is to cease in the vicinity of the find and a qualified archaeologist shall be notified. The find shall be properly investigated and appropriate mitigative and/or protective measures (if necessary) shall be taken. If human remains are found, procedures for their treatment shall follow CEQA guidelines in 14 CCR 15064.5(e).</p>	

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
excavation activities for the proposed project. Therefore, impacts to human remains are potentially significant. However, the majority of the project site has never been subject to subsurface disturbance, and it is difficult to know what lies beneath the ground surface.		
<b>GEOLOGY AND SOILS</b>		
<p><i>Erosion and Topsoil</i></p> <p><i>Construction</i></p> <p>The proposed project would be required to obtain a grading permit from the Public Works Department,</p> <p>During construction activities there is a potential for erosion to occur during the grading process during periods of heavy precipitation.</p> <p>In addition, project construction would be performed in accordance with the Storm Water Pollution Prevention Plan (SWPPP), which specifies Best Management Practices (BMPs) to prevent all soil from moving off-site due to water and wind erosion. With implementation of the applicable grading and building permit requirements and the application of BMPs, impacts with respect to erosion or loss of topsoil would be less than significant.</p> <p><i>Operation</i></p> <p>Under the existing condition the project site is susceptible to erosion. The proposed project would develop the project site with</p>	<p>The proposed project would result in a less than significant impact with respect to geology and soils. The applicant shall comply with the following mitigation measure to further reduce the already less than significant impacts:</p> <p>G-1 A comprehensive geotechnical investigation for the project site shall be conducted and submitted to the City of Lancaster as part of the permitting process for the proposed project. The specific design recommendations presented in the comprehensive geotechnical reports, specifically with respect to soil corrosivity, shall be incorporated into the design and construction of the proposed project.</p>	Less than significant impact.

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
<p>pervious and impervious surfaces including structures, paved areas, and landscaping. As such, the proposed development would reduce the rate and amount of erosion occurring at the project site and impacts with respect to erosion or loss of topsoil would be less than significant.</p> <p><i>Seismic Hazards</i></p> <p><i>Surface Fault Rupture</i></p> <p>The project site is not located within an established Alquist-Priolo Earthquake Fault Zone for surface fault rupture hazards and no active or potentially active faults with the potential for surface fault rupture are known to be located directly beneath or projecting toward the project site. Thus, the potential for surface rupture is considered low and the proposed project would not present any adverse impacts with respect to exposing people or property to hazardous conditions resulting from rupture of a known earthquake fault on the project site. Impacts would be less than significant.</p> <p><i>Seismicity</i></p> <p>Although the project site is located within approximately four miles of the San Andreas Fault, and near many other faults on a regional level, the potential seismic hazard to the project site would not be higher than in most areas of the City of Lancaster or elsewhere in the region. However, the proposed construction would be consistent with the seismic design criteria contained in the City's Building Code. Therefore, the risks associated with seismicity</p>		

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
<p>would be less than significant.</p> <p><i>Ground Shaking</i></p> <p>The project site could be subjected to strong ground shaking in the event of an earthquake. Modern, well-constructed buildings are designed to resist ground shaking through the use of shear walls and reinforcements. The proposed project would comply with the seismic design criteria contained within the City’s Building Code. Therefore, the risks from seismic ground shaking would be less than significant.</p> <p><i>Liquefaction</i></p> <p>According to the California State Seismic Hazard Map the project site is not located within an area identified as having a potential for liquefaction.</p> <p>The groundwater level at the site is greater than 100 feet deep and the potential for liquefaction is considered to be low. Therefore, the risks from liquefaction would be less than significant.</p> <p><i>Seismically-Induced Settlement</i></p> <p>Settlement of soils due to seismic shaking, infiltration of surface water or foundation loads could occur if low density soils are present at the site. Though the project site could be subject to strong ground shaking in a seismic event, which could cause settlement, the proposed project would comply with the seismic</p>		

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
<p>design criteria contained within the City’s Building Code. Therefore, impacts related to seismically-induced settlement would be less than significant.</p> <p><i>Subsidence</i></p> <p>According to the City of Lancaster General Plan (2020), portions of Lancaster are characterized by soils which exhibit subsidence. The project site is not located in an area of known ground fissures or sinkholes indicated in the City’s plan. Therefore, potential subsidence of the project site is considered to have a less than significant impact.</p> <p><i>Expansive Soils</i></p> <p>According to the City of Lancaster’s Draft Master Environmental Assessment, the project site is located in an area of low shrink-swell potential. Laboratory testing performed for the Preliminary Geotechnical Evaluation, by Ninyo &amp; Moore, showed soil expansion potential at the site ranging from very low to low. Therefore, impacts with respect to expansive soils would be less than significant.</p> <p><i>Corrosive Soils</i></p> <p>The project site is located in a geologic environment that could potentially contain soil conditions that are corrosive to concrete and metals. Typical mitigation measures for corrosive soil include epoxy and metallic protective coatings, the use of alternative</p>		

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
(corrosion resistant) materials, and selection of the type of cement and water/cement ratio. Specific measures to mitigate the potential effects of corrosive soils will be developed in the design phase, if necessary. Therefore, impacts with respect to soil corrosivity would be less than significant.		
<b>HAZARDS AND HAZARDOUS MATERIALS</b>		
<p><b><i>Routine, Transport, Use, Disposal, or Release of Hazardous Materials</i></b></p> <p><i>Construction</i></p> <p>During the temporary construction phase, the proposed project is anticipated to require the routine, transport, use and disposal of cleaning solvents, fuels, and other hazardous materials commonly associated with construction projects. All hazardous materials encountered or used during the grading/excavation, and construction activities would be handled in accordance with all applicable local, state, and federal regulations, which include requirements for disposal of hazardous materials at a facility licensed to accept such wastes. As such, impacts with respect to routine transport, use, and disposal of hazardous materials during construction would be less than significant.</p> <p><i>Operation</i></p> <p>During the operation of the proposed project, the proposed retail uses would require, at most, minimal amounts of hazardous</p>	<p>While project related impacts would be less than significant, the following Mitigation Measures are recommended to further reduce impacts.</p> <p>H-1 During site development, if historic septic systems or cesspools are discovered, they shall be abandoned by the project applicant in general accordance with current county and state regulations.</p>	Less than significant impact

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
<p>materials for routine cleaning and would not pose any substantial potential for accident conditions involving the release of hazardous materials. The proposed project would be required to comply with applicable local, state and federal regulations, regarding the storage and retail sale of potentially hazardous materials such as pesticides, fertilizers, and paint products at the project site. Transportation, storage, and disposal/recycling of such products are extensively regulated at the local, state, and federal levels. Further, the potential for explosion or release of pesticides, fertilizer, paint products, etc. available at retail outlets is considered to be negligible given that all materials would be pre-packaged in limited quantities for retail consumption and use. Therefore, potential impacts associated with the emission of hazardous materials during the operational phase of the proposed project would be less than significant.</p> <p><u>Wells</u></p> <p>Although not observed during the Phase I ESA, five obsolete wells were discovered while preliminary work was being performed on the project site. All five wells have been abandoned. Four of the wells have received Los Angeles County Department of Health Services permit approval and one has approval pending. Permit approval by the Los Angeles County Department of Health Services indicates that the well has been properly abandoned and would not have the potential to impact the project site. With approval from the Los Angeles County Department of Health Services impact would</p>		

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
<p>be less than significant.</p> <p><b><i>Sensitive Receptors, Including Schools</i></b></p> <p><i>Construction</i></p> <p>The project site is located immediately north of Quartz Hill High School (separated by Avenue L) as well as in the immediate vicinity of residences that have been identified as sensitive receptors with respect to hazardous materials. Additionally, as discussed above, during the temporary construction phase, the proposed project is anticipated to require the routine transport, use, and disposal of cleaning solvents, fuels, and other hazardous materials commonly associated with construction projects. All hazardous materials encountered or used during the grading/excavation, and construction activities would be handled in accordance with all applicable local, state, and federal regulations, which include requirements for disposal of hazardous materials at a facility licensed to accept such waste. With the implementation of the identified mitigation measures, such materials would not be expected to endanger sensitive receptors in the project vicinity. In addition, the transport of potentially hazardous materials off-site would be conducted in accordance with all applicable laws and regulations to ensure the health and safety of the general public as well as any sensitive receptors along the haul route, resulting in a less than significant impact.</p> <p><i>Operation</i></p>		

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
<p>The project site is located immediately north of Quartz Hill High School (separated by Avenue L) as well as in the immediate vicinity of residences that have been identified as sensitive receptors with respect to hazardous materials.</p> <p>Operation of the proposed project would not involve substantial quantities of hazardous materials. As such, no substantial quantities of hazardous materials would be used, transported or disposed of in conjunction with the routine day-to-day operations of the proposed project, and such materials would not be expected to endanger sensitive receptors in the project vicinity. Therefore, impacts would be less than significant.</p> <p><b><i>Hazardous Material Sites</i></b></p> <p>As discussed previously, the project site was not listed as a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, no impact would occur.</p> <p><b><i>Emergency Response/Evacuation</i></b></p> <p>Implementation of the proposed project would not substantially impede public access or travel upon public rights-of-way and would not interfere with any adopted emergency response plan or emergency evacuation plan. Furthermore, the construction phase of the proposed project would not substantially impede public access or travel on public rights-of-way, and would not interfere with any adopted emergency response plan or emergency evacuation plan.</p>		

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
No impact would occur to emergency response plans with implementation of the proposed project.		
<b>HYDROLOGY AND WATER QUALITY</b>		
<p><b>Water Quality</b></p> <p><i>Construction</i></p> <p>The proposed project would be required to implement a SWPPP. The SWPPP identifies which structural and nonstructural BMPs will be implemented, such as gravel bag barriers, temporary desilting basins, tracking controls, dust controls, employee training, masonry waste controls, spill prevention plans, litter controls, and general good housekeeping practices. In addition, the proposed project would be required to obtain a grading permit from the Department of Building and Safety, which would further ensure the implementation of BMPs related to water quality. With implementation of the applicable grading and building permit requirements and the application of BMPs, the proposed project would not violate any water quality standards or waste discharge requirements. Therefore, impacts on water quality from construction activities would be less than significant.</p> <p><i>Operation</i></p> <p>The project site is currently undeveloped, and as such, under existing conditions the project site is highly susceptible to erosion and sedimentation. The proposed development on the project site</p>	<p><b>Code Required</b></p> <p>The following measures are required by the SRWQCB for development projects like the proposed project. The analysis presented in the preceding sections assumes compliance with these requirements.</p> <p>I-1 The project applicant shall prepare and submit a Notice of Intent (NOI) to comply with the Construction General Permit to the State Water Resources Control Board.</p> <p>I-2 The project applicant shall prepare a Stormwater Pollution Prevention Plan (SWPPP) and erosion control plan per the requirements of the Construction General NPDES Permit.</p> <p>I-3 The project applicant shall implement the following SWPPP BMPs:</p> <ul style="list-style-type: none"> <li>• During construction and operation, all waste shall be disposed of in accordance with all applicable laws and regulations. Properly labeled</li> </ul>	Less than significant impact.

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
<p>would reduce the rate of erosion on the project site. While some infiltration through landscape areas would occur, the project site would primarily rely on the implementation of treatment control BMPs to control storm water runoff contamination. Runoff from the project site would also have the potential to create erosion off-site which would cause water quality impacts elsewhere. Proper management of the onsite water through BMPs would prevent this potential impact. With compliance with the CWA and the City’s municipal code, the proposed project would not violate any water quality standards or waste discharge requirements. Therefore, the project’s operational impacts would be less than significant.</p> <p><b>Groundwater</b></p> <p>Subsurface construction activities for the proposed project are anticipated to consist of relatively shallow excavations for building pads, foundations, and utilities. Based on the anticipated depth of these construction activities and reported depths to groundwater, the proposed project does not have the potential to intercept existing aquifers, nor would it involve additions (with the exception of normal water percolation from rainfall/landscape irrigation) or withdrawals of groundwater. In addition, as the project area receives little rainfall, it is not considered to be a substantial contribution to groundwater reserves in the project area, and the increase in impervious surfaces at the project site would not substantially interfere with groundwater recharge.</p>	<p>recycling bins shall be utilized for recyclable construction materials including solvents, water-based paints, vehicle fluids, broken asphalt and concrete, wood, and vegetation. Non-recyclable materials and wastes must be taken to an appropriate landfill. Toxic wastes must be discarded at a licensed, regulated disposal site by a licensed waste hauler.</p> <ul style="list-style-type: none"> <li>• All leaks, drips and spills occurring during construction shall be cleaned up promptly and in compliance with all applicable laws and regulations to prevent contaminated soil on paved surfaces that can be washed away into the storm drains.</li> <li>• If materials spills occur, they should not be hosed down. Dry cleaning methods shall be employed whenever possible.</li> <li>• Construction dumpsters shall be covered with tarps or plastic sheeting if left uncovered for extended periods. All dumpsters shall be well</li> </ul>	

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
<p><i>Drainage</i></p> <p>Currently, surface water runoff from the project site drains toward the northeasterly corner of the project site. The proposed project would alter the existing drainage patterns on the project site, as the site would be developed with pervious and impervious surfaces including structures, paved areas, and landscaping. As such, the proposed project would result in an increase in runoff from the site, with an overall increase in debris. The proposed runoff for the project has been determined (as shown in the drainage report contained in Appendix I), however, the outlet has not been determined at this time.</p> <p>The project applicant will be required to construct a 60-inch storm drain along the site in Avenue L (approximately 1300 feet in length). At the terminus, the drain will connect into a proposed storm drain, or outlet through an energy dissipater structure. All onsite runoff would be outletted into the proposed storm drain in Avenue L or the existing storm drain in 60<sup>th</sup> Street West, with the approval of the City Engineer.</p> <p>These improvements would assure that development of the proposed project would not redirect drainage patterns in a manner that would cause flooding or erosion elsewhere. In addition, as per the municipal code, the applicant would be required to pay drainage fees, which were established to provide planned drainage improvements in the project area. However, as the project applicant is installing the 60-inch storm drain which is a part of the storm</p>	<p>maintained.</p> <ul style="list-style-type: none"> <li>• The project applicant/developer shall conduct street sweeping and truck wheel cleaning to prevent dirt in storm water.</li> <li>• The project applicant/developer shall provide regular sweeping of private streets and parking lots with equipment designed for removal of hydrocarbon compounds.</li> <li>• The amount of exposed soil shall be limited and erosion control procedures implemented for those areas that must be exposed.</li> <li>• Grading activities shall be phased so that graded areas are landscaped or otherwise covered, as quickly as possible after completion of activities.</li> <li>• Appropriate dust suppression techniques, such as watering or tarping, shall be used in areas that must be exposed.</li> </ul>	

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
<p>drain system, the project applicant would get a credit against the drainage fees (the cost of the 60-inch storm drain exceeds the fees). Thus, the project's impacts would be less than significant.</p> <p><b>Flooding</b></p> <p>The project site is located in an area susceptible to flooding. However, as much of the City of Lancaster is within federally-designated flood zones, the risks associated with flooding at the project site is essentially the same as with most other areas of the City. However, as discussed above, the project applicant will install a 60-inch storm drain in lieu of paying drainage fees. Additionally, detailed plans for the project site would be submitted to the City as part of the development plan approval process prior to issuance of building and grading permits. Under the proposed project, most runoff from the site would be collected by drainage improvements which would then direct rainfall to the storm drain system and would therefore reduce the project site's contribution to the street flooding that occurs in the project area. The nearest 100-year FEMA flood zone is located approximately 1.5 miles to the southeast of the project site. As such, the project's impacts with respect to flooding would be less than significant.</p>	<ul style="list-style-type: none"> <li>• The area shall be secured to control off-site migration of pollutants.</li> <li>• Construction entrances shall be designed to facilitate removal of debris from vehicles exiting the site, by passive means such as paved/graveled roadbeds, and/or by active means such as truck washing facilities.</li> <li>• Truck loads shall be tarped.</li> <li>• Roadways shall be swept or washed down to prevent generation of fugitive dust by local vehicular traffic.</li> <li>• Simple sediment filters shall be constructed at or near the entrances to the storm drainage system wherever feasible.</li> </ul> <p><b>Project-Specific Mitigation Measures</b></p> <p>The following mitigation measures are required to mitigate projected increase of runoff from the site:</p> <p>I-4 The project applicant shall be required to construct the proposed 60-inch storm drain along the site in Avenue L. At the terminus, the</p>	

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	<p>drain shall connect into a proposed storm drain, or outlet through an energy dissipater structure. The onsite runoff can be outlletted into the proposed drain in Avenue L, or the existing storm drain in 60<sup>th</sup> Street West, with the approval of the City Engineer.</p> <p>I-5 Detention shall be required to reduce the post development runoff to 85 percent of the pre-development runoff rate. A basin shall be required to reduce the post-development runoff of 703 cfs to a total peak outflow of 24.9 cfs.</p>	
<b>LAND USE PLANNING</b>		
<p><b><i>Community Division</i></b></p> <p>The project site is situated at the northwest corner of 60<sup>th</sup> Street West and Avenue L, both of which are arterial streets. In addition, the project site is currently surrounded to the north and east by single-family residential neighborhoods and to the south by Quartz Hill High School. West of the project site is vacant land. Therefore, the proposed project would not physically divide any established community or uses and impacts would be less than significant.</p> <p><b><i>Conflict with any Applicable Conservation Plan or Natural Community Conservation Plan</i></b></p>	<p>No mitigation measures are required.</p>	<p>Less than significant impact</p>

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
<p>There are no habitat conservation plans or natural community conservation plans that are applicable to the proposed project. Therefore, the proposed project would not conflict with any habitat conservation plan or community conservation plan and impacts would be less than significant.</p> <p><b><i>Consistency with City of Lancaster-General Plan</i></b></p> <p>The City of Lancaster General Plan is a policy-planning document, which guides land uses in the City. The project applicant has requested a GPA. Existence of an inconsistency between a proposed project and an applicable general plan is a legal determination, vested in the City Council and subject to court review if challenged. Inconsistency is not an impact under CEQA – plan inconsistencies in and of themselves are not significant impacts on the environment under CEQA. The site redesignation and rezoning would not substantially conflict with applicable policies of the Lancaster General Plan and would work to implement a number of those policies.</p> <p><b><i>Consistency with City Zoning Classification</i></b></p> <p><b><i>Density</i></b></p> <p>The project site is approximately 40 acres and is zoned R-7,000 and R-10,000. The proposed project includes a request to rezone the project site to CPD. The proposed project would also request a Conditional Use Permit (CUP) for commercial development on a site larger than two acres. Therefore, development of 344,550</p>		

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
<p>square feet of commercial uses would be subject to approval by Planning Commission.</p> <p><i>Height</i></p> <p>The CPD zone has a maximum height limit of 50 feet or two stories. The proposed commercial buildings would have a maximum height of 38.5 feet with tower elements up to 41.6 feet in height. Final height is subject to approval by Planning Commission. Therefore, the proposed project would be within the allowable height limit for this zone.</p> <p><i>Setbacks</i></p> <p>The CPD zone has 30 feet setbacks for the Front Yard and Corner Side Yard. The commercial buildings have been proposed with these setbacks and would therefore be within the allowable setbacks for this zone subject to approval by Planning Commission.</p> <p><i>Consistency with Regional Comprehensive Plan and Guide (RCPG)</i></p> <p>The RCPG includes several policies which could be potentially applicable to the proposed project. The proposed Commons at Quartz Hill project would be consistent with the RCPG.</p> <p><i>Land Use Compatibility</i></p> <p>The GPA land use redesignation and rezoning of the project site</p>		

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
<p>from Urban Residential to Commercial would allow for the development of commercial/retail uses. The proposed structures are compatible with the surrounding one- to two-story residential and institutional buildings. In addition, developing residential neighborhoods surrounding the project site would benefit from a commercial project, which includes a Wal-Mart and other retail shops and restaurants. Through its proposed uses and architectural urban form, the proposed project would become fully integrated into the existing streetscape and community. In addition, as discussed above, the proposed general plan amendment and zone change would not introduce land uses that would be inconsistent with the policies and intent of the General Plan. Thus, no significant land use compatibility impacts related to the scale and massing of the proposed project would occur.</p>		
<b>NOISE</b>		
<p><b>Construction Noise</b></p> <p>Construction of the proposed project would require the use of heavy equipment for demolition, site grading, installation of utilities, paving, and building fabrication. Development activities would also involve the use of smaller power tools, generators, and other sources of noise. In general, the site preparation and grading activities at the project site, which would involve the use of scrapers, would generate the loudest noise levels during construction of the proposed project. The operation of scrapers could generate a maximum noise level of 86 dBA at 50 feet. The construction noise levels experienced by the off-site sensitive</p>	<p>No mitigation measures required.</p>	<p>Less than significant impact</p>

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
<p>receptors would range from 71.4 dBA L<sub>max</sub> at the single family residential uses to the east and north to 75.1 dBA L<sub>max</sub> at the nearest portions of Quartz Hill High School located to the south of the project site, with the use of mufflers on the construction equipment. for single-family residences and schools, the maximum allowable construction noise level would be 80 dBA. Therefore, significant short-term noise impacts from construction would not occur at any off-site locations as construction noise levels would not exceed 80 dBA and these construction noise impacts would be less than significant.</p> <p><b><i>Construction-Related Groundborne Vibration</i></b></p> <p>Construction activities that would occur within the project site would include grading, which would have the potential to generate low levels of groundborne vibration. The existing off-site sensitive uses could be exposed to groundborne vibration levels ranging from up to 76.1 VdB at Quartz Hill High School to up to 77.4 VdB at the single-family residences located to the east and north of the project site. As the identified off-site sensitive receptors are located at a distance where the vibration levels from the project site would be attenuated to a level below the Federal Railway Administration’s thresholds of 80 VdB for residences and 83 VdB for institutional uses, the vibration impact at these off-site sensitive uses would be considered less than significant.</p> <p><b><i>Operational Noise – Vehicular (Weekday)</i></b></p>		

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
<p>Long-term noise concerns from the development of the proposed project may have the potential to affect offsite locations, resulting primarily from vehicular traffic utilizing the local roadways along affected roadway segments analyzed in the project traffic study. The proposed project would increase local noise levels by a maximum of 1.8 dBA CNEL for the roadway segments of 60th Street West, north of Avenue J, when compared with the future weekday traffic volumes without the project. Because this is below the 3.0 dBA threshold, this impact would be less than significant.</p> <p><b><i>Operational Noise – Vehicular (Saturday)</i></b></p> <p>Similar to the weekday peak hour, long-term noise concerns from the development of the proposed project may have the potential to affect offsite locations, resulting primarily from vehicular traffic utilizing the local roadways along affected roadway segments analyzed in the project traffic study during the Saturday peak hour. The proposed project would increase local noise levels by a maximum of 1.8 dBA CNEL for the roadway segment of Avenue M, east of 60th Street West , when compared with the future weekend traffic volumes without the project. Because this is below the 3.0 dBA threshold, this impact would be less than significant.</p> <p><b><i>Operational Noise - Periodic</i></b></p> <p><b><i>Loading Dock and Solid Waste Collection Noise</i></b></p> <p>Intermittent noise levels would occur in association with delivery vehicle operations, loading dock activities and solid waste</p>		

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
<p>collection for the proposed commercial/retail uses at the project site. The loading docks and trash collection equipment would be located on the backside of the proposed retail centers with ingress and egress points for delivery trucks and trash collection trucks located along 60<sup>th</sup> Street and the proposed Avenue K-12. The noise levels generated by loading dock activities involving small to large-sized delivery trucks at the proposed loading dock with an estimated 70 to 75 dBA at 50 feet, as well as trash collecting activities, would therefore, not exceed the maximum noise level allowed for single events at the single-family residences.</p> <p><i>HVAC</i></p> <p>Temporary or periodic increases in ambient noise levels may occur from the heating, ventilation, and air conditioning (HVAC) systems which may be installed for the new residential buildings located within the project site. The noise levels from these systems could be reduced to approximately 50 dBA L<sub>eq</sub> at 50 feet from the equipment. The shielding installed around these systems would typically reduce noise levels by approximately 15 dBA. Therefore, these future noise levels would be similar to existing noise levels. As such, impacts from commercial HVAC units would be less than significant.</p>		
<b>POPULATION AND HOUSING</b>		
<p><b><i>Extension of Infrastructure</i></b></p> <p>The vicinity of the project site is a rapidly urbanizing area of the</p>	<p>No mitigation measures are required.</p>	<p>Less than significant impact.</p>

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
<p>City of Lancaster. It is possible that construction of the proposed project could result in the need for the extension of roads or other infrastructure to the site. If extensions of infrastructure are required as a result of the proposed project, the project applicant would be responsible for these upgrades. As such, potential indirect impacts to population growth in the area would be less than significant.</p> <p><b>Construction</b></p> <p>Construction of the proposed project is expected to last for approximately 12 months and would result in increased employment opportunities in the construction field, which could potentially result in increased permanent population and demand for housing in the vicinity of the project site. However, the employment patterns of construction workers in Southern California are such that it is not likely that they would relocate their households as a consequence of the construction employment associated with the project site. Therefore, project-related construction workers would not be likely to relocate their place of residence as a consequence of working on the proposed project site, and significant housing or population impacts would not result from construction of the project.</p> <p><b>Operation</b></p> <p><b>Employment</b></p> <p>Operation of the proposed project, consisting of approximately 344,550 square feet of commercial development, and according to</p>		

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
<p>the economic impact analysis prepared for the proposed project, would provide full and part time employment for approximately 927 persons. SCAG predicts approximately 7,565 new jobs in the City of Lancaster between 2000 and 2010. The proposed project's estimated employment generation therefore represents approximately 12 percent of this increase. .As the proposed project requires a zone change and General Plan Amendment to allow for commercial uses on the project site, the job producing potential of the project site was not likely considered by SCAG in determining job projections. However, as discussed in the economic impact analysis, there is currently a job/housing imbalance in the City of Lancaster with an expected 40 percent growth in housing and only 14.5 percent growth in jobs. As the estimated employment generation of the project site represents approximately 12 percent of the increase forecast by SCAG, and as the jobs generated by the proposed project would lessen the current job/housing imbalance, the jobs created by the proposed project would result in a beneficial impact. Therefore, as the employment generation of the proposed project is within the SCAG projections, and as the jobs generated by the proposed project would help remedy the current job/housing imbalance, the proposed project would result in a less than significant impact regarding employment.</p> <p><i>Housing</i></p> <p>The proposed project would not include development of any housing units. The proposed project is expected to generate approximately 927 new jobs compared to current conditions on the</p>		

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
<p>project site. Typical skills required for many of the uses proposed by the project (i.e., retail, restaurant, fast food) are of the type that are filled by workers and students who are already present in the local labor force. It is reasonable to expect, therefore, that many of the new employees would be drawn from the local labor force and student population readily available in the immediate area and surrounding communities. In addition, the Related Projects listing includes 78 new housing developments (of the 82 related projects) which would add an additional 11,130 homes in the project area, potentially adding an additional 34,069 residents in the project vicinity. Furthermore, there is currently a job/housing imbalance in the City of Lancaster with an expected 40 percent housing growth and only a 14.5 percent job growth. As such, the employment opportunities generated as a result of the proposed project would actually help offset the current job/housing imbalance. Therefore the proposed project would not result in a direct demand for new housing in the area beyond that which is already proposed and as such, impacts regarding housing would be less than significant.</p> <p><i>Population</i></p> <p>The proposed project would develop approximately 344,550 square feet of commercial/retail uses; the proposed project would not include the development of residential uses and therefore would not directly induce population growth. The jobs created by the proposed project would not likely create a demand for additional housing in the project vicinity, and similarly would not result in population growth. Thus, the proposed project would not result in a</p>		

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
direct increase in population and impacts regarding population would be less than significant.		
<b>PUBLIC SERVICES-FIRE PROTECTION</b>		
<p><b>Construction</b></p> <p>Construction of the proposed project would increase the potential for accidental on-site fires from such sources as the operation of mechanical equipment, use of flammable construction materials, and from carelessly discarded cigarettes. In most cases, the implementation of “good housekeeping” procedures by the construction contractors and the work crews would minimize these hazards. Construction activities also have the potential to affect fire protection services, such as emergency vehicle response times, by adding construction traffic to the street network and by partial lane closures during street improvements and utility installations. These impacts, while potentially adverse, are considered to be less than significant because partial lane closures would not greatly affect emergency vehicles, the drivers of which normally have a variety of options for avoiding traffic, such as using their sirens to clear a path of travel or driving in the lanes of opposing traffic. Project construction would not be expected to tax fire fighting and emergency services to the extent that there would be a need for new or expanded fire facilities, in order to maintain acceptable service ratios, response times, or other performance objectives of the LACFD. Therefore, construction-related impacts to fire protection services would be less than significant.</p>	<p>The following mitigation measures are required to ensure impacts to fire protection are less than significant.</p> <p>M.1-1 The development of this project shall comply with all applicable code and ordinance requirements for construction, access, water mains, fire flows and fire hydrants.</p> <p>M.1-2 Every building constructed shall be accessible to Fire Department apparatus by way of access roadways, with an all-weather surface of not less than the prescribed width. The roadway shall be extended to within 150 feet of all portions of the exterior walls when measured by an unobstructed route around the exterior of the building.</p> <p>M.1-3 Fire sprinkler systems are required in most commercial occupancies. For those occupancies not requiring fire sprinkler systems, fire sprinkler systems shall be installed. This will reduce potential fire</p>	Less than significant impact

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
<p><i>Operational</i></p> <p><i>Response Distance</i></p> <p>As previously mentioned, the project site is within a 1.8-mile radius of a LACFD fire station housing a Fire Engine Company and Fire Squad. In addition, the project site is within a 4-mile radius of a LACFD fire station housing another Fire Engine Company and USAR Engine Company. The proposed project’s distance from these fire stations does not meet the LACFD’s requirement of one mile for an engine company. The Fire Department’s current facilities plan includes a future fire station in the vicinity of Avenue K and 70<sup>th</sup> Street; however, the station is not currently funded for construction. Therefore, the project site’s proximity to its jurisdictional fire station is inadequate and is considered a potentially significant impact. As the proposed project is not within LACFD’s required distance, the project applicant will therefore be required to install a fire sprinkler system, in which to stop the spread of a fire before the LACFD could arrive. The construction of a new fire station would require a separate environmental review process outside of the EIR to evaluate the potential effects of the proposed new fire station.</p> <p><i>Emergency Access</i></p> <p>As discussed in Section IV.A, Impacts Found To Be Less Than Significant, traffic impacts during operation of the proposed project would not result in a significant impact on any nearby roadways or</p>	<p>and life losses.</p> <p>M.1-4 The development may require fire flows up to 5,000 gallons per minute at 20 pounds per square inch residual pressure for up to a five-hour duration. Final fire flows will be based on the size of the buildings, their relationship to other structures, property lines, and types of construction used.</p> <p>M.1-5 Fire hydrant spacing shall be 300 feet and shall meet the following requirements:</p> <ul style="list-style-type: none"> <li>a. No portion of lot frontage shall be more than 200 feet via vehicular access from a public fire hydrant.</li> <li>b. No portion of a building shall exceed 400 feet via vehicular access from a properly spaced fire hydrant.</li> <li>c. Additional hydrants will be required if hydrant spacing exceeds specified distances.</li> <li>d. When cul-de-sac depth exceeds 200 feet on a commercial street, hydrants shall be required at the corner and</li> </ul>	

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
<p>intersections, which could thereby impede emergency access. The proposed project would not involve any other activities during its operational phase that could impede public access or travel upon public rights-of-way or would interfere with an adopted emergency response or evacuation plan. Thus, project implementation would not require the construction or expansion of fire stations or other fire protection facilities and impacts would be less than significant.</p> <p><i>Fire Flows</i></p> <p>The Waterworks Division of the Los Angeles County Department of Public Works would perform a fire flow study at the time of permit review in order to ascertain whether further water system or site-specific improvements would be necessary. Hydrants, water lines, and water tanks would be installed per Fire Code requirements and would be based upon the specific land uses of the proposed project. Therefore, with respect to fire flows, fire protection would be adequate.</p> <p><i>LACFD Review</i></p> <p>Based on the existing staffing levels, equipment, facilities, and most importantly, response distance from existing stations, LACFD would not be able to accommodate the proposed project's demand for fire protection service without the addition of manpower, equipment and facilities. With the payment of the required developer fees, the impacts to LACFD would be less than significant.</p>	<p>mid-block.</p> <p>e. A cul-de-sac shall not be more than 500 feet in length, when serving land zoned for commercial use.</p> <p>M.1-6 Turning radii shall not be less than 32 feet. This measurement shall be determined at the centerline of the road. A Fire Department approved turning area shall be provided for all driveways exceeding 150 feet in length and at the end of all cul-de-sacs.</p> <p>M.1-7 All on-site driveways/roadways shall provide a minimum unobstructed width of 28 feet, clear-to-sky. The on-site driveway is to be within 150 feet of all portions of the exterior wall of the first story of any building. The centerline of the access driveway shall be located parallel to, and with 30 feet of an exterior wall on one side of the proposed structure.</p> <p>M.1-8 Driveway width for non-residential developments shall be increased when any of the following conditions will exist:</p> <p>a. Provide 34 feet in width, when parallel</p>	

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	<p>parking is allowed in one side of the access roadway/driveway. Preference is that such parking is not adjacent to the structure.</p> <p>b. Provide 42 feet in width, when parallel parking is allowed on each side of the access roadway/driveway.</p> <p>c. Any access way less than 34 feet in width in width shall be labeled “Fire Lane” on the final recording map, and final building plans.</p> <p>d. For streets or driveway with parking restrictions: The entrance to the street/driveway and intermittent spacing distances of 150 feet shall be posted with Fire Department approved signs stating “NO PARKING – FIRE LANE” in three-inch high letters. Driveway labeling is necessary to ensure access for Fire Department use.</p> <p>M.1-9 Prior to the issuance of a building permit, the project applicant shall pay fire protection fees to the City of Lancaster pursuant to Section 15.76 of the Municipal</p>	

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	Code.	
<b>PUBLIC SERVICES-POLICE PROTECTION</b>		
<p><b>Construction Impacts</b></p> <p>Construction sites can be sources of attractive nuisances, providing hazards, and inviting theft and vandalism. Therefore, when not properly secured, construction sites can become a distraction for local law enforcement from more pressing matters that require their attention. Consequently, developers typically take precautions to prevent trespassing through construction sites. As such, temporary fencing would be installed around the construction site to keep out unauthorized persons. Construction of the proposed project is not expected to cause significant congestion at the local study intersections. Although minor traffic delays may occur during construction, particularly during the construction of utilities and street improvements, impacts to police response time would be minimal and temporary. Therefore, the proposed project's construction-related impacts to police protection services would be less than significant.</p> <p><b>Long-Term Operational Impacts</b></p> <p>As the project site is currently undeveloped, the proposed project is expected to create a substantial increase of activity on the project site. Thus, an increase in the demand for police protection services is anticipated. The juxtaposition of the proposed project near sensitive uses such as residences and schools could potentially</p>	<p>The following mitigation measures are recommended to ensure impacts to police protection services are less than significant.</p> <p><b>Construction Impacts</b></p> <p>M.2-1 The applicant shall fence off the project site during the construction phase.</p> <p><b>Operational Impacts</b></p> <p>M.2-2 The building and layout design of the proposed project shall include crime prevention features, such as nighttime security lighting, and building security systems.</p>	<p>Less than significant impact.</p>

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

<b>Environmental Impact</b>	<b>Mitigation Measures</b>	<b>Level of Impact After Mitigation</b>
<p>result in additional crime to the area. While there is not a directly proportional relationship between increases in land use activity and increases in demand for police protection services, the number of requests for assistance for police response to retail burglaries, vehicle burglaries, damage to vehicles, traffic-related incidents, and crimes against persons would be anticipated to increase with the greater onsite activity and increased traffic on adjacent streets and arterials. The LACSD has stated that the Lancaster Station is staffed and equipped to provide full service to the City of Lancaster, which includes the project site, and that the proposed project would not result in the need for construction or expansion of police stations or other police protection facilities to maintain current service demand, the construction of which could cause a significant environmental impact. As such, no new or expanded police stations would be needed as a result of the proposed project, and there would be no long-term operational impacts to police protection services. Therefore, impacts would be less than significant.</p>		
<b>PUBLIC SERVICES-SCHOOLS</b>		
<p>The proposed commercial uses are estimated to generate a total of 11 elementary students, seven middle school students, and two high school students. Only Joe Walker Middle School would have adequate capacity to accommodate the students generated by the proposed project. Therefore impacts would be less than significant with respect to Joe Walker Middle School. However, Quartz Hill Elementary School and Quartz Hill High School are currently operating over the design enrollment capacity, and the addition of project-generated students would result in a potentially significant</p>	<p>No mitigation measures required..</p>	<p>Less than significant impact</p>

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
<p>impact. In addition, as AVUHSD has adopted school fees, the proposed project would be required to pay school fees as per SB 50. The payment of which is considered to provide full and complete mitigation of school facilities impacts. With payment of the required fees, impacts to schools would be less than significant.</p>		
<b>PUBLIC SERVICES-PARKS</b>		
<p>Typically, residential developments have the greatest potential to result in impacts to parks and recreation facilities. This is a result of residential developments generating a permanent increase in the population. In general, employees are not likely to have the time to use parks and recreational facilities during working hours, and are more likely to use parks and recreational facilities near their homes during non-work hours. George Lane Park is less than one mile from the project site. However, it is unlikely that employees would have time to travel to a park during work hours. The proposed project would not result in an increase of permanent residents to the project site, as is discussed in Section IV.L, Population and Housing. Therefore the proposed project is not likely to increase park usage. Although there is a need for increased parkland in the Lancaster area, the proposed project would not contribute to this deficit and therefore would result in no impact with respect to parks and recreational facilities.</p>	<p>No mitigation measures required.</p>	<p>Less than significant impact</p>
<b>PUBLIC SERVICES-LIBRARY</b>		
<p>Development of the proposed project is a commercial development and would not bring new permanent residents to the area as discussed in Section IV.L, Population and Housing. The proposed</p>	<p>No mitigation measures required.</p>	<p>Less than significant impact</p>

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
<p>project would result in a net increase of 927 employees; however, in general, employees of commercial sites are not likely to patronize libraries during working hours, as they are more likely to use libraries near their homes during non-work hours. Therefore, the proposed project would not generate the need for additional library space or the addition of volumes to the library collection. As the proposed project would not require the need for new or altered library facilities, the proposed project would result in no impact with respect to library facilities.</p>		
<b>TRANSPORTATION AND TRAFFIC</b>		
<p><b><i>Trip Generation</i></b></p> <p>Since both Avenue L and 60<sup>th</sup> Street West are arterial roadways, it would be reasonable to assume that some of the patrons to the shopping center would already be utilizing the roadways (not new vehicle trips) on the way to/from other destinations and make a stop at the project as part of another trip. The proposed project would be expected to add an average of 17,076 daily vehicle trips with 670 weekday AM peak hour trips, 1,528 weekday PM peak hour trips, and 2,012 midday Saturday trips to the roadway network.</p> <p><b><i>Future with Project Traffic Volumes</i></b></p> <p>Many of the intersections operate at poor levels of service in the “without project” condition where considered projects are incorporated into the analysis but any traffic improvements required of them are not. The addition of the project traffic further degrades</p>	<p>The following improvements are required to mitigate traffic impacts to less than significant levels. The applicant shall pay their fair share of the improvements as determined by the Director of Public Works.</p> <p><b><u>60<sup>th</sup> Street West and Avenue J</u></b></p> <p>N-1      Currently 60<sup>th</sup> Street West and Avenue J is not signalized. The intersection warrants a traffic signal in future conditions without and with the project. Therefore, the project applicant shall provide fair share contribution towards this improvement.</p> <p>N-2      Currently the southbound direction provides a left turn lane and a shared lane for the through and right turn directions. The project applicant</p>	<p>Less than significant impact.</p>

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
<p>the traffic conditions. Traffic mitigation has been identified which will reduce the significant impact to a level of insignificance if sufficient right of way is available.</p> <p><b>Street Segment Analysis</b></p> <p>The combined project will create a significant impact along all of the roadway segments with the project based upon the impact criteria established by the County of Los Angeles. The impact criteria is the percentage increase in the passenger cars per hour by the project based on the pre-project LOS C cannot exceed 4%, cannot exceed 2% at pre-project LOS D, or cannot exceed 1% with a pre-project LOS of E or F. All of the existing conditions are at LOS A. All of the pre-project levels of service and future with project conditions exceed the above LOS requirements. However, these impacts can be mitigated to a level of insignificance through roadway widening and improving mass transit amenities in the immediate area.</p> <p><b>Access and Parking</b></p> <p>City of Lancaster Municipal Code 17.12.220(E) dictates that shopping centers provide five spaces per 1,000 square feet of floor area when the land area is over two acres unless the eating, drinking, or entertainment venues exceed 10% of the overall development. The project proposes 1,728 parking stalls in the current concept plan. The proposed project would exceed the City’s parking requirement by five parking spaces. No potential parking</p>	<p>shall provide fair share contribution for a second southbound through lane.</p> <p><b><u>60<sup>th</sup> Street West and Avenue J-8</u></b></p> <p>N-3 Currently 60<sup>th</sup> Street West and Avenue J-8 is not signalized. The intersection warrants a traffic signal in future conditions without and with the project. The southbound and eastbound directions currently provide a left, through, and right turn lane. The project applicant shall provide fair share contribution for a second southbound through lane.</p> <p><b><u>60<sup>th</sup> Street West and Avenue K</u></b></p> <p>N-4 Currently the southbound 60<sup>th</sup> Street West lane configuration at Avenue K provides a single left, through, and right turn lane. The project applicant shall provide fair share contribution for a second southbound through lane.</p> <p>N-5 Currently the westbound direction provides a single left, through, and right turn lane. The project applicant shall provide fair share contribution for a second westbound left turn lane.</p>	

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
<p>impacts are anticipated with the project.</p> <p><b><i>Impacts on Regional Transportation System</i></b></p> <p>For purposes of the CMP, a substantial change in freeway segments are defined as an increase 2% in the demand to capacity ration and a change in LOS. In general, a CMP traffic impact analysis is required if a project will add 150 or more trips, in either direction during either the AM or PM weekday peak hour. A freeway evaluation was conducted and shows a 1.1% increase at LOS D in traffic on the Antelope Valley Freeway (14 Freeway) in Table 13 of the traffic study (included as Appendix K to this Draft EIR). No freeway impacts are therefore anticipated as a result of the proposed project.</p> <p>The CMP also indicates that CMP monitoring locations be evaluated for significant traffic impacts if 50 or more trips will travel through the location during the morning or afternoon peak periods. There are no CMP roadway segments or intersections near the project site, and as such, no impact would occur.</p> <p><b><i>Transit</i></b></p> <p>The proposed project is forecast to generate approximately 13,658 weekday daily trips with 296 trips during the AM peak hour and 1,274 trips during the PM peak hour. As per CMP 2004 guidelines, person trips can be estimated by multiplying the total trips generated by 1.4. The transit route fronting the project is Route 7 along 60<sup>th</sup> Street West. The established bus route operates</p>	<p><b><u>60<sup>th</sup> Street West and Avenue K-8</u></b></p> <p>N-6 Currently 60<sup>th</sup> Street West and Avenue K-8 is not signalized. The intersection warrants a traffic signal in future conditions without and with the project. The project applicant shall provide fair share contribution towards this improvement.</p> <p>N-7 Currently the southbound direction provides a single left, two through lanes, and right turn lane. The project applicant shall provide fair share contribution for a second northbound through lane.</p> <p><b><u>60<sup>th</sup> Street West and Avenue K-12</u></b></p> <p>N-8 Currently 60<sup>th</sup> Street West and Avenue K-12 is not signalized. The intersection warrants a traffic signal in future conditions without and with the project. The project applicant shall provide fair share contribution towards this improvement.</p> <p>N-9 Currently the northbound direction provides a through lane and a right turn lane. Future conditions with other projects indicate a need for a fourth leg to the intersection. The project applicant shall provide fair share contribution</p>	

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
<p>approximately once per hour during the peak hours. The additional ridership may constitute a burden on the existing system necessitating a reduced headway and/or more frequent stops in the project area.</p>	<p>towards a second northbound through lane.</p> <p><b><u>60<sup>th</sup> Street West and Avenue L</u></b></p> <p>N-10 Currently 60<sup>th</sup> Street West and Avenue L is signalized. The northbound direction currently provides a left, through, and right turn lane. The project applicant shall provide fair share contribution to a second northbound through lane. Currently southbound 60<sup>th</sup> Street West at Avenue L provides a left turn lane, a through lane with the curb lane wide enough to provide a right turn movement out of the through lane. The southbound and eastbound ultimate roadway improvements were incorporated into this analysis. However, the project applicant shall provide fair share contribution toward an additional northbound through lane.</p> <p><b><u>60<sup>th</sup> Street West and Avenue L-4</u></b></p> <p>N-11 Currently 60<sup>th</sup> Street West and Avenue L-4 is not signalized. The intersection warrants a traffic signal in future conditions without and with the project. The project applicant shall provide fair share contribution towards this improvement.</p> <p>N-12 Currently, the northbound direction provides a left turn lane and a through lane. The project</p>	

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	<p>applicant shall provide fair share contribution to a second northbound through lane.</p> <p><b><u>60<sup>th</sup> Street West and Avenue L-8</u></b></p> <p>N-13 Currently 60<sup>th</sup> Street West and Avenue L-8 is signalized. The northbound direction provides a left turn lane, a through lane, and a right turn lane. The project applicant shall provide fair share contribution to a second northbound through lane.</p> <p><b><u>60<sup>th</sup> Street West and Avenue M/Columbia</u></b></p> <p>N-14 Currently 60<sup>th</sup> Street West and Avenue M/Columbia is not signalized. The intersection warrants a traffic signal in future conditions without and with the project. The project applicant shall provide fair share contribution towards this improvement.</p> <p>N-15 The north and eastbound directions provide a single travel lane. The westbound direction provides a shared through/left turn lane and right turn lane and the southbound direction provides a left and shared through/right turn lane. The lanes should be changed to provide left turn lanes in all directions with a second northbound through lane and in the westbound direction a</p>	

**Table I-1 (Continued)**  
**Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	<p>left, through, through/right, and right turn lane. The project applicant shall provide a fair share contribution to this improvement.</p> <p><b><u>70<sup>th</sup> Street West and Avenue L</u></b></p> <p>N-16 Currently 70<sup>th</sup> Street West and Avenue L is not signalized. The intersection warrants a traffic signal in future conditions. The project applicant shall provide fair share contribution towards this improvement.</p> <p><b><u>65<sup>th</sup> West and Avenue L</u></b></p> <p>N-17 Currently 65<sup>th</sup> Street West at Avenue L is a single lane in the northbound direction. The project applicant shall provide fair share contribution to the separation of the right and left turn moves in the northbound lane, to their own lanes.</p> <p><b><u>55<sup>th</sup> Street West and Avenue L</u></b></p> <p>N-18 Currently 55<sup>th</sup> Street West and Avenue L is not signalized. The intersection warrants a traffic signal in future conditions without and with the project. The project applicant shall provide fair share contribution towards the improvement.</p>	

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	<p>N-19 Currently the eastbound direction is a single lane and the westbound direction provides a through and right turn lane. The project applicant shall provide fair share contribution toward a second east and westbound through lane.</p> <p><b><u>50<sup>th</sup> Street West and Avenue L</u></b></p> <p>N-20 Currently This intersection is currently signalized. Currently, there are single through lanes in the east and westbound direction. The project applicant shall provide fair share contribution toward an additional east and westbound through lane.</p> <p><b><u>45<sup>th</sup> Street West and Avenue L</u></b></p> <p>N-21 This intersection is currently signalized. Currently there is a single through lane in the eastbound direction. and westbound direction at 45<sup>th</sup> Street West. The project applicant shall provide fair share contribution toward an additional eastbound through lane.</p> <p><b><u>40<sup>th</sup> Street West and Avenue L</u></b></p> <p>N-22 This intersection is currently signalized. A single through lane is provided in the eastbound direction. The project applicant shall provide fair</p>	

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
	<p>share contribution toward an second eastbound through lane.</p> <p><b><u>Street Segments</u></b></p> <p>N-23 The addition of one to three lanes will reduce the significant impacts along the study street segments. The project applicant shall provide fair share contribution to the improvement of Avenue L between 55<sup>th</sup> Street West to 60<sup>th</sup> Street West for three additional lanes, from 60<sup>th</sup> Street West to 62<sup>nd</sup> Street West for two additional lanes, and from 62<sup>nd</sup> Street West to 65<sup>th</sup> Street West for one additional lane. The project applicant shall provide fair share contribution to the improvement of 60<sup>th</sup> Street West between Avenue K-8 and Avenue L-8 for three additional lanes.</p>	
<b>UTILITIES-WASTEWATER</b>		
<p>The proposed project is estimated to generate a total of 47,321 gpd or 0.05 mgd. This increase in wastewater generation is well within the 16 mgd of wastewater that the LWRP currently is able to process. According to the Los Angeles County Sanitation Districts, the project site's contribution of sewage to the wastewater flows would continue to be served by the existing local sewers and the trunk sewer line conveying wastewater from the project site. Wastewater would continue to be conveyed to the Lancaster Water</p>	<p>No mitigation measures required.</p>	<p>Less than significant impact.</p>

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
<p>Reclamation Plant. As part of the proposed project permitting process, the project applicant would verify with the Los Angeles County Sanitation Department the 15-inch trunk line capacity. Furthermore, the WRP is currently upgrading its facilities to accommodate the growing demand for treatment services at its plant by adding another 2 million gpd in capacity. The WRP upgrade will also undergo the necessary CEQA process to complete its project outside of the context of this project. Furthermore, the County Sanitation Districts are empowered by the California Health and Safety Code to charge a fee for the privilege of connecting (directly or indirectly) to the Districts' sewerage system or increasing the existing strength and/or quantity of wastewater attributable to a particular parcel. This connection fee is required to construct an incremental expansion of the sewerage system to accommodate the proposed project, which will mitigate the impact of this project on the present sewerage system. As such, project impacts to wastewater conveyance infrastructure and treatment capacity would be less than significant.</p>		
<b>UTILITIES-WATER</b>		
<p><b>Water Supplies</b></p> <p>The proposed project is anticipated to consume approximately 56,785 gallons per day (gpd) of water. As such, impacts related to water supplies would be less than significant. According to the 2005 Integrated Urban Water Management Plan for the Antelope Valley, all water purveyors, including District 40 which serves the City of Lancaster, will have enough water supplies to meet the</p>	<p>The following mitigation measures are required to reduce the project's impacts on water supplies:</p> <p>O.2-1 The project developer shall ensure that the landscape irrigation system be designed, installed and tested to provide uniform irrigation coverage. Sprinkler head patterns shall be adjusted to minimize over spray onto walkways</p>	<p>Less than significant impact.</p>

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
<p>increasing demands projected through the year 2020 under an average water year assessment and through 2030 under single dry-year and multi dry-year water assessments. While the Urban Water Management Plan would have considered the site for residential uses (under the current zoning and general plan designation), the water demand for the proposed project would be similar as for a residential project on the site. As shown in Section VI Alternatives, the existing zoning alternative consisting of 197 single-family residences would create demand for 54,372 gallons per day, whereas the proposed project would create demand for 56,785 gallons per day. However, the pumping curtailments in the Sacramento Delta area have the potential to affect water supplies in all of Southern California including the project site, water would be supplied to the project site as part of the City of Lancaster’s water allotment from District 40. Therefore, as water supply can be verified for the proposed project, impacts with respect to water supply would be less than significant.</p> <p><b><i>Water Supply Infrastructure</i></b></p> <p>The water demands of the project site would be served by the existing water system and would comply with state and local water conservation measures. Los Angeles County Water Works undertakes expansion or modification of water service infrastructure to serve future growth in the City as these expansions or modifications are required in the normal process of providing water service. Furthermore, the Antelope Valley-East Kern Water Agency is upgrading the Quartz Hill Water Treatment Plant from</p>	<p>and streets.</p> <p>O.2-2 The project developer shall install either a “smart sprinkler” system to provide irrigation for the landscaped areas or, at a minimum, set automatic irrigation timers to water landscaping during early morning or late evening hours to reduce water losses from evaporation. Irrigation run times for all zones shall be adjusted seasonally, reducing water times and frequency in the cooler months (fall, winter, spring). Sprinkler timer run times shall be adjusted to avoid water runoff, especially when irrigating sloped property.</p> <p>O.2-3 The project developer shall select and use drought-tolerant, low-water-consuming plant varieties to reduce irrigation water consumption.</p> <p>O.2-4 The project developer shall install low-flush water toilets in new construction. Low-flow faucet aerators should be installed on all sink faucets.</p> <p>O.2-5 The City of Lancaster shall allocate water to the proposed project from the 1,000-acre feet of water allotted to the City from County Waterworks.</p>	

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
production capacities of 65 million gpd to 90 million gallons per day to accommodate the increase in demand in the City of Lancaster. The Antelope Valley-East Kern Agency will undergo the CEQA process for the above-mentioned upgrades outside the context of the proposed project. As such, impacts to water supply infrastructure would be less than significant.		
<b>UTILITIES-SOLID WASTE</b>		
<p><b>Construction Impacts</b></p> <p>Construction of the proposed project would generate solid waste (in the form of construction debris) that would need to be disposed of at area landfills. Construction debris includes concrete, asphalt, wood, drywall, metals, and other miscellaneous and composite materials. Much of this material would be recycled and salvaged to the maximum extent feasible. Materials not recycled would be disposed of at local landfills. Because there would be no demolition involved, combined with the recycling of most of the solid waste generated by the construction phase, short-term construction impacts to landfills and solid waste service would be less than significant.</p> <p><b>Operational Impacts</b></p> <p>Over the long term, the proposed project would be expected to generate 1,723 pounds or 0.86 tons of solid waste per day. As discussed above, the AB 939 requirement to reduce the solid waste stream in landfills by 50 percent means that 862 pounds (1,723/2)</p>	No mitigation measures required.	Less than significant impact

**Table I-1 (Continued)  
Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
<p>or 0.43 tons must be recycled rather than disposed of in a landfill. The Lancaster Landfill and Recycling Center currently is permitted to accept 1,700 tons per day of solid waste and accepts approximately 1,500 tons per day. The project site would generate approximately 862 pounds per day, or 0.43 tons per day. This represents approximately 0.0003 percent of the sold waste the Lancaster Landfill and Recycling Center is currently permitted to take on a daily basis. Therefore, impacts associated with solid waste service would be less than significant.</p>		
<b>UTILITIES-NATURAL GAS</b>		
<p>The proposed project is estimated to generate a total of 33,307 cf per day. The Southern California Gas Company would have adequate supply and facilities to serve the proposed project. Therefore, the increase in natural gas consumption would be less than significant.</p>	<p>No mitigation measures required.</p>	<p>Less than significant impact</p>
<b>UTILITIES-ELECTRICITY</b>		
<p>The proposed project is estimated to consume a total of 14,118 kilowatt hours (kWh) per day. Southern California Edison undertakes expansion and/or modification of electricity distribution infrastructure and systems to serve future growth in the City of Lancaster as required in the normal process of providing electrical service. According to Southern California Edison, the current infrastructure and plans for expansion are adequate to accommodate the needs of the City of Lancaster through 2010. Impacts related to electrical power distribution would be addressed through this process. As such, impacts associated with electricity distribution</p>	<p>No mitigation measures required.</p>	<p>Less than significant impact.</p>

**Table I-1 (Continued)**  
**Summary of Environmental Impacts and Mitigation Measures**

Environmental Impact	Mitigation Measures	Level of Impact After Mitigation
infrastructure would be less than significant.		

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## II. PROJECT DESCRIPTION

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### A. PROJECT APPLICANT

The project applicant is Lancaster West 60<sup>th</sup>, LLC, located at 1801 Avenue of the Stars, Suite 920, Los Angeles, California.

### B. PROJECT LOCATION

The project site is located in the City of Lancaster, at the northwest corner of 60<sup>th</sup> Street West and Avenue L. The project site is bound by Avenue L to the south, 60<sup>th</sup> Street West to the east, an undeveloped lot to the west and undeveloped land followed by residential development to the north. The project site is approximately 4.5 miles west of the Antelope Valley Freeway (SR-14/SR-138) (see Figure II-1, Regional and Vicinity Location Map, and Figure II-2, Aerial Photograph). While the aerial photograph shows some structures on the south end of the site, all structures have since been demolished. Therefore, the project site is currently vacant and undeveloped.

### C. PROJECT CHARACTERISTICS

The proposed project, The Commons at Quartz Hill, (proposed project) would redesignate and rezone the property, and develop a commercial shopping center on the project site. The City of Lancaster General Plan designates the project site as Urban Residential (UR), and the zoning code designates the project site as Single-Family Residential, minimum lot size 7,000 square feet (R-7,000) and minimum lot size 10,000 square feet (R-10,000). The project site is currently undeveloped. A site-specific project description is provided below.

#### **Proposed Project**

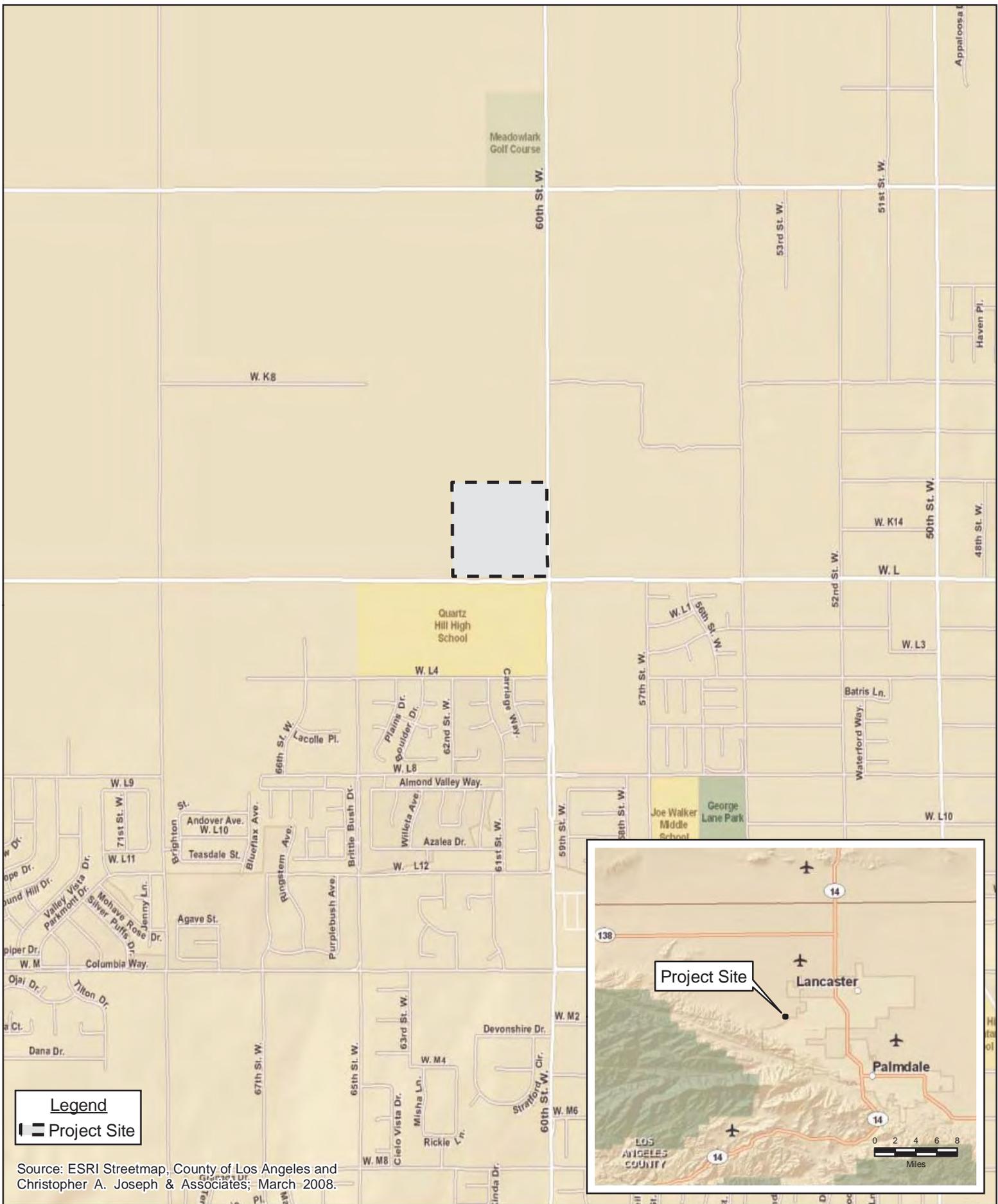
The proposed project would include a general plan amendment and zone change to redesignate the project site from UR to Commercial (C) and rezone the project site from R-7,000 and R-10,000 to Commercial Planned Development (CPD). The project site is approximately 40 acres. Development on the project site would include approximately 344,550 square feet of commercial retail and restaurant facilities. The two anchor tenants would be located on the west side of the project site, with loading docks located in the back of each building (at the westernmost portion of the project site). The inline retail structure and anchors would be oriented toward 60<sup>th</sup> Street West, pad buildings along the perimeter of the project site would front 60<sup>th</sup> Street West and wrap the corner to Avenue L, surface parking would be provided at the interior of the site. The only known tenant at this time for the project is a Wal-Mart Supercenter (Major 1 on the site plan). A project summary is provided in Table II-1.

**Table II-1  
Proposed Project Summary**

<b>Proposed Use</b>	<b>Size (square feet)</b>
Super Discount Store (Bldg 1)	195,906 sf
Fast Food (Bldgs 3, 5)	4,198 sf
Restaurant (Bldgs 6A, 6B)	11,095 sf
Pharmacy (Bldg 4)	14,470 sf
Retail (Bldgs 2, 6A, 8)	113,111 sf
Bank (Bldg 7)	5,500 sf
<b>Total</b>	<b>344,550 sf</b>

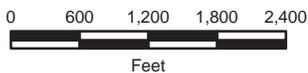
Development on the project site would include 1,728 parking spaces, and access to the development would be provided via both 60<sup>th</sup> Street West and Avenue L. The project site would include three driveway entrances along Avenue L and three driveways along 60<sup>th</sup> Street West. In addition, a proposed roadway, Avenue K-12 to the north, would provide additional access with two driveways. No demolition would occur as the project site is currently undeveloped. A conceptual site plan is provided in Figure II-3, Conceptual Site Plan, and elevations of the proposed Wal-Mart Supercenter (Major 1) are provided in Figure II-4.

The proposed Wal-Mart Supercenter would consist of all appurtenant structures and facilities and would offer general retail merchandise and groceries, including, without limitation, alcohol for off-site consumption, pool chemicals, petroleum products, pesticides, paint products, and ammunition. The proposed Wal-Mart Supercenter store may include a pharmacy, a vision care center, a food service center, a photo studio, a photo finishing center, a banking center, an arcade, a garden center, outdoor sale facilities, outside container storage facilities, and rooftop proprietary satellite communication facilities. The proposed Wal-Mart Supercenter would operate 24 hours per day.

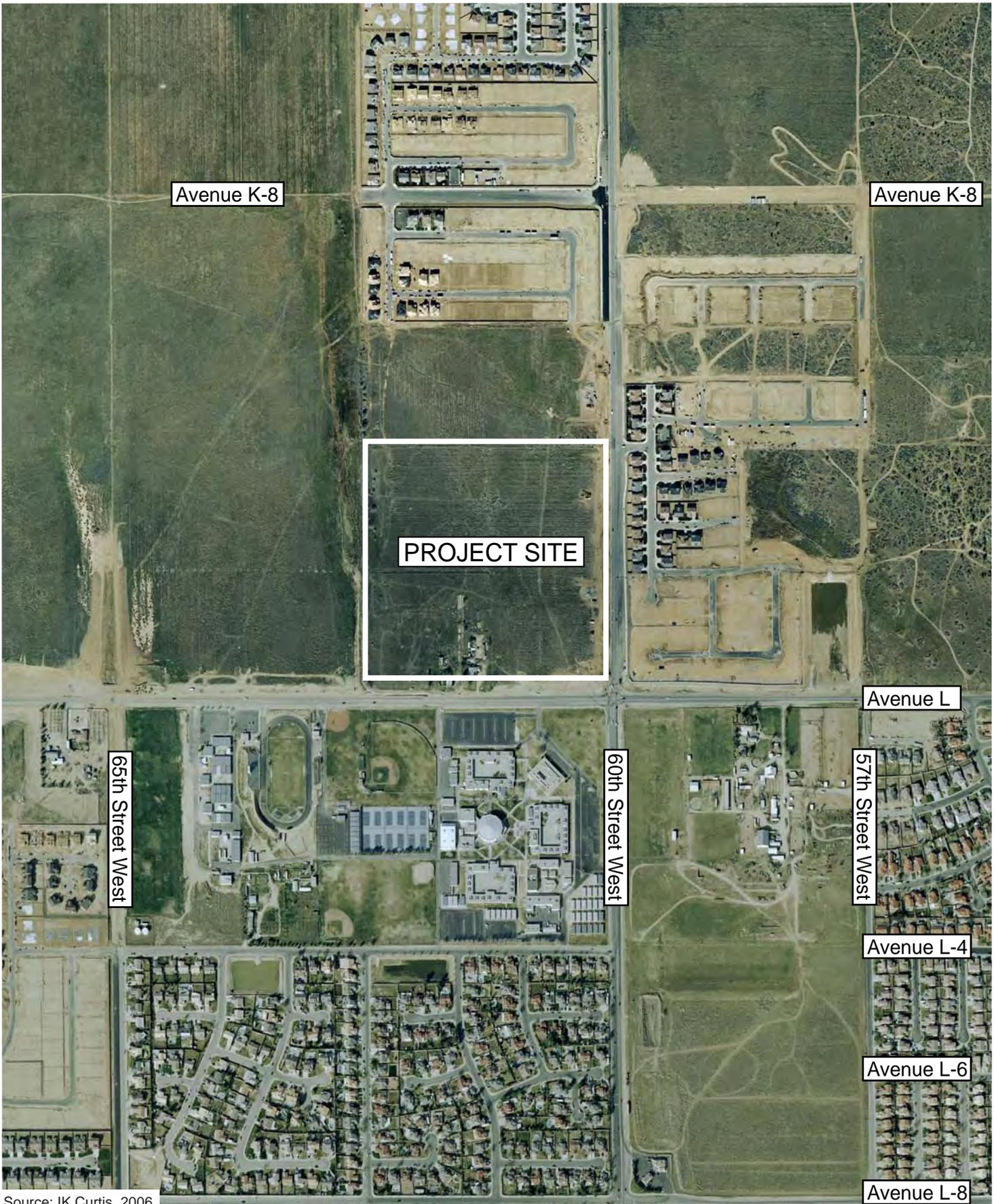


**Legend**  
 Project Site

Source: ESRI Streetmap, County of Los Angeles and Christopher A. Joseph & Associates; March 2008.



**Figure II-1**  
 Regional and Project Vicinity Map



Avenue K-8

Avenue K-8

PROJECT SITE

Avenue L

65th Street West

60th Street West

57th Street West

Avenue L-4

Avenue L-6

Avenue L-8

Source: IK Curtis, 2006.



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0 250 500 750 1000  
Scale (Feet)

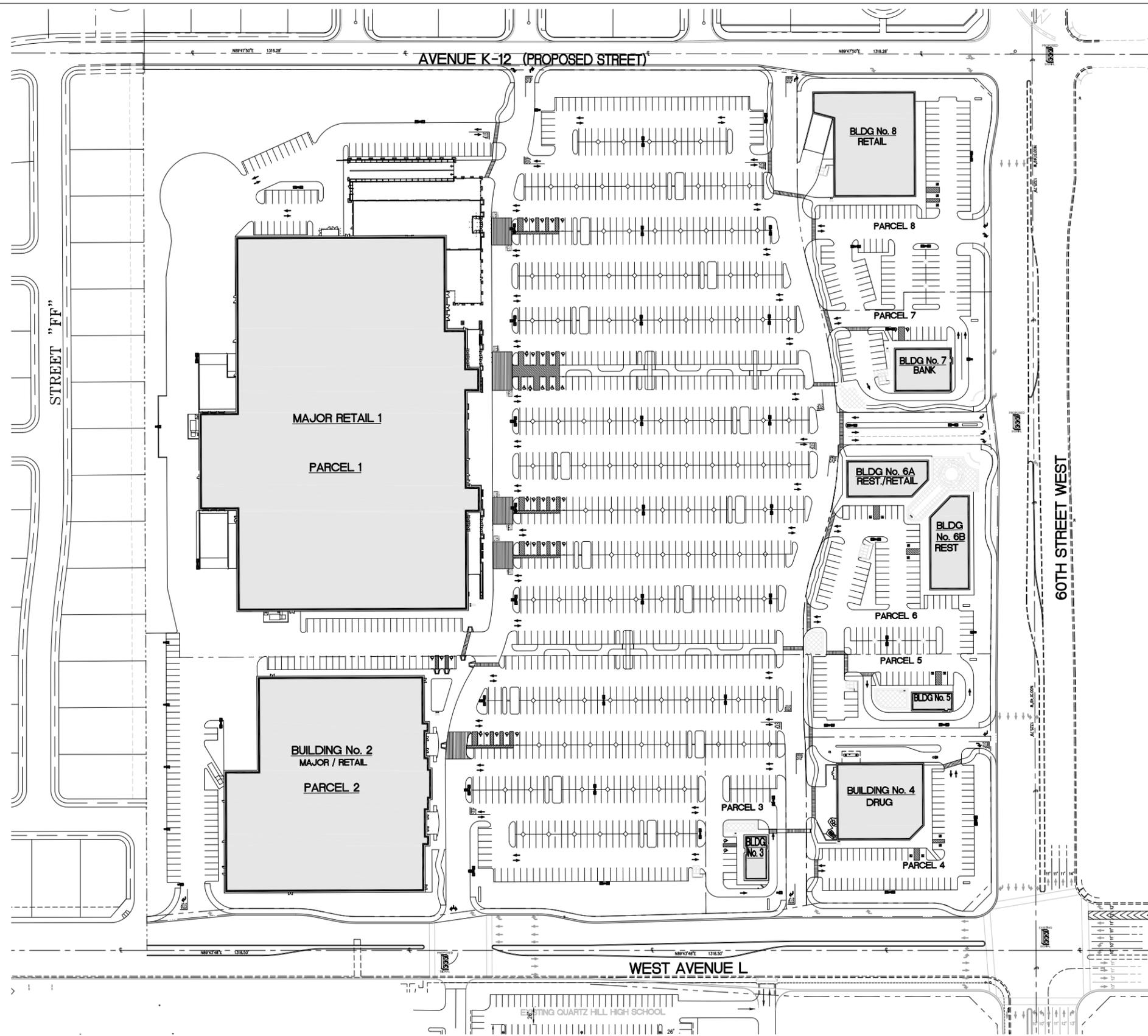
Figure II-2  
Aerial Photograph

## Energy Efficiency Design

The proposed Wal-Mart would be constructed to maximize building efficiency, in accordance with Wal-Mart's building practices. The proposed Wal-Mart would have a "daylighting" system, which includes skylights, electronic dimming ballasts and computer controlled daylight sensors. This results in a continuous adjustment of the lighting based on the daylight contribution. Furthermore, the proposed Wal-Mart would have night dimming, where internal lighting is dimmed to about 65% illumination during late night hours. The proposed Wal-Mart would utilize T-8 fluorescent lamps and electronic ballasts, which is currently the most energy efficient lighting system available. It is estimated that the energy load is reduced by approximately 15 to 20 percent with the use of these lights.

Additionally, the proposed Wal-Mart would use "super" high efficiency packaged heating, ventilating, and air conditioning (HVAC) units. The industry standard Energy Efficiency Ratio (EER) is 9.0, while the proposed Wal-Mart units would be rated between 10.8 and 13.2 (the higher the EER, the greater the energy efficiency). Depending on the EER, the units will range between 4 to 17 percent more efficient than required by California Title 24. Furthermore, the proposed Wal-Mart would be equipped with energy management systems which allows for remote monitoring from Wal-Mart corporate offices. This allows constant monitoring of energy usage and performance, allows for adjustments to lighting, temperature and refrigeration from a central location to maximize efficiency. Moreover, the proposed Wal-Mart would capture waste heat from the refrigeration equipment to heat water for the kitchen preparation areas of the store. The roof of the proposed Wal-Mart would have a "white" membrane, which results in lowering the "cooling" load approximately 10 percent.

The proposed Wal-Mart exterior signage would utilize light-emitting diodes (LED) lighting. LED lighting is approximately 70 percent more energy efficient than fluorescent illumination. Furthermore, LEDs have a longer service life (approximately 100,000 hours) in comparison to fluorescents. Additionally, the proposed Wal-Mart would have integrally colored concrete floors, instead of carpet and vinyl. This reduces the environmental concerns resulting from the manufacture and disposal of these products, along with reducing the need for chemical cleaning agents, wax and wax strippers. The proposed Wal-Mart would be constructed of nearly 100 percent recycled structural steel. The structural steel suppliers use high efficient electric arc furnaces that require 50 percent less energy than traditional methods. The proposed Wal-Mart would also use recycled plastic for base boards and for the majority of plastic shelving. The restroom sinks will use sensor-activated low flow faucets. The low flow faucets reduce water usage by 84 percent and the sensors save approximately 20 percent more water than non-sensor, manual shut off faucets. Finally, the proposed Wal-Mart would use zero ozone depleting refrigerants; R404a refrigerant for refrigeration equipment and R410a refrigerant for air conditioning.



LEGEND FOR PROPOSED IMPROVEMENTS	
	PROPOSED PARKING SPACES
	LANDSCAPE ISLANDS
	HEAVY DUTY ASPHALTIC CONCRETE PAVEMENT
	HEAVY DUTY CONCRETE PAVEMENT
	STANDARD DUTY ASPHALTIC CONCRETE PAVEMENT
	DECORATIVE PAVING
	PROPOSED NEW BUILDINGS OFFSITE AC PAVEMENT
	FUTURE PAVEMENT IMPROVEMENTS BY OTHERS

Source: Tait & Associates.

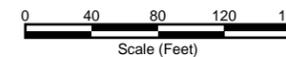


Figure II-3  
Conceptual Site Plan



EAST ELEVATION



NORTH ELEVATION



WEST ELEVATION



SOUTH ELEVATION

Source: William Parrish Design & Development, May 14, 2007.

## **D. PROJECT OBJECTIVES**

The objectives of the proposed project are as follows:

- To create development on the currently underutilized project site to provide commercial retail facilities to serve the local community;
- To generate significant sales tax revenues to benefit the general fund;
- To provide a well-designed development that is compatible and complementary with surrounding land uses;
- To provide a development that is financially viable;
- To generate employment opportunities for the local area;
- To mitigate, to the extent feasible, the potential environmental impacts of the proposed project; and
- To provide adequate parking facilities to serve the proposed development customers, and employees.

## **E. DISCRETIONARY ACTIONS**

The City of Lancaster is the lead agency for the proposed project. In order to develop the proposed project, the following discretionary approvals are required to be approved by the City:

- General Plan Amendment for redesignation of the project site from UR to Commercial.
- Zone Change for the project site from R-7,000 and R-10,000 to CPD.
- Tentative Parcel Map.
- Conditional Use Permit for commercial development.
- Conditional Use Permit(s) for alcohol sales.
- Other permits, ministerial or discretionary, may be necessary in order to execute and implement the project. Such approvals may include, but are not limited to: landscaping approvals, exterior approvals, permits for driveway curb cuts, storm water discharge permits, grading permits, installation and hookup approvals for public utilities and related permits. Additional discretionary or ministerial action may include sewer and water hook-up permits from Los Angeles County Sanitation District 14 and Los Angeles County Waterworks District 40, respectively.

This EIR is an informational document prepared in compliance with CEQA, which is intended to provide the lead agency and its decision makers with information regarding the potential environmental impacts of the discretionary actions needed to implement the proposed project. This EIR may also be relied upon by other State, regional, and/or local government agencies to grant discretionary approvals that may be required to implement the project, whether or not they are explicitly listed.

- Antelope Valley Air Quality Management District.
- Regional Water Quality Control Board, Lahontan Region.
- California Department of Fish and Game.
- Department of Toxic Substances Control.

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## III. ENVIRONMENTAL SETTING

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### A. OVERVIEW OF ENVIRONMENTAL SETTING

This section provides a brief overview of the project site's regional and local settings. Additional descriptions of the environmental setting as it relates to each of the environmental issues analyzed in this EIR are included in the environmental setting discussions contained within Sections IV.B through IV.O. A list of related projects, which is used as the basis for the discussion of cumulative impacts in Section IV (Environmental Impact Analysis), is also provided.

#### **Regional Setting**

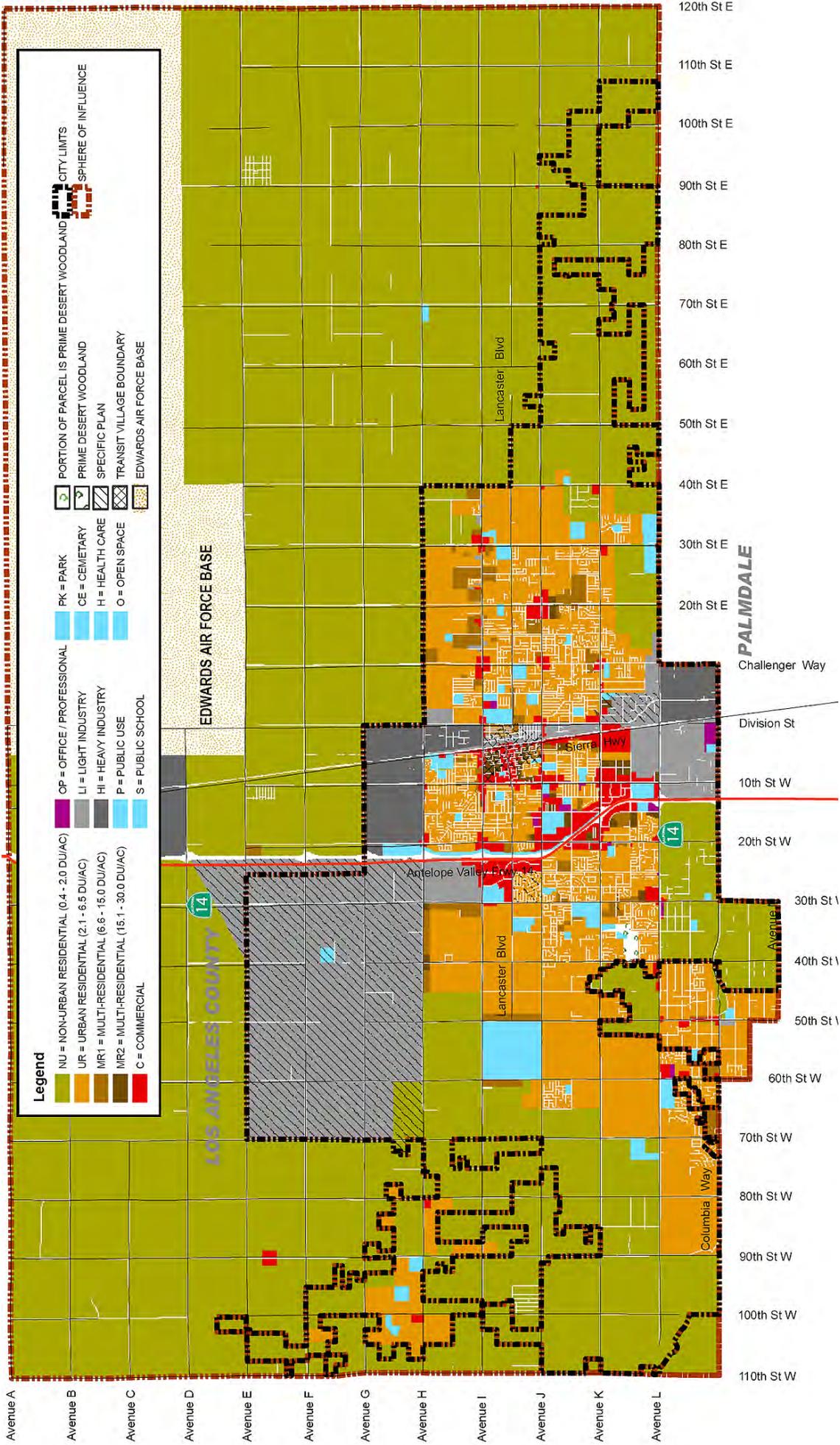
The project site for the proposed project is located in northern Los Angeles County within an urbanized area in the City of Lancaster (see Figure II-1, Regional and Project Vicinity Map). Regional access to the project area is provided via SR 14/138 (Antelope Valley Freeway), which is located approximately 4.5 miles east of the project site. The project site is located on the western side of the Antelope Valley within the Quartz Hill community. The San Gabriel Mountains are located approximately seven miles south and southwest of the project site. The Tehachapi Mountains are located approximately 25 miles northwest of the project site.

#### **Local Setting/Land Uses**

The project site is located at the intersection of 60<sup>th</sup> Street West and Avenue L, and is approximately 40 acres in size. The project site is vacant and undeveloped, although the site has been used for the planting of row crops in the past. The project site is bound by Avenue L to the south, 60<sup>th</sup> Street West to the east, an undeveloped lot to the west and undeveloped land followed by a residential neighborhood to the north. The City of Lancaster General Plan designates the project site as UR and the zoning code designates the site as R-7,000 and R-10,000. The project proposes a General Plan Amendment to reclassify the site as Commercial, and a zone change to Commercial Planned Development (CPD). As shown in Figure III-5, the properties surrounding the project site to the north, east, and west are classified as Urban Residential, and the property to the south is classified as Public School. A land use map showing the project site and surrounding uses is provided in Figure III-1. Views of the project site are shown in Figures III-2 and III-3.

#### **Surrounding Land Uses**

The area surrounding the project site consists primarily of residential uses and undeveloped land. To the south of the project site is Avenue L, followed by Quartz Hill High School (approximately 100 feet from the project site). To the east of the project site is 60<sup>th</sup> Street West, followed by single-family residential development (approximately 150 feet from the project site). To the west of the project site is undeveloped land. Finally, to the north of the project site is undeveloped land followed by single-family residential development (also approximately 150 feet from the project site). As shown in Figure III-1, the properties surrounding the project site to the north, east, and west are classified as Urban Residential, and the property to the south is classified as Public School. Views of the uses surrounding the project site are shown in Figures III-4 and III-5.



Not to Scale

Figure III-1  
Land Use Map

Source: www.cityoflanasterca.org, 2008.

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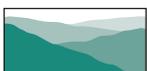
**View 1:** View of the project site from Avenue L.

**View 2:** Additional view of the project site from Avenue L.



**View 3:** View of the project site from western border of the site at Avenue L.

Source: Christopher A. Joseph & Associates, 2008.





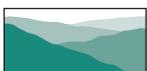
**View 4:** View of the project site looking south.

**View 5:** View of the project site looking west from 60th Street West.



**View 6:** Additional view of the project site looking west from 60th Street West.

Source: Christopher A. Joseph & Associates, 2008.





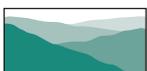
**View 7:** View of Quartz Hill High School from Avenue L.

**View 8:** Additional view of Quartz Hill High School from Avenue L.



**View 9:** Vacant land to the west of the project site.

Source: Christopher A. Joseph & Associates, 2008.





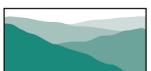
**View 10:** Homes located north of the project site.

**View 11:** View of additional homes located east of the project site, taken from 60th Street West.



**View 12:** View looking south on 60th Street West at project site on west side and homes on east side.

Source: Christopher A. Joseph & Associates, 2008.



## B. RELATED PROJECTS

Sections 15126 and 15130 of the State CEQA Guidelines provide that EIRs consider the significant environmental effects of a proposed project as well as “cumulative impacts.” “Cumulative impacts” refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts (CEQA Guidelines Section 15355). Cumulative impacts may be analyzed by considering a list of past, present, and probable future projects producing related or cumulative impacts (CEQA Guidelines Section 15130 (b)(1)(A)).

All proposed, recently approved, under construction, or reasonably foreseeable projects that could produce a related or cumulative impact on the local environment when considered in conjunction with the proposed project are included in Table III-1 below. For an analysis of the cumulative impacts associated with these related projects and the proposed project, cumulative impact discussions are provided under each individual environmental impact category in Chapter IV of this EIR. The locations of the related projects are shown in Figure III-6.

**Table III-1  
Related Projects**

No.	Location	Size	Description
1	SE Corner 85 <sup>th</sup> Street & Avenue L-8	111 dwelling units	Single Family Homes
2	NW Corner 80 <sup>th</sup> Street & Avenue M	183 dwelling units	Single Family Homes
3	NE Corner 80 <sup>th</sup> Street & Avenue M	300 dwelling units	Single Family Homes
4	SE Corner 80 <sup>th</sup> Street & Avenue L	204 dwelling units	Single Family Homes
5	SW Corner 75 <sup>th</sup> Street & Avenue L-8	62 dwelling units	Single Family Homes
6	NW Corner 75 <sup>th</sup> Street & Avenue M	64 dwelling units	Single Family Homes
7	NW Corner 85 <sup>th</sup> Street & Avenue L	2 dwelling units	Single Family Homes
8	NW Corner 80 <sup>th</sup> Street & Avenue L	600 dwelling units	Active Adult
9	NW Corner 80 <sup>th</sup> Street & Avenue K	600 dwelling units	Active Adult
10	NW Corner 70 <sup>th</sup> Street & Avenue M	23 dwelling units	Single Family Homes
11	SW Corner 70 <sup>th</sup> Street & Avenue L	207 dwelling units	Single Family Homes
		31 dwelling units	Single Family Homes
12	SW Corner 70 <sup>th</sup> Street & Avenue L	245 dwelling units	Single Family Homes
13	NE Corner 70 <sup>th</sup> Street & Avenue L-8	59 dwelling units	Single Family Homes
	SW Corner 70 <sup>th</sup> Street & Avenue L	59 dwelling units	Single Family Homes
14	SW Corner 70 <sup>th</sup> Street & Avenue L	176 dwelling units	Single Family Homes
15	SW Corner 70 <sup>th</sup> Street & Avenue L	56 dwelling units	Single Family Homes
16	70 <sup>th</sup> Street & Avenue K	1,594 dwelling units	Single Family Homes
		27.05 acres	Park
		13.39 acres	School
17	NW Corner 60 <sup>th</sup> Street & Avenue K-12	84 dwelling units	Single Family Homes
18	SW Corner 60 <sup>th</sup> Street & Avenue K	77 dwelling units	Single Family Homes
19	NW Corner 60 <sup>th</sup> Street & Avenue J-12	21 dwelling units	Single Family Homes
20	NW Corner 65 <sup>th</sup> Street & Avenue K	77 dwelling units	Single Family Homes
21	NE Corner 65 <sup>th</sup> Street & Avenue K	36 dwelling units	Single Family Homes
22	SW Corner 60 <sup>th</sup> Street & Avenue J-8	19 dwelling units	Single Family Homes

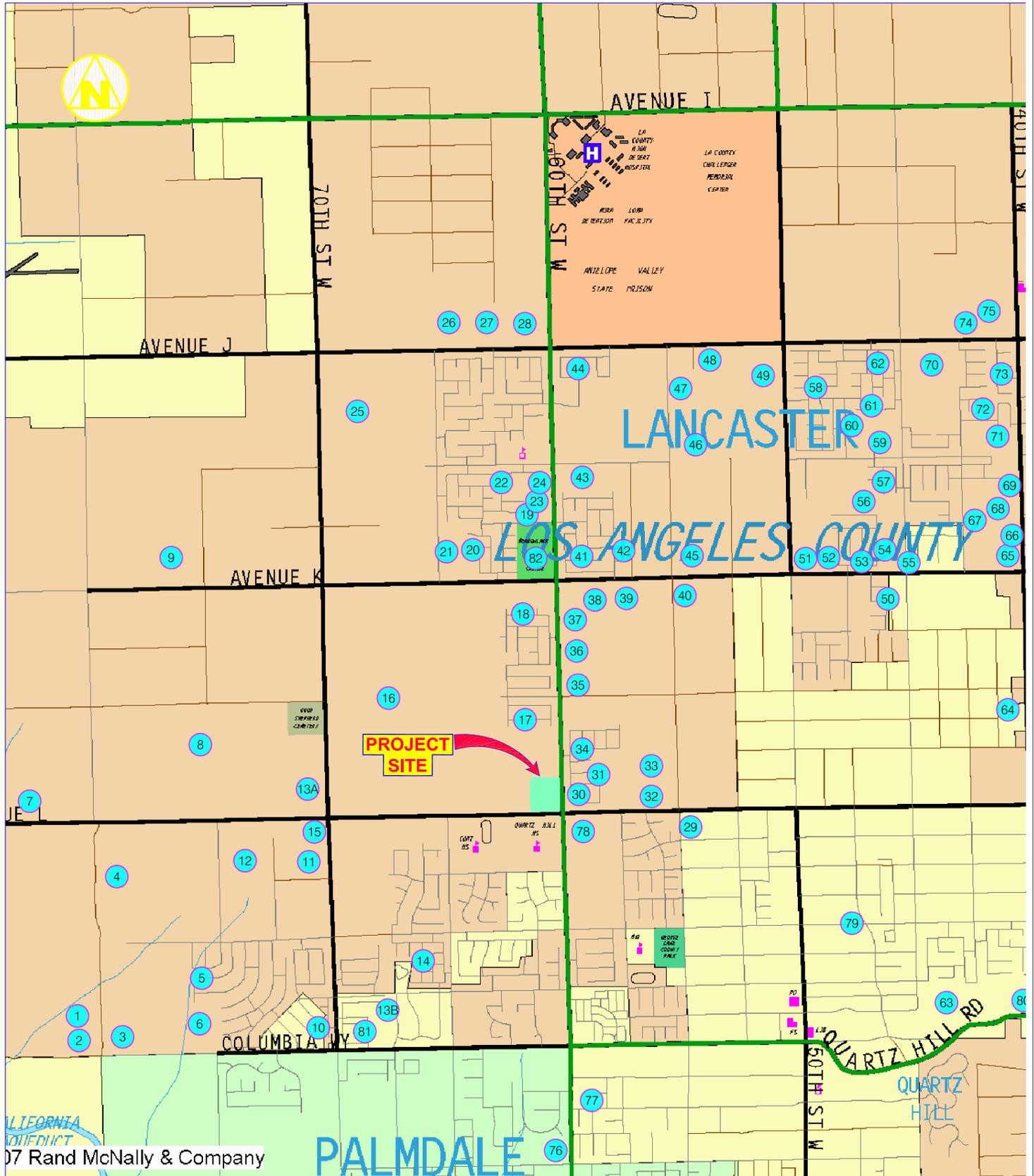
**Table III-1 (Continued)**  
**Related Projects**

No.	Location	Size	Description
23	SW Corner 60 <sup>th</sup> Street & Avenue J-8	49 dwelling units	Single Family Homes
24	SW Corner 60 <sup>th</sup> Street & Avenue J-8	36 dwelling units	Single Family Homes
25	SW Corner 65 <sup>th</sup> Street & Avenue J	650 dwelling units	Single Family Homes
26	NW Corner 60 <sup>th</sup> Street & Avenue J	104 dwelling units	Single Family Homes
27	NW Corner 60 <sup>th</sup> Street & Avenue J	32 dwelling units	Single Family Homes
28	NW Corner 60 <sup>th</sup> Street & Avenue J	41 dwelling units	Single Family Homes
29	SE Corner 55 <sup>th</sup> Street & Avenue L	112 dwelling units	Single Family Homes
30	NE Corner 60 <sup>th</sup> Street & Avenue L	85 dwelling units	Single Family Homes
31	NE Corner 60 <sup>th</sup> Street & Avenue L	33 dwelling units	Single Family Homes
32	NE Corner 55 <sup>th</sup> Street & Avenue L	40 dwelling units	Single Family Homes
33	NE Corner 55 <sup>th</sup> Street & Avenue K-14	58 dwelling units	Single Family Homes
34	NE Corner 60 <sup>th</sup> Street & Avenue K-12	41 dwelling units	Single Family Homes
35	NE Corner 60 <sup>th</sup> Street & Avenue K-8	43 dwelling units	Single Family Homes
36	NE Corner 60 <sup>th</sup> Street & Avenue K-8	156 dwelling units	Single Family Homes
37	NE Corner 60 <sup>th</sup> Street & Avenue K-4	86 dwelling units	Single Family Homes
38	SW Corner 57 <sup>th</sup> Street & Avenue K	58 dwelling units	Single Family Homes
39	SE Corner 58 <sup>th</sup> Street & Avenue K	58 dwelling units	Single Family Homes
40	SE Corner 55 <sup>th</sup> Street & Avenue K	60 dwelling units	Single Family Homes
41	NE Corner 60 <sup>th</sup> Street & Avenue K	254 dwelling units	Single Family Homes
42	SW Corner 56 <sup>th</sup> Street & Avenue J-12	22 dwelling units	Single Family Homes
43	SE Corner 60 <sup>th</sup> Street & Avenue J	106 dwelling units	Single Family Homes
44	SE Corner 60 <sup>th</sup> Street & Avenue J	73 dwelling units	Single Family Homes
45	NE Corner 55 <sup>th</sup> Street & Avenue K	108 dwelling units	Single Family Homes
46	NE Corner 55 <sup>th</sup> Street & Avenue J-8	73 dwelling units	Single Family Homes
47	NE Corner 55 <sup>th</sup> Street & Avenue J-4	20 dwelling units	Single Family Homes
48	SW Corner 52 <sup>nd</sup> Street & Avenue J	42 dwelling units	Single Family Homes
49	NW Corner 50 <sup>th</sup> Street & Avenue J-8	152 dwelling units	Single Family Homes
50	SW Corner 45 <sup>th</sup> Street & Avenue K	65 dwelling units	Single Family Homes
51	NE Corner 50 <sup>th</sup> Street & Avenue K	78 dwelling units	Single Family Homes
52	NE Corner 50 <sup>th</sup> Street & Avenue K	39 dwelling units	Single Family Homes
53	NE Corner 50 <sup>th</sup> Street & Avenue K	88 dwelling units	Single Family Homes
54	NW Corner 45 <sup>th</sup> Street & Avenue K	38 dwelling units	Single Family Homes
55	NW Corner 45 <sup>th</sup> Street & Avenue K	700 students	Middle School
56	NW Corner 45 <sup>th</sup> Street & Avenue K	215 dwelling units	Single Family Homes
57	NW Corner 45 <sup>th</sup> Street & Avenue K	54 dwelling units	Single Family Homes
58	SE Corner 50 <sup>th</sup> Street & Avenue J	307 dwelling units	Single Family Homes
59	SW Corner 45 <sup>th</sup> Street & Avenue J	95 dwelling units	Single Family Homes
60	SW Corner 45 <sup>th</sup> Street & Avenue J	20 dwelling units	Single Family Homes
61	SW Corner 45 <sup>th</sup> Street & Avenue J	169 dwelling units	Single Family Homes
62	SW Corner 45 <sup>th</sup> Street & Avenue J	34 dwelling units	Single Family Homes
63	NE Corner 45 <sup>th</sup> Street & Avenue M	101 dwelling units	Single Family Homes
64	NW Corner 40 <sup>th</sup> Street & Avenue L	29 dwelling units	Single Family Homes
65	NE Corner 40 <sup>th</sup> Street & Avenue K	116 dwelling units	Single Family Homes
66	NE Corner 40 <sup>th</sup> Street & Avenue K	87 dwelling units	Single Family Homes
67	NE Corner 40 <sup>th</sup> Street & Avenue K	242 dwelling units	Single Family Homes
68	NE Corner 40 <sup>th</sup> Street & Avenue K	61 dwelling units	Single Family Homes
69	NE Corner 40 <sup>th</sup> Street & Avenue K	94 dwelling units	Single Family Homes

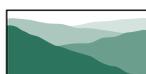
**Table III-1 (Continued)  
Related Projects**

<b>No.</b>	<b>Location</b>	<b>Size</b>	<b>Description</b>
70	SE Corner 45 <sup>th</sup> Street & Avenue J	240 dwelling units	Single Family Homes
71	SW Corner 40 <sup>th</sup> Street & Avenue J	61 dwelling units	Single Family Homes
72	SW Corner 40 <sup>th</sup> Street & Avenue J	19 dwelling units	Single Family Homes
73	SW Corner 40 <sup>th</sup> Street & Avenue J	77 dwelling units	Single Family Homes
74	NW Corner 40 <sup>th</sup> Street & Avenue J	74 dwelling units	Single Family Homes
75	NW Corner 40 <sup>th</sup> Street & Avenue J	61 dwelling units	Single Family Homes
76	60 <sup>th</sup> Street & Avenue M-8	450 dwelling units	Single Family Homes
77	60 <sup>th</sup> Street & Avenue M-4	650 dwelling units	Single Family Homes
78	60 <sup>th</sup> Street & Avenue L	394,575 sf	Retail
79	47 <sup>th</sup> Bte. Avenue M & Quartz Hill	9 dwelling units	Single Family Homes
80	4609 Quartz Hill	14,112 sf	Retail
81	6705 Quartz Hill	75 dwelling units	Senior Housing
82	NW Corner 60 <sup>th</sup> Street & Avenue K	267,494 sf	Retail

*Source: Overland Traffic Consultants, Inc., October 2008.*



Source: Overland Traffic Consultants, March 2008.



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Figure III-6  
Related Projects Location Map

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## **IV. ENVIRONMENTAL IMPACT ANALYSIS**

### **A. IMPACTS FOUND TO BE LESS THAN SIGNIFICANT**

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The City of Lancaster has determined that the proposed project would not result in potentially significant impacts related to the environmental topics listed below. Section 15128 of the CEQA Guidelines states:

*“An EIR shall contain a statement briefly indicating the reasons that various possible significant effects of a project were determined not to be significant and were therefore not discussed in detail in the EIR. Such a statement may be contained in an attached copy of the Initial Study.”*

It has been determined that there is no substantial evidence that the proposed project would cause significant environmental effects in the following areas; therefore, no further environmental review of these issues is necessary for the reasons described below.

#### **GEOLOGY AND SOILS**

##### **Landslides**

The topography of the project site and surrounding area is generally flat. Therefore, no impact with respect to landslides would occur for the proposed project, and no further analysis of this issue is required.

##### **Septic Tanks**

The proposed project site does not propose the use of septic tanks or alternative disposal systems. Therefore, no impact would occur with implementation of the proposed project, and no further analysis of this issue is required.

#### **HAZARDS AND HAZARDOUS MATERIALS**

##### **Airport Safety Hazards**

No airport exists within two miles of the project site. In addition, the project site is not located within any Airport Land Use Plan and is not subject to land use regulations within any such plan. Thus, no impact would occur. No private airstrips are located in the vicinity of the project site. No impact would occur with regard to private airstrips.

##### **Wildland Fire Risks**

A significant impact may occur if a project is located in proximity to wildland areas and poses a potential fire hazard, which could affect persons or structures in the area in the event of a fire. The project site is currently vacant and undeveloped, located in an area surrounded by residential and institutional

development. As shown on Figure IV.A-1, according to the California Department of Forestry, the project site is located in an area of the City of Lancaster with little or no threat of wildland fire. Therefore, the proposed project would not expose people or structures to a greater than average risk of loss, injury or death involving wildland fires, and no impacts would occur.

## **HYDROLOGY AND WATER QUALITY**

### **Seiche, Tsunami or Mudflow**

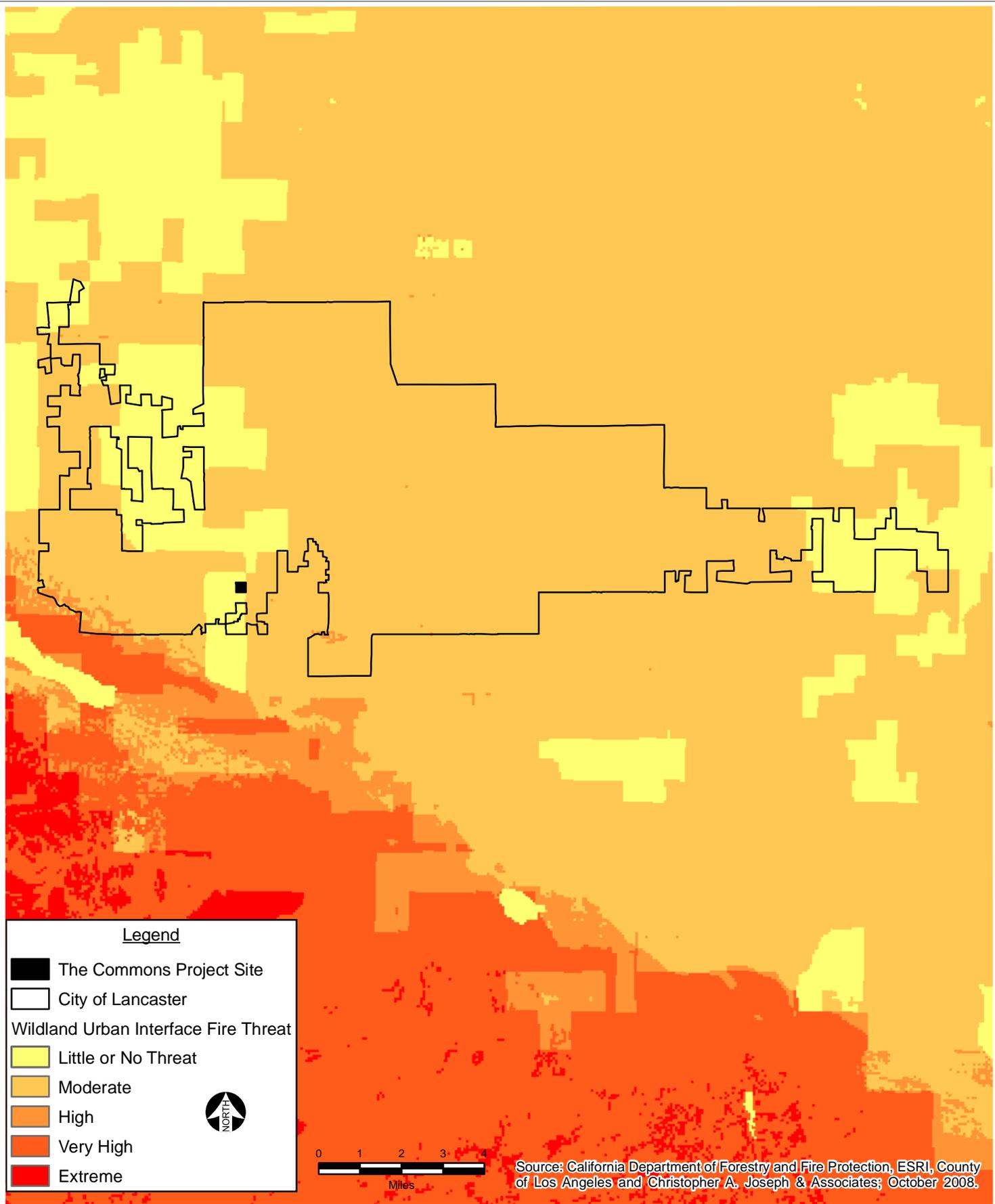
The City of Lancaster is not located near a large body of water such as a lake or ocean in which a seiche or tsunami would occur. Thus, no impact would occur as a result of a seiche or tsunami from any body of water. In addition, as the project site is not located near any hills or slopes, there is no risk of the site being affected by mudflow. These issues need not be further analyzed in the EIR.

### **Dam/Levee Failure**

The project site is not located near any dam or levee, the failure of which could impact to the proposed project. As such, no impact would occur with respect to dam or levee failure, and no further discussion of this issue is required.

### **Housing in 100-Year Flood Plain**

The proposed project does not include any housing. As such, there would be no impact with respect to placing housing in a 100-year floodplain. Therefore, no further discussion of this issue is required.



## **MINERAL RESOURCES**

### **Loss of a Known or Locally Important Mineral Resource**

The project site is not located in an area where mining of mineral resources occurs. The project site may contain known mineral deposits that would be of value to the region and the residents of the State, but development of the proposed project would not preclude or otherwise result in the loss of availability of these resources. The minerals would continue to exist on the project site with development, and could be mined and used in the future. The proposed project therefore would not result in the loss of availability of a known mineral resource. Impacts to mineral resources would be less than significant.

## **NOISE**

### **Airport Land Use Plan and Private Airstrip**

No airport exists within two miles of the project site. As such, the project site is not located within any Airport Land Use Plan and would not be exposed to severe noise levels from airport or aircraft-related activities.

## **POPULATION AND HOUSING**

### **Displacement of Existing Housing and Persons**

The project site is currently vacant and undeveloped. Therefore, development of the proposed project would not result in the displacement of existing housing and persons and would not require the construction of replacement housing elsewhere. Therefore, no impacts associated with displacement of existing housing or people would occur.

## **TRANSPORTATION AND TRAFFIC**

### **Air Traffic Patterns**

The height of the building would not interfere with air traffic patterns and would not cause an increase in traffic levels or change in located that results in substantial safety risks. Since the building is not a multi-story tower, no additional lighting for air traffic safety is required. Therefore, no further discussion of this issue is required.

### **Adopted Plans, Policies or Programs Regarding Alternative Transportation**

The proposed project is not expected to conflict with adopted policies, plans, or programs supporting alternative transportation. Therefore, there would be no impact to adopted policies or existing alternative transportation facilities.

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## IV. ENVIRONMENTAL IMPACT ANALYSIS

### B. AESTHETICS

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#### INTRODUCTION

The following section includes a summary of and incorporates by reference the Economic, Fiscal and “Urban Decay” Analysis of The Commons at Quartz Hill, a Proposed Shopping Center, in the City of Lancaster, California, prepared by HR&A Advisors, Inc., November 2008. A copy of this report can be found as Appendix L to this Draft EIR.

#### ENVIRONMENTAL SETTING

Aesthetic impact assessment generally deals with the issue of contrast, or the degree to which elements of the environment differ visually. Aesthetic features occur in a diverse array of environments, ranging in character from urban centers to rural regions and wildlands. Adverse visual effects can include the loss of natural features or areas, the removal of urban features with aesthetic value, or the introduction of contrasting urban features into natural areas or urban settings.

Since this project site is located within a suburban setting, the aesthetic impact assessment concentrates on those features that may contribute to a valued aesthetic character or image including: structures of architectural or historic significance or visual prominence; public plazas, art or gardens; Joshua trees, California Juniper or other trees; consistent design elements (such as setbacks, massing, height and signage) along a street or district; pedestrian amenities; and landscaped medians or park area.

The following analysis examines the attributes of aesthetic values with respect to environmental impacts. For purposes of this environmental analysis, aesthetic values are defined by visual character and quality, which also include views and viewsheds, and physical degradation.

Visual character and quality addresses the material changes of the project site from the current condition of an undeveloped site to a built environment with multiple retail structures and surface parking. The inherent subjectivity of issues and values of visual character creates a challenge in arriving at a conclusive determination of what constitutes a “significant impact” for the purposes of the California Environmental Quality Act (CEQA). Impacts regarding visual character typically include changes to the style or ambiance of a community, the insertion of a prominent feature that changes the original visual character of an area, or the elimination of a significant natural feature (or open space).

Regarding viewshed, “significant impacts” for the purposes of the CEQA typically consist of loss or obstruction of a valued public view (e.g., scenic vista or views of the horizon). These impacts also include changes in the character of the viewshed that detract from a valued public view, such as the elimination or obstruction of natural features that were formerly part of a valued public viewshed.

Physical degradation addresses the indirect potential economic impacts of the proposed project on existing nearby retail centers leading to store vacancies and ultimately to the physical degradation of these sites, also commonly referred to urban decay.

The final aesthetic resource to be addressed refers to light and glare and shade and shadow and the proposed project's potential contribution to such effects.

### **Existing Conditions**

The project site is located in northern Los Angeles County in the northwestern portion of the City of Lancaster in a rapidly developing environment. Physical development in this area is primarily characterized by residential uses, institutional uses (i.e., churches and schools such as Quartz Hill High School), low-rise commercial/retail uses and undeveloped or vacant land. No particular architectural styles characterize the area, and landscaping is limited to those areas which have undergone development. The project site is currently vacant.

Public views of the project site are available from Avenue L and 60<sup>th</sup> Street West. Vehicles and pedestrians traveling west/east along Avenue L and north/south along 60<sup>th</sup> Street West would have short, temporary views of the project site.

### **Scenic Resources**

As stated above, the project site is located within a generally developed suburban area of the City of Lancaster. There are no significant natural features (such as rock outcroppings, bodies of water, substantial stands of native vegetation, etc.) on the project site. The project site does not contain any Joshua trees or California Juniper, which are identified in Objective 3.4 of the Lancaster General Plan as important biological resources. See Section IV.E, Biological Resources, for a discussion of the project site's biological resources. As the project site is currently undeveloped, it does not contain any buildings found to be of historic significance. See Section IV.F, Cultural Resources, for a discussion of the project site's potential cultural resources.

The project site is not located on a designated State Scenic Highway.<sup>1</sup> According to the Lancaster General Plan, important scenic resources in and around Lancaster include: local views of the surrounding buttes, Quartz Hill, and long distance panoramas of the San Gabriel Mountains and desert expanses.<sup>2</sup> The San Gabriel Mountains are located approximately seven miles south and southwest of the project site. The Tehachapi Mountains are located approximately 25 miles northwest of the project site.

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<sup>1</sup> *Caltrans California Scenic Highway Program, Officially Designated State Scenic Highways, website: <http://www.dot.ca.gov/hq/LandArch/scenic/schwyl.html>, accessed July 17, 2007.*

<sup>2</sup> *City of Lancaster General Plan, City of Lancaster Planning Department, Adopted October 28, 1997.*

### ***Existing Viewsheds***

Viewsheds refer to the visual qualities of a geographical area that are defined by the horizon, topography, and other natural features that give an area its visual boundary and context, or by development that has become a prominent visual component of the area. Public views are those which can be seen from vantage points that are publicly accessible, such as streets, freeways, parks, and vista points. These views are generally available to a greater number of persons than are private views. Private views are those which can be seen from vantage points located on private property. Private views are not considered to be impacted when interrupted by land uses on adjacent blocks, specifically if the project complies with the zoning and design guidelines applicable to the site. In the area of the project site, the existing viewsheds are defined primarily by residential and institutional (school) uses. Long-range views of the San Gabriel Mountains are available to the south and southwest of the project site, and long-range views of the Tehachapi Mountains are available to the northwest of the project site.

### **Surrounding Land Uses**

#### ***Topography/Vegetation***

The area surrounding the project site is characterized by relatively flat topography that generally slopes from south to north. Vegetation is limited to natural, high desert vegetation within the vacant lots in the project vicinity as well as the ornamental vegetation provided in the housing developments.

#### ***Built Environment***

The project site vicinity has experienced and continues to experience growth patterns characteristic of suburban development. This suburbanizing nature of the area is shown in Figure II-2, Aerial Photograph, as undeveloped parcels in the area have been developed with single-family residences. A single-family subdivision is located to the north separated from the project site by undeveloped land. Currently, undeveloped land is located immediately to the west; however, a single-family subdivision is located east of Avenue L. South of Avenue L, west of 60<sup>th</sup> Street West, there is an existing high school with single-family residential adjacent. East of 60<sup>th</sup> Street West, south of Avenue L, there is an existing ranch with nearby single-family residential development.

Commercial uses in the form of several retail stores (Wells Fargo Bank, Vons, Del Taco, AutoZone, etc.) are located approximately two miles east of the project site along Avenue L. These retail stores are contained within low-rise structures that are one to two stories in height. There is a one-story gas station and mini-mart located at the southeast corner of the intersection of Avenue L-8 and 60<sup>th</sup> Street West.

Views from the project site include indirect views of nearby mountain ranges and direct views of surrounding low-rise institutional, residential and vacant land uses. Existing views to the immediate east of the proposed project site consist of residential uses. Existing views to the immediate north and northwest of the project site consist of vacant land and residential uses just beyond. Existing views to the

immediate south of the project site consist of Quartz Hill High School directly across Avenue L (see Figures III-4 and III-5).

### ***Light and Glare***

Nighttime lighting and daytime glare are common throughout the City of Lancaster and suburban areas in general. Ambient light consists primarily of natural light conditions and light that spills over from surrounding uses. Glare is largely a daytime phenomenon, occurring when sunlight is reflected off the surfaces of buildings, objects (e.g., vehicle windshields), or by vehicle headlights on adjacent roadways. Excessive glare not only restricts visibility but also increases the ambient heat reflectivity in a given area. Currently, light sources in the area include ambient nighttime lighting including street lights, architectural and security lighting, indoor building illumination (light emanating from the interior of structures which passes through windows) and automobile headlights. However, parcels to the west and immediately to the north are undeveloped and do not generate nighttime lighting or glare (both daytime and nighttime).

### ***Shade and Shadow***

The issue of shade and shadow pertains to the blockage of direct sunlight by on-site buildings, which affect adjacent properties. Shading is an important environmental issue because the users or occupants of certain land uses, such as residential, recreational, churches, schools, outdoor restaurants, and pedestrian areas have expectations for direct sunlight and warmth from the sun. These land uses are termed “shadow-sensitive.”

Shadow lengths are dependent on the height and size of the building from which it is cast and the angle of the sun. The angle of the sun varies to the rotation of the earth (i.e. time of day) and elliptical orbit (i.e. change in seasons). The longest shadows are cast during the winter months and the shortest shadows are cast during the summer months.

### ***Existing Shadow Patterns***

Shadow-sensitive uses in the immediate project vicinity include the surrounding single-family residential uses and Quartz Hill High School. As the project site is currently undeveloped, it does not project shade or shadows onto the surrounding uses.

## **ENVIRONMENTAL IMPACTS**

### **Thresholds of Significance**

In accordance with Appendix G to the State CEQA Guidelines, the proposed project would have a significant impact if it would:

- a) Have a substantial adverse effect on a scenic vista;

- b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway;
- c) Substantially degrade the existing visual character or quality of the site and its surroundings;
- d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Although not included in the State CEQA Guidelines, impacts related to shade and shadow have become generally recognized as necessary for evaluation in the CEQA process. The concern is particularly important for sensitive land uses such as residential, recreational, churches, schools, outdoor restaurants, and pedestrian areas, as they have expectations for direct sunlight and warmth from the sun.

As previously discussed, none of the streets surrounding the site are designated State Scenic Highways. Furthermore, as discussed above, the proposed project would not have a substantial adverse effect on a scenic vista. Therefore, the proposed project would not result in impacts with respect to Thresholds a) and b) listed above, and no further analysis is required.

In addition, this section provides an analysis of the general economic and fiscal impacts of the proposed project, and the potential for the operation of the project to directly or indirectly cause “urban decay,” as that concept has been addressed in court decisions interpreting CEQA. Based on the direction of the Court of Appeal, it is generally accepted that a proposed project would potentially have a significant impact if:

- The development of the proposed project would result in a diversion of sales from existing retailers within the primary market area that is severe enough to lead to business closures, and in turn, the resulting business closures are significant enough in scale to result in long-term vacancies which affect the viability of existing shopping centers or districts.

## **Project Impacts**

### ***Substantially Degrade the Existing Visual Character or Quality of the Site and Its Surroundings***

This CEQA threshold has been addressed by the following subcategories: visual character and quality (of the project site), views and view corridors (of the project site), and physical degradation (or urban decay) of other retail centers.

#### *Visual Character and Quality*

The proposed project would result in the development of a grouping of one- and two-story structures containing commercial/retail stores and associated surface parking. As shown in Figure II-3, the main anchor retail stores would be sited largely parallel to 60<sup>th</sup> Street West, extending from the northern edge to the southern edge of the western portion of the approximately 40-acre project site. Smaller, sub-major shops and restaurant buildings would be scattered around the more easterly portions of the project site. Development on the project site would include 1,728 parking spaces, and access to the development

would be provided via both 60<sup>th</sup> Street West and Avenue L. The majority of the parking would be provided in the center of the site with limited parking available west of Building No. 2, and some spaces north of Building No. 1. Loading facilities for both Building No. 1 and No. 2 would be provided on the western elevations of these buildings. Access to the site would be provided with three driveway entrances along Avenue L and two driveways along 60<sup>th</sup> Street West. In addition, a proposed roadway, Avenue K-12, to the north would provide additional access with two driveways.

The main (east) elevations of the anchor stores would include architecturally-detailed façades, while the west, south and north elevations have additional architectural features to visually break up and distinguish the linear look of the buildings.

The proposed project would materially change the visual character of the site from an undeveloped site to a built environment with retail structures and surface parking. The proposed development would employ multiple architectural elements and details in the design to provide interest to the anchor and sub-major buildings. The proposed anchor buildings would employ modern architectural styles. The structures would have a rectangular shape, similar to surrounding uses, and employ additional decorative elements. The core structures would be constructed of concrete masonry block, stucco, glass and metal. Additional decorative elements on the main store frontages as well as the sub-major buildings would include architectural finish accents (including stone veneer) and overhangs.

The proposed anchor buildings would have a finished height averaging between approximately 22.5 to 38.5 feet, with tower elements up to 41.6 feet in height. The height and massing would be varied across the building façades to prevent the impression of a single bulky structure. Similar to the surrounding residential and institutional uses, by abiding by local setback regulations the development would not encroach upon adjacent uses or streets.

Landscaping, including ornamental trees, shrubs and groundcover would be provided in the landscape setbacks all around the perimeter of the project site. Further, ornamental trees and plantings would be provided around all of the new structures and throughout the common parking area.

The building heights and massing that would be developed with the implementation of the proposed project would represent a substantial change in the visual character of the project site from what currently exists. The proposed project would provide a visual contrast mostly in terms of use type rather than massing, with the residential uses located to the east and north and the school uses located to the south of the project site. Views of the project site would become more prominent from the surrounding land uses because of the increased height and mass of the proposed project compared to the existing undeveloped condition of the site.

Whether the alteration of the project site would degrade or improve the visual character of the site is a subjective assessment. The implementation of the proposed project would substantially change the existing character of the site from an undeveloped parcel to an urban use with retail buildings and surface parking facilities. The City of Lancaster General Plan Land Use designation for the project site is currently Urban Residential (UR). The proposed project includes a request for a General Plan

Amendment to redesignate the project site as Commercial (C). See Section IV.J, Land Use Planning, for a full discussion of the project site's land use issues. However, even absent the granting of a General Plan Amendment, the City of Lancaster General Plan presently envisions the transformation of the site from the current undeveloped condition to urban uses. Further, the surrounding area is in transition with intensification of rural or undeveloped land to suburban and urban uses. For reasons stated, the project would have a less than significant impact with regard to visual character.

#### *Views and View Corridors*

Due to the similar height and location of the proposed buildings compared to the existing surrounding institutional and residential uses as well as the urbanized character of the area, the proposed buildings would be visible from all of the viewing locations previously described. These locations include portions of Avenue L and 60<sup>th</sup> Street West in the project area, as well as from some of the institutional and residential uses along these roadways (see Figures III-2 and III-3, Views of the Project Site). Changes in views of the project site from adjacent land uses and roadways would not result in a significant impact, because the project area is already urbanized with a mix of institutional, commercial and residential uses.

The proposed project would not result in the obstruction of any permanent, public scenic views. Pedestrians and motorists traveling in vehicles would have a temporary, passing view of the proposed project from public vantage points such as Avenue L and 60<sup>th</sup> Street West, as the vantage point would be constantly changing. As such, the proposed project would not obstruct any scenic views from permanent, public vantage points. Long-range views of the San Gabriel Mountains to the south and southwest would not be substantially altered. Considering the distance of the mountains from the project site, which is approximately seven miles, long-range views from the surrounding area would still be available above and around the proposed development. Therefore, impacts relative to public scenic views would be less than significant.

#### *Physical Degradation (Urban Decay)*

The CEQA Guidelines do not contain set standards of significance for economic impacts, because as stated in Section 15382, it does not consider an economic or social change by itself a significant effect on the environment. However, physical changes that could result from economic or social effects of projects are within the scope of CEQA considerations. Section 15131 echoes this statement and establishes that if included, these issues need only be mentioned to the extent necessary to "...trace a chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused in turn." Accordingly, an economic analysis was prepared assessing the project's potential to induce physical change as a result of its economic or social effects. The results of the project economic analysis are summarized below. The complete economic analysis, the Economic, Fiscal and "Urban Decay" Analysis of The Commons at Quartz Hill, a Proposed Shopping Center, in the City of Lancaster, California, prepared by HR&A Advisors, Inc., November 2008 is presented in Appendix L.

The purpose of the economic analysis was, among other things, to determine any potential physical impacts to competing commercial uses that might result from economic effects of the project. That is,

would implementation of the project as proposed result in significant market shifts in the region resulting in declining sales of like commercial activities leading eventually to store closures, with a subsequent increase in long-term commercial vacancies that leads to physical deterioration or other manifestations of “urban decay”.

CEQA itself does not provide any specific direction as to what should be considered a significant urban decay impact. However, the Fifth District Court of Appeal in *Bakersfield Citizens for Local Control v. City of Bakersfield* indicated that a significant adverse physical change in the environment resulting from economic impacts of a proposed retail project, or “urban decay,” is characterized by a chain reaction of store closures and long-term vacancies ultimately destroying neighborhoods. Based on the direction of the Court of Appeal, it is generally accepted that a proposed project would potentially have a significant impact if:

- The development of the proposed project would result in a diversion of sales from existing retailers within the primary market area that is severe enough to lead to business closures, and in turn, the resulting business closures are significant enough in scale to result in long-term vacancies which affect the viability of existing shopping centers or districts.

#### Urban Decay Analysis Methodology

The analysis evaluates whether development of the retail and dining space contained in the proposed project would result in such intense competition that there is likely to be a significant adverse economic impact on existing retail developments in the City of Lancaster and other nearby jurisdictions. Methodologically, the potential for such an impact can be determined in a given market area through a comparison of the projected growth in demand for retail goods, as measured by the change in supportable retail space for particular retail store categories, with the amount of proposed additions to the supply of retail space. In this particular context, the analysis focuses on whether the proposed amount of floor area in each major retail and dining use category planned for the proposed project exceeds the likely increase in demand for those same uses within the relevant market area(s) serving the proposed project, where demand is measured by the anticipated growth in population and per capita personal income that would be available for expenditure on the specified retail goods and dining. If the proposed change in the supply of floor area for retail and eating and drinking activities exceeds anticipated growth in demand, the resulting competitive conditions could challenge existing retailers and restaurateurs to such a degree that net sales could be attracted away from their existing stores without their likely replacement by sales from the new sources of demand. Under such circumstances, further analyses would be required to assess whether it is foreseeable that this draining of sales from existing businesses would logically result in significant disinvestment, business closures, abandonment, or other forms of physical deterioration, leading to urban decay.

Conversely, if the amount of retail and eating and drinking facility space planned for the proposed project, together with proposed retail space for comparable uses in other planned projects within the same time frame, is less than the increase in space that can be supported by projected increases in future demand, it can be argued that the proposed project is not exerting significant adverse competitive pressures that

could potentially lead to urban decay. This conclusion follows the logic that the growth in customer demand would be large enough to economically support both the proposed project and other existing and planned projects offering comparable retail and restaurant uses. Given such circumstances, there is no need to further evaluate the potential for urban decay as a consequence of the development of the proposed project.

Making these economic impact measurements requires: (1) establishing appropriate market areas for each retail and restaurant category in the proposed project for which such retail space will be provided; (2) projecting the scale of customer demand based on population growth, income growth and spending growth for those use categories over a relevant time period (i.e., 2007-2012); (3) converting projected changes in future customer retail spending and eating and drinking facility spending into magnitudes of supportable square feet of gross leasable floor area (GLA), so that the projected increase in supportable space can be compared directly with the projected change in supply proposed for each retail category in the proposed project's development program; and (4) comparing the magnitude(s) of supportable space with the proposed supply of space and evaluating the results of this comparison.

Accordingly, separate market impact analyses were conducted for the four basic types of retail and restaurant uses that are to be included in the proposed project: (1) Shopper Goods, consisting of stores offering General Merchandise (typically, department stores); Apparel and Accessories stores; Home Furnishings, Furniture and Appliance stores; and Other (or Specialty) retail stores; (2) Building Materials and Garden Supply stores; (3) Convenience Goods stores, including food stores (e.g., supermarkets, bakeries, liquor stores) and drug stores; and (4) Eating and Drinking Facility space, including both fast food facilities and "sit-down" restaurants serving alcohol.

#### Delineation of Market Areas

Given the dispersed character of existing development in the Antelope Valley and the location of existing retail development competition, two market areas were established for the determination of potential demand for the four classes of retail goods that were evaluated in the analysis: (1) a *Primary Market Area* (PMA) encompassing the geographic area within a five mile radius of the project site, utilizing as a central point the intersection of 60<sup>th</sup> Street West and Avenue L; and (2) a *Secondary Market Area* (SMA) encompassing a circular ring around the PMA and extending from five to 10 miles around the project site. For certain types of retail goods, notably Shopper Goods and Building Materials and Garden Supplies, the PMA would provide 70 percent of the market support and the SMA 30 percent of the market support. For other classes of goods (e.g., Convenience Goods and Eating and Drinking Facilities) market support would be expected almost entirely from the PMA.

It should be noted that the PMA for the proposed project is a fast growing residential community of single-family detached homes with residents whose incomes are higher than the Los Angeles County average. Between 2007 and 2012 the resident population of the PMA is projected to increase by 12,544 persons that, along with general income growth in the region, should provide the major source of market support for the proposed project. In addition, the proposed project's location coupled with its anchor stores and the presence of an adjacent proposed retail development known as Lane Ranch Towne Center ("Lane Ranch"),

should draw additional market support from the SMA. Between 2007 and 2012 the SMA is projected to grow by 15,925 persons and contribute 30 percent of total market support to the Shopper Goods and Building Materials/Garden Supply space at the proposed project.

The growth forecasts have been examined from both an historical perspective and from a review of proposed developments in the market areas. A recent listing of planned developments suggests that about 9,800 units have been proposed for development in the PMA alone that could generate population growth over 29,000 persons. While the actual timing and delivery of this product is open to some question, particularly in the current market where mortgage foreclosures have spiked and access to mortgage debt has become more difficult, the forecasts appear to be realistic in their suggestion that major growth is likely to continue in the Antelope Valley subregion well beyond 2012.

As noted above, in addition to the proposed project, there is a proposed development known as Lane Ranch Towne Center that would be developed at the same intersection that would initiate operations in the same year, 2012. As presently conceived these two developments together would add a total of approximately 776,873 square feet GLA of retail space to the market area. Given their proximity and timing, they will function as one large project in terms of their potential impact on the local market area. In this regard, the juxtaposition of these two centers should yield “agglomerative” benefits in that the range of choice provided by the combined retail offerings on the two sites should enhance the location as a retail destination for SMA residents and enhance this location’s customer drawing power beyond the normal market reach of a single 400,000+/- square foot GLA shopping center.

#### Shopper Goods (General Merchandise, Apparel, Home Furnishings/Furniture and Specialty Goods)

The analysis of Shoppers Goods considered three different comparisons between potential market support for new retail space and potential future competitive supply. These three comparisons were as follows.

- **Project with PMA:** The proposed project’s proposed Shopper Goods space is compared to future PMA resident support for additional Shopper Goods space;
- **Project and Lane Ranch with the Combined PMA and SMA:** The total proposed Shopper Goods space from the proposed project and Lane Ranch is compared to the projected total supportable Shopper Goods space from all market sources, represented by both PMA residents and SMA residents; and
- **Cumulative Projects with the Combined PMA and SMA:** The total proposed Shopper Goods space (including the proposed project, Lane Ranch and all other identified developments proposed for completion by 2012) is compared to the projected total supportable Shopper Goods space from all market sources, represented by both PMA residents and SMA residents.

The results of the first of these comparisons indicate that the proposed project’s Shopper Goods space can be supported by the PMA, as it would provide the equivalent of 66 percent of the PMA’s potential supportable Shopper Goods space. Under the assumptions for the second comparison, the results indicate that the combination of the proposed project and Lane Ranch, together would provide an amount of Shopper

Goods space that would constitute 113 percent of the total supportable space from the combined PMA and SMA resident markets. This comparison recognizes that in this type of market context the two centers would draw patronage much like a regional shopping center, where the PMA would account for 70 percent of potential market support, and the SMA an additional 30 percent. In the final comparison, the projected supply of Shopper Goods space from all proposed developments is compared with the Total Supportable from all sources of market support as defined by the combination of PMA and SMA residents. Under these assumptions, the total proposed supply represents the equivalent of 145 percent of total demand in 2012.

While the development of the proposed project together with (1) the development of Lane Ranch and (2) other planned retail projects in the PMA could theoretically lead to an oversupply of Shopper Goods space in the PMA by 2012, this oversupply is unlikely to create conditions that could lead to urban decay. The primary reasons that underline this summary observation are the following:

- The market demand for Shoppers Goods in the PMA and SMA is growing with development of the residential base, and by 2012 the annual growth in supportable Shopper Goods space should exceed 100,000 square feet GLA on an annual basis. Thus, if there is excess supply, it would likely be a short-term phenomenon that would be resolved from growth in resident demand in the two market areas by 2014.
- The proposed major Shopper Goods anchor tenants for the two centers (including the proposed project) to be developed at 60th Avenue West and Avenue L are already well-established in the market area. If the two projects draw sales from other establishments it is likely that this “cannibalization” by the anchor tenants will largely come from their own stores that are already located in the region. Presumably, this potential loss in sales has already been considered in the decisions by the major department store chains to locate additional stores in this location.
- The threshold sales requirement for Shopper Goods that has been utilized in the analysis has been set at a standard for the industry that assumes that the stores have reached maturity, thus may be conservative (i.e., too high) for stores opening in a market area that is undergoing significant growth. These anchor stores appear to be making a strategic choice to establish new stores well in advance of the long-term demand that will ultimately be present in the growing Quartz Hill community, and may have allowed for slightly lower sales in the first years of operation.
- Developers of other projects have the option to delay or otherwise adjust their development programs to reflect market conditions, particularly in recognition of the strength of the anchor tenants that will be present at the proposed project and Lane Ranch.

Therefore, the short-term oversupply of Shopper Goods space projected in the analysis would not create competitive conditions that would lend to urban decay. Thus, impacts related to the proposed project’s Shopper Goods space would be less than significant.

### Building Materials and Garden Supplies

The analysis of Building Materials and Garden Supplies retail space follows the same basic approach that was utilized for the Shopper Goods analysis, recognizing that shopping behavior for these types of goods and the anchor tenants that will provide this space, such as home improvement stores, Wal-Mart and Target, will likely attract significant sales from beyond the PMA. Once again, three basic comparisons were made between supportable space and the proposed development supply, following the framework provided above for Shopper Goods. The results of these comparisons are as follows:

- **Project with PMA:** Growth in demand within the PMA for Building Material and Garden Supplies is sufficient to support the retail space proposed for this use in the proposed project. The proposed supply at the proposed project would effectively represent 103 percent of potential supportable space in this category, thus absorbing the entire projected increase in PMA demand by 2012.
- **Project and Lane Ranch with the Combined PMA and SMA:** The proposed cumulative supply of Building Materials and Garden Supplies space in the proposed project and Lane Ranch would represent 84 percent of the total demand generated by PMA and SMA residents that could be captured at the shared location of 60th Street W and Avenue L.
- **Cumulative Projects with the Combined PMA and SMA:** The proposed supply represents 149 percent of total projected supportable space from the combined market areas, as it includes the space at the 60th Street/Avenue L complexes plus a proposed home improvement store with approximately 139,410 square feet GLA of space by 2012. At the projected rate of growth in demand for this type of space, the market would support all of the proposed space at the threshold sales level utilized in this analysis in 2015.

The short-term oversupply of building materials/garden supplies space projected in the analysis would not create competitive conditions that could lead to urban decay for essentially the same reasons as were noted in the discussion of potential oversupply of Shopper Goods. Therefore, impacts related to the proposed project's Building Materials and Garden Supplies retail space would be less than significant.

### Convenience Goods

Analysis of the potential market support for Convenience Goods was based exclusively on the additional demand generated by PMA residents. Accordingly, the three comparisons were modified to the following for both Food Store Space and Drug Store/Pharmacy Space: (1) Project with PMA; (2) Project and Lane Ranch with the PMA; and (3) Cumulative Projects with the PMA. These comparisons are summarized below:

*Food Stores, including Supermarkets, Other Food Stores and Beverage Stores*

- **Project with PMA:** The proposed project will offer approximately 49,800 square feet GLA of this type of space. This is equal to 42 percent of the potential supportable demand, leaving considerable market share available for other projects.
- **Project and Lane Ranch with the PMA:** The two projects will offer approximately 59,800 square feet GLA, representing about 49 percent of the total demand for this category, again leaving considerable market share available for other projects.
- **Cumulative Projects with the PMA:** The cumulative proposed supply will represent 109 percent of total supportable demand for this category. This oversupply would be balanced by growth in PMA residents by mid-2014, and thus is not considered to be a significant issue with respect to potential impact on existing and future retailers that might lead to “urban decay.”

*Drug Stores/Pharmacies (including free-standing drug stores and pharmacies within major retailers)*

- **Project with PMA:** The proposed project will provide a freestanding drug store and pharmacy space within the Wal-Mart, estimated to total 24,740 square feet GLA for the two facilities. This supply represents 82 percent of total projected PMA resident demand by 2012, leaving market share available for other projects.
- **Project and Lane Ranch with the PMA:** The two projects together will provide two free-standing drug stores and two pharmacies within their respective anchor stores, for a combined square footage of approximately 91,467 square feet. This amount of space constitutes 158 percent of the total PMA resident demand for this expenditure category, and thus indicates a significant potential oversupply by 2012.
- **Cumulative Projects with the PMA:** As presently proposed, the cumulative supply of proposed drug stores and pharmacies represents over three times (304 percent) total projected supportable demand from PMA residents for this category by 2012.

These results indicate that if all proposed drug stores and pharmacies are developed as currently proposed in the PMA by 2012, there could be a very significant condition of oversupply. While this condition would not be generated by the proposed project in isolation of other projects, the proposed development of four drug stores and pharmacies at the intersection of 60th Avenue West and Avenue L would appear to be unrealistic. In light of this information, and depending on which project signs up a drug store tenant first, it is likely that there would be adjustments to the tenant mix in one or both project development programs.

In recognition of the likely conditions of oversupply of drug store space in the PMA by 2012, field surveys and additional market research were conducted for four existing drug stores and one proposed drug store property in order to determine which, if any, would be susceptible to closure and significant urban decay from the forces of extreme competition caused by development of the proposed drug store and pharmacy facilities at the proposed project and other proposed developments. Five properties located closest to the intersection of 60th Avenue West and Avenue L are considered most at risk, due to the overlap of their

respective markets with that of the proposed project. These investigations indicate, for the reasons presented in the urban decay analysis, that even in light of a serious oversupply of drug store and pharmacy space in the proposed project's PMA if the proposed project and Lane Ranch open as currently scheduled, it is unlikely that the competitive retail centers studied would experience the store closures, abandonment and physical deterioration that characterizes "urban decay." The four major drug store chains with stores in the PMA are all capable of holding on to their market shares for the long term due to their respective geographic positioning. However, it is also very possible that the sales achieved by these stores per square foot may be below the standard threshold utilized in this analysis for determining supportable drug store and pharmacy space.

Therefore, the oversupply of Food Store space and Drug Store/Pharmacy space projected in the analysis would not create competitive conditions that would lend to urban decay. Thus, impacts related to the proposed project's Food Store Space and Drug Store/Pharmacy space would be less than significant.

#### Eating and Drinking Facilities

The analysis of the potential impact of the proposed Eating and Drinking Facility component of the proposed project utilized the same comparison framework that was followed in the Convenience Goods analysis where market support is derived from PMA residents.

Two types of restaurant space are considered in the analysis: fast food restaurants and "sit-down" restaurants serving alcohol. The analysis indicates that the PMA can adequately support the proposed project's proposed fast food restaurants and all other proposed fast food restaurant space that was considered in the analysis. With regard to restaurants serving alcohol, the analysis indicates that there would be a short-term oversupply in 2012, though this would be satisfied by growth in demand by 2013. Given these findings, there is little likelihood that the proposed restaurant space at the proposed project would have major competitive impacts on other existing or future eating and drinking facilities in the PMA.

As the addition of the proposed eating and drinking uses in the proposed project will not have a significant negative impact on the existing and proposed supply of competitive uses in the PMA, this component of the proposed project will not lead to urban decay at any of the existing or proposed shopping centers and business districts found in the competitive market area. Therefore, impacts related to the proposed project's Eating and Drinking Facilities would be less than significant.

#### *Light and Glare*

The proposed project would introduce new sources of light to the currently undeveloped condition of the site. The nine proposed retail structures would each include indoor lighting, architectural lighting and security lighting and all lighting would be shielded and focused on the project site and directed away from the neighboring land uses. Even though the immediate area is experiencing growth, conversion of the undeveloped site would substantially change the nighttime lighting of the area. Further, the project site is surrounded on two sides with undeveloped land that would currently remain dark. As a result, the project nighttime lighting would potentially affect the immediate area with light "spill" onto dark areas. Also,

this “spill” could potentially increase the nighttime illumination of the nearby residential areas resulting in potential impacts. Therefore, project implementation would result in a potentially significant impact with respect to nighttime lighting.

The proposed project would introduce new sources of glare to the project site. Development of the proposed project would include architectural features and facades that have a low level of reflectivity to reduce the possibility of impacts associated with glare. Overall, the building materials used would not be expected to cause glare that would be visually inconsistent with surrounding land uses, or to result in a substantial increase in glare that would affect nearby sensitive uses. However, the proposed project would create reflective sources where none currently exist, and would provide large areas for parking which would increase the amount of glare on the project site. Further, nighttime illumination of signs could generate glare. Thus, impacts associated with glare (both daytime and nighttime) would be potentially significant.

### Shade and Shadow

The tallest structures proposed would be approximately 41.5 feet above grade. Shadows are generally cast in a westerly direction in the morning moving clockwise until being cast to the east in the later afternoon. In summer months, shadows would be cast in a southerly direction as well; in winter months, the sun is in the southern sky, and shadows would be cast in a northerly direction. During the summer months, summer shadows are relatively short, and shadows cast by the proposed building at the southernmost portion of the project site would not be expected to cast shadows that extended past the property line. Because the anchor buildings of the proposed project would be set back a minimum of 80 feet from the western property line, the single family homes located east of the project site would not be subject to significant shade or shadows produced by the proposed project.

Although Quartz Hill High School, which is considered a sensitive use, is located south of the project site, the minimal height of the proposed structures coupled with the distance from the school create a situation where shade or shadow would not affect the school buildings or any athletic or recreational areas. Therefore, impacts related to shade and shadow would be less than significant.

## **CUMULATIVE IMPACTS**

As presented in Table III-1 of this Draft EIR, there are a total of 82 related projects proposed in the vicinity of the project site. Development of the related projects is expected to occur in accordance with adopted plans and regulations. Related project No. 78, Lane Ranch, is located near the project site. No substantial scenic resources are located in the area surrounding the project site that could be affected by a cumulatively considerable reduction in views. Therefore, the proposed project in conjunction with the related projects would not result in significant cumulative impacts with regard to the aesthetic and visual character of the area.

Development of the proposed project, in conjunction with the related projects, would increase ambient lighting and glare levels in the project vicinity. However, any additional glow from the related projects

would be subject to the City's reflective materials design standards which limits the amount of reflective surface areas and materials that can be used for any given project. The potential glare created from these related projects would not be cumulatively considerable.

Development of the proposed project, in conjunction with the related projects would not result in an increase of shading impacts on the project site or in the vicinity of the project site as major roadways separate the project site from the nearest related projects. There are no related projects in the immediate vicinity of the project site that would increase the shading of the sensitive uses adjacent to the project site. Therefore, no cumulatively considerable shading impacts would occur.

Finally, the cumulative impacts of this project in conjunction with the related projects, on potential physical degradation or urban decay related to Shopper Goods space, Building Materials and Garden Supplies space, Food Store space, Drug Store/Pharmacy space and Eating and Drinking Facilities would be less than significant.

## **MITIGATION MEASURES**

The following mitigation measures will be implemented to reduce potential light impacts to less than significant levels.

### **Night Lighting**

- B-1 The project applicant shall submit a Lighting Mitigation Plan that incorporates reduction of night lighting "spill" onto adjacent parcels to the City of Lancaster for review and approval. The approved Lighting Mitigation Plan shall be installed to the satisfaction of the City of Lancaster.
- B-2 The height of the proposed on-site light standards shall be of such height as not to create a nuisance to the adjacent neighbors.
- B-3 Entrance and all forms of exterior lighting shall focus illumination downward and onto the project site. A combination of shielding, screening, and directing the lighting away from off-site areas shall be utilized to minimize "spill-over" effects onto adjacent roadways, properties and open space areas.
- B-4 Exterior lighting shall be the lowest intensity necessary for security and safety purposes, while still adhering to the recommended levels of the Illuminating Engineering Society of North America.
- B-5 In order to minimize illumination wash onto adjacent areas, parking lot lighting shall utilize non-glare fixtures directed downward onto the project site.
- B-6 Parking lot lights shall be oriented to minimize off-site impacts (i.e., the maximum candlepower shall be aimed away from the off-site viewer).
- B-7 Atmospheric light pollution shall be minimized by utilizing street lighting fixtures that cut-off light directed to the sky.

- B-8 The use of exterior uplighting fixtures for building facades and trees shall be prohibited.
- B-9 Use of "glowing" fixtures that would be visible from existing communities or public roads shall be prohibited. A glowing fixture is a lantern style fixture, or any fixture that allows light through its vertical components
- B-10 Only downlighting for exterior-building mounted fixtures shall be permitted.
- B-11 The adverse effects of night-lighting shall be mitigated by provision of one or more of the following: (1) low-elevation lighting poles and (2) shielding by internal silvering of the globe or external opaque reflectors.
- B-12 Exterior lighting fixtures that cut-off light directed to the sky shall be installed to minimize atmospheric light pollution, reflected heat and daytime glare.

**Glare**

The following mitigation measures shall be implemented to reduce potential glare impacts to less than significant levels.

- B-13 Expansive areas of highly reflective materials, such as mirrored glass, shall not be permitted.
- B-14 The proposed buildings shall incorporate non-reflective exterior building materials (such as plaster and masonry) in their design. Any glass to be incorporated into the façade of the building shall be either of low-reflectivity, or accompanied by a non-glare coating.
- B-15 All roofs shall be surfaced with non-reflective materials.

**LEVEL OF SIGNIFICANCE AFTER MITIGATION**

With implementation of Mitigation Measures B-1 through B-15, impacts to light and glare would be less than significant. Impacts of the proposed project related to Aesthetics (visual quality [visual character, views and view corridors] and shade and shadow), would be less than significant. Impacts of the proposed project on potential physical degradation or urban decay related to Shopper Goods space, Building Materials and Garden Supplies space, Food Store space, Drug Store/Pharmacy space and Eating and Drinking Facilities would be less than significant.

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## IV. ENVIRONMENTAL IMPACT ANALYSIS

### C. AGRICULTURAL RESOURCES

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#### ENVIRONMENTAL SETTING

##### Agricultural Production and Crop Value

The County of Los Angeles has a long history of agricultural production which continues to this day. In 2005, a total gross value of 277,844,000 in agricultural crops and commodities was produced in Los Angeles County. Nursery products remain the number one crop produced in Los Angeles County, constituting 64.9% of the total overall production value in 2005. Table IV.C-1 shows the top 14 crops produced, by dollar amount, in Los Angeles County for 2005.<sup>1</sup>

**Table IV.C-1**  
**Los Angeles County Crop Production for 2005**

Crop	2005 Dollar Amount
Ornamental trees and shrubs	107,866,000
Bedding Plants	30,631,000
Dry Onions	28,866,000
Root Vegetables	18,000,000
Orchard Fruit	17,455,000
Alfalfa Hay	8,858,000
Dairy and Livestock	7,651,000
Ground Cover	6,731,000
Indoor Plants, Flowering	5,283,000
Indoor Plants, Foliage	4,331,000
Strawberries	3,303,000
Herbs	2,432,000
Rangeland	2,400,000
Vine Crops	1,504,000

*Source: Los Angeles County Agricultural Crop and Livestock Report, 2005.*

##### Project Site and Surrounding Uses

From 1952 to 2002, the site was utilized for agricultural purposes. During this period, several buildings associated with agricultural use of the site and single-family residences were located on the site. Between 1994 and 2002 agricultural production ceased and the land was allowed to remain fallow. Currently no structures are located on the site, and no agricultural uses are present.

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<sup>1</sup> Los Angeles County Agricultural Crop and Livestock Report, 2005.

The project area has experienced and continues to experience growth patterns characteristic of suburban areas. Undeveloped land has been converted to residential subdivisions in the project area. Immediately adjacent to the site are undeveloped parcels; however, there are new residential developments to the north and east of the project site. South of Avenue L uses include Quartz Hill High School, residential development, and a small ranch (Lane Ranch). However, most of the area to the south has been converted to suburban uses (see Figure II-2).

### Farmland and Soil Classification

The U.S. Department of Agriculture Natural Resources Conservation Service (NRCS) has identified, mapped, and classified the various soil types in Los Angeles County. The existing soil types, water availability, and quality are some of the predominant factors that determine where agricultural cultivation will occur and what types of crops will be grown. Soil units are classified according to their characteristics with an emphasis on those features that influence their suitability for the growing of crop plants, grasses, and trees. In many places throughout the county, soil units form a mixed pattern so that they have been grouped based on similar characteristics and are represented as an association. An association is made up of two or more soil units that are represented as one unit on the map. Within these soil types, minor soil differences, such as the variations in effective rooting depth, slope, erosion, drainage, and salt content or alkali content may be an important factor for agricultural production.

One method the NRCS uses to rate the suitability of soils for agriculture is the Storie Index. This index expresses numerically the relative degree of suitability of a soil for general intensive agriculture as it exists at the time of evaluation. The rating is based on soil characteristics only and is obtained by evaluating such factors as soil depth, surface texture, subsoil characteristics, drainage, salts and alkali, and relief. The six grades and their range in index ratings are shown in Table IV.C-2. A rating of 100 percent expresses the most favorable, or ideal soil, while a lower rating indicates that the soil is less favorable for crop production.

**Table IV.C-2**  
**NRCS Storie Index Ratings**

Grade	Index Rating	Description
1	80-100	Few limitations that restrict their use for crops
2	60-80	Suitable for most crops, but have limitations that narrow the choice of crops and have a few special management needs
3	40-60	Suited to a few crops or to special crops and require special management
4	20-40	If used for crops, are severely limited and require special management
5	10-20	Not suited for cultivated crops, but can be used for pasture and range
6	<10	Soil and land types generally not suited to farming

*Source: United States Department of Agriculture Soil Conservation Service, Soil Survey of Los Angeles County, California.*

According to the Los Angeles County Soil Survey, the agricultural area of the project site is underlain by approximately 78.9 percent Adelanto coarse sandy loam, 10.8 Greenfield sandy loam, and 10.3 percent Hesperia fine sandy loam. All three of these soil types have a Storie rating of 85 (excellent).

### **State of California Department of Conservation Farmland Classifications**

The California Department of Conservation has developed a Farmland Mapping and Monitoring Program that classifies the different agricultural soil types related to their ability to sustain agricultural crops. The soil type classifications are prime farmland, farmland of statewide importance, unique farmland, farmland of local importance, grazing land, urban and built-up land, and other land.

According to the California Department of Conservation, Farmland Mapping and Monitoring Program, the project site is classified as urban and built-up land, and other land. Therefore, the project site is not considered to be an important agricultural resource.

### **Williamson Act Contracts**

The California Land Conservation Act of 1965 (the “Williamson Act” – California Government Code Section 51200) recognizes the importance of agricultural land as an economic resource that is vital to the general welfare of society. The enacting legislation declares that the preservation of a maximum amount of the limited supply of agricultural land is necessary to the conservation of the state’s economic resources, and is necessary not only to the maintenance of the agricultural economy of the state, but also for the assurance of adequate, healthful, and nutritious food for future residents of the state and the nation.

Intended to assist the long-term preservation of prime agricultural land in the state, Williamson Act contracts provide the agricultural landowner with a substantial property tax break for keeping land in agricultural use. When under contract, the landowner no longer pays property tax for an assessed valuation based upon the property’s urban development potential. The Williamson Act stipulates that for properties under contract, “the highest and best use of such land during the life of the contract is for agricultural uses.” Therefore, property under contract is assessed and taxed based upon its agricultural value. Williamson Act contracts remain in effect for ten to twenty years unless the property owner files for a notice of non-renewal with the county. The project site is not subject to any Williamson Act contracts. As discussed in Section III, Environmental Setting of this EIR, the site is also zoned and designated for non-agricultural uses.

### **Regulatory Environment**

#### ***City of Lancaster General Plan***

As indicated in the City of Lancaster General Plan, the City values its agricultural resources and recognizes that agricultural lands create a sense of community identity and need to be appropriately managed. However, the trend in the Antelope Valley and the City of Lancaster is moving away from

agriculture and towards an urban environment. Therefore, the City of Lancaster recognizes the possibility of farmland conversion to urban or rural uses.

As discussed in Section III, Environmental Setting of this EIR, the General Plan designates the project site as Urban Residential (UR). The site has a corresponding R-7,000 and R-10,000 zoning classification. Therefore, the City has already planned for the eventual conversion of the site from rural to urban uses.

## **ENVIRONMENTAL IMPACTS**

### **Thresholds of Significance**

In accordance with Appendix G of the State CEQA Guidelines, a project could have a potentially significant impact on agricultural resources if any of the following were to occur:

- (a) Convert prime farmland, unique farmland, or farmland of statewide importance (farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use;
- (b) Conflict with existing zoning for agricultural use, or a Williamson Act contract; or
- (c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of farmland to non-agricultural use.

### **Project Impacts**

#### ***Conversion of Prime Farmland, Unique Farmland, or Farmland of Statewide Importance***

According to the California Department of Conservation, Farmland Mapping and Monitoring Program, the project site is classified as urban and built-up land, and other land. Therefore, the project site would not convert prime farmland, unique farmland, or farmland of statewide importance to a non-agricultural use, and no impact would occur.

#### ***Conflict with Existing Zoning or a Williamson Act Contract***

As discussed in Section III, Environmental Setting of this EIR, the General Plan designates the project site as Urban Residential (UR). The site has a corresponding R-7,000 and R-10,000 zone classification. Therefore, the City has already planned for the eventual conversion of the site from rural to urban uses. The project site is also not subject to a Williamson Act contract. Therefore, no impact would occur.

#### ***Other Changes in the Existing Environment Which Could Result in Conversion of Farmland to Non-Agricultural Use***

The proposed project would be constructed on a site within the City of Lancaster that has been planned for conversion to urban uses. In addition, surrounding uses consist of residential and institutional uses. No agricultural uses are located near the project site. Therefore, there would be no unanticipated actions

that could cause other land in the vicinity of the project site to convert from agriculture to non-agriculture uses, and no impact would occur.

### **CUMULATIVE IMPACTS**

None of the related projects are of an agricultural nature. These projects in combination with the proposed project would greatly intensify the residential and commercial land usage in the immediate project area. None of the nearby projects involve the conversion of agricultural uses to non-agricultural uses. In addition, each related project must be individually assessed to determine if agricultural resources are being negatively impacted. Therefore, no cumulative impact would occur.

### **MITIGATION MEASURES**

No mitigation measures are required.

### **LEVEL OF SIGNIFICANCE AFTER MITIGATION**

No mitigation measures are required as the project has a less than significant impact on agricultural resources.

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## IV. ENVIRONMENTAL IMPACT ANALYSIS

### D. AIR QUALITY

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This section includes a summary of the Health Risk Assessment (HRA) for Diesel Exhaust prepared by Kleinfelder on August 31, 2007. The HRA is incorporated by reference and is included as Appendix D to this Draft EIR. Air Quality modeling data is also included as Appendix C.

#### ENVIRONMENTAL SETTING

##### Climate

The Antelope Valley Air Quality Management District (AVAQMD) maintains jurisdiction over the western portion of the Mojave Desert Air Basin (MDAB); the project site is located near the center of the MDAB. Prevailing winds in the MDAB are out of the west and southwest due to the proximity of the MDAB to coastal and central regions, which cause air masses to be pushed onshore and into the MDAB by differential heating. The Antelope Valley is bordered by the Tehachapi Mountains to the northwest, the Tehachapi Pass and Sierra Nevadas to the north, and the San Gabriel Mountains to the south. The Sierra Nevada Mountains block air masses from entering from the north and escaping to the north.

The climate of the MDAB is classified as dry-hot desert climate (BWh), with portions classified as dry-very hot desert (BWbh), indicated by at least three months with maximum average temperatures over 100.4° F. During the summer the MDAB is generally influenced by a Pacific Subtropical High cell that sits off the coast and inhibits cloud formation, consequently encouraging daytime solar heating. Most desert moisture arrives from infrequent warm, moist, and unstable air masses from the south. The MDAB is rarely influenced by cold air masses moving south from Canada and Alaska, as these frontal systems are weak and diffuse by the time they reach the desert. The MDAB averages between three and seven inches of precipitation per year (from 16 to 30 days with at least 0.01 inches of precipitation).<sup>1</sup>

The climatological station closest to the project site that monitors temperature is the Lancaster climatological station. The annual average maximum temperature recorded from 1971 to 2000 at this station is 76.2°F, and the annual average minimum is 43.6°F.<sup>2</sup> December and January are typically the coldest months in the City. The annual average precipitation recorded at the Lancaster climatological station is 4.43 inches.

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<sup>1</sup> *Antelope Valley AQMD California Environmental Quality Act (CEQA) and Federal Conformity Guidelines, May 2005.*

<sup>2</sup> *Western Regional Climate Center (WRCC), Lancaster Climate Summary, website: <http://www.wrcc.dri.edu/cgi-bin/cliMAIN.pl?ca4747>, April 16, 2007.*

## Air Pollutants

Air pollutant emissions within the MDAB are generated by stationary and mobile sources. Stationary sources can be divided into two major subcategories: point and area sources. Point sources are usually subject to a permit to operate from the AVAQMD, occur at specific identified locations, and are usually associated with manufacturing and industry. Examples of point sources are boilers or combustion equipment that produce electricity or generate heat, such as heating, ventilation, and air conditioning (HVAC) units. In contrast, area sources are widely distributed, produce many small emissions, and they do not require permits to operate from the AVAQMD. Examples of area sources include residential and commercial water heaters, painting operations, portable generators, lawn mowers, agricultural fields, landfills, and consumer products, such as barbecue lighter fluid and hairspray, the area-wide use of which contributes to regional air pollution. Mobile sources refer to emissions from motor vehicles, including tailpipe and evaporative emissions, and are classified as either on-road or off-road. On-road sources are those that are legally operated on roadways and highways. Off-road sources include aircraft, ships, trains, racecars, and construction vehicles.

Mobile sources account for the majority of the air pollutant emissions within the MDAB. However, air pollutants can also be generated by the natural environment, such as when fine dust particles are pulled off the ground surface and suspended in the air during high winds. The air quality within the MDAB is influenced by a wide range of emissions sources, but is primarily influenced by airborne dust and pollution transported from other air basins.

Both the federal and state governments have established ambient air quality standards for outdoor concentrations of specific pollutants, referred to as “criteria pollutants,” in order to protect public health. The national and state ambient air quality standards have been set at concentration levels to protect the most sensitive persons from illness or discomfort with a margin of safety. It is the responsibility of the AVAQMD to bring air quality within the MDAB into attainment with the national and state ambient air quality standards, which are identified later in this EIR section.

The criteria pollutants for which federal and state standards have been promulgated and that are most relevant to air quality planning and regulation in the MDAB are ozone, carbon monoxide, fine suspended particulate matter, and nitrogen dioxide. In addition, toxic air contaminants and greenhouse gases are of concern in the MDAB. The characteristics of each of these pollutants are briefly described below.

- Ozone (O<sub>3</sub>) is a highly reactive and unstable gas that is formed when volatile organic compounds (VOCs) and nitrogen oxides (NO<sub>x</sub>), both byproducts of internal combustion engine exhaust, undergo slow photochemical reactions in the presence of sunlight. Ozone concentrations are generally highest during the summer months when direct sunlight, light wind, and warm temperature conditions are favorable to the formation of this pollutant.
- Carbon Monoxide (CO) is a colorless, odorless gas produced by the incomplete combustion of carbon-containing fuels, such as gasoline or wood. CO concentrations tend to be the highest

during the winter morning, when little to no wind and surface-based inversions trap the pollutant at ground levels. Because CO is emitted directly from internal combustion engines, unlike ozone, motor vehicles operating at slow speeds are the primary source of CO in the Basin. The highest ambient CO concentrations are generally found near congested transportation corridors and intersections.

- Respirable Particulate Matter (PM<sub>10</sub>) and Fine Particulate Matter (PM<sub>2.5</sub>) consist of extremely small, suspended particles or droplets 10 microns and 2.5 microns or smaller in diameter, respectively. Some sources of particulate matter, like pollen and windstorms, are naturally occurring. However, in populated areas, most particulate matter is caused by road dust, diesel soot, combustion products, abrasion of tires and brakes, and construction activities.
- Nitrogen dioxide (NO<sub>2</sub>) is a nitrogen oxide compound that is produced by the combustion of fossil fuels, such as in internal combustion engines (both gasoline and diesel powered), as well as point sources, especially power plants. Of the seven types of nitrogen oxide compounds, NO<sub>2</sub> is the most abundant in the atmosphere. As ambient concentrations of NO<sub>2</sub> are related to traffic density, commuters in heavy traffic may be exposed to higher concentrations of NO<sub>2</sub> than those indicated by regional monitors.
- Toxic Air Contaminants (TAC) refer to a diverse group of “non-criteria” air pollutants that can affect human health, but have not had ambient air quality standards established for them. This is not because they are fundamentally different from the pollutants discussed above, but because their effects tend to be local rather than regional. There are hundreds of toxic air contaminants and exposure to these pollutants can cause or contribute to cancer, birth defects, genetic damage, and other adverse health effects.
- Greenhouse Gas (GHG) emissions refer to a group of emissions that are generally believed to affect global climate conditions. Simply put, the greenhouse effect compares the Earth and the atmosphere surrounding it to a greenhouse with glass panes. The glass panes in a greenhouse let heat from sunlight in and reduce the amount of heat that escapes. Greenhouse gases such as carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O) keep the average surface temperature of the Earth close to a hospitable 60 degrees Fahrenheit. Without the greenhouse effect, the Earth would be a frozen globe with an average surface temperature of about 5 degrees Fahrenheit. However, there appears to be a close relationship between the concentration of greenhouse gases in the atmosphere and global temperatures. A number of scientists believe that the amount of greenhouse gas emissions in the atmosphere has increased at a rapid rate due to the use of machines powered by fossil fuels and that these gases are increasing global temperatures.

In addition to CO<sub>2</sub>, methane, and nitrous oxide, GHGs include hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), sulfur hexafluoride (SF<sub>6</sub>), and water vapor. Of all the GHGs, CO<sub>2</sub> is the most abundant climate change pollutant with fossil fuel combustion CO<sub>2</sub> comprising 81.0% of the

total GHG emissions in California in 2002 and non-fossil fuel CO<sub>2</sub> comprising 2.3%.<sup>3</sup> The other GHGs are less abundant, but have higher global warming potential than CO<sub>2</sub>. To account for this higher potential, emissions of other GHGs are frequently expressed in the equivalent mass of CO<sub>2</sub>, denoted as CO<sub>2</sub>e. The CO<sub>2</sub>e of methane represented 6.4% of the 2002 California GHG emissions, nitrous oxide 6.8%, and the other high global warming potential gases represented 3.5% of these emissions.<sup>4</sup> In addition, there are a number of man-made pollutants, such as carbon monoxide (CO), nitrogen oxides (NO<sub>x</sub>), non-methane volatile organic compounds (NMVOCs), and sulfur dioxide (SO<sub>2</sub>), that have indirect effects on terrestrial or solar radiation absorption by influencing the formation or destruction of other climate change emissions.

### Existing Regional Air Quality

Measurements of ambient concentrations of the criteria pollutants are used by the United States Environmental Protection Agency (U.S. EPA) and the California Air Resources Board (ARB) to assess and classify the air quality of each air basin, county, or, in some cases, a specific urbanized area. The classification is determined by comparing actual monitoring data with national and state standards. If a pollutant concentration in an area is lower than the standard, the area is classified as being in “attainment.” If the pollutant exceeds the standard, the area is classified as a “non-attainment” area. If there is not enough data available to determine whether the standard is exceeded in an area, the area is designated “unclassified.”

The MDAB is designated as a national-level Severe-17 non-attainment area for O<sub>3</sub>, meaning that national ambient air quality standards are not expected to be met for more than 17 years. Nevertheless, AVAQMD has established year 2007 as the required attainment year for O<sub>3</sub>. The MDAB is a State-level extreme non-attainment area for ozone, and is a non-attainment area for PM<sub>10</sub>. It is in attainment for both the national and State ambient air quality standards for CO, NO<sub>2</sub>, SO<sub>2</sub>, and lead (see Table IV.D-1).

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<sup>3</sup> California Environmental Protection Agency, *Climate Action Team Report to Governor Schwarzenegger and the Legislature*, March 2006, p. 11.

<sup>4</sup> *Ibid.*

**Table IV.D-1  
AVAQMD Designations and Classification**

<b>Ambient Air Quality Standard</b>	<b>AVAQMD</b>
One-hour Ozone (Federal)	Non-attainment; classified Severe-17
Eight-hour Ozone (Federal)	Non-attainment
Ozone (State)	Non-attainment; classified Extreme
PM <sub>10</sub> (Federal)	Unclassified
PM <sub>2.5</sub> (Federal)	Unclassified/attainment
PM <sub>2.5</sub> (State)	Unclassified
PM <sub>10</sub> (State)	Non-attainment
Carbon Monoxide (State and Federal)	Attainment
Nitrogen Dioxide (State and Federal)	Attainment/unclassified
Sulfur Dioxide (State and Federal)	Attainment/unclassified
Lead (State and Federal)	Attainment
Particulate Sulfate (State)	Unclassified
Hydrogen Sulfate (State)	Unclassified
Visibility Reducing Particles (State)	Unclassified
<i>Source: Antelope Valley AQMD California Environmental Quality Act (CEQA) and Federal Conformity Guidelines, May 2008.</i>	

The AVAQMD operates a monitoring station in the City of Lancaster. The Division Street air quality monitoring station at 43301 Division Street, Lancaster, California, is approximately 6 miles east of the project site. The station monitors O<sub>3</sub>, CO, PM<sub>10</sub>, PM<sub>2.5</sub>, and NO<sub>2</sub>. **Error! Reference source not found.**, Summary of Ambient Air Quality in the Proposed Project Vicinity, identifies the national and State ambient air quality standards for the relevant air pollutants, along with the ambient pollutant concentrations that were measured at the Division Street monitoring station between 2004 and 2006.

According to the air quality data from the Division Street monitoring station shown in **Error! Reference source not found.**, the national 1-hour ozone standard has been exceeded for a total of three days from 2004 to 2006, while the State 1-hour ozone standard has been exceeded for a total of 101 days from 2004 to 2006. The national 8-hour ozone standard was exceeded a total of 71 days from 2004 to 2006. No national or State 24-hour standards for PM<sub>10</sub> or CO have been exceeded from 2004 to 2006, while the national 24-hour standard for PM<sub>2.5</sub> was also not exceeded from 2004 to 2006. In addition, the State 1-hour standard for NO<sub>2</sub> was not exceeded from 2004 to 2005.<sup>5</sup>

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<sup>5</sup> As indicated in Table IV.D-2, insufficient (or no) data was available from the Division Street monitoring station to determine whether the annual average level of NO<sub>2</sub> had exceeded the national annual average NO<sub>2</sub> standard in 2006.

**Table IV.D-2  
Summary of Ambient Air Quality in the Proposed Project Vicinity**

Air Pollutants Monitored at Division Street Station, Lancaster	Year		
	2004	2005	2006
<b>Ozone (O<sub>3</sub>)</b>			
Maximum 1-hour concentration measured	0.121 ppm	0.127 ppm	0.132 ppm
Number of days exceeding national 0.12 ppm 1-hour standard	0	1	2
Number of days exceeding State 0.09 ppm 1-hour standard	37	42	22
Maximum 8-hour concentration measured	0.101 ppm	0.103 ppm	0.105 ppm
Number of days exceeding national 0.08 ppm 8-hour standard	24	31	16
<b>Respirable Particulate Matter (PM<sub>10</sub>)</b>			
Maximum national 24-hour concentration measured	56.0 µg/m <sup>3</sup>	55.5 µg/m <sup>3</sup>	45.4 µg/m <sup>3</sup>
Number of days exceeding national 150 µg/m <sup>3</sup> 24-hour standard	0	0	0
Maximum State 24-hour concentration measured	33.0 µg/m <sup>3</sup>	47.0 µg/m <sup>3</sup>	33.0 µg/m <sup>3</sup>
Number of days exceeding State 50 µg/m <sup>3</sup> 24-hour standard	0	0	0
<b>Fine Particulate Matter (PM<sub>2.5</sub>)</b>			
Maximum 24-hour concentration measured	18.0 µg/m <sup>3</sup>	28.0 µg/m <sup>3</sup>	10.0 µg/m <sup>3</sup>
Number of days exceeding national 65.0 µg/m <sup>3</sup> 24-hour standard	0	0	0
<b>Carbon Monoxide (CO)</b>			
Maximum 1-hour concentration measured	2.9 ppm	2.9 ppm	*
Maximum 8-hour concentration measured	1.72 ppm	1.54 ppm	1.18 ppm
Number of days exceeding national 9.0 ppm 8-hour standard	0	0	0
Number of days exceeding State 9.0 ppm 8-hour standard	0	0	0
<b>Nitrogen Dioxide (NO<sub>2</sub>)</b>			
Maximum 1-hour concentration measured	0.103 ppm	0.074 ppm	0.066 ppm
Number of days exceeding State 0.25 ppm 1-hour standard	0	0	0
Annual average	0.015 ppm	0.015 ppm	*
Does measured annual average exceed national 0.0534 ppm annual average standard?	No	No	*
<i>Note: ppm = parts by volume per million of air.  µg/m<sup>3</sup> = micrograms per cubic meter.  * = Insufficient (or no) data was available to determine the value.</i>			
<i>Source: California Air Resources Board, Top 4 Summary: Select Pollutant, Years, and Area, website:  <a href="http://www.arb.ca.gov/adam/cgi-bin/db2www/adamtop4b.d2w/Branch">http://www.arb.ca.gov/adam/cgi-bin/db2www/adamtop4b.d2w/Branch</a>, April 16, 2007</i>			

### Existing Local Air Quality

The project site located at the intersection of 60<sup>th</sup> Street West and Avenue L, and is approximately 40.15 acres in size. The area surrounding the project site consists primarily of residential uses and undeveloped land. To the south of the project site is Avenue L, followed by Quartz Hill High School (approximately 100 feet from the project site). To the east of the project site is 60<sup>th</sup> Street West, followed by single-family residential development (approximately 150 feet from the project site). To the west of the project site is undeveloped land. Finally, to the north of the project site is undeveloped land followed by single-family residential development (also approximately 150 feet from the project site).

Motor vehicles are the primary source of pollutants in the proposed project vicinity. Traffic-congested roadways and intersections have the potential to generate localized high levels of CO. Localized areas where ambient concentrations exceed federal and/or State standards for CO are termed CO “hotspots”. The AVAQMD follows the recommendations of the SCAQMD in that it recommends the use of CALINE4, a dispersion model for predicting CO concentrations, as the preferred method of estimating pollutant concentrations at sensitive receptors near congested roadways and intersections. For each intersection analyzed, CALINE4 adds roadway-specific CO emissions calculated from peak-hour turning volumes to the existing ambient CO air concentrations. For this analysis, CO concentrations were calculated based on a simplified CALINE4 screening procedure developed by the Bay Area Air Quality Management District and approved by the SCAQMD. The simplified model is intended as a screening analysis in order to identify a potential CO hotspot. This methodology assumes worst-case conditions and provides a screening of maximum, worst-case CO concentrations.

Maximum existing CO concentrations were calculated for the intersections evaluated in the traffic report prepared by Overland Traffic Consultants, included as Appendix L to this Draft EIR, which may have receptors in close proximity to the roadways. For the purpose of this analysis, receptors are any of the sensitive receptor types (including, but not limited to, residents, schools, retirement homes and day care facilities), as well as any location where people would be required (as in a work site) to be located for one to eight hours. The results of these calculations are presented in Table IV.D-3, (Existing Localized Carbon Monoxide Concentrations) and Table IV.D-4, (Existing (Saturday) Localized Carbon Monoxide Concentrations) for representative receptor locations at 25, 50, and 100 feet from each roadway. These distances were selected because they represent locations where a person may be living or working for more than one or eight hours at a time. The National 1-hour standard is 35.0 parts per million (ppm), and the State 1-hour standard is 20.0 ppm. The 8-hour National and State standards are 9.5 ppm and 9.1 ppm, respectively.

As shown in Table IV.D-3, Existing (Weekday) Localized Carbon Monoxide Concentrations, and Table IV.D-4, Existing (Saturday) Localized Carbon Monoxide Concentrations, under worst-case conditions, existing CO concentrations for both weekday and Saturday peak hours at 5 intersections analyzed in the traffic report do not exceed the national or State 1-hour and 8-hour ambient air quality standards at 25, 50 or 100 feet from the roadways. Therefore, sensitive receptors in close proximity to these 5 intersections are currently not exposed to substantial pollutant concentrations under existing conditions.

**Table IV.D-3  
Existing (Weekday) Localized Carbon Monoxide Concentrations**

Intersection	CO Concentrations in Parts per Million <sup>a,b</sup>					
	25 Feet		50 Feet		100 Feet	
	1-Hour	8-Hour	1-Hour	8-Hour	1-Hour	8-Hour
60 <sup>th</sup> Street West & Avenue K	3.5	1.6	3.3	1.6	3.2	1.4
60 <sup>th</sup> Street West & Avenue L	3.4	1.5	3.3	1.5	3.2	1.4
50 <sup>th</sup> Street West & Avenue L	3.6	1.7	3.4	1.5	3.3	1.4
45 <sup>th</sup> Street West & Avenue L	3.7	1.7	3.5	1.6	3.3	1.5
40 <sup>th</sup> Street West & Avenue L	3.9	1.9	3.7	1.7	3.4	1.6

<sup>a</sup> National 1-hour standard is 35.0 parts per million. State 1-hour standard is 20.0 parts per million.  
<sup>b</sup> National 8-hour standard is 9.5 parts per million. State 8-hour standard is 9.1 parts per million.  
Note: Additional intersections were analyzed in the traffic report. However, these additional intersections were located too close to an active freeway and therefore, CO Hotspot modeling would not represent a realistic CO concentration at these intersections.  
Source: Christopher A. Joseph and Associates, 2008. Calculation print out sheets are provided in Appendix D.  
Traffic Information Source: Overland Traffic Consultants, Inc., 2008.

**Table IV.D-4  
Existing (Saturday) Localized Carbon Monoxide Concentrations**

Intersection	CO Concentrations in Parts per Million <sup>a,b</sup>					
	25 Feet		50 Feet		100 Feet	
	1-Hour	8-Hour	1-Hour	8-Hour	1-Hour	8-Hour
60 <sup>th</sup> Street West & Avenue K	3.2	1.4	3.1	1.4	3.1	1.3
60 <sup>th</sup> Street West & Avenue L	3.3	1.4	3.2	1.4	3.1	1.3
50 <sup>th</sup> Street West & Avenue L	3.5	1.6	3.4	1.5	3.2	1.4
45 <sup>th</sup> Street West & Avenue L	3.6	1.7	3.4	1.5	3.3	1.4
40 <sup>th</sup> Street West & Avenue L	3.7	1.7	3.5	1.6	3.3	1.5

<sup>a</sup> National 1-hour standard is 35.0 parts per million. State 1-hour standard is 20.0 parts per million.  
<sup>b</sup> National 8-hour standard is 9.5 parts per million. State 8-hour standard is 9.1 parts per million.  
Note: Additional intersections were analyzed in the traffic report. However, these additional intersections were located too close to an active freeway and therefore, CO Hotspot modeling would not represent a realistic CO concentration at these intersections.  
Source: Christopher A. Joseph and Associates, 2008. Calculation print out sheets are provided in Appendix D.  
Traffic Information Source: Overland Traffic Consultants, Inc., 2008.

### Existing State-wide Greenhouse Gas Emissions

In December 2006, the California Energy Commission published the *Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004*. This report indicates that California is the second largest emitter of greenhouse gasses in the United States next to Texas. This is largely a result of the number of people

living in a large state, as opposed to a small state such as Rhode Island. California generates about half as much CO<sub>2</sub> emissions as Texas. When considering fossil fuel emissions at the individual person level, California is second lowest in the nation in per capita CO<sub>2</sub> emissions with only the District of Columbia lower. Between 1990 and 2000, California's population grew by 4.1 million people and during the 1990 to 2003 period, California's gross state product grew by 83 percent (in dollars, not adjusted for inflation). However, California's greenhouse gas emissions grew by only 12 percent between 1990 and 2003. The report concludes that California's ability to slow the rate of growth of greenhouse gas emissions is largely due to the success of its energy efficiency, renewable energy programs, and commitment to clean air and clean energy. In fact, the State's programs and commitments lowered its greenhouse gas emissions rate of growth by more than half of what it would have been otherwise.

### **Health Effects of Air Pollutants**

The health effects of the criteria pollutants (i.e., ozone, carbon monoxide, fine suspended particulate matter, nitrogen dioxide, sulfur dioxide, and lead) and TACs are described below:<sup>6</sup>

#### ***Ozone***

Individuals exercising outdoors, children and people with preexisting lung disease such as asthma and chronic pulmonary lung disease are considered to be the most susceptible sub-groups for ozone effects. Short-term exposures (lasting for a few hours) to ozone at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes. Elevated ozone levels are associated with increased school absences. In recent years, a correlation between elevated ambient ozone levels and increases in daily hospital admission rates, as well as mortality, has also been reported. An increased risk for asthma has been found in children who participate in multiple sports and live in high ozone communities.

Ozone exposure under exercising conditions is known to increase the severity of the above mentioned observed responses. Animal studies suggest that exposures to a combination of pollutants that include ozone may be more toxic than exposure to ozone alone. Although lung volume and resistance changes observed after a single exposure diminish with repeated exposures, biochemical and cellular changes appear to persist, which can lead to subsequent lung structural changes.

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<sup>6</sup> *The descriptions of the health effects of the criteria pollutants are taken from Appendix C (Health Effects of Ambient Air Pollutants) of SCAQMD's "Guidance Document for Addressing Air Quality Issues in General Plans and Local Planning" document.*

### ***Carbon Monoxide***

Individuals with a deficient blood supply to the heart are the most susceptible to the adverse effects of CO exposure. The effects observed include earlier onset of chest pain with exercise, and electrocardiograph changes indicative of worsening oxygen supply to the heart.

Inhaled CO has no direct toxic effect on the lungs, but exerts its effect on tissues by interfering with oxygen transport by competing with oxygen to combine with hemoglobin present in the blood to form carboxyhemoglobin (COHb). Hence, conditions with an increased demand for oxygen supply can be adversely affected by exposure to CO. Individuals most at risk include patients with diseases involving heart and blood vessels, fetuses, and patients with chronic hypoxemia (oxygen deficiency) as seen in high altitudes.

Reduction in birth weight and impaired neurobehavioral development has been observed in animals chronically exposed to CO resulting in COHb levels similar to those observed in smokers. Recent studies have found increased risks for adverse birth outcomes with exposure to elevated CO levels. These include pre-term births and heart abnormalities. Additional research is needed to confirm these results.

### ***Particulate Matter***

A consistent correlation between elevated ambient fine particulate matter (PM<sub>10</sub> and PM<sub>2.5</sub>) levels and an increase in mortality rates, respiratory infections, number and severity of asthma attacks and the number of hospital admissions has been observed in different parts of the United States and various areas around the world. In recent years, some studies have reported an association between long-term exposure to air pollution dominated by fine particles and increased mortality, reduction in life-span, and an increased mortality from lung cancer.

Daily fluctuations in fine particulate matter concentration levels have also been related to hospital admissions for acute respiratory conditions in children, to school and kindergarten absences, to a decrease in respiratory lung volumes in normal children and to increased medication use in children and adults with asthma. Recent studies show lung function growth in children is reduced with long-term exposure to particulate matter.

The elderly, people with pre-existing respiratory or cardiovascular disease and children appear to be more susceptible to the effects of PM<sub>10</sub> and PM<sub>2.5</sub>.

### ***Nitrogen Dioxide***

Population-based studies suggest that an increase in acute respiratory illness, including infections and respiratory symptoms in children (not infants), is associated with long-term exposures to NO<sub>2</sub> at levels found in homes with gas stoves, which are higher than ambient levels found in Southern California. Increase in resistance to air flow and airway contraction is observed after short-term exposure to NO<sub>2</sub> in

healthy subjects. Larger decreases in lung functions are observed in individuals with asthma or chronic obstructive pulmonary disease (e.g., chronic bronchitis, emphysema) than in healthy individuals, indicating a greater susceptibility of these sub-groups.

In animals, exposure to levels of NO<sub>2</sub> considerably higher than ambient concentrations results in increased susceptibility to infections, possibly due to the observed changes in cells involved in maintaining immune functions. The severity of lung tissue damage associated with high levels of ozone exposure increases when animals are exposed to a combination of O<sub>3</sub> and NO<sub>2</sub>.

### ***Sulfur Dioxide***

A few minutes exposure to low levels of SO<sub>2</sub> can result in airway constriction in some asthmatics, all of whom are sensitive to its effects. In asthmatics, increase in resistance to air flow, as well as reduction in breathing capacity leading to severe breathing difficulties, are observed after acute exposure to SO<sub>2</sub>. In contrast, healthy individuals do not exhibit similar acute responses even after exposure to higher concentrations of SO<sub>2</sub>.

Animal studies suggest that despite SO<sub>2</sub> being a respiratory irritant, it does not cause substantial lung injury at ambient concentrations. However, very high levels of exposure can cause lung edema (fluid accumulation), lung tissue damage, and sloughing off of cells lining the respiratory tract.

Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient SO<sub>2</sub> levels. In these studies, efforts to separate the effects of SO<sub>2</sub> from those of fine particles have not been successful. It is not clear whether the two pollutants act synergistically or one pollutant alone is the predominant factor.

### ***Sulfates***

Most of the health effects associated with fine particles and SO<sub>2</sub> at ambient levels are also associated with SO<sub>4</sub>. Thus, both mortality and morbidity effects have been observed with an increase in ambient SO<sub>4</sub> concentrations. However, efforts to separate the effects of SO<sub>4</sub> from the effects of other pollutants have generally not been successful.

Clinical studies of asthmatics exposed to sulfuric acid suggest that adolescent asthmatics are possibly a subgroup susceptible to acid aerosol exposure. Animal studies suggest that acidic particles such as sulfuric acid aerosol and ammonium bisulfate are more toxic than non-acidic particles like ammonium sulfate. Whether the effects are attributable to acidity or to particles remains unresolved.

### ***Lead***

Fetuses, infants, and children are more sensitive than others to the adverse effects of lead exposure. Exposure to low levels of lead can adversely affect the development and function of the central nervous

system, leading to learning disorders, distractibility, inability to follow simple commands, and lower intelligence quotient. In adults, increased lead levels are associated with increased blood pressure.

Lead poisoning can cause anemia, lethargy, seizures and death. It appears that there are no direct effects of lead on the respiratory system. Lead can be stored in the bone from early-age environmental exposure, and elevated blood lead levels can occur due to breakdown of bone tissue during pregnancy, hyperthyroidism (increased secretion of hormones from the thyroid gland) and osteoporosis (breakdown of bony tissue). Fetuses and breast-fed babies can be exposed to higher levels of lead because of previous environmental lead exposure of their mothers.

### ***Toxic Air Contaminants***

Toxic Air Contaminants (TACs) are a broad class of compounds known to cause or contribute to cancer or non-cancer health effects such as birth defects, genetic damage, and other adverse health effects. As discussed previously, effects from TACs may be both chronic and acute on human health. Acute health effects are attributable to sudden exposure to high quantities of air toxics. These effects include nausea, skin irritation, respiratory illness, and, in some cases, death. Chronic health effects result from low-dose, long-term exposure from routine releases of air toxics. The effect of major concern for this type of exposure is cancer, which requires a period of 10-30 years after exposure to develop.<sup>7</sup>

TACs are found in ambient air, especially in urban areas, and are caused by industry, agriculture, fuel combustion, and commercial operations (e.g., dry cleaners). TACs are typically found in low concentrations, even near their source (e.g., benzene near a freeway). Because chronic exposure can result in adverse health effects, TACs are regulated at the regional, state, and federal level.

Diesel exhaust is the predominant TAC in urban air and is estimated to represent about two-thirds of the cancer risk from TACs (based on the statewide average). According to the ARB, diesel exhaust is a complex mixture of gases, vapors and fine particles. This complexity makes the evaluation of health effects of diesel exhaust a complex scientific issue. Some of the chemicals in diesel exhaust, such as benzene and formaldehyde, have been previously identified as TACs by the ARB, and are listed as carcinogens either under the State's Proposition 65 or under the federal Hazardous Air Pollutants programs. California has adopted a comprehensive diesel risk reduction program. The United States Environmental Protection Agency (U.S. EPA) has adopted low sulfur diesel fuel standards that will reduce diesel particulate matter substantially. These went into effect in June 2006.

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<sup>7</sup> ARB, *Air Quality Analysis Guidance Handbook (Handbook)—Chapter 3 (Basic Air Quality Information)*, [http://www.aqmd.gov/ceqa/handbook/CH3\\_rev.doc](http://www.aqmd.gov/ceqa/handbook/CH3_rev.doc), accessed July 14, 2006.

## **Regulatory Framework**

Air quality in the United States is governed by the Federal Clean Air Act (CAA). In addition to being subject to the requirements of the CAA, air quality in California is also governed by more stringent regulations under the California Clean Air Act (CCAA). At the federal level, the CAA is administered by the United States Environmental Protection Agency (USEPA). In California, the CCAA is administered by the Air Resources Board (ARB) at the State level and by the Air Quality Management Districts at the regional and local levels.

Air quality within the MDAB is addressed through the efforts of various federal, State, regional, and local government agencies. These agencies work jointly, as well as individually, to improve air quality through legislation, regulations, planning, policy-making, education, and a variety of programs. The agencies responsible for improving the air quality within the Basin are discussed below.

### ***Federal***

#### ***USEPA***

The USEPA is responsible for setting and enforcing the federal ambient air quality standards for atmospheric pollutants. It regulates emission sources that are under the exclusive authority of the federal government, such as aircraft, ships, and certain locomotives. The USEPA also has jurisdiction over emissions sources outside state waters (outer continental shelf), and establishes various emissions standards for vehicles sold in states other than California.

As part of its enforcement responsibilities, the USEPA requires each state with nonattainment areas to prepare and submit a State Implementation Plan (SIP) that demonstrates the means to attain the federal standards. The SIP must integrate federal, State, and local plan components and regulations to identify specific measures to reduce pollution, using a combination of performance standards and market-based programs.

In terms of toxic air contaminants, the federal government has established lists of pollutants that are regulated at the federal level through the National Emissions Standards for Hazardous Air Pollutants (NESHAPs), discussed previously.

### ***State***

#### ***ARB***

The ARB, a part of the California Environmental Protection Agency, is responsible for the coordination and administration of both state and federal air pollution control programs within California. In this capacity, the ARB conducts research, sets State ambient air quality standards, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. The ARB establishes emissions standards for motor vehicles sold in California, consumer products (such as hair

spray, aerosol paints, and barbecue lighter fluid), and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions.

In terms of toxic air contaminants, the State has established lists of pollutants that are regulated through Assembly Bill (AB) 1807 (Tanner Air Toxics Act). The State regulations governing toxic air contaminants are more stringent than federal regulations.

California has responded to the issue of global climate change by adopting a series of laws to reduce GHG emissions from various sources within the State. These efforts began in September 2002 when then-Governor Gray Davis signed AB 1493 requiring the development and adoption of regulations to achieve “the maximum feasible reduction of greenhouse gases” emitted by noncommercial passenger vehicles, light-duty trucks, and other vehicles used primarily for personal transportation in the State. In September 2006, Governor Arnold Schwarzenegger signed in to law AB 32, the California Global Warming Solutions Act of 2006. AB 32 requires the California ARB to adopt regulations to require the reporting and verification of statewide greenhouse gas emissions and to monitor and enforce compliance with that program. As part of this effort, the ARB will adopt a statewide greenhouse gas emissions limit equivalent to the statewide greenhouse gas emissions levels in 1990, to be achieved by 2020. The ARB will adopt rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emission reductions. These are expected to include market-based compliance mechanisms. The statute further requires the ARB to monitor compliance with and enforce any rule, regulation, order, emission limitation, emissions reduction measure, or market-based compliance mechanism that it adopts. Senate Bill (SB) 1368, a companion bill to AB 32, requires the California Public Utilities Commission (PUC) and the California Energy Commission (CEC) to establish GHG emission performance standards for the generation of electricity. These standards will apply not only to power that is generated within California, but will also apply to power that is generated elsewhere and imported into the State.

In October 2006, Governor Schwarzenegger issued an Executive Order in which he designated the Cal/EPA Secretary with the primary responsibility for implementing AB 32. In late December 2006, the Governor announced the members of a blue-ribbon Market Advisory Committee Board to devise approaches to develop a market for carbon trading. More developments are likely as the Governor and the Legislature determine who has primary responsibility for implementation and the relationship between regulations and market-based mechanisms. Because, the intent of AB 32 is to limit 2020 emissions to the equivalent of 1990, and the present year (2008) is near the midpoint of this timeframe, it is expected that the regulations would affect many existing sources of GHGs and not just new general development projects.

In response to the Executive Order, the Secretary of Cal/EPA created the Climate Action Team (CAT), which, in March 2006, published the *Climate Action Team Report to Governor Schwarzenegger and the Legislature* (the “2006 CAT Report”). The 2006 CAT Report identifies a recommended list of strategies that the State could pursue to reduce climate change greenhouse gas emissions. These are strategies that

could be implemented by various State agencies to ensure that the Governor's targets are met and can be met with existing authority of the State agencies.

Since implementation of AB 32, several updates have been produced and new regulatory standards have been enacted which include the following:

- Senate Bill 97 (Chapter 185, Statutes of 2007) directed the Governor's Office of Planning and Research (OPR) to prepare CEQA guidelines for the mitigation of GHG emissions, including but not limited to, effects associated with transportation or energy consumption;
- On June 19, 2008, OPR released a Technical Advisory, which explains how impacts and mitigation measures from climate change and GHG emissions should be addressed in EIRs. Going forward, OPR has also directed the ARB to recommend a method for setting the GHG emissions threshold of significance, including both qualitative and quantitative options.
- On October 24, 2008, the ARB released a draft staff proposal making preliminary recommendations on significance thresholds. The guidance provides that if certain projects meet performance standards and remain below numeric thresholds, GHG impacts will be considered less than significant. While the guidance specifies the California Energy Commission's Tier II Energy Efficiency standards as the energy efficiency performance standard, ARB has not specified other performance standards nor the numeric threshold for CO<sub>2</sub> emissions. ARB has requested public and stakeholder input in the development of these emission levels and the thresholds in general.
- On October 22, 2008, the South Coast Air Quality Management District (SCAQMD) issued its own draft recommendations on GHG CEQA significance thresholds. While the project is within a different air basin, these recommendations provide further insight into possible approaches to GHG analysis and mitigation for commercial project.

## ***Regional***

### *Southern California Association of Governments*

The Southern California Association of Governments (SCAG) is a council of governments for Imperial, Los Angeles, Orange, Riverside, San Bernardino, and Ventura Counties. It is a regional planning agency and serves as a forum for regional issues relating to transportation, the economy and community development, and the environment.

Although SCAG is not an air quality management agency, it is responsible for developing transportation, land use, and energy conservation measures that affect air quality. SCAG's Regional Comprehensive Plan and Guide (RCPG) provides growth forecasts that are used in the development of air quality-related land use and transportation control strategies by the AVAQMD. The RCPG is a framework for decision-

making for local governments, assisting them in meeting federal and State mandates for growth management, mobility, and environmental standards, while maintaining consistency with regional goals regarding growth and changes through the year 2015, and beyond. Policies within the RCPG include consideration of air quality, land use, transportation, and economic relationships by all levels of government.

### **AVAQMD**

The AVAQMD is directly responsible for reducing emissions from stationary (area and point), mobile, and indirect sources. Prior to incorporation of the AVAQMD (formerly Antelope Valley Air Pollution Control District), the South Coast Air Quality Management District (SCAQMD) included the desert portions of Los Angeles County. Since incorporation of the AVAQMD, SCAQMD has phased out preparation of ozone attainment plans for the desert portion of Los Angeles County. The 2004 Ozone Attainment Plan (State and Federal) is an update of the Antelope Valley portion of the SCAQMD's 2003 Air Quality Management Plan (AQMP). The 2004 Ozone Attainment Plan by AVAQMD replaces all previous plans submitted by SCAQMD. Because the MDAB is in non-attainment status for ozone, the Ozone Attainment Plan "(1) demonstrates that the AVAQMD will meet the primary required federal ozone planning milestones, attainment of the ozone NAAQS by the end of 2007; (2) presents the progress the AVAQMD will make towards meeting all required state ozone planning milestones, including attainment of the ozone CAAQS; and (3) discusses the 8 hour ozone NAAQS, preparatory to an expected non-attainment designation for the new NAAQS."<sup>8</sup>

The MDAB is also classified as nonattainment for state PM<sub>10</sub> standards, and unclassified/attainment for the state PM<sub>2.5</sub> standard. Most of the PM emissions in the Antelope Valley come from fugitive dust sources such as travel on unpaved roads, construction, and agricultural operations, and wind-driven dust. Other significant PM sources include open burning, inactive disturbed land, fireplaces, combustion sources, and coating operations. In 2005, in response to Senate Bill 656, the California ARB produced a list of potential measures to reduce PM<sub>10</sub> emissions. The AVAQMD is required to adopt implementation schedules for appropriate PM<sub>10</sub> control measures that can be feasibly and effectively implemented in the MDAB.

### **Local**

#### *City of Lancaster*

Local jurisdictions, such as the City of Lancaster, have the authority and responsibility to reduce air pollution through its police power and decision-making authority. Specifically, the City is responsible for the assessment and mitigation of air emissions resulting from its land use decisions. The City of

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<sup>8</sup> AVAQMD 2004 Ozone Attainment Plan, April 20, 2004.

Lancaster is also responsible for the implementation of transportation control measures as outlined in the AQMP. Examples of such measures include bus turnouts, energy-efficient streetlights, and synchronized traffic signals. In accordance with CEQA requirements and the CEQA review process, the City assesses the air quality impacts of new development projects, requires mitigation of potentially significant air quality impacts by conditioning discretionary permits and monitors and enforces implementation of such mitigation.

## ENVIRONMENTAL IMPACTS

### Thresholds of Significance

In accordance with Appendix G to the State CEQA Guidelines, a significant air quality impact may occur if the proposed project would result in any of the following conditions:

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

### *AVAQMD CEQA Guidelines*

The AVAQMD prepared the *Antelope Valley AQMD California Environmental Quality Act (CEQA) and Federal Conformity Guidelines* in 2008. Construction and operational emissions associated with the proposed project would be significant if they exceed the thresholds shown in **Error! Reference source not found.**, AVAQMD's Significant Emissions Thresholds.

**Table IV.D-5  
AVAQMD's Significant Emissions Thresholds**

<b>Criteria Pollutant</b>	<b>Annual Threshold (tons)</b>	<b>Daily Threshold (pounds)</b>
Carbon Monoxide (CO)	100	548
Oxides of Nitrogen (NO <sub>x</sub> )	25	137
Volatile Organic Compounds (VOC)	25	137
Sulfur Oxides (SO <sub>x</sub> )	25	137
Particulate Matter (PM <sub>10</sub> )	15	82
<i>Source: AVAQMD California Environmental Quality Act (CEQA) and Federal Conformity Guidelines, 2008</i>		

The AVAQMD also states that a project's environmental effects will be considered significant if it generates a violation of any ambient air quality standard when added to the local background. Therefore, construction and operational related emissions that cause the following ambient air quality standards to be exceeded at existing human receptors shall be considered significant:

- 0.18 parts per million NO<sub>x</sub> averaged over a 1-hour period (State standard)
- 20 parts per million of CO averaged over a 1-hour period (State standard)
- 9.0 parts per million of CO averaged over an 8-hour period (Federal and State standard)
- 50 micrograms per cubic meter (µg/m<sup>3</sup>) of PM<sub>10</sub> averaged over a 24-hour period (State standard)
- 35 micrograms per cubic meter (µg/m<sup>3</sup>) of PM<sub>2.5</sub> averaged over a 24-hour period (Federal Standard)

Carbon monoxide emissions from a project are significant if they cause CO concentrations at impacted locations to exceed a national or State ambient air quality standard. As the MDAB currently experiences low levels of CO throughout, CO hotspots are not a concern in this area.

A project's impacts will also be considered significant if it exposes sensitive receptors to substantial pollutant concentrations of toxic air contaminants including those resulting in a cancer risk greater than or equal to one in a million and/or a Hazard Index (HI)(non-cancerous) greater than or equal to 0.1.

In order to assess cumulative impacts, projects are generally evaluated to determine whether they would be consistent with 2004 Ozone Attainment Plan performance standards and project-specific emissions thresholds. In the case of the proposed project, air pollutant emissions would be considered to be cumulatively considerable if the new sources of emissions exceeded AVAQMD emissions thresholds for ozone. Additionally, the *Antelope Valley AQMD California Environmental Quality Act (CEQA) and Federal Conformity Guidelines* state that "a project's indirect and cumulative emissions are not significant if the project is residential or commercial development whose population, employment, and traffic increases are consistent with the local general plan, and the local general plan is consistent with the

applicable attainment plan (i.e., the Ozone Attainment Plan). Such a project's direct emissions are only significant if they have the potential to generate a violation of the CO, NO<sub>2</sub>, or particulate ambient air quality standards."<sup>9</sup>

### ***Greenhouse Gas Emissions***

At the time that this EIR was being prepared, no air agency or municipality had yet established project-level significance thresholds for Greenhouse Gas (GHG) emissions. However, the OPR Advisory recognizes the uncertainties associated with defining the significance of GHG emissions associated with an individual project and notes that significance must be evaluated on a case-by-case basis. The OPR Advisory did not set significance thresholds, but directed ARB to recommend a method for setting the GHG emission threshold of significance, including both qualitative and quantitative options. ARB's draft staff proposal has not yet set significance thresholds for GHG impacts from land use projects. As such, GHG emissions can be quantified, but no applicable thresholds exist to determine level of significance for the purpose of CEQA. Furthermore, the regulations required to meet the goal under AB 32 of reducing emissions to 1990 levels by 2010 are still under development and are expected to be implemented no later than January 1, 2010. The list of discrete early action measures that can be adopted and implemented before January 1, 2010, was adopted by the ARB in June, 2007. The three early action measures focus on major State-wide contributing sources and industries, not on individual development projects or practices. These three measures are: 1) a low-carbon fuel standard; 2) reduction of refrigerant losses from motor vehicle air conditioning system maintenance; and 3) increased methane capture from landfills. At this time, there is no single criterion by which the implementation of a project can be judged to support or hinder attainment of the State's goals.

Therefore, while the City continues to monitor guidance from the state agencies as to how to set a significance threshold, as the state has not yet released any binding guidance, the City has not yet adopted a threshold exclusively related to GHG. In the absence of any other adopted thresholds, this assessment assumes that the project would be considered to generate a substantial increase in GHG emissions if it is not consistent with any strategies from the 2006 CAT Report that the Lead Agency deems to be applicable and feasible for the proposed land uses. This would be considered a significant impact with regards to global climate change.

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<sup>9</sup> *Antelope Valley AQMD California Environmental Quality Act (CEQA) and Federal Conformity Guidelines*, May 2008, p. 5 of 8.

## **Project Impacts**

### ***Air Quality Plan Consistency***

The *2004 Ozone Attainment Plan*, discussed previously, is the applicable air quality plan for the AVAQMD and consequently the project area. The purpose of the plan is to bring the Antelope Valley into attainment for ozone. The *2004 Ozone Attainment Plan* is based on approved regional air emission modeling, which takes into account future development consistent with adopted plans and policies. Because the City of Lancaster's General Plan was used by SCAG to prepare the regional growth forecasts for northern Los Angeles County, development that is consistent with the City's General Plan would also not create air emissions that exceed the AVAQMD's *2004 Ozone Attainment Plan*. Development of the proposed project, however, would require a general plan amendment and zone change to redesignate the project site from Urban Residential to Commercial and rezone a portion of the site from R-7,000 and R-10,000 to CPD. As such, the proposed project has not been accounted for in the City's General Plan.

Although the proposed project has not been accounted for in the City's General Plan, the development of the proposed commercial use on the project site would serve to reduce vehicle emissions in the City by providing retail facilities to serve the local community. In addition, the proposed project would also serve to generate employment opportunities for the local area. As indicated in the City's General Plan, the City has become a commuter community, with long commutes recognized as being a source of additional air pollutants.<sup>10</sup> One of the specific actions indicated as part of the Air Quality Program presented in the City's General Plan is the minimization of vehicle travel by new development. The proposed project is a large commercial/retail development which could serve to decrease the distance City residents would have to travel for consumer goods. This in turn would reduce the trip lengths residents would need to travel and the emissions associated with those vehicle trips. Thus, although development of the proposed project would not be consistent with the growth projected in the City's General Plan, it would not conflict with or obstruct implementation of the *2004 Ozone Attainment Plan*. Therefore, this impact would be less than significant.

### ***Construction Impacts***

#### ***Construction Period Emissions- Mass Daily Emissions***

The proposed project involves the construction of an approximately 344,550 square foot commercial/retail and restaurant facilities. Three basic types of activities are expected to generate construction-related emissions at the project site as a result of implementation of the proposed project. The first activity would involve the grading of the project site to accommodate the proposed buildings. Secondly, the proposed retail buildings would be constructed. Finally, the site would be paved and

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<sup>10</sup> *City of Lancaster 2020 General Plan, October 1997, p.I-20.*

architectural coatings would be applied. Overall, construction activities at the project site would occur over an approximate 12-month period.

Emissions from construction can be categorized into three sources:

1. Fugitive dust from earthmoving activities;
2. Construction equipment exhaust; and
3. Worker vehicle exhaust.

Generally, fugitive dust from earthmoving activities produces the most PM<sub>10</sub> construction emissions, while exhaust emissions from construction equipment produce volatile organic carbon (VOC) or reactive organic gas (ROG), NO<sub>x</sub>, and carbon monoxide (CO). Criteria pollutant emissions from worker vehicle exhaust are typically small compared with those from the other two construction activities.

During the construction phase, fugitive dust emissions generally result from clearing, material handling, and storage piles. To calculate fugitive emissions the following equations from the USEPA AP-42 were used:

- Clearing:<sup>11</sup> PM<sub>10</sub> Emissions (lb/day) = 0.75 \* (silt content<sup>1.5</sup>)/(moisture content<sup>1.4</sup>)\* hours operated (hours/day) \* (1 – control efficiency)
- Storage Piles:<sup>12</sup> PM<sub>10</sub> Emissions (lb/day) = 1.7 x (silt content/1.5) x ((365-precipitation days)/235) x wind speed percent/15 x TSP fraction x Area) x (1 - control efficiency)
- Material Handling:<sup>13</sup> PM<sub>10</sub> Emissions (lb/day) = (0.0032 x aerodynamic particle size multiplier x (wind speed (mph)/5)<sup>1.3</sup>/(moisture content/2)<sup>1.4</sup> x dirt handled

The parameters used for these equations are derived from the USEPA AP-42 and the South Coast Air Quality Handbook. The values for each parameter are as follows:

- Silt Content:<sup>14</sup> 6.9
- Moisture Content:<sup>4</sup> 7.9
- Precipitation Days:<sup>15</sup> 10
- Mean Wind Speed Percent:<sup>16</sup> 100.

<sup>11</sup> USEPA, AP-42, July 1998, Table 11.9-1, Equation for bulldozer, overburden, ≤ 10 μm

<sup>12</sup> USEPA, AP-42, Nov 2006, Section 13.2.4 Aggregate Handling and Storage Piles, Equation 1

<sup>13</sup> USEPA, Fugitive Dust Background Document and Technical Information Document for Best Available Control Measures, Sept 1992, EPA-450/2-92-004, Equation 2-12

<sup>14</sup> USEPA, AP-42, July 1998, Table 11.9-3 Typical Values for Correction Factors Applicable to the Predictive Emission Factor Equations

<sup>15</sup> Table A9-9-E2, SCAQMD CEQA Air Quality Handbook, 1993

Exhaust emissions from off-road construction equipment were calculated using CARB's off-road emissions model (OFF-ROAD). It was assumed that all equipment used is diesel fueled. Emissions factors for on-road construction vehicles were calculated using CARB's EMFAC2007 emissions factor model (version 2.3). It was assumed that the speed limit on the site will be 10 miles per hour. A temperature of 75°F and a relative humidity of 40 percent were used within the EMFAC2007 model. Emissions from on-road construction vehicles were calculated separately from those of off-road equipment, because on-road vehicles must meet stricter emissions standards. Emissions from worker vehicle exhaust were calculated using URBEMIS2007 v.9.2.

Table IV.D-6, Estimated Daily Construction Emissions, identifies daily emissions that were estimated to occur on peak construction days. These calculations assume that appropriate dust control measures would be implemented during each phase of development as required by AVAQMD Rule 403-Fugitive Dust. The daily construction-related emissions shown in Table IV.D-6 have been estimated for peak construction days based on the assumptions described below.

#### Grading

The grading phase for the proposed project is expected to occur over a 1.3 month work period. The most intense activities associated with site grading and excavation at the project site would involve the use of the following equipment: two graders, two crawler tractors, six scrapers, and one water truck. Each of these pieces of equipment is assumed to operate a maximum of eight hours per day. Approximately 80,000 cubic yards of soil is expected to be imported to the project site.

#### Building

The building phase for the proposed project is expected to occur over a 10.7 month period. This time frame includes the anchor buildings and outlying pads which are anticipated to be built simultaneously. During this phase, the maximum daily amount of equipment that would operate onsite would include two cranes, four rough terrain forklifts, four tractors/loaders/backhoes, and two welders. Each of these pieces of equipment is assumed to operate a maximum of eight hours per day.

#### Asphalt/Architectural Coating

The asphalt/architectural coating phase of the proposed project is expected to occur over a 1.1 month period. During this phase, the maximum daily amount of equipment that would operate onsite would include two graders, one paver, four pieces of paving equipment, and two rubber tired loaders. Each of these pieces of equipment is assumed to operate a maximum of eight hours per day. In addition, an average of ten haul trucks per day would operate at the construction site during this phase.

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<sup>16</sup> Mean wind speed percent - percent of time mean wind speed exceeds 12 mph

As shown in Table IV.D-6, emissions of NO<sub>x</sub> during the grading phase would exceed the mass emission thresholds recommended by the AVAQMD while emissions of VOC would exceed the AVAQMD mass emission thresholds during the application of architectural coatings. Therefore, this impact would be considered potentially significant. In addition, none of the remaining ambient air quality standards would be exceeded during construction.

**Table IV.D-6  
Estimated Daily Construction Emissions**

Emissions Source	Emissions in Pounds per Day					
	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>Grading Phase</b>						
Fugitive Dust	-	-	-	-	6.41	1.34
Off-Road Diesel Equipment	16.15	145.61	68.42	0.00	6.63	6.10
On-Road Diesel Equipment	0.78	10.40	4.07	0.01	0.49	0.43
Worker Trips	0.11	0.20	3.33	0.00	0.03	0.01
<b>Total Emissions</b>	<b>17.04</b>	<b>156.21</b>	<b>75.82</b>	<b>0.01</b>	<b>13.56</b>	<b>7.88</b>
AVAQMD Thresholds	137.00	137.00	548.00	137.00	82.00	NT
Significant Impact?	No	<b>Yes</b>	No	No	No	No
<b>Building Construction</b>						
Off-Road Diesel Equipment	3.87	17.35	11.50	0.00	1.28	1.17
On-Road Diesel Equipment	0.40	4.66	3.75	0.01	0.23	0.19
Worker Trips	0.92	1.71	28.49	0.03	0.23	0.13
<b>Total Emissions</b>	<b>5.19</b>	<b>23.72</b>	<b>43.74</b>	<b>0.04</b>	<b>1.73</b>	<b>1.49</b>
AVAQMD Thresholds	137.00	137.00	548.00	137.00	82.00	NT
Significant Impact?	No	No	No	No	No	No
<b>Asphalt/Architectural Coatings</b>						
Paving Off-Gas	0.59	0.00	0.00	0.00	0.00	0.00
Paving Off-Road Diesel Equipment	3.17	18.98	10.39	0.00	1.64	1.51
Paving On-Road Diesel Equipment	0.21	2.79	1.07	0.00	0.13	0.11
Paving Worker Trips	0.08	0.15	2.54	0.00	0.02	0.01
Coating Off-Gas	423.07	0.00	0.00	0.00	0.00	0.00
Coating Worker Trips	0.18	0.33	5.57	0.01	0.05	0.02
<b>Total Emissions</b>	<b>427.30</b>	<b>22.55</b>	<b>19.57</b>	<b>0.01</b>	<b>1.79</b>	<b>1.63</b>
AVAQMD Thresholds	137.00	137.00	548.00	137.00	82.00	NT
Significant Impact?	<b>Yes</b>	No	No	No	No	No
<i>NT – No established AVAQMD significance threshold</i>						
<i>Source: Christopher A. Joseph and Associates, 2008. Calculation sheets are provided in Appendix C.</i>						

*Construction Period Emissions – Localized Emissions of CO, NO<sub>x</sub>, PM<sub>10</sub>, PM<sub>2.5</sub>*

As discussed previously, emissions that would expose sensitive receptors to pollutant concentrations that exceed national or state ambient air quality standards would be considered significant. The nearest sensitive receptors to the project site include Quartz Hill High School located directly south of the project site and residential developments located to the north and east of the project site. Due to the proximity of these receptors, pollutant concentrations within 75 feet (25 meters) of the project site will be considered, the closest distance at which there are sensitive receptors.

The U.S. Environmental Protection Agency (EPA) - approved dispersion model Industrial Source Complex (Version 3) was used to determine localized pollutant concentrations from construction activities. The localized pollutant concentrations from construction activities were then added to the existing background concentrations as measured by the 43301 Division Street air quality monitoring station. The results of these calculations are summarized in Table IV.D-7.

**Table IV.D-7**  
**Summary of Dispersion Modeling Results – Construction**

Emissions	Pollutant – Averaging Time				
	CO - 1 Hour	CO - 8 Hour	NO <sub>x</sub> - 1 Hour	PM <sub>10</sub> - 24 Hour	PM <sub>2.5</sub> - 24 Hour
<b>Construction - Maximum Concentration</b>	0.091 ppm	0.022 ppm	0.171 ppm	3.14 µg/m <sup>3</sup>	N/T
<b>Background Concentration</b>	2.9 ppm	1.18 ppm	0.066 ppm	33.0 µg/m <sup>3</sup>	N/T
<b>Project plus background</b>	2.991 ppm	1.202 ppm	1.237 ppm	36.14 µg/m <sup>3</sup>	N/T
<b>Significance Threshold</b>	9.0 ppm	20.0 ppm	0.18 ppm	50.0 µg/m <sup>3</sup>	N/T
<b>Significant Impact?</b>	<b>No</b>	<b>No</b>	<b>Yes</b>	<b>No</b>	<b>No</b>
<p><i>N/T – No Thresholds</i></p> <p><i>Note: The AVAQMD does not currently have localized thresholds for PM<sub>2.5</sub> emissions during construction. However, it is assumed that because PM<sub>2.5</sub> is only a small fraction of PM<sub>10</sub> emissions, PM<sub>2.5</sub> would cause an exceedance of PM<sub>10</sub> thresholds.</i></p> <p><i>Source: Christopher A. Joseph and Associates, 2008. Modeling output sheets are provided in Appendix C.</i></p>					

As shown in Table IV.D-7, the NO<sub>x</sub> 1-hour threshold would be exceeded by approximately 0.05 ppm, this would result in a potentially significant impact. In addition, none of the remaining ambient air quality standards would be exceeded during construction.

## Operational Impacts

### Operational Emissions – Mass Annual Emissions

Operational emissions generated by both stationary and mobile sources would result from normal day-to-day activities on the project site after occupation. Stationary area source emissions would be generated by the consumption of natural gas for space and water heating devices and cooking appliances, the operation of landscape maintenance equipment, the use of consumer products, and the application of architectural coatings (paints). Mobile emissions would be generated by the motor vehicles traveling to and from the project site.

The analysis of annual operational emissions from the proposed project has been prepared utilizing the URBEMIS 2007 computer model. The model was adjusted so that trip generation rates match the rates given in the traffic study. The results of these calculations are shown below in Table IV.D-8.

As shown in Table IV.D-8, annual emissions of CO and PM<sub>10</sub> from operational activities would exceed the thresholds set by AVAQMD. Therefore, based on the AVAQMD thresholds, impacts from operational emissions would constitute a significant impact.

**Table IV.D-8**  
**Estimated Future (2012) Mass Annual Operational Emissions**

Emissions Source	Emissions in Tons per Year					
	VOC	NOx	CO	SOx	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>Proposed Land Uses</b>						
Water and Space Heating	0.05	0.70	0.59	0.00	0.00	0.00
Landscape Maintenance Equipment	0.05	0.01	0.00	0.00	0.00	0.00
Consumer Products	0.00	-	0.59	0.00	0.00	0.00
Architectural Coatings	0.42	-	-	-	-	-
Motor Vehicles	19.08	19.67	195.01	0.17	32.26	6.15
<b>Total Operational Emissions</b>	<b>19.60</b>	<b>20.38</b>	<b>196.19</b>	<b>0.17</b>	<b>32.26</b>	<b>6.15</b>
AVAQMD Thresholds	25.0	25.0	100.0	25.0	15.0	N/T
Significant Impact?	No	No	<b>Yes</b>	No	<b>Yes</b>	No
N/T = No AVAQMD threshold for PM <sub>2.5</sub> emissions.						
Note: Subtotals may not appear to add correctly due to rounding in the URBEMIS2007 model.						
Source: Christopher A. Joseph & Associates, 2008. Calculation sheets are provided in Appendix C.						

### Operational Emissions – Localized Emissions of CO, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>

The average daily emissions associated with stationary and area sources, and motor vehicles operating within the project site have the potential to generate localized emissions of CO, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. The average daily emissions have been calculated using URBEMIS 2007, assuming that each vehicle would travel a maximum of 0.1 miles within the project site. The average daily emissions were then

modeled using the ISC model to determine localized pollution concentrations generated by project operations. As shown in Table IV.D-9, localized emissions of PM<sub>10</sub> and PM<sub>2.5</sub> from operational activities would exceed the thresholds set by AVAQMD thus resulting in a potentially significant impact.

**Table IV.D-9  
Summary of Dispersion Modeling Results – Operational**

Emissions	Pollutant – Averaging Time				
	CO - 1 Hour	CO - 8 Hour	NO <sub>x</sub> - 1 Hour	PM <sub>10</sub> - 24 Hour	PM <sub>2.5</sub> - 24 Hour
<b>Operation - Maximum Concentration</b>	0.69 ppm	0.61 ppm	0.04 ppm	61.56µg/m <sup>3</sup>	11.87 µg/m <sup>3</sup>
<b>Background Concentration</b> <sup>a</sup>	2.9 ppm	1.7 ppm	0.103 ppm	N/A	N/A
<b>Project plus background</b>	3.59 ppm	2.31 ppm	0.143 ppm	61.56µg/m <sup>3</sup>	11.87 µg/m <sup>3</sup>
<b>Significance Threshold</b>	9.0 ppm	20.0 ppm	0.18 ppm	2.5µg/m <sup>3</sup>	2.5µg/m <sup>3</sup>
<b>Significant Impact?</b>	No	No	No	<b>Yes</b>	<b>Yes</b>
<sup>a</sup> Values based on measurements from the Los Angeles portion of the Mojave Desert Air Basin in 2005. Data obtained from the California Air Resources Board, August 2007. Source: Christopher A. Joseph and Associates, 2008. Modeling output sheets are provided in Appendix C					

#### *Local CO Concentrations*

Motor vehicles are the primary source of pollutants in the project vicinity. Traffic-congested roadways and intersections have the potential to generate localized high levels of CO. For this analysis, CO concentrations were calculated based on the simplified CALINE4 screening procedure developed by the Bay Area Air Quality Management District and utilized by the AVAQMD. The results of these calculations are presented in Table IV.D-10, Future (2012) Plus Project (Weekday) Localized Carbon Monoxide Concentrations and Table IV.D-11, Future (2012) Plus Project (Saturday) Localized Carbon Monoxide Concentrations. As shown therein, future CO concentrations near the study intersections would not exceed national or State ambient air quality standards. Therefore, CO hotspots would not occur near these intersections in the future with operation of the proposed project. Therefore, impacts related to local CO concentrations at these intersections would be less than significant.

**Table IV.D-10  
Future (2012) Plus Project (Weekday) Localized Carbon Monoxide Concentrations**

Intersection	CO Concentrations in Parts per Million <sup>a,b</sup>					
	25 Feet		50 Feet		100 Feet	
	1-Hour	8-Hour	1-Hour	8-Hour	1-Hour	8-Hour
60 <sup>th</sup> Street West & Avenue K	4.4	2.2	4.0	2.0	3.7	1.8
60 <sup>th</sup> Street West & Avenue L	4.1	2.0	3.8	1.8	3.5	1.6
50 <sup>th</sup> Street West & Avenue L	4.1	2.0	3.8	1.8	3.5	1.6
45 <sup>th</sup> Street West & Avenue L	4.2	2.1	3.9	1.9	3.6	1.7
40 <sup>th</sup> Street West & Avenue L	4.4	2.3	4.1	2.0	3.7	1.8

<sup>a</sup> National 1-hour standard is 35.0 parts per million. State 1-hour standard is 20.0 parts per million.  
<sup>b</sup> National 8-hour standard is 9.5 parts per million. State 8-hour standard is 9.1 parts per million.

Source: Christopher A. Joseph and Associates, 2008. Calculation worksheets are provided in Appendix D.  
Traffic Information Source: Overland Traffic Consultants, Inc, 2008.

**Table IV.D-11  
Future (2012) Plus Project (Saturday) Localized Carbon Monoxide Concentrations**

Intersection	CO Concentrations in Parts per Million <sup>a,b</sup>					
	25 Feet		50 Feet		100 Feet	
	1-Hour	8-Hour	1-Hour	8-Hour	1-Hour	8-Hour
60 <sup>th</sup> Street West & Avenue K	4.8	2.5	4.3	2.2	3.9	1.9
60 <sup>th</sup> Street West & Avenue L	4.7	2.4	1.3	2.2	3.9	1.9
50 <sup>th</sup> Street West & Avenue L	4.1	2.0	3.8	1.8	3.6	1.6
45 <sup>th</sup> Street West & Avenue L	4.2	2.1	3.9	1.9	3.6	1.7
40 <sup>th</sup> Street West & Avenue L	4.0	2.0	3.7	1.8	3.5	1.6

<sup>a</sup> National 1-hour standard is 35.0 parts per million. State 1-hour standard is 20.0 parts per million.  
<sup>b</sup> National 8-hour standard is 9.5 parts per million. State 8-hour standard is 9.1 parts per million.

Source: Christopher A. Joseph and Associates, 2008. Calculation worksheets are provided in Appendix D.  
Traffic Information Source: Overland Traffic Consultants, Inc, 2008.

### **Operational Emissions – Toxic Air Contaminants**

Diesel particulate emissions, a known toxic air contaminant, would occur from heavy-duty diesel delivery trucks associated with the proposed project. To address diesel particulate emissions, statewide programs and regulations are presently being developed and implemented by the ARB and U.S. EPA to reduce the risks of exposure to diesel exhaust. These programs include emission control requirements along with subsidies for upgrading older diesel engines to low-emissions models.

A Health Risk Assessment was conducted by Kleinfelder West, Inc. (see Appendix D) to evaluate the impacts of annual average diesel exhaust emissions from vehicular sources (specifically heavy-duty, diesel delivery trucks). Using an air quality dispersion model, Kleinfelder estimated the potential diesel concentrations generated from the proposed project's operations at nearby sensitive receptors. The inhalation cancer risk at the closest exposed individual resident is 3 in one million and the chronic non-cancer hazard index (HI) at this receptor is <0.01. The inhalation cancer risk and chronic non-cancer HI at the nearest individual worker and the nearest sensitive receptor (students at Quartz Hill High School) were 0.2 in one million and <0.01 respectively.

The AVAQMD CEQA guidelines specify that a project is significant if it exposes sensitive receptors to substantial pollutant concentrations, including those resulting in a cancer risk greater than or equal to 10 in a million; and/or a HI (noncancerous) greater than or equal to 1. The inhalation cancer risk at the maximum exposed sensitive receptor is 3 in a million. This is below the AVAQMD CEQA significance threshold of 10 in a million. The chronic non-cancer HI at the maximum exposed sensitive receptor is <0.01. This is below the AVAQMD CEQA significance threshold of 1.

### ***Greenhouse Gas Emissions***

The emissions generated by the proposed project, and indeed any project, are too small to influence global climate change on their own. Even if an individual project's GHG emissions were large enough to influence global climate change, the significance of the impact of a single project on global climate cannot be determined at this time. First, no guidance exists to indicate what level of GHG emissions would be considered substantial enough to result in a significant adverse impact on global climate. Second, global climate change models are not sensitive enough to be able to predict the effect of a single project on global temperatures and the resultant effect on climate; therefore, they cannot be used to evaluate the significance of a project's impact. Thus, insufficient information and predictive tools exist to assess whether a single project would result in a significant impact on global climate. For these reasons, determining the significance of the impact of the proposed project on global climate is speculative, and a reasonable conclusion cannot be reached. Furthermore, there are currently no adopted thresholds or guidance adopted by the SCAQMD or other agencies in California to assess the significance of potential impacts associated with greenhouse gases. In the absence of established thresholds, however, a quantitative analysis containing an inventory of a project's GHG emissions and a qualitative analysis involving a project's compliance with adopted programs and policies to reduce GHG emissions have been suggested as a method to evaluate a project's potential effect on climate change.<sup>17</sup>

In terms of generating an inventory of the proposed project's GHG emissions, the California Climate Action Registry (CCAR) published version 2.2 of its General Reporting Protocol (Protocol) in March 2007 as a means for businesses, government agencies, and non-profit organizations to calculate GHG

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<sup>17</sup> Association of Environmental Professionals (AEP), *Alternative Approaches to Analyzing Greenhouse Gas Emissions and Global Climate Change in CEQA Documents*, Final, June 29, 2007.

emissions from a number of general and industry-specific activities and participate in the Registry. This Protocol is not intended for CEQA purposes, but it does provide methods that can be used to quantify the GHG emissions of CO<sub>2</sub>, CH<sub>4</sub>, and N<sub>2</sub>O associated with a project's increase in on-road mobile vehicle operations, electricity consumption, and natural gas consumption.

The consumption of fossil fuels to generate electricity and to provide heating and hot water for the proposed project, as well as the consumption of fuel by on-road mobile vehicles associated with the proposed project, has the potential to create GHG emissions. As such, in generating the GHG emissions for the proposed project, the future fuel consumption rates for the proposed project by these sources are estimated based on the square footages of the proposed project. Natural gas and electricity demand factors derived from the SCAQMD's *CEQA Air Quality Handbook* are used to project fuel consumption rates. The GHG emission factors from the CCAR Protocol for natural gas and electricity are then applied to the respective consumption rates, to calculate annual GHG emissions in metric tons. Mobile source CO<sub>2</sub> emissions were obtained from the URBEMIS2007 emissions inventory model. Mobile source CH<sub>4</sub> and N<sub>2</sub>O emissions were obtained using vehicle miles traveled data generated by URBEMIS2007 and emission factors obtained from the CARB's EMFAC2007 model. It should be noted that it is difficult to identify the specific generating source of electricity. The emission factors used in this analysis represent a State-wide average of known power producing facilities utilizing various technologies and emission control strategies and do not reflect targeted future reductions in GHG emissions under SB 1368. At this time, these emission factors are considered conservative and representative.

Not all greenhouse gases exhibit the same ability to induce climate change; as a result, greenhouse gas contributions are commonly quantified in carbon dioxide equivalencies (CO<sub>2</sub>e). The GHG mass emissions for the proposed project are calculated by converting pollutant specific emissions to CO<sub>2</sub>e emissions by applying the applicable global warming potential (GWP) value.<sup>18</sup> These GWP ratios are published in the CCAR Protocol. By applying the GWP ratios, the proposed project-related CO<sub>2</sub>e emissions are converted to metric tons per year.

For the qualitative GHG emissions analysis for the proposed project, the 2006 CAT Report, as discussed previously, has recommended a list of strategies that the State could pursue to reduce climate change greenhouse gas emissions. Thus, in the absence of any other adopted thresholds, this Draft EIR assumes that the proposed project would be considered to generate a substantial increase in greenhouse gas emissions if it is not consistent with the CAT Report strategies that the Lead Agency deems to be applicable and feasible for the proposed land uses and the goals of AB32. It should be noted that many of the CAT strategies are applicable only to State agencies such as the CARB. Whereas some of the CAT strategies that apply to GHG emissions from the operational activities of a project can be implemented at the project level, the identified CAT strategies pertaining to construction-related GHG emissions can only

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<sup>18</sup> CO<sub>2</sub>e was developed by the Intergovernmental Panel on Climate Change (IPCC), and published in its *Second Assessment Report (SAR) 1996*.

be implemented by the CARB. In particular, the only two CAT strategies that are relevant to the construction-related GHG emissions associated with the proposed project include the development of regulations to require the use of one to four percent biodiesel displacement of California diesel fuel, and increasing the efficiency in the design of heavy duty vehicles. As neither of the recommended CAT strategies that are relevant to construction emissions can be implemented independently by the Applicant, the analysis of the proposed project's GHG emissions focuses on GHG emissions generated during the proposed project's operational phase.

### *Greenhouse Gas Inventory*

The predicted operational greenhouse gas emissions are shown in Table IV.D-12 for the proposed uses at the project site. Also included in this table is the California Energy Commission's estimated 2004 State-wide inventory, the latest year for which data are available. As shown, the increase in GHG emissions from vehicle, electrical, and natural gas usage is approximately 0.0056 percent of the 2004 State-wide emission level.

Emitting GHGs into the atmosphere is not itself an adverse environmental effect. Rather, it is the increased accumulation of GHGs in the atmosphere that may result in global climate change; the consequences of which result in adverse environmental effects. However, it is not possible to predict the specific impact, if any, to global climate change from the relatively small incremental increase in emissions associated with one general development project.

**Table IV.D-12  
Predicted Operational Greenhouse Gas Emissions**

<b>Emissions Source</b>	<b>CO<sub>2</sub>e Emissions in Metric Tons per Year</b>
<b>Existing Land Uses</b>	
Natural Gas Consumption	0
Electricity Generation	0
Motor Vehicles	0
Subtotal	0
<b>Proposed Land Uses</b>	
Natural Gas Consumption	1,367.85
Electricity Generation	1,954.14
Motor Vehicles	17,242.25
Subtotal	20,564.24
Net Increase (Project - Existing)	20,564.24
2004 Statewide Total <sup>a</sup>	364,000,000
Net Increase as a Percentage of 2004 Statewide Total	0.0056
<sup>a</sup> Statewide totals were derived from the California Energy Commission: <a href="http://www.energy.ca.gov/2006publications/CEC-600-2006-013/CEC-600-2006-013-SF.PDF">http://www.energy.ca.gov/2006publications/CEC-600-2006-013/CEC-600-2006-013-SF.PDF</a> . Source: Christopher A. Joseph & Associates, 2008.	

The consistency of the proposed project with the strategies from the 2006 CAT Report is evaluated in Table IV.D-13. As shown, the project would be consistent with all feasible and applicable strategies to reduce greenhouse gas emissions in California and therefore would be considered consistent with the 2006 CAT report.

**Table IV.D-13  
Project Consistency with 2006 CAT Report Greenhouse Gas Emission Reduction Strategies**

Strategy	Project Consistency
<b>California Air Resources Board</b>	
<u>Vehicle Climate Change Standards</u>  AB 1493 (Pavley) required the state to develop and adopt regulations that achieve the maximum feasible and cost-effective reduction of climate change emissions emitted by passenger vehicles and light duty trucks. Regulations were adopted by the ARB I September 2004.	Consistent  The vehicles that travel to and from the project site on public roadways would be in compliance with ARB vehicle standards that are in effect at the time of vehicle purchase.
<u>Diesel Anti-Idling</u>  In July 2004, the ARB adopted a measure to limit diesel-fueled commercial motor vehicle idling.	Consistent  Current State law restricts diesel truck idling to five minutes or less. Diesel trucks making deliveries to the project site are subject to this State-wide law.
<u>Hydrofluorocarbon Reduction</u>  1) Ban retail sale of HFC in small cans. 2) Require that only low Global Warming Potential (GWP) refrigerants be used in new vehicular systems. 3) Adopt specifications for new commercial refrigeration. 4) Add refrigerant leak-tightness to the pass criteria for vehicular inspection and maintenance programs. 5) Enforce federal ban on releasing HFCs.	Consistent  This strategy applies to consumer products. All applicable products sold by the proposed project would comply with the regulations that are in effect at the time of manufacture.
<u>Transportation Refrigeration Units, Off-Road Electrification, Port Electrification (ship to shore)</u>  Require all new transportation refrigeration units (TRU) to be equipped with electric standby. Require cold storage facilities to install electric infrastructure to support electric standby TRUs. Off-road Electrification  Port Electrification	Not applicable  Consistent with implementation of mitigation measure D-12.  Not applicable
<u>Manure Management</u>  Improved management practices, manure handling practices, and lagoon/liquid waste control options.	Not applicable

**Table IV.D-13 (Continued)**  
**Project Consistency with 2006 CAT Report Greenhouse Gas Emission Reduction Strategies**

Strategy	Project Consistency
<u>Semi Conductor Industry Targets</u>  Emission reduction rules for semiconductor operations.	Not applicable
<u>Alternative Fuels: Biodiesel Blends</u>  ARB would develop regulations to require the use of 1 to 4 percent biodiesel displacement of California diesel fuel.	Consistent  The diesel vehicles that travel to and from the project site on public roadways could utilize this fuel once it is commercially available.
<u>Alternative Fuels: Ethanol</u>  Increased use of E-85 fuel.	Consistent  Employees and patrons of the project site could purchase flex-fuel vehicles and utilize this fuel once it is commercially available in the region and local vicinity.
<u>Heavy-Duty Vehicle Emission Reduction Measures</u>  Increased efficiency in the design of heavy duty vehicles and an education program for the heavy duty vehicle sector.	Consistent  The heavy-duty vehicles that travel to and from the project site on public roadways would be subject to all applicable ARB efficiency standards that are in effect at the time of vehicle manufacture.
<u>Reduced Venting and Leaks on Oil and Gas Systems</u>  Improved management practices in the production, processing, transport, and distribution of oil and natural gas.	Not applicable
<u>Hydrogen Highway</u>  The California Hydrogen Highway Network (CA H2 Net) is a State initiative to promote the use of hydrogen as a means of diversifying the sources of transportation energy.	Not applicable
<u>Achieve 50% Statewide Recycling Goal</u>  Achieving the State's 50 percent waste diversion mandate as established by the Integrated Waste Management Act of 1989, (AB 939, Sher, Chapter 1095, Statutes of 1989), will reduce climate change emissions associated with energy intensive material extraction and production as well as methane emission from landfills. A diversion rate of 48% has been achieved on a statewide basis. Therefore, a 2% additional reduction is needed.	Consistent  As discussed in Section IV.O.3, Utilities, Solid Waste, the project would reduce the solid waste stream in landfills by 50 percent meaning that 0.43 tons per day of waste must be recycled rather than disposed in a landfill.
<u>Landfill Methane Capture</u>  Install direct gas use or electricity projects at landfills to capture and use emitted methane.	Not applicable

**Table IV.D-13 (Continued)**  
**Project Consistency with 2006 CAT Report Greenhouse Gas Emission Reduction Strategies**

Strategy	Project Consistency
<u>Zero Waste – High Recycling</u>  Efforts to exceed the 50 percent goal would allow for additional reductions in climate change emissions.	Consistent  As discussed in Section IV.O.3, Utilities, Solid Waste, the project would reduce solid waste stream in landfills by 50 percent meaning that 0.43 tons per day of waste must be recycled rather than disposed in a landfill.
<b>Department of Forestry</b>	
<u>Forest Management</u>  Increasing the growth of individual forest trees, the overall age of trees prior to harvest, or dedicating land to older aged trees.	Not applicable
<u>Forest Conservation</u>  Provide incentives to maintain an undeveloped forest landscape.	Not applicable
<u>Fuels Management/Biomass</u>  Reduce the risk of wildland fire through fuel reduction and biomass development.	Not applicable
<u>Urban Forestry</u>  A new statewide goal of planting 5 million trees in urban areas by 2020 would be achieved through the expansion of local urban forestry programs.	Consistent  The landscaping proposed for the proposed project would include new trees within the landscape setbacks of the project site.
<u>Afforestation/Reforestation</u>  Reforestation projects focus on restoring native tree cover on lands that were previously forested and are now covered with other vegetative types.	Not applicable
<b>Department of Water Resources</b>	
<u>Water Use Efficiency</u>  Approximately 19 percent of all electricity, 30 percent of all natural gas, and 88 million gallons of diesel are used to convey, treat, distribute and use water and wastewater. Increasing the efficiency of water transport and reducing water use would reduce greenhouse gas emissions.	Consistent  As discussed in Section IV.O.2, Utilities, Water, the demands of the proposed project would be served by the existing water system and would comply with State and local water conservation measures. Furthermore, the local water district serving the project site has pledged to comply with the 15 demand management measures required under the California Urban Water Conservation Council (CUWCC).

**Table IV.D-13 (Continued)**  
**Project Consistency with 2006 CAT Report Greenhouse Gas Emission Reduction Strategies**

Strategy	Project Consistency
<b>California Energy Commission (CEC)</b>	
<u>Building Energy Efficiency Standards in Place and in Progress</u>  Public Resources Code 25402 authorizes the CEC to adopt and periodically update its building energy efficiency standards (that apply to newly constructed buildings and additions to and alterations to existing buildings).	Consistent  The project would be required to be constructed in compliance with the standards of Title 24 that are in effect at the time of development.
<u>Appliance Energy Efficiency Standards in Place and in Progress</u>  Public Resources Code 25402 authorizes the CEC to adopt and periodically update its appliance energy efficiency standards (that apply to devices and equipment using energy that are sold or offered for sale in California).	Consistent  Under State law, appliances that are purchased for the project – both pre- and post-development – would be consistent with energy efficiency standards that are in effect at the time of manufacture.
<u>Fuel-Efficient Replacement Tires &amp; Inflation Programs</u>  State legislation established a statewide program to encourage the production and use of more efficient tires.	Consistent  Employees and patrons of the project site could purchase tires for their vehicles that comply with State programs for increased fuel efficiency.
<u>Cement Manufacturing</u>  Cost-effective reductions to reduce energy consumption and to lower carbon dioxide emissions in the cement industry.	Not applicable
<u>Municipal Utility Energy Efficiency Programs/Demand Response</u>  Includes energy efficiency programs, renewable portfolio standard, combined heat and power, and transitioning away from carbon-intensive generation.	Not applicable, but the project would not preclude the implementation of this strategy by municipal utility providers.
<u>Municipal Utility Renewable Portfolio Standard</u>  California's Renewable Portfolio Standard (RPS), established in 2002, requires that all load serving entities achieve a goal of 20 percent of retail electricity sales from renewable energy sources by 2017, within certain cost constraints.	Not applicable, but the project would not preclude the implementation of this strategy by the Southern California Edison company.
<u>Municipal Utility Combined Heat and Power</u>  Cost effective reduction from fossil fuel consumption in the commercial and industrial sector through the application of on-site power production to meet both heat and electricity loads.	Not applicable since this strategy addresses incentives that could be provided by utility providers such as the Southern California Edison company and The Gas Company.

**Table IV.D-13 (Continued)**  
**Project Consistency with 2006 CAT Report Greenhouse Gas Emission Reduction Strategies**

Strategy	Project Consistency
<p><u>Municipal Utility Electricity Sector Carbon Policy</u></p> <p>State agencies to address ways to transition investor-owned utilities away from carbon-intensive electricity sources.</p>	Not applicable
<p><u>Alternative Fuels: Non-Petroleum Fuels</u></p> <p>Increasing the use of non-petroleum fuels in California's transportation sector, as recommended as recommended in the CEC's 2003 and 2005 Integrated Energy Policy Reports.</p>	<p>Consistent</p> <p>Employees and patrons of the project site could purchase alternative fuel vehicles and utilize these fuels once they are commercially available in the region and local vicinity.</p>
<b>Business, Transportation and Housing</b>	
<p><u>Measures to Improve Transportation Energy Efficiency</u></p> <p>Builds on current efforts to provide a framework for expanded and new initiatives including incentives, tools and information that advance cleaner transportation and reduce climate change emissions.</p>	<p>Consistent</p> <p>The location of the project promotes fuel conservation by reducing vehicle emissions in the area by providing retail facilities to serve the local community. The proposed project is a large commercial/retail development that decrease the distance city residents have to travel for consumer goods.</p>
<p><u>Smart Land Use and Intelligent Transportation Systems (ITS)</u></p> <p>Smart land use strategies encourage jobs/housing proximity, promote transit-oriented development, and encourage high-density residential/commercial development along transit corridors.</p> <p>ITS is the application of advanced technology systems and management strategies to improve operational efficiency of transportation systems and movement of people, goods and services.</p> <p>The Governor is finalizing a comprehensive 10-year strategic growth plan with the intent of developing ways to promote, through state investments, incentives and technical assistance, land use, and technology strategies that provide for a prosperous economy, social equity and a quality environment.</p> <p>Smart land use, demand management, ITS, and value pricing are critical elements in this plan for improving mobility and transportation efficiency. Specific strategies include: promoting jobs/housing proximity and transit-oriented development; encouraging high density residential/commercial development along transit/rail corridor; valuing and congestion pricing;</p>	<p>Consistent</p> <p>This project locates commercial/retail uses in close proximity to existing homes. The project site is also located near the Antelope Valley Transit Authority Route 7 which provides opportunities for the project employees and patrons to use public transit rather than automobiles.</p> <p>The project would provide goods to residents and employees located at and near the project site, thereby improving the efficiency of goods movement.</p>

**Table IV.D-13 (Continued)**  
**Project Consistency with 2006 CAT Report Greenhouse Gas Emission Reduction Strategies**

Strategy	Project Consistency
implementing intelligent transportation systems, traveler information/traffic control, incident management; accelerating the development of broadband infrastructure; and comprehensive, integrated, multimodal/intermodal transportation planning.	
<b>Department of Food and Agriculture</b>	
<u>Conservation Tillage/Cover Crops</u>  Conservation tillage and cover crops practices are used to improve soil tilth and water use efficiency, and to reduce tillage requirements, labor, fuel, and fertilizer requirements.	Not applicable
<u>Enteric Fermentation</u>  Cattle emit methane from digestion processes. Changes in diet could result in a reduction in emissions.	Not applicable
<b>State and Consumer Services Agency</b>	
<u>Green Buildings Initiative</u>  Green Building Executive Order, S-20-04 (CA 2004), sets a goal of reducing energy use in public and private buildings by 20 percent by the year 2015, as compared with 2003 levels. The Executive Order and related action plan spell out specific actions state agencies are to take with state-owned and –leased buildings. The order and plan also discuss various strategies and incentives to encourage private building owners and operators to achieve the 20 percent target.	Consistent  As discussed previously, the project would be required to be constructed in compliance with the standards of Title 24 that are in effect at the time of development. The current 2005 Title 24 standards are approximately 8.5 percent more efficient than those of the 2001 standards.
<b>Public Utilities Commission (PUC)</b>	
<u>Accelerated Renewable Portfolio Standard</u>  The Governor has set a goal of achieving 33 percent renewable in the State's resource mix by 2020. The joint PUC/Energy Commission September 2005 Energy Action Plan II (EAP II) adopts the 33 percent goal.	Not applicable, but the project would not preclude the implementation of this strategy by energy providers.
<u>California Solar Initiative</u>  The solar initiative includes installation of 1 million solar roofs or an equivalent 3,000 MW by 2017 on homes and businesses, increased use of solar thermal systems to offset the increasing demand for natural gas, use of advanced metering in solar applications, and creation of a funding source that can provide rebates over 10 years through a declining incentive schedule.	Consistent  Although solar roofs are not proposed as part of the project, they could be installed and used in the future if they become cost effective from a purchase and maintenance standpoint.

**Table IV.D-13 (Continued)**  
**Project Consistency with 2006 CAT Report Greenhouse Gas Emission Reduction Strategies**

Strategy	Project Consistency
<u>Investor-Owned Utility Programs</u>  These strategies include energy efficiency programs, combined heat and power initiative, and electricity sector carbon policy for investor owned utilities.	Not applicable
<i>Sources: Climate Action Team, 2006 and Christopher A. Joseph &amp; Associates, 2008.</i>	

In addition to the measures outlined above, Wal-Mart implements measures which would add to the reduction of green house gas emissions. The proposed Wal-Mart would be constructed to maximize building efficiency, in accordance with Wal-Mart's building practices. The proposed Wal-Mart would have a "daylighting" system, which includes skylights, electronic dimming ballasts and computer controlled daylight sensors. This results in a continuous adjustment of the lighting based on the daylight contribution. Furthermore, the proposed Wal-Mart would have night dimming, where internal lighting is dimmed to about 65% illumination during late night hours. The proposed Wal-Mart would utilize T-8 fluorescent lamps and electronic ballasts, which is currently the most energy efficient lighting system available. It is estimated that the energy load is reduced by approximately 15 to 20 percent with the use of these lights.

Additionally, the proposed Wal-Mart would use "super" high efficiency packaged HVAC units. The industry standard Energy Efficiency Ratio (EER) is 9.0, while the proposed Wal-Mart units would be rated between 10.8 and 13.2 (the higher the EER, the greater the energy efficiency). Depending on the EER, the units will range between 4 to 17 percent more efficient than required by California Title 24. Furthermore, the proposed Wal-Mart would be equipped with energy management systems which allows for remote monitoring from Wal-Mart corporate offices. This allows constant monitoring of energy usage and performance, allows for adjustments to lighting, temperature and refrigeration from a central location to maximize efficiency. Moreover, the proposed Wal-Mart would capture waste heat from the refrigeration equipment to heat water for the kitchen preparation areas of the store. The roof of the proposed Wal-Mart would have a "white" membrane, which results in lowering the "cooling" load approximately 10 percent.

The proposed Wal-Mart exterior signage would utilize light-emitting diodes (LED) lighting. LED lighting is approximately 70 percent more energy efficient than fluorescent illumination. Furthermore, LEDs have a longer service life (approximately 100,000 hours) in comparison to fluorescents. Additionally, the proposed Wal-Mart would have integrally colored concrete floors, instead of carpet and vinyl. This reduces the environmental concerns resulting from the manufacture and disposal of these products, along with reducing the need for chemical cleaning agents, wax and wax strippers. The proposed Wal-Mart would be constructed of nearly 100 percent recycled structural steel. The structural steel suppliers use high efficient electric arc furnaces that require 50 percent less energy than traditional

methods. The proposed Wal-Mart would also use recycled plastic for base boards and for the majority of plastic shelving. The restroom sinks will use sensor-activated low flow faucets. The low flow faucets reduce water usage by 84 percent and the sensors save approximately 20 percent more water than non-sensor, manual shut off faucets. Finally, the proposed Wal-Mart would use zero ozone depleting refrigerants; R404a refrigerant for refrigeration equipment and R410a refrigerant for air conditioning.

### ***Odors***

Odors are typically associated with industrial projects involving the use of chemicals, solvents, petroleum products, and other strong-smelling elements used in manufacturing processes, as well as sewage treatment facilities and landfills. As the proposed project involves no elements related to these types of activities, no odors are anticipated.

During the construction phase, paving of the project site would entail the application of asphalt that would produce discernible odors typical of most construction site. Such odors would be a temporary source of nuisance to residents located adjacent to the project sites, but because they are temporary and intermittent in nature, would not be considered a significant environmental impact.

Odors related to any potential kitchen use may result. However, these odors would be considered consistent with odors generated in other areas of the City due to existing residents and restaurants and impacts associated with objectionable odors would be less than significant.

## **CUMULATIVE IMPACTS**

According to the *AVAQMD California Environmental Quality Act (CEQA) and Federal Conformity Guidelines*, cumulative impacts are similar to the direct and indirect impacts that the proposed project contributes to.<sup>19</sup> In addition, in terms of conformity impacts, a project is conforming if it “complies with all applicable District rules and regulations, complies with all proposed control measures that are not yet adopted from the applicable plans(s), and is consistent with the growth forecasts in the applicable plan(s) (or is directly included in the applicable plan).” Because the City of Lancaster’s General Plan was used by SCAG to prepare the growth forecasts for northern Los Angeles County, development that is consistent with the City’s General Plan would not create air emissions that exceed the applicable air quality plan, which is the AVAQMD’s *2004 Ozone Attainment Plan*. Consequently, as long as growth in the City is consistent with the City’s General Plan, implementation of the *2004 Ozone Attainment Plan* would not be obstructed by such growth and cumulative impacts would be less than significant. Although development of the proposed project would result in a general plan amendment and zone change to the project site, the development of the proposed commercial uses on the project site could serve to reduce

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<sup>19</sup> *Antelope Valley AQMD California Environmental Quality Act (CEQA) and Federal Conformity Guidelines*, May 2008, p. 5 of 8.

vehicle emissions in the area by providing retail facilities on the project site to serve the local community. In particular, the proposed project, which is a large commercial/retail development, would serve to decrease the distance City residents would have to travel for consumer goods, which in turn would reduce the trip lengths residents would need to travel and the emissions associated with those vehicle trips. Thus, the proposed project would not conflict with or obstruct implementation of the *2004 Ozone Attainment Plan*. Therefore, the contribution of the proposed project to this impact would be less than significant.

### ***Greenhouse Gas Emissions***

As discussed previously, the increased accumulation of GHGs in the atmosphere may result in global climate change, the consequences of which result in adverse environmental effects. The State has mandated a goal of reducing State-wide emissions to 1990 levels by 2020, even though State-wide population and commerce is predicted to grow substantially. The increase in commercial space with implementation of the proposed project would generate greater than zero GHG emissions and the cumulative effect of global climate change would be considered incrementally cumulatively considerable. This would be considered a potentially significant cumulative impact.

## **MITIGATION MEASURES**

### **Construction Mitigation**

#### ***Code Required Measures***

The following measures are required pursuant to AVAQMD Rule 403:

- D-1. Apply approved non-toxic chemical soil stabilizers according to manufacturer's specification to all inactive construction areas (previously graded areas inactive for four days or more).
- D-2. Apply chemical soil stabilizers according to manufacturers' specifications to all unpaved parking or staging areas or unpaved road surfaces.
- D-3. Water active grading sites at least three times daily.
- D-4. Enclose, cover, water three times daily, or apply approved soil binders to exposed piles (i.e., gravel, sand, and dirt) according to manufacturers' specifications.
- D-5. Replace ground cover in disturbed areas as quickly as possible.
- D-6. Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 miles per hour (mph).
- D-7. Provide temporary wind fencing consisting of 3- to 5-foot barriers with 50 percent or less porosity along the perimeter of site that have been cleared or are being graded.

- D-8. Sweep streets at the end of the day if visible soil material is carried over to adjacent roads.
- D-9. Install wheel washers where vehicles enter and exit unpaved roads onto paved roads, or wash off trucks and any equipment leaving the site each trip.
- D-10. Enforce traffic speed limits of 10 mph or less on all unpaved roads

### ***Project Specific***

The following mitigation measures are required in addition to the AVAQMD Rule 403 measures listed above to further reduce the construction emissions associated with the proposed project.

- D-11. The project applicant shall require in the construction specifications for the proposed project that construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, are turned off when not in use for an extended period of time (i.e., 5 minutes or longer). The contract specifications shall be reviewed by the City prior to the issuance of permits.
- D-12. The project applicant shall require in the construction specifications for the proposed project that construction operations rely on the electricity infrastructure surrounding the construction site rather than electrical generators powered by internal combustion engines to the extent feasible. The contract specifications shall be reviewed by the City prior to the issuance of permits.
- D-13. The project applicant shall be required to use off-road equipment with a diesel oxidation catalyst to reduce emissions of NO<sub>x</sub> by 25% to mitigate impacts from NO<sub>x</sub> during the grading phase.
- D-14. Architectural coatings with a VOC content of 50 g/liter or less shall be used to mitigate impacts from VOCs during the paving/architectural coatings phase.

### **Cumulative GHG Emission Impacts**

- D-15. The proposed project shall follow the guidelines and regulations outlined by AB 32 and the 2006 CAT Report Strategies.

## **LEVEL OF SIGNIFICANCE AFTER MITIGATION**

### **Construction Period Emissions – Mass Daily Emissions with Mitigation**

As discussed previously, emissions generated during the site preparation and building phases associated with the proposed project would not exceed the thresholds recommended by AVAQMD. However, the emissions of NO<sub>x</sub> during the grading phase and emissions of VOC during the architectural coating phase would exceed the mass emission thresholds recommended by the AVAQMD. With implementation of Mitigation Measures D-1 through D-10, which reflect the requirements under AVAQMD Rule 403, and

Mitigation Measures D-11 through D-13, the construction emissions associated with the proposed project would be reduced. In particular, implementation of Mitigation Measures D-13 would reduce the emissions of NO<sub>x</sub> during the grading phase to below the thresholds of significance recommended by the AVAQMD. **Error! Reference source not found.** shows the resulting NO<sub>x</sub> emissions after implementation of Mitigation Measures D-13. As shown, the mass daily construction emissions of NO<sub>x</sub> would not exceed the thresholds set by the AVAQMD. Therefore, impacts from mass daily emissions of these criteria pollutants during construction of the proposed project would be reduced to a less than significant level.

**Table IV.D-14  
Mass Daily Construction Emissions – Mitigated**

Emissions Source	Emissions in Pounds per Day
<b>Site Grading Phase – NO<sub>x</sub> Emissions</b>	
Fugitive Dust	0.00
Off-Road Diesel Equipment	128.90
On-Road Diesel Equipment	0.86
Worker Trips	0.00
<b>Total Emissions</b>	<b>129.76</b>
AVAQMD Thresholds	137.00
Significant Impact?	<b>No</b>
<b>Architectural Coating – VOC Emissions</b>	
Coating Off-Gas	105.75
Coating Worker Trips	0.18
<b>Total Emissions</b>	<b>105.93</b>
AVAQMD Thresholds	137.00
Significant Impact?	<b>No</b>
<i>Source: Christopher A. Joseph &amp; Associates, 2008. Calculation sheets are provided in Appendix C.</i>	

### Operational Emissions – Mass Daily Emissions

Annual emissions of PM<sub>10</sub> and PM<sub>2.5</sub> from operational activities would continue to exceed the thresholds set by AVAQMD. Therefore, because the majority of operational emissions are generated by motor vehicles, the only way to reduce these emissions would be to reduce the size of the proposed project. Therefore, impacts from operational emissions would remain significant and unavoidable.

### Green House Gas Emissions

With implementation of Mitigation Measure D-15 above, the proposed project would be consistent with the goals of AB32 and the 2006 CAT Report strategies, cumulative impacts would be less than significant. Furthermore, with implementation of Target specific GHG Measures outlined above, impacts

from the generation of GHG emissions would be minimized to the greatest extent feasible. Overall, air quality impacts would be less than significant.

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## IV. ENVIRONMENTAL IMPACT ANALYSIS

### E. BIOLOGICAL RESOURCES

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This section of the Draft Environmental Impact Report (EIR) provides a description of the biological resources on the project site, including vegetation communities, wildlife, and special-status species, a discussion of the regulations that serve to protect sensitive resources, an assessment of the potential impacts of the project, and recommendations to mitigate potentially significant impacts on sensitive resources. Various technical reports were prepared and reviewed to analyze the potential biological resources impacts associated with the proposed project. These technical reports are summarized in the Background and Methods section below and are included in Appendix E of this EIR.

#### ENVIRONMENTAL SETTING

##### Regional Setting

The project site is located within the community of Quartz Hill in the City of Lancaster, Los Angeles County, California. The project site is at an elevation of approximately 2,400 feet within the U.S. Geological Survey (USGS) Lancaster West Quadrangle 7.5 Minute Series Map Sections 27 and 35, Township 7 North, Range 13 West.

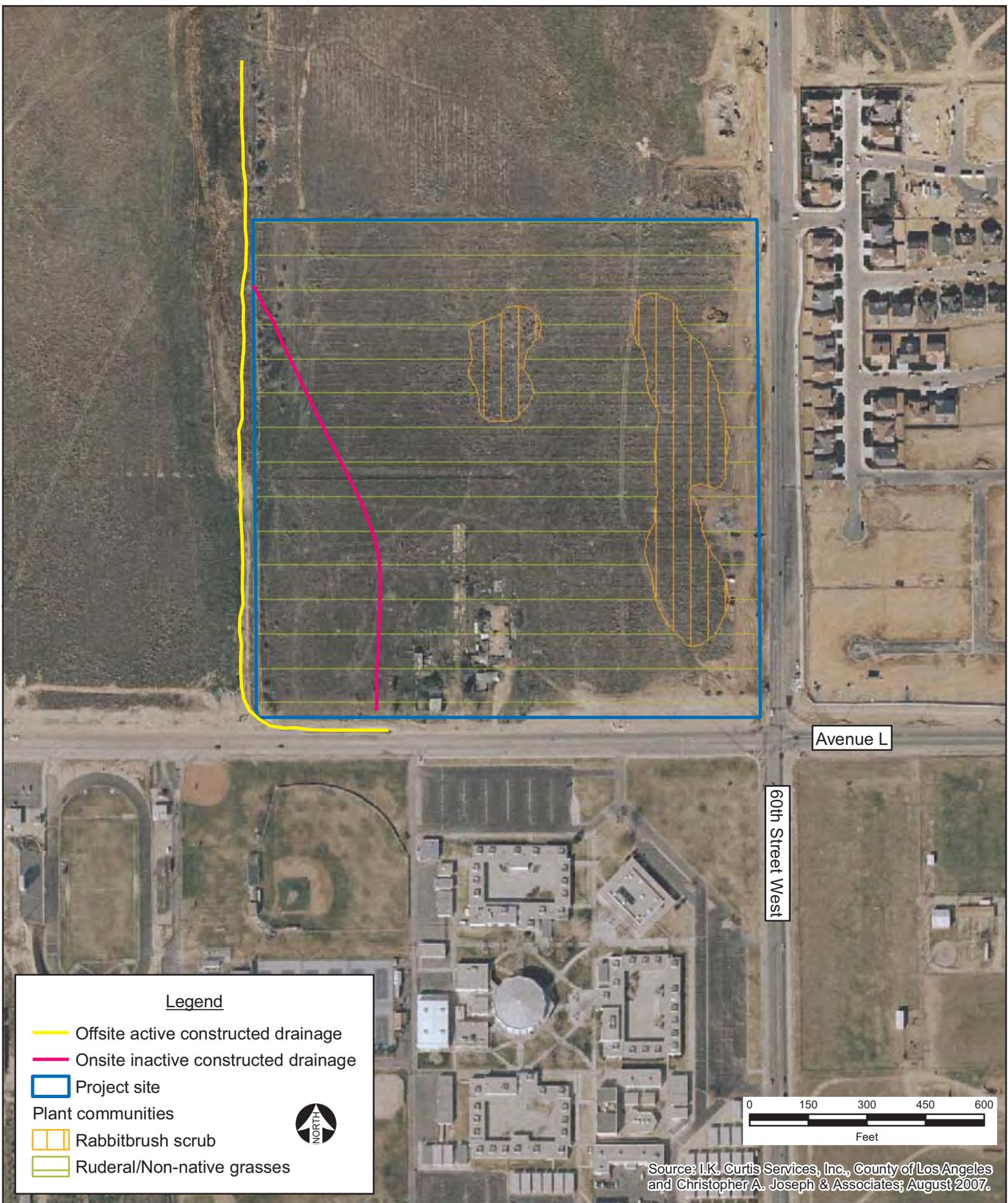
##### Local Setting

The project site is a vacant fenced parcel located at the northwest corner of 60<sup>th</sup> Street West and Avenue L. The site is bounded by vacant parcels to the west, by Quartz Hill High School to the south, by a residential development to the east, and by undeveloped land followed by a residential development to the north. Topography of the project site is generally flat with a slight downslope toward the northeast. The soil series identified on-site per the US Department of Agriculture Soil Survey of the Antelope Valley Area are Hesperia fine sandy loam with 0 to 2 percent slopes and Greenfield sandy loam with 2 to 9 percent slopes<sup>1</sup>.

The project site is predominantly vegetated with ruderal grassland plant species, with patches of rabbitbrush scrub in the eastern portion of the site and scattered willows along the western boundary (see Figure IV.E-1). Two hydrological features were observed during the surveys: 1) an offsite active constructed drainage flowing north is located immediately outside the western edge of the project site (hereafter referred to as the offsite active constructed drainage) and 2) an onsite inactive constructed drainage which crosses through the southwestern portion of the project site (hereafter referred to as the onsite inactive constructed drainage).

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<sup>1</sup> US Department of Agriculture Natural Resources Conservation Service. Accessed online June 2007. US Department of Agriculture Natural Resources Conservation Service Soil Survey Area: Antelope Valley Area, California. <http://websoilsurvey.nrcs.usda.gov/app/>



## **Regulatory Framework**

The following discussion identifies federal, state and local environmental regulations and policies that serve to protect sensitive biological resources relevant to the California Environmental Quality Act (CEQA) review process.

### **Federal Regulations**

#### ***Federal Endangered Species Act***

The Federal Endangered Species Act (FESA) of 1973, as amended, provides the regulatory framework for the protection of plant and animal species (and their associated critical habitats), which are formally listed, proposed for listing, or candidates for listing as endangered or threatened under the FESA. The FESA has four major components: provisions for listing species, requirements for consultation with the U.S. Fish and Wildlife Service (USFWS) and the National Oceanic and Atmospheric Administration's (NOAA) National Marine Fisheries Service (referred to as "NOAA Fisheries"), prohibitions against "taking" of listed species, and provisions for permits that allow incidental "take." The FESA also discusses recovery plans and the designation of critical habitat for listed species. Both the USFWS and the NOAA Fisheries share the responsibility for administration of the FESA. During the CEQA review process, each agency is given the opportunity to comment on the potential impacts of the proposed project to affect listed plants and animals within their respective jurisdictions.

#### ***The Migratory Bird Treaty Act***

The Federal Migratory Bird Treaty Act (MBTA) (16 U.S.C. 703 et seq.), and its implementing regulations, Title 50 Code of Federal Regulations (CFR) Part 10, prohibits taking, killing, possessing, transporting, and importing of migratory birds, parts of migratory birds, and their eggs and nests, except when specifically authorized by the Department of the Interior. As used in the act, the term "take" is defined as meaning, "to pursue, hunt, capture, collect, kill or attempt to pursue, hunt, shoot, capture, collect or kill, unless the context otherwise requires." With a few exceptions, most birds are considered migratory under the MBTA. Disturbances that causes nest abandonment and/or loss of reproductive effort or loss of habitat upon which these birds depend would be in violation of the MBTA.

#### ***Clean Water Act Section Sections 404 and 401***

The U.S. Army Corps of Engineers (Corps) and the U.S. Environmental Protection Agency (EPA) regulate the discharge of dredged or fill material into waters of the United States, including wetlands, under Section 404 of the Clean Water Act (CWA) (33 U.S.C. 1344). Waters of the United States are defined in Title 33 CFR Part 328.3(a) and include a range of wet environments such as lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds. The lateral limits of jurisdiction in those waters may be divided into three categories – territorial seas, tidal waters, and non-tidal waters – and is determined depending on

which type of waters is present (Title 33 CFR Part 328.4(a), (b), (c)). Activities in waters of the United States regulated under Section 404 include fill for development, water resource projects (such as dams and levees), infrastructure developments (such as highways and airports) and mining projects. Section 404 of the CWA requires a federal license or permit before dredged or fill material may be discharged into waters of the United States, unless the activity is exempt from Section 404 regulation.

Section 401 of the Clean Water Act (33 U.S.C. 1341) requires any applicant for a federal license or permit to conduct any activity that may result in a discharge of a pollutant into waters of the United States to obtain a certification from the state in which the discharge originates or would originate, or, if appropriate, from the interstate water pollution control agency having jurisdiction over the affected waters at the point where the discharge originates or would originate, that the discharge will comply with the applicable effluent limitations and water quality standards. A certification obtained for the construction of any facility must also pertain to the subsequent operation of the facility. The responsibility for the protection of water quality in California rests with the State Water Resources Control Board (SWRCB) and its nine Regional Water Quality Control Boards (RWQCBs).

## **State Regulations**

### ***California Endangered Species Act***

The State of California enacted similar laws to the FESA, the California Native Plant Protection Act (NPPA) in 1977 and the California Endangered Species Act (CESA) in 1984. The CESA expanded upon the original NPPA and enhanced legal protection for plants, but the NPPA remains part of the California Fish and Game Code. To align with the FESA, CESA created the categories of “threatened” and “endangered” species. It converted all “rare” animals into the CESA as threatened species, but did not do so for rare plants. Thus, these laws provide the legal framework for protection of California-listed rare, threatened, and endangered plant and animal species. The California Department of Fish and Game (CDFG) implements NPPA and CESA, and its Wildlife and Habitat Data Analysis Branch maintains the California Natural Diversity Database (CNDDDB), a computerized inventory of information on the general location and status of California’s rarest plants, animals, and natural communities. During the CEQA review process, the CDFG is given the opportunity to comment on the potential impacts of the proposed project to affect listed plants and animals.

### ***Fully Protected Species & Species of Special Concern***

The classification of “fully protected” was the CDFG’s initial effort to identify and provide additional protection to those animals that were rare or faced possible extinction. Lists were created for fish, amphibian and reptiles, birds, and mammals. Most of the species on these lists have subsequently been listed under CESA and/or FESA. The Fish and Game Code sections (fish at §5515, amphibian and reptiles at §5050, birds at §3511, and mammals at §4700) dealing with “fully protected” species states that these species “...may not be taken or possessed at any time and no provision of this code or any other law shall be construed to authorize the issuance of permits or licenses to take any fully protected species,”

although take may be authorized for necessary scientific research. This language makes the “fully protected” designation the strongest and most restrictive regarding the “take” of these species. In 2003, the code sections dealing with fully protected species were amended to allow the CDFG to authorize take resulting from recovery activities for state-listed species.

Species of special concern are broadly defined as animals not listed under the FESA or CESA, but which are nonetheless of concern to the CDFG because are declining at a rate that could result in listing or historically occurred in low numbers and known threats to their persistence currently exist. This designation is intended to result in special consideration for these animals by the CDFG, land managers, consulting biologist, and others, and is intended to focus attention on the species to help avert the need for costly listing under FESA and CESA and cumbersome recovery efforts that might ultimately be required. This designation also is intended to stimulate collection of additional information on the biology, distribution, and status of poorly known at-risk species, and focus research and management attention on them. Although these species generally have no special legal status, they are given special consideration under CEQA during project review.

### ***California Fish and Game Code Sections 3503 & 3513***

According to Section 3503 of the California Fish and Game Code it is unlawful to take, possess, or needlessly destroy the nest or eggs of any bird (except English sparrows (*Passer domesticus*) and European starlings (*Sturnus vulgaris*)). Section 3503.5 specifically protects birds in the orders Falconiformes and Strigiformes (birds-of-prey). Section 3513 essentially overlaps with the MTBA, prohibiting the take or possession of any migratory non-game bird. Disturbance that causes nest abandonment and/or loss of reproductive effort is considered “take” by the CDFG.

### ***California Fish and Game Code Section 1600***

Streams, lakes, and riparian vegetation as habitat for fish and other wildlife species, are subject to jurisdiction by the CDFG under Sections 1600-1616 of the California Fish and Game Code. Any activity that will do one or more of the following: 1) substantially obstruct or divert the natural flow of a river, stream, or lake; 2) substantially change or use any material from the bed, channel, or bank of a river, stream, or lake; or 3) deposit or dispose of debris, waste, or other material containing crumbled, flaked, or ground pavement where it can pass into a river, stream, or lake; generally require a 1602 Lake and Streambed Alteration Agreement. The term “stream”, which includes creeks and rivers, is defined in the California Code of Regulations (CCR) as follows: “a body of water that flows at least periodically or intermittently through a bed or channel having banks and supports fish or other aquatic life. This includes watercourses having a surface or subsurface flow that supports or has supported riparian vegetation” (14 CCR 1.72). In addition, the term stream can include ephemeral streams, dry washes, watercourses with subsurface flows, canals, aqueducts, irrigation ditches, and other means of water conveyance if they support aquatic life, riparian vegetation, or stream-dependent terrestrial wildlife. Riparian is defined as, “on, or pertaining to, the banks of a stream;” therefore, riparian vegetation is defined as, “vegetation which occurs in and/or adjacent to a stream and is dependent on, and occurs because of, the stream itself.”

Removal of riparian vegetation also requires a Section 1602 Lake and Streambed Alteration Agreement from the CDFG.

### ***Porter-Cologne Water Quality Control Act***

Waters of the State are defined by the Porter-Cologne Water Quality Control Act as “any surface water or groundwater, including saline waters, within the boundaries of the state.” The RWQCB protects all waters in its regulatory scope, but has special responsibility for isolated wetlands and headwaters. These waterbodies have high resource value, are vulnerable to filling, and may not be regulated by other programs, such as Section 404 of the CWA. The RWQCB regulates Waters of the State through two regulatory programs. Waters subject to jurisdiction under Section 404 of the CWA are also regulated by RWQCB through the State Water Quality Certification Program, which regulates discharges of dredged and fill material under Section 401 of the CWA. Projects that require a Corps permit, or fall under other federal jurisdiction, and have the potential to impact waters of the State are required to comply with the terms of the Water Quality Certification Program. If a proposed project does not require a federal license or permit, but does involve activities that may result in a discharge of harmful substances to waters of the State, the RWQCB has the option to regulate such activities under its State authority in the form of Waste Discharge Requirements or Certification of Waste Discharge Requirements. The Waste Discharge Requirements’ authority allow the State to regulate waters that may be exempt from Section 404, such as isolated wetlands.

### ***California Native Plant Society***

The California Native Plant Society (CNPS) publishes and maintains an Inventory of Rare and Endangered Vascular Plants of California in both hard copy and electronic version ([www.cnps.org/rareplants/inventory/6thedition.htm](http://www.cnps.org/rareplants/inventory/6thedition.htm)). The Inventory assigns plants to the following categories:

- 1A – Presumed extinct in California
- 1B – Rare, threatened, or endangered in California and elsewhere
- 2 – Rare, threatened, or endangered in California, but more common elsewhere
- 3 – Plants for which more information is needed
- 4 – Plants of limited distribution

Additional endangerment codes are assigned to each taxa as follows:

- 1 – Seriously endangered in California (over 80% of occurrences threatened/high degree of immediacy of threat).
- 2 – Fairly endangered in California (20-80% occurrences threatened).
- 3 – Not very endangered in California (<20% of occurrences threatened or no current threats known).

Plants on Lists 1A, 1B, and 2 of the CNPS Inventory consist of plants that may qualify for listing under either the State or Federal ESA and impacts to these plants are considered significant under CEQA. Plants on Lists 3 and 4 are considered under CEQA, but impacts to these plants are generally not considered significant under CEQA.

### ***Sensitive Vegetation Communities***

Sensitive vegetation communities are natural communities and habitats that are either unique, of relatively limited distribution in the region, or of particularly high wildlife value. These resources have been defined by federal, state, and local conservation plans, policies or regulations. The CDFG ranks sensitive communities as “threatened” or “very threatened” and keeps records of their occurrences in its CNDDDB. Sensitive vegetation communities are also identified by CDFG on its List of California Natural Communities Recognized by the CNDDDB. Impacts to sensitive natural communities and habitats identified in local or regional plans, policies, regulations or by federal or state agencies must be considered and evaluated under CEQA (CCR: Title 14, Div. 6, Chap. 3, Appendix G).

### **Local**

In addition to federal and state regulations, the City of Lancaster General Plan includes goals and policies protecting natural resources. The City has also adopted various ordinances that provide protection to natural resources.

### ***General Plan***

The City of Lancaster General Plan includes objectives, policies and actions regarding the identification, preservation and maintenance of important biological systems, including Joshua Tree and California Juniper woodlands, sensitive species, and natural areas of regional significance.

### ***Ordinances***

Ordinance 848 requires an in-lieu Biological Impact Mitigation fee for new development which compensates for the cumulative impacts to biological resources in the City.

### **Background and Methods**

The information contained in this section is primarily summarized from the *Biological Site Assessment Report*, *Jurisdictional Delineation Report* and *Burrowing Owl Survey Report* prepared by Christopher A. Joseph & Associates; these reports are included in Appendix E to this EIR. Other documents reviewed included the *City of Lancaster General Plan Draft Master Environmental Assessment*; this document can be viewed at the City of Lancaster Planning Department.

The potential for sensitive biological resources to occur on-site was initially investigated through a review of pertinent literature (including regional floral and faunal guides, resource agency special reports) and

current database information (including the CNDDDB). A complete list of the resources consulted is included in the *Biological Site Assessment Report* in Appendix E. On-site biological field surveys were conducted on June 20, July 3, 5, 6 and 10, 2007. All areas were traversed on foot and visually surveyed for plant and animal species, existing site conditions, and physical characteristics. Plant communities within the project site were identified, characterized, and mapped during the field surveys. Plant communities mapped within the project site are illustrated in Figure IV.E-1.

A survey was conducted on July 10, 2007 to determine the extent of potentially federal and/or state jurisdictional waters and wetlands (“jurisdictional features”) within or adjacent to the project site. The purpose of this analysis was to identify and delineate jurisdictional features within the project site and areas immediately adjacent that may be subject to CDFG regulatory jurisdiction under Fish and Game Code Sections 1600-1616 (Lake and Streambed Alternation Program), U.S. Army Corps of Engineers (Corps) regulatory jurisdiction under Section 404 of the Clean Water Act (CWA) (as defined in the United States Code (U.S.C) 33 part 1344) and Regional Water Quality Control Board (RWQCB) regulatory jurisdiction under Section 401 of the CWA (33 U.S.C. 1341) and State Porter-Cologne Act. Survey methods followed current Corps, CDFG and RWQCB regulations and guidance. A detailed discussion of the methods of the jurisdictional delineation study is found in the Jurisdictional Delineation Report provided in Appendix E.

Focused surveys were also conducted for burrowing owls (*Athene cunicularia*), a CDFG Species of Special Concern, according to the protocol prepared by the California Burrowing Owl Consortium<sup>2</sup> (CBOC) and adopted by CDFG. The study area encompassed the project site and a 500-foot buffer surrounding the project site. These surveys were conducted on June 20, July 3, 5, 6 and 10, 2007 and involved identifying potential burrows and four separate follow-up surveys during dawn or dusk in order to observe any burrowing owl individuals present.

### **Existing Conditions**

The project site is a vacant parcel bordered by new residential developments to the east and north and a high school directly to the south. The project site contains patches of rabbitbrush scrub within the eastern portion, and ruderal vegetation along the southern and western portion (see Figure IV.E-1); the northern portion of the site supports little to no vegetation, given that the area was recently burned and subsequently scraped. The project site is bordered to the west by an offsite active constructed drainage which receives irrigation runoff from the high school, beyond which lies a vacant parcel supporting ruderal grassland vegetation. The southeastern corner of the site also appears to have been recently graded or scraped, as evidenced by vehicle/equipment tracks and exposed bare soils. Evidence of recent and extensive site disturbance includes several piles of debris remaining from the recent demolition of the

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<sup>2</sup> California Burrowing Owl Consortium. April 1993. *Burrowing Owl Survey Protocol and Mitigation Guidelines*. Sacramento, California.

structure along the southern boundary, numerous unpaved roads traversing the site, and miscellaneous household and industrial trash scattered throughout.

The project site supports marginal habitat for common native plant and wildlife species and lacks quality suitable habitat for sensitive plant and wildlife species. The project site is heavily disturbed, supports minimal native vegetation, and is somewhat fragmented from nearby natural areas to the north, east and south. Further, the area in the vicinity of the project site supports predominantly suburban developments, which tend to support mostly non-native species and common urban wildlife.

### ***Natural Communities***

Ruderal vegetation is dominant throughout the project site, with patches of rabbitbrush scrub within the eastern portion. A few scattered Arroyo willow (*Salix lasiolepis*), sandbar willow (*Salix exigua*) and red willow (*Salix laevigata*) are located along the western boundary of the site associated with the offsite active constructed drainage channel. These individuals and small patches of willows, however, are not considered a riparian plant community, as they do not exhibit the appropriate density or characteristics to be classified as unique ecological plant communities. In addition, the site supports a patch of non-native trees along the western boundary, including black locust (*Robinia pseudoacacia*) and ash (*Fraxinus* sp.). However, most of the project site is dominated with ruderal plants and non-native annual grasses, which are substantially disturbed by recent human activities. The project site supports scattered and fragmented Ruderal Non-native Grassland and Rabbitbrush Scrub plant communities, which are described in detail below and illustrated in Figure VI.E-1. In addition, these plant communities within the project site are not considered sensitive plant communities as defined by CDFG.

### ***Ruderal Non-native Grassland***

Ruderal non-native grassland occurs throughout the project site and occupies most of the project site. Ruderal non-native grassland is characterized by the dominance of non-native annual grass species, which is generally due to regular disking, scraping or other disturbance activities. These areas support non-native plant species including cheat grass (*Bromus tectorum*), rattail fescue (*Vulpia myuros* var. *hirsuta*), Russian thistle (*Salsola tragus*), and short pod mustard (*Hirschfeldia incana*).

### ***Rabbitbrush Scrub***

Rabbitbrush scrub occurs as patches within the eastern portion of the project site. Rabbitbrush scrub is a subset of desert scrub, and is characterized by an association of desert-adapted shrubs or plants in which a rabbitbrush (*Chrysothamnus* sp.) is a dominant species. In general, rabbitbrush scrub occurs on sandy or gravelly soils and consists of relatively widely-spaced shrubs and minimal herbaceous understory. The dominant rabbitbrush species within this plant community is rubber rabbitbrush (*Chrysothamnus nauseosus*); however, other native desert shrubs are present within this plant community including four-wing saltbush (*Atriplex canescens*) and ragweed (*Ambrosia* sp.). Due to the level of site disturbance, however, dominant herbaceous plants observed in the understory are mostly non-native species, including

short pod mustard, tumble mustard (*Sisymbrium altissimum*), London rocket (*Sisymbrium irio*), rattail fescue, Russian thistle, and cheatgrass. Ruderal vegetation has also intermixed with the patches of rabbitbrush scrub, further degrading the composition and structure of these existing patches of the presumed former natural plant community.

### ***Sensitive and Special Status Plants and Wildlife Species***

Most sensitive and special status plants and wildlife species were either “not expected” to occur on-site; however, a few were considered to have a “low potential” or a “moderate potential” to occur on the project site. These determinations were based on (1) a review of the onsite plant communities in relation to the species’ specific habitat requirements, (2) recorded regional occurrence information and published species’ ranges, and (3) an assessment of the on-site conditions and disturbance, topography, elevation, soils and surrounding land uses. Those species considered to have a low or moderate potential to occur on-site and are discussed below.

The white-bracted spineflower (*Chorizanthe xanti* var. *leucotheca*), a CNPS List 1B.2 plant species, is considered to have a low potential to occur within the project site. Although the project site supports small patches of marginally suitable scrub habitat, it is highly unlikely to support this sensitive plant species given that the site generally lacks quality suitable habitat and consists largely of heavily and recently disturbed ruderal vegetation.

Sensitive reptile species considered to have a low potential to occur on-site are silvery legless lizard (*Anniella pulchra pulchra*), San Diego horned lizard (*Phrynosoma coronatum blainvillii*), and California horned lizard (*P. c. frontale*); these are considered by CDFG to be Species of Special Concern. Although the project site supports limited areas of marginally suitable habitat, the site has been heavily disturbed by on-site activities (structure demolition, vegetation removal, vehicle/equipment use, drainage construction) and ongoing off-site activities (regular excavation of the off-site active drainage, suburban development). These sensitive reptile species are not known to occur in heavily disturbed or degraded areas<sup>3</sup>. In addition, the residential developments to the north and east of the site also increase the potential predation of any reptiles on-site by domestic cats, which are thought to be a major factor responsible for the decline of many sensitive reptile populations<sup>4</sup>. Therefore, these species are considered to have a low potential to occur on-site.

The results of the focused burrowing owl surveys were negative, indicating that no burrowing owls were present on or adjacent to the site; however, marginally suitable habitat is still present for this species. The burrowing owl, although not observed on-site during focused surveys, still has a low potential to occur

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<sup>3</sup> Jennings, M. R. and M. P. Hayes. 1994. *Amphibian and Reptile Species of Special Concern in California*. California Department of Fish and Game, Inland Fisheries Division, Rancho Cordova, CA.

<sup>4</sup> *Ibid.*

on-site due to the presence of potential burrows that the species may colonize in the future prior to development activities.

Several additional sensitive bird species are considered to have a low potential to occur on-site, as they may forage within the heavily disturbed habitat on-site; these are: Cooper's Hawk (*Accipiter cooperii*), short-eared owl (*Asio flammeus*), ferruginous hawk (*Buteo regalis*), mountain plover (*Charadrius montanus*), and merlin (*Falco columbarius*); all of these are CDFG Species of Special Concern. However, none of these species are expected to nest on-site, either because the site lacks suitable nesting habitat (such as for Cooper's hawk and short-eared owl) or the species is not known to nest in California (such as for ferruginous hawk, mountain plover and merlin). One additional sensitive bird species, Swainson's hawk (*Buteo swainsoni*), a state threatened species, is considered to have a moderate potential to occur on-site, both for foraging and nesting. There are four recently recorded occurrences of Swainson's hawk nests in the region, and although the site does not support optimal nesting habitat for the species (large trees along riparian systems), it may nest in the utility poles on-site<sup>5</sup>; one unoccupied stick nest was observed in a utility pole along the site's eastern boundary during the surveys.

None of the sensitive mammal species reported from the region are expected to occur on-site, due to the fact that the site only supports minimal, fragmented, and heavily disturbed habitat. For example, Mohave ground squirrel (*Spermophilus mohavensis*), State threatened species, is not expected on the project site given the disturbed nature of the site and the fact that the site is located beyond the survey zone stated in CDFG's survey protocol for the species.

### ***Preliminary Jurisdictional Findings***

The offsite active constructed drainage was found to be a potentially jurisdictional streambed, subject to regulation by CDFG, and a potentially jurisdictional "waters of the state," subject to regulation by the RWQCB. The Corps determined that the project site was in an area that is part of an isolated, non-navigable stream system that does not have a substantial interstate commerce connection and, therefore, this drainage is exempt from Corps regulation.<sup>6</sup> Potential CDFG jurisdiction was determined to be approximately 0.47-acre, most of which occurs within the offsite active constructed drainage (only where it borders the project site); only 0.07-acre is present on-site, consisting of two small patches of arroyo and red willows, which may be considered riparian habitat associated with the adjacent offsite active constructed drainage. Approximately 0.12-acre is a patch of riparian habitat within the center portion of the off-site active constructed drainage consisting of sandbar willow. The remaining 0.28-acre consists of the portion of the channel between the tops of the banks, which exist as slightly sloping earthen berms

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<sup>5</sup> California Department of Fish and Game. 2005. *California Wildlife Habitat Relationships version 8.1 personal computer program*. California Interagency Wildlife Task Group. Sacramento, California.

<sup>6</sup> Letter from Aaron O. Allen, U.S. Army Corps of Engineers to Jocelyn Swain, City of Lancaster, October 12, 2007.

along the off-site active constructed drainage. Potential RWQCB jurisdiction is present within the active flow/channel portion of the offsite active constructed drainage, consisting of approximately 0.09-acre (only where it borders the project site). However, these measurements are only valid as of the field survey date (July 10, 2007) since the off-site active constructed drainage is regularly maintained by the City. Such maintenance activities were observed during the site visit, and include excavating material from the drainage channel and regrading the slopes and berms. The City staff indicated that such activities are conducted once every few months, resulting in regular modifications to the flow pattern, vegetation, berms and depth of the drainage.

The onsite inactive constructed drainage was created within the last year or two by the City Public Works Department without the landowner's knowledge or approval. The City is currently coordinating with the appropriate regulatory agencies to determine what type of regulatory permits and/or mitigation may be required in order to remove the drainage; therefore, it was not evaluated to determine its regulatory or jurisdictional status. However, as stated above, this drainage is not subject to Corps regulation as it is in an area that is considered isolated and non-navigable.

## **ENVIRONMENTAL IMPACTS**

### **Thresholds of Significance**

In accordance with Appendix G of the CEQA Guidelines, the proposed project would have a significant environmental impact on biological resources if it would:

- (a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
- (b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service;
- (c) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means;
- (d) Interfere substantially with the movement of any native resident or migratory fish and wildlife species or with established native resident or migratory wildlife corridors, or impede the use of a native wildlife nursery site;
- (e) Conflict with an local polices or ordinances protecting biological resources, such as a tree preservation policy or ordinance; or

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

## **Project Impacts**

### ***Special Status Wildlife Species***

Based on the initial database and background research three sensitive reptile species and seven sensitive bird species were determined as having a low potential to occur on the project site, as it only supports limited areas of marginally suitable habitat due to heavy disturbance both on-site (structure demolition, vegetation removal, vehicle/equipment use, drainage construction) and off-site (maintenance of the off-site active constructed drainage). Therefore, potential impacts to these species are considered to be less than significant.

Swainson's hawk is considered to have a moderate potential to occur on-site. The proposed project may result in significant impacts to nesting Swainson's hawk, if present on or adjacent to the site, through direct nest removal while occupied by eggs or young, or through noise or vibration due to project construction, which may cause nest abandonment and subsequent death of the eggs or young. Therefore, a potentially significant impact could occur to Swainson's hawk with project implementation.

The development of the project site would remove approximately 40 acres of potential raptor foraging habitat, including potential foraging habitat for Swainson's hawk. However, given the mobility of these species, the somewhat isolated nature of the project site, the marginal and heavily disturbed nature of the habitat present onsite, and the relative abundance of suitable foraging (including winter raptor foraging habitat) habitat in the region, the loss of the existing foraging habitat onsite is considered to be less than significant.

Nesting birds and raptors are protected under the state Fish and Game code and/or the federal Migratory Bird Treaty Act. Construction activities including vegetation removal, noise and vibration have a potential to result in direct (i.e. death or physical harm) and indirect (i.e. nest abandonment) adverse impacts to nesting birds; these impacts would be considered significant.

Although focused surveys for burrowing owls were negative, the project site contains several potentially suitable burrows, which although currently unoccupied, could be colonized by burrowing owls in the region prior to site construction. The removal of occupied burrowing owl burrows during vegetation removal and grading associated with site development would be considered a significant impact.

### ***Special Status Plant Species and Sensitive Plant Communities***

As discussed above, special status plant species are either not expected or are considered to have a low potential to be present on-site, due to the general disturbed and degraded conditions of the site and vegetation and/or the lack of specific habitat requirements for the special status plants known from the region. In addition, none of the plant communities on-site are considered to be sensitive. Although several

willows are present on-site, they occur as isolated individuals or small patches, which are disturbed, and do not have the appropriate density or characteristics to be classified as true ecological plant communities. The development of the proposed project is not anticipated to impact sensitive plants or communities and therefore would be a less than significant impact.

### ***Jurisdictional Features***

The project may impact the offsite active constructed drainage located along the outside western boundary of the project site. Although this drainage feature is not located within the project site, due to its close proximity to the project development site (within 25 feet, or closer in places), grading activities associated with project development as determined during the development of more detailed grading plans may impact portions of, or the entire length of, the drainage. The removal, grading, or disturbance of any portion of the offsite active constructed drainage may be considered a significant impact.

### ***Wildlife Movement or Native Wildlife Nurseries***

A wildlife corridor joins otherwise fragmented habitats, which helps to increase the gene flow between the individual habitats, provides an escape route and improves the overall fitness of resident species. The project site is surrounded to the north, south and east by suburban development and, therefore, lacks connectivity to nearby natural habitats. Although several vacant parcels are located north of West Avenue L and west of 60<sup>th</sup> Street West, there are no large contiguous natural or open space areas to the north, south or east of the project site; therefore, the site would not be used as a movement or migration corridor for wildlife to use while traveling between two high quality habitat areas. Additionally, the project site is currently fenced with chainlink fence, dominated with ruderal and non-native vegetation and is regularly disturbed; these conditions tend to preclude the use of areas by wildlife species for use as a movement or migration corridor or as a native nursery site as they prefer areas that are accessible and safe from harm. Therefore, the proposed project is not expected to impact wildlife movement, migration corridors, or native nursery sites.

### ***Conflict with Local Policies or Ordinances***

The City of Lancaster does not have an ordinance specifically protecting tree species; therefore, the non-native trees on-site are not protected by local ordinances. In addition, those General Plan policies protecting sensitive species have already been addressed under *Special Status Species* above. Therefore, the proposed project would have no impacts regarding conflicts with local policies or ordinances.

### ***Conflict with Conservation Plans***

The project site is not located in an area which is covered by an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan. Although a draft of the West Mojave Plan has been prepared that would eventually cover lands within the City of Lancaster, this plan has not yet been approved by regulatory agencies and currently

only covers lands owned by the Bureau of Land Management. Therefore, the proposed project would not result in impacts regarding conflicts with conservation plans.

## **CUMULATIVE IMPACTS**

The proposed project in combination with the related projects listed in Section III, Environmental Setting, would result in the continued development of residential and commercial uses in City of Lancaster. Per the provisions of CEQA, actions which have impacts that are individually limited, but cumulatively considerable, may be considered significant and adverse. Potential cumulative impacts on biological resources are generally related to both the regional and local loss of native trees and the displacement of sensitive wildlife species from their habitat.

Although the project site is a vacant parcel which supports marginally suitable habitat for common native wildlife species, and the loss of such habitat is not a substantial adverse impact for native wildlife species. Therefore, the loss of marginally suitable habitat from the implementation of the proposed project, when considered with the related projects, would not be cumulatively considerable. However, a few of the related projects are located on undeveloped lands which may support nesting birds, burrowing owls and/or potentially jurisdictional waterways; potential impacts to these sensitive biological resources, when considered with the potential impacts to these resources from the proposed project, may result in cumulatively considerable adverse impacts. However, with the implementation of the mitigation measures below, impacts would be less than significant.

## **MITIGATION MEASURES**

- E-1 A qualified wildlife biologist shall conduct a pre-construction nesting bird survey no more than 5 days prior to initiation of grading to provide confirmation on presence or absence of active nests in the vicinity (at least 300 feet around the project site). If active nests are encountered, species-specific measures shall be prepared by a qualified biologist in consultation with the CDFG and implemented to prevent abandonment of the active nest. At a minimum, grading in the vicinity of the nest shall be deferred until the young birds have fledged. A minimum exclusion buffer of 100 feet shall be maintained during construction, depending on the species and location. The perimeter of the nest-setback zone shall be fenced or adequately demarcated with staked flagging at 20-foot intervals, and construction personnel and activities restricted from the area. A survey report by the qualified biologist verifying that (1) no active nests are present, or (2) that the young have fledged, shall be submitted to the City prior to initiation of grading in the nest-setback zone. The qualified biologist shall serve as a construction monitor during those periods when construction activities will occur near active nest areas to ensure that no inadvertent impacts on these nests will occur.
- E-2 In order to avoid adverse impacts to burrowing owl, a pre-construction survey for burrowing owls shall be performed on the project site within 30 days prior to ground disturbance. The survey shall be performed according to accepted burrowing owl survey protocols by a qualified biologist.

The results of the survey shall be reported to CDFG and the City of Lancaster prior to ground disturbance. If any burrowing owls are found on-site during the pre-construction surveys, passive relocation of the owls shall be completed outside of the nesting season according to California Burrowing Owl Consortium guidelines; a report shall be prepared by a qualified biologist following any passive relocation efforts documenting the methods and results of the relocation activities. All ground disturbance associated with site development and construction shall be postponed until passive relocation efforts have been completed and the associated report has been submitted to CDFG.

E-3 If development activities will result in impacts to the off-site active constructed drainage (such as during development of more detailed grading plans), the applicant shall apply for and receive the following regulatory permits (or exemptions) prior to grading near the off-site active constructed drainage:

- A Streambed Alteration Agreement from CDFG (Section 1600 permit)
- A Notice of Intent to receive coverage under the Lahontan RWQCB's General Permit R6T-2003-0004 for minor streambed alteration projects where the Corps does not have jurisdiction.

Mitigation shall include construction measures including Best Management Practices for erosion control, as well as compensatory measures such as restoration of the drainage to the pre-existing condition (or better) and installation of riparian or wetland vegetation at a 1:1 ratio to removed vegetation. These measures, if not included as permit requirements, shall be enforced by the City and shall conform to a mitigation plan to be prepared by the applicant and approved by the City prior to receiving grading permit approvals for the project. The mitigation plan shall include methods for implementation as well as monitoring methods, performance criteria, and contingency measures in case of mitigation failure.

## **LEVEL OF SIGNIFICANCE AFTER MITIGATION**

With implementation of mitigation measures E-1, E-2, and E-3, project specific and cumulative impacts to biological resources would be reduced to less than significant.

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## IV. ENVIRONMENTAL IMPACT ANALYSIS

### F. CULTURAL RESOURCES

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The following section includes information from the Cultural Resources Survey for the Commons at Quartz Hill Project in Lancaster, Los Angeles County, California, prepared by Applied Earthworks, Inc., dated August 2007. This report is incorporated herein by reference and is included as Appendix F to this Draft EIR.

#### ENVIRONMENTAL SETTING

##### Regional Setting

The project site is located in northern Los Angeles County within an urbanized area in the City of Lancaster. Regional access to the project area is provided via SR 14/138 (Antelope Valley Freeway), which is located 4.5 miles east of the project site. The project site is located on the western side of the Antelope Valley within the Quartz Hill community. The San Gabriel Mountains are located approximately seven miles south and southwest of the project site. The Tehachapi Mountains are located approximately 25 miles northwest of the project site.

##### Prehistory

The regional prehistory of the project area identifies a long-term use of the Lancaster area. Archaeological investigations suggest early use of the Pleistocene lakes in the Fremont and Antelope Valleys, dating to the Paleo-Indian period (10,000 to 6,000 years ago). Several occupation sites have been recorded around Rosamond Lake that date from the Pinto Period (6,000 to 4,000 years ago). From 4,000 to 1,500 years ago, many prehistoric groups continuously lived and utilized this area of the Mojave Desert following a semi-sedentary life style. There are many recorded sites that date to the Rose Spring Period (2,000 to 1,000 years ago) and show the adaptation to the use of the bow and arrow with small-sized projectile points. The semi-sedentary life style of the Rose Spring time period extends into the Late Prehistoric Period (1,000 years ago to Historic Contact). This Late Prehistoric Period is characterized by the first appearance of Desert side-notched style of projectile points.

By the time of Spanish contact (500 years ago), the population for the Western Mojave Desert had diminished. It is not clear why the population declined; it may be that archaeological sites from that time have not yet been discovered.

Based upon Spanish documents and later ethnographic research, this area of the Mojave Desert was utilized by at least three groups, the Kawaiisu, the Serrano, and the Kitanemuk. The Kawaiisu are Numic speakers and resided primarily in the southern Sierras, with villages in the Piute and Tehachapi mountains. The Kitanemuk and Serrano are Takic speakers. The Kitanemuk lived in the southern end of the San Joaquin Valley with contacts into Western Mojave Desert as far south as Rosamond Lake. The Serrano lived in the San Bernardino Mountains and in the northern foothills of the San Gabriel

Mountains. Today, a number of Serrano Native Americans live on the San Manuel and Morongo reservations.

## **History**

The City of Lancaster, established in 1884, started when the Southern Pacific Railway Company established its line between the San Joaquin Valley and the Los Angeles Basin through the Antelope Valley. At first the City grew because of the artesian water supply in the area, but droughts by 1895 nearly destroyed Lancaster and the other towns in Antelope Valley. Farmers returned to the Valley when electric water pumps made irrigated agriculture possible. Alfalfa became the main crop in the Valley by the early 20th century.

## **Historical Resources**

### ***Regulatory Environment***

Generally, a lead agency must consider a property an historic resource under the California Environmental Quality Act if it is eligible for listing in the California Register of Historical Resources (California Register). The California Register is modeled after the National Register of Historic Places (National Register). Furthermore, a property is presumed to be historically significant if it is listed in a local register of historic resources or has been identified as historically significant in an historic resources survey (provided certain criteria and requirements are satisfied) unless a preponderance of evidence demonstrates that the property is not historically or culturally significant.

### ***National Register of Historic Places***

The National Register is an “authoritative guide to be used by federal, state, and local governments, private groups and citizens to identify the nation’s cultural resources and to indicate what properties should be considered for protection from destruction or impairment.”

### **Criteria**

To be eligible for listing in the National Register, a property must be at least 50 years of age and possess significance in American history and culture, architecture, or archaeology. A property of potential significance must meet one or more of four established criteria:

- A. Associated with events that have made a significant contribution to the broad patterns of our history; or
- B. Associated with the lives of persons significant in our past; or

- C. Embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. Yield, or may be likely to yield, information important in prehistory or history.

### Physical Integrity

According to the National Register Bulletin 15, “to be eligible for listing in the National Register, a property must not only be shown to be significant under National Register criteria, but it must also have integrity.” Integrity is defined in National Register Bulletin 15 as “the ability of a property to convey its significance.” Within the concept of integrity, the National Register recognizes seven aspects or qualities that in various combinations define integrity. They are feeling, association, workmanship, location, design, setting, and materials.

### Context

To be eligible for listing in the National Register, a property must also be significant within an historic context. National Register Bulletin 15 states that the significance of an historic property can be judged only when it is evaluated within its historic context. Historic contexts are “those patterns, themes, or trends in history by which a specific ... property or site is understood and its meaning ... is made clear.” A property must represent an important aspect of the area’s history or prehistory and possess the requisite integrity to qualify for the National Register.

### Historic Districts

The National Register includes significant properties, which are classified as buildings, sites, districts, structures, or objects. An historic district “derives its importance from being a unified entity, even though it is often composed of a variety of resources. The identity of a district results from the interrelationship of its resources, which can be an arrangement of historically or functionally related properties.”

A district is defined as a geographically definable area of land containing a significant concentration of buildings, sites, structures, or objects united by past events or aesthetically by plan or physical development. A district’s significance and historical integrity should help determine the boundaries. Other factors include:

- Visual barriers that mark a change in historic character of the area or that break the continuity of the district, such as new construction, highways, or development of a different character;
- Visual changes in the character of the area due to different architectural styles, types, or periods, or to a decline in the concentration of contributing resources;

- Boundaries at a specific time in history, such as the original city limits or the legally recorded boundaries of a housing subdivision, estate, or ranch; and
- Clearly differentiated patterns of historical development, such as commercial versus residential or industrial.

Within historic districts, properties are identified as contributing and noncontributing. A contributing building, site, structure, or object adds to the historic associations, historic architectural qualities, or archaeological values for which a district is significant because:

- It was present during the period of significance, relates to the significance of the district, and retains its physical integrity; or
- It independently meets the criterion for listing as a National Historic Landmark, and historic units of the National Park system.

#### *California Register of Historical Resources*

In 1992, Governor Wilson signed AB 2881 into law establishing the California Register. The California Register is an authoritative guide used by state and local agencies, private groups, and citizens to identify historic resources and to indicate what properties are to be protected, to the extent prudent and feasible, from substantial adverse change.

The California Register consists of properties that are listed automatically as well as those that must be nominated through an application and public hearing process. The California Register automatically includes the following:

- California properties listed in the National Register and those formally Determined Eligible for the National Register;
- California Registered Historical Landmarks from No. 0770 onward; and
- Those California Points of Historical Interest that have been evaluated by the Office of Historic Preservation and have been recommended to the State Historical Resources Commission for inclusion on the California Register.

The criteria for eligibility of listing in the California Register are based upon National Register criteria. To be eligible for listing in the California Register, a property must be at least 50 years of age and possess significance at the local, state, or national level, under one or more of the following four criteria:

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history, or the cultural heritage of California, or the United States; or

2. It is associated with the lives of persons important to local, California, or natural history; or
3. It embodies the distinctive characteristics of a type, period, or method of construction or represents the work of a master, or possesses high artistic values; or
4. It has yielded, or has the potential to yield, information important in the prehistory or history of the local area, California, or the nation.

Properties eligible for listing in the California Register may include buildings, sites, structures, objects, and historic districts. A property less than 50 years of age may be eligible if it can be demonstrated that sufficient time has passed to understand its historical importance. While the enabling legislation for the California Register is less rigorous with regard to the issue of integrity, there is the expectation that properties reflect their appearances during their period of significance.

### ***Historical Resources within the Project Site***

The project site is a currently vacant and undeveloped open field with no standing structures. A field survey of the project site was conducted on July 30, 2007. One concrete foundation and presumably associated historic and modern debris were observed during the Cultural Resources survey; however, there were no indications that the foundations were more than 50 years old and the refuse scatter consisted of mixed historic and modern debris.<sup>1</sup> Building records were reviewed for the project site as part of the Phase I Environmental Site Assessment (see Appendix H of this Draft EIR), and as shown therein, a building permit was issued in 1955 for living quarters for employees, who presumably worked on the row crops. While there is no indication of when the foundation was actually constructed, it is likely that the foundation was constructed in conjunction with the building permit issued in 1955. However, there is no Therefore, neither the foundation nor the trash scatter is considered a historic resource.

### **Archaeological Resources**

#### ***Definition of Archaeological Resources***

Although the Archaeological Resources Protection Act is not directly applicable to the project site as it is a federal act, in the absence of a comparable State statute it provides a clear definition as to what constitutes an archaeological resource. According to the Archaeological Resources Protection Act of 1979, “the term ‘archaeological resource’ means any material remains of past human life or activities which are of archaeological interest, as determined under uniform regulations promulgated pursuant to this Act. Archaeological resources shall include, but are not limited to: pottery, basketry, bottles, weapons, weapon projectiles, tools, structures or portions of structures, pit houses, rock paintings, rock

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<sup>1</sup> *Cultural Resources Survey for the Commons at Quartz Hill Project in Lancaster, Los Angeles County, California, Applied Earthworks, Inc., August 2007, at page 14.*

carvings, intaglios, graves, human skeletal materials, or any portion or piece of any of the foregoing items. Nonfossilized and fossilized paleontological specimens, or any portion or piece thereof, shall not be considered archaeological resources, under the regulations under this paragraph, unless found in an archaeological context. No item shall be treated as an archaeological resource under regulations under this paragraph unless such item is of at least 100 years of age (although just because an item is 100 years old does not automatically qualify it as an archaeological resource).”<sup>2</sup>

### ***Archaeological Resources within the Project Site***

According to the records search conducted by the South Central Coastal Information Center of the California Historical Resources Information System at California State University, Fullerton, 28 previous archaeological investigations have been documented within or adjacent to the one-mile radius study area, with the earliest occurring in 1976 and the most recent in 2007. Three studies have been conducted within or adjacent to the 40-acre project area. Five archaeological sites and three isolated artifacts were identified within the one-mile radius study area during the records search. However, none of the sites or isolates are located within the project site.<sup>3</sup>

### ***Archaeological Resources Proximate to the Project Site***

As discussed above, according to the records search conducted by the South Central Coastal Information Center, five archaeological sites and three isolated artifacts were identified within a one-mile radius of the project site during the records search.<sup>4</sup> Additionally, a field survey of the project site was conducted on July 30, 2007, which revealed no evidence of prehistoric or archaeological sites, or other cultural resources within the project boundaries.<sup>5</sup>

## **Paleontological Resources**

### ***Definition of Paleontological Resources***

Paleontological resources include fossil remains, fossil localities, and formations that have produced fossil materials in other nearby areas. Paleontological resources are limited, nonrenewable, sensitive scientific and educational resources, including: fossils preserved either as impressions of soft (fleshy) or hard (skeletal) parts, mineralized remains of skeletons, tracks, or burrows; other trace fossils; coprolites

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<sup>2</sup> *Archaeological Resources Protection Act of 1979 (as amended) Section 3*, [http://www.cr.nps.gov/local-law/FHPL\\_ArchRsrcsProt.pdf](http://www.cr.nps.gov/local-law/FHPL_ArchRsrcsProt.pdf), June 15, 2006.

<sup>3</sup> *Cultural Resources Survey for the Commons at Quartz Hill Project in Lancaster, Los Angeles County, California, Applied Earthworks, Inc., August 2007, at page 13.*

<sup>4</sup> *Ibid.*

<sup>5</sup> *Ibid. at page 14.*

(fossilized excrement); seeds or pollen; and other microfossils from terrestrial, aquatic, or aerial organisms.

#### ***Paleontological Resources within the Project Site***

There are no known or anticipated paleontological resources on the project site, nor would development of the proposed project be expected to impact existing paleontological resources.

#### ***Paleontological Resources Proximate to the Project Site***

There are no known or anticipated paleontological resources in the project area, nor would development of the proposed project be expected to impact existing paleontological resources proximate to the project site.

### **Human Remains**

#### ***Human Remains within the Project Site***

As part of the cultural resources survey, Applied Earthworks contacted the Native American Heritage Commission (NAHC) on June 11, 2007 to request a current list of contacts and a review of the sacred lands file at the NAHC in accordance with SB 18. According to the NAHC, no sacred lands or other Native American cultural resources are listed for the project site.<sup>6</sup> In addition, the NAHC provided contact information for eight local representatives. Applied Earthworks submitted a letter to each contact with details about the project to solicit information and provide an opportunity for expression of interest or concern regarding the project. To date, none of the contacts have responded to the letters regarding the project.<sup>7</sup>

#### ***Human Remains Proximate to the Project Site***

Additionally, as part of the NAHC review of their sacred lands file, the NAHC stated that there are no sacred lands or other Native American cultural resources in the project area.<sup>8</sup>

## **ENVIRONMENTAL IMPACTS**

### **Thresholds of Significance**

In accordance with Appendix G of the State CEQA Guidelines, the proposed project would have a significant environmental impact if it would:

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<sup>6</sup> *Ibid.* at page 13.

<sup>7</sup> *Ibid.*

<sup>8</sup> *Ibid.*

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

## **Project Impacts**

### ***Historical Resources***

As discussed above, the project site is a currently vacant and undeveloped open field with no standing structures. One concrete foundation and presumably associated historic and modern debris were observed during the Cultural Resources survey; however, as discussed above, there were no indications that the foundations were more than 50 years old and the refuse scatter consisted of mixed historic and modern debris. Therefore, neither the foundation nor the trash scatter is considered a historic resource, and the proposed project would have no impact with respect to historical resources. The foundation has since been removed from the project site.

### ***Archaeological Resources***

Surface examination often cannot reveal whether archaeological resources are present at a specific project location. However, according to the records search conducted by the South Central Coastal Information Center, there are no identified prehistoric or archaeological sites, prehistoric isolates, historic archaeological sites, or historic isolates within the boundaries of the project site. Thus, no evidence of archaeological remains on the project site has been discovered, and excavation on site and development of project site is not anticipated to affect archaeological resources. However, the majority of the project site has never been developed, although the site has been subject to agricultural use including the planting of row crops, and it is difficult to know what lies beneath the ground surface. Additionally, as discussed above, there are five archaeological sites and three isolated artifacts within a one-mile radius of the project site. There is a possibility that impacts to archaeological resources could occur during excavation activities for the proposed project. Therefore, impacts to archaeological resources are potentially significant.

### ***Paleontological Resources***

Surface examination often cannot reveal whether paleontological resources are present at a specific project location. However, no evidence of paleontological resources on the project site has been discovered, and excavation on site and development of the project site is not anticipated to affect

paleontological resources. However, the majority of the project site has never been developed and it is difficult to know what lies beneath the ground surface. There is a possibility that impacts to paleontological resources could occur during excavation activities for the proposed project. Therefore, impacts to paleontological resources are potentially significant.

### ***Human Remains***

As stated above, according to the NAHC there are no sacred lands or other Native American cultural resources in the project area. Additionally, none of the NAHC contacts have expressed any concerns regarding the project. However, the majority of the project site has never been subject to subsurface disturbance and it is difficult to know what lies beneath the ground surface. There is a possibility that impacts to human remains could occur during excavation activities for the proposed project. Therefore, impacts to human remains are potentially significant.

## **CUMULATIVE IMPACTS**

Development of the proposed project in conjunction with the development of the 82 related projects has the potential to increase the risk to cultural resources in the project area. While the development of the related projects in conjunction with the proposed project would greatly intensify the land usage in the immediate project area, impacts to cultural resources tend to be site-specific and are assessed on a site-by-site basis. The extent of cultural resources (if any) that occur at the related project sites is unknown and, as such, it is not known whether any of the related projects would result in significant impacts to cultural resources. However, similar to the proposed project, such determinations would be made on a case-by-case basis and, if necessary, the applicants of the related projects would be required to implement the appropriate mitigation measures. Furthermore, the analysis of the proposed project's impacts to cultural resources concluded that, through the implementation of the identified mitigation measures, project impacts to cultural resources would be less than significant. Therefore, the proposed project would not contribute to any potential cumulative impacts, and impacts to cultural resources would not be cumulatively considerable and impacts would be less than significant.

## **MITIGATION MEASURES**

Impacts with respect to archaeological and paleontological resources and human remains would be potentially significant. Therefore, the following mitigation measure is recommended to reduce the potentially significant impacts to less than significant levels.

- F-1 All contractors and subcontractors shall be informed about the potential for archaeological and paleontological discoveries during construction, and all construction personnel should be informed on the appropriate responses to such discoveries. The information will include a description of the kinds of cultural resources that might be encountered during construction and the steps to be taken if such a find is unearthed.

If buried or concealed cultural resources are discovered during excavation, construction, or related development work, all such work is to cease in the vicinity of the find and a qualified archaeologist shall be notified. The find shall be properly investigated and appropriate mitigative and/or protective measures (if necessary) shall be taken. If human remains are found, procedures for their treatment shall follow CEQA guidelines in 14 CCR 15064.5(e).

#### **LEVEL OF SIGNIFICANCE AFTER MITIGATION**

Because there is the potential that unknown resources could be encountered during the course of project development, implementation of the recommended Mitigation Measure F-1 would ensure that no significant impacts occur to a unique cultural resource. Therefore, with implementation of the identified mitigation measure, impacts to cultural resources would be less than significant.

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## IV. ENVIRONMENTAL IMPACT ANALYSIS

### G. GEOLOGY/SOILS

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The following analysis is based on the *Preliminary Geotechnical Evaluation, Proposed Commercial Shopping Center, The Commons at Quartz Hill, Northwest Corner of 60<sup>th</sup> Street West and Avenue L, Lancaster California*, prepared by Ninyo and Moore, Geotechnical and Environmental Sciences Consultants, August 31, 2007. The Geotechnical Report is included as Appendix G of this Draft EIR.

#### **ENVIRONMENTAL SETTING**

The project site located at the intersection of 60<sup>th</sup> Street West and Avenue L, and is approximately 40 acres in size and is rectangular in shape. The project site is bound by Avenue L to the south, 60<sup>th</sup> Street West to the east, undeveloped land followed by a residential development to the north, and an undeveloped lot to the west. The project site is vacant, but was subject to agricultural operations including the planting of row crops in the past. No surface water exists on the project site. Vegetation on the site consists of grasses, a few bushes, and scattered trees. The site is relatively level and slopes gently downwards to the northeast, varying from an approximate elevation of 2,420 feet above mean sea level near the south side of the site to an approximate elevation of 2,410 above mean sea level near the north side of the project site.

#### **Geologic Setting**

Regionally, the project site is located in the western extreme of the Mojave Desert geomorphic province. The Mojave Desert geomorphic province is bound by the San Andreas Fault zone on the south, the Garlock fault zone on the north, and the Colorado River on the east. The northwestern and southwestern boundaries of the Antelope Valley were formed by uplift along the Garlock and San Andreas Fault zones. The tectonic movement of the Pacific Plate relative to the North American plate, which is principally expressed as slip along the San Andreas Fault, is responsible for the near east-west trending mountain ridges of the Transverse Ranges province to the south, which includes the San Gabriel, Sierra Pelona, and Santa Monica Mountain ranges.

#### **Geologic Materials**

Regional geologic mapping indicates that the near-surface earth materials underlying the project area consist primarily of sand, silt, and gravel soils from alluvial deposits in the Antelope Valley. More detailed surficial mapping by the California Geological Survey (CGS) indicates that the project site is covered by late-Pleistocene alluvial fan deposits that are unconsolidated, uplifted, and slightly dissected. Alluvial fan deposits are typically comprised of sand and gravel sediments. These coarse materials are further described as having moderately developed soils with distinct soil horizons and clay accumulations. Fill soils may be present on the project site, related to previous site development. Surface soils observed at the site consist of light brown, gravelly sand to silty clay.

## **Groundwater**

According to the City of Lancaster's General Plan, the site is located within the Antelope Valley Groundwater Basin. The General Plan reports the depth of groundwater at 100 feet or more below the ground surface in the general site vicinity. The historic high groundwater level in the vicinity of the site is reported by the CGS to be at a depth of approximately 225 feet. Borings at the site to a depth of 51 feet did not encounter groundwater.

Groundwater levels may be influenced by seasonal variations, precipitation, irrigation, soil/rock types, groundwater pumping, and other factors and are subject to fluctuations. Shallow perched conditions may be present in places.

## **Faults**

The project site is located in a seismically active area, as is the majority of Southern California. The numerous faults in southern California include active, potentially active, and inactive faults. As defined by the CGS, active faults are faults that have ruptured within Holocene time, or within approximately the last 11,000 years. Potentially active faults are those that show evidence of movement during Quaternary time (approximately the last 1.6 million years), but for which evidence of Holocene movement has not been established. Inactive faults have not moved in the last approximately 1.6 million years.

The ground surface in the vicinity of the project site is not transected by known active or potentially active faults. The site is not located within a State of California Seismic Hazard Zone or Earthquake Fault Zone. However, the site is located in a seismically active area, as is the majority of Southern California, and the potential for strong ground motion at the site is considered significant.

The active San Andreas Fault is located approximately four miles southwest of the project site. Other known active faults within approximately 30 miles of the project site include the San Gabriel, Garlock, Sierra Madre, Santa Susana, and Northridge. These nearby active faults are discussed in further detail in the following sections. Based on the proximity and number of known active and potentially active faults within the general region, it is reasonable to expect a strong ground motion seismic event during the lifetime of structures for the proposed project. In general, potential hazards associated with seismic activity include strong ground motion, ground surface rupture, seismically induced liquefaction, and landsliding.

### ***Active Faults***

#### ***San Andreas Fault Zone***

The San Andreas Fault Zone has long been recognized as the dominant seismotectonic feature in California. This fault is over 700 miles long and strikes northwest through the State from the Gulf of California to north of San Francisco. The project site is located approximately four miles northeast from the San Andreas Fault Zone. Two of California's three largest historic earthquakes, the 1906 San

Francisco earthquake and the 1857 Fort Tejon earthquake, occurred along the San Andreas Fault. Ground surface offset as much as 30 feet was recorded across the fault due to the 1857 earthquake. The fault is considered capable of producing earthquakes in excess of magnitude 7.4, and the average frequency of earthquakes along this segment of the San Andreas Fault is approximately 140 years.

#### *San Gabriel Fault Zone*

Segments of the San Gabriel Fault Zone are described as potentially active. This right-lateral, strike-slip fault is considered capable of producing a magnitude 7.2 earthquake. The San Gabriel fault has a total length of approximately 87 miles, and the slip rate of the fault is estimated to be 1 millimeter (mm) per year. The San Gabriel Fault Zone is located approximately 22 miles southwest of the project site.

#### *Garlock (West) Fault Zone*

The Garlock (West) Fault Zone is a prominent fault feature in southern California and strikes northeast across the northern part of the Mojave Desert province. Although this fault has not produced large earthquakes historically, geomorphic and stratigraphic evidence indicates that it has done so in the past. The Garlock (West) Fault is considered capable of generating about a magnitude 7.3 earthquake. The Garlock (West) Fault is located approximately 27 miles northwest of the project site.

#### *Sierra Madre Fault Zone*

The Sierra Madre Fault Zone is composed of a series of active reverse faults. The approximately 35-mile-long fault zone is located approximately between the cities of Sunland and Azusa along the foothills of the San Gabriel Mountains. The Sierra Madre Fault is considered capable of generating about a magnitude 7.2 earthquake. The Sierra Madre Fault is located approximately 26 miles south of the project site.

#### *Santa Susana Fault*

The Santa Susana Fault is a thrust fault approximately 23 miles long located near the communities of Piru, Sylmar, and San Fernando. A short segment of the fault ruptured slightly during the 1971 San Fernando earthquake. The Santa Susana Fault is considered capable of generating about a magnitude 6.7 earthquake. The Santa Susana Fault is located approximately 27 miles southwest of the project site.

#### *Northridge (East Oak Ridge) Fault*

The Northridge (East Oak Ridge) Fault is an active reverse thrust fault located on Oak Ridge near the communities of Santa Paula and Fillmore, northwest of the community of Northridge. This fault was associated with the 1994 magnitude 6.7 Northridge earthquake. The Northridge (East Oak Ridge) Fault is considered capable of generating about a magnitude 7.0 earthquake. The fault is approximately 56 miles long. The Northridge (East Oak Ridge) Fault is located approximately 28 miles southwest of the project site.

## **Geologic-Seismic Hazards**

### ***Surface Fault Rupture***

The project site is not within a currently established Alquist-Priolo Earthquake Fault Zone for surface fault rupture hazards. As discussed above, the closest Alquist-Priolo Earthquake Fault Zone, established for the active San Andreas Fault zone, is approximately four miles southwest of the project site. No active or potentially active faults with the potential for surface fault rupture are known to be located directly beneath or projecting toward the project site.

### ***Seismicity***

As stated above, the project site is located in a seismically active area, as is the majority of Southern California. The numerous faults in southern California include active, potentially active, and inactive faults, some of which have the potential to generate strong earthquakes.

### ***Ground Shaking***

Ground shaking from earthquakes is a seismic hazard that can cause damage to structures. The Southern California region is seismically active and therefore most areas could be subjected to strong ground shaking in the event of an earthquake.

### ***Liquefaction***

Liquefaction is the process in which loose granular soils below the groundwater table temporarily lose strength during strong ground shaking as a consequence of increased pore pressure and thereby, reduced effective stress. The vast majority of liquefaction hazards are associated with sandy soils and silty soils of low plasticity. Potentially liquefiable soils (based on composition) must be saturated or nearly saturated to be susceptible to liquefaction. Liquefaction potential is greatest where the groundwater level is shallow, and submerged loose, fine sands occur within a depth of about 50 feet or less. According to the California State Seismic Hazard Map, the project site is not within an area identified as having a potential for liquefaction.<sup>1</sup> The groundwater level at the site is greater than 100 feet deep and the potential for liquefaction is considered to be low.

### ***Seismically-Induced Settlement***

Settlement of soils due to seismic shaking, infiltration of surface water or foundation loads could occur if low density soils are present at the site. The potential for such soils at the site is low to moderate.

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<sup>1</sup> *Preliminary Geotechnical Evaluation, Proposed Commercial Shopping Center, The Commons at Quartz Hill, Northwest Corner of 60<sup>th</sup> Street West and Avenue L, Ninyo & Moore, August 31, 2007.*

### ***Slope Stability/Landslides/Mudflows***

Landslides, slope failures, and mudflows of earth materials predominately occur where slopes are too steep and/or the earth materials too weak to support themselves. Landslides may also occur by seismic ground shaking, particularly where high groundwater is present. There are no significant slopes within the boundaries of the project site nor are significant slopes proposed for project implementation. Therefore, the proposed project would not result in, or expose people to, on- or off-site landslides, slope failures or mudflows.

### ***Subsidence***

According to the City of Lancaster General Plan, portions of Lancaster are characterized by soils which exhibit subsidence. Areas of Lancaster that have experienced subsidence have developed sinkholes and/or ground fissures. Fissures are typically associated with faults or groundwater withdrawal, which results in the cracking of the ground surface. The General Plan has described areas of known fissuring and sinkholes. The project site is not located in an area of known ground fissures or sinkholes indicated in the City's plan.

### ***Expansive Soils***

Expansive soils generally result from specific clay minerals that have the capacity to shrink or swell in response to changes in moisture content. The ability of clayey soil to change volume can result in uplift or cracking to foundation elements or other rigid structures such as slabs-on-grade, rigid pavements, sidewalks, or other slabs or hardscape founded on these soils. Geologic references reviewed indicate that much of the alluvial deposits at the project site consist of coarse, sandy materials. According to the City of Lancaster's General Plan, the project site is located in an area of low shrink-swell potential.

### ***Corrosive Soils***

The project site is located in a geologic environment that could potentially contain soil conditions that are corrosive to concrete and metals. Corrosive soil conditions may exacerbate the corrosion hazard to pipelines, foundations, and other buried improvements. Based on laboratory testing, it was found that a negligible potential for sulfate attack of concrete in contact with site soils, and a low potential for corrosion of buried metals at the site.

## **ENVIRONMENTAL IMPACTS**

### **Thresholds of Significance**

In accordance with guidance provided in Appendix G of the State CEQA Guidelines, the proposed project would have a potentially significant geological impact if it would:

- (a) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:
  - i. 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.
  - ii. Strong seismic ground-shaking.
  - iii. Seismic-related ground failure, including liquefaction.
  - iv. Landslides.
- (b) Result in substantial soil erosion or the loss of topsoil;
- (c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;
- (d) Be located on expansive soil, as identified in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property;
- (e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater.

## **Project Impacts**

As discussed in the Section IV.A., Impacts Found Less than Significant of the Draft EIR, the proposed project would have no impact with respect to Thresholds (a)iv and (e), listed above. As such, no further analysis of these topics is required. The following impact analysis addresses thresholds a)i-iii, b) through d)listed above.

### ***Erosion and Topsoil***

#### *Construction*

During construction activities there is a potential for erosion to occur during the grading process. The proposed project would have a potentially significant impact if it would result in substantial soil erosion or the loss of topsoil during construction. Regulatory measures are required to be implemented during construction periods to minimize wind (see Section IV.D, Air Quality) and water-borne erosion (see Section IV.I, Hydrology and Water Quality). The proposed project would be required to obtain a grading permit from the Public Works Department. In addition, project construction would be performed in accordance with the Storm Water Pollution Prevention Plan (SWPPP), which specifies Best Management Practices (BMPs) to prevent all soil from moving off-site due to water and wind erosion. With

implementation of the applicable grading and building permit requirements and the application of BMPs, impacts with respect to erosion or loss of topsoil would be less than significant.

### *Operation*

The proposed project would result in a potentially significant impact if it would result in substantial soil erosion or the loss of topsoil during project operation. Under the existing condition the project site is susceptible to erosion. The proposed project would develop the project site with pervious and impervious surfaces including structures, paved areas, and landscaping. As such, the proposed development would reduce the rate and amount of erosion occurring at the project site and impacts with respect to erosion or loss of topsoil would be less than significant.

### *Seismic Hazards*

#### *Surface Fault Rupture*

The project site is not located within an established Alquist-Priolo Earthquake Fault Zone for surface fault rupture hazards and no active or potentially active faults with the potential for surface fault rupture are known to be located directly beneath or projecting toward the project site. Thus, the potential for surface rupture is considered low and the proposed project would not present any adverse impacts with respect to exposing people or property to hazardous conditions resulting from rupture of a known earthquake fault on the project site. Impacts would be less than significant.

#### *Seismicity*

As previously discussed, Southern California is a seismically active region. Although the project site is located within approximately four miles of the San Andreas Fault, and near many other faults on a regional level, the potential seismic hazard to the project site would not be higher than in most areas of the City of Lancaster or elsewhere in the region. Additionally, the proposed construction would be consistent with the seismic design criteria contained in the City's Building Code. Therefore, the risks associated with seismicity would be less than significant.

#### *Ground Shaking*

The project site could be subjected to strong ground shaking in the event of an earthquake. Although the project site is located within approximately four miles of the San Andreas Fault, and near many other faults on a regional level, the potential seismic hazard to the project site would not be higher than in most areas of the City or elsewhere in the region. Modern, well-constructed buildings are designed to resist ground shaking through the use of shear walls and reinforcements. The proposed project would comply with the seismic design criteria contained within the City's Building Code. Therefore, the risks from seismic ground shaking would be less than significant.

### *Liquefaction*

According to the California State Seismic Hazard Map the project site is not located within an area identified as having a potential for liquefaction. Liquefaction potential is greatest where the groundwater level is shallow, and submerged loose, fine sands occur within a depth of about 50 feet or less. The groundwater level at the site is greater than 100 feet deep and the potential for liquefaction is considered to be low. Therefore, the risks from liquefaction would be less than significant.

### *Seismically-Induced Settlement*

Settlement of soils due to seismic shaking, infiltration of surface water or foundation loads could occur if low density soils are present at the site. As previously discussed, the potential for such soils at the project site is low to moderate. Though the project site could be subject to strong ground shaking in a seismic event, which could cause settlement, the proposed project would comply with the seismic design criteria contained within the City's Building Code. Therefore, impacts related to seismically-induced settlement would be less than significant.

### *Subsidence*

According to the City of Lancaster General Plan, portions of Lancaster are characterized by soils which exhibit subsidence. Areas of Lancaster that have experienced subsidence have developed sinkholes and/or ground fissures. Fissures are typically associated with faults or groundwater withdrawal, which results in the cracking of the ground surface. The General Plan has described areas of known fissuring and sinkholes. The project site is not located in an area of known ground fissures or sinkholes indicated in the City's plan. Therefore, potential subsidence of the project site is considered to have a less than significant impact.

### *Expansive Soils*

The soils at the project site consist of gravelly sand and silty clay. Clayey soils could be moderately to highly expansive, and therefore could shrink and swell with changes in the moisture content. Sandy soils at the project site are expected to have low expansion potential. According to the City of Lancaster's Draft Master Environmental Assessment, the project site is located in an area of low shrink-swell potential. Laboratory testing performed for the Preliminary Geotechnical Evaluation, by Ninyo & Moore, showed soil expansion potential at the site ranging from very low to low. Therefore, impacts with respect to expansive soils would be less than significant.

### *Corrosive Soils*

The project site is located in a geologic environment that could potentially contain soil conditions that are corrosive to concrete and metals. The degree of potential corrosivity of soils will be evaluated by site-specific analysis during design of the project. Typical mitigation measures for corrosive soil include epoxy and metallic protective coatings, the use of alternative (corrosion resistant) materials, and selection

of the type of cement and water/cement ratio. Concrete resistant to sulfate, exposure and corrosion protection for metals would be used where appropriate for underground structures in areas where corrosive groundwater or soil could potentially cause deterioration. Specific measures to mitigate the potential effects of corrosive soils will be developed in the design phase, if necessary. Therefore, impacts with respect to soil corrosivity would be less than significant.

## **CUMULATIVE IMPACTS**

Development of the proposed project in conjunction with the related projects listed in Section III, Environmental Setting, would result in further development of various land uses in the City of Lancaster. These projects in combination with the proposed project would greatly intensify the land usage in the immediate project area. Geologic hazards are site-specific and there is little, if any, cumulative relationship between development of the proposed project and the related projects. As such, construction of the related projects is not anticipated to combine with the proposed project to cumulatively expose people or structures to such geologic-seismic hazards as earthquakes, ground shaking, liquefaction, landslides, and/unstable soils, expansive soils, or result in substantial soil erosion or the loss of topsoil. Therefore, no cumulatively considerable impacts are anticipated from the proposed project and the related projects.

## **MITIGATION MEASURES**

The proposed project would result in a less than significant impact with respect to geology and soils. The applicant shall comply with the following mitigation measure to further reduce the already less than significant impacts:

- G-1 A comprehensive geotechnical investigation for the project site shall be conducted and submitted to the City of Lancaster as part of the permitting process for the proposed project. The specific design recommendations presented in the comprehensive geotechnical reports, specifically with respect to soil corrosivity, shall be incorporated into the design and construction of the proposed project.

## **LEVEL OF SIGNIFICANCE AFTER MITIGATION**

Impacts with respect to geology and soils would be less than significant. With implementation of the Mitigation Measure G-1 listed above, impacts with regard to geology and soils would be further reduced. Specifically, potentially significant impacts with regards to corrosive soil would be mitigated with implementation of Mitigation Measure G-1, and impacts would be less than significant.

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## IV. ENVIRONMENTAL IMPACT ANALYSIS

### H. HAZARDS AND HAZARDOUS MATERIALS

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This section summarizes the results of the Phase I Environmental Site Assessment, Proposed Wal-Mart Store #4315-00, (ESA) prepared for the project site by Krazan & Associates, Inc., on January 11, 2006, and the Limited Soil Assessment, Proposed Wal-Mart Store #4315-00, prepared for the project site by Krazan & Associates, Inc., on February 13, 2006. The Phase I ESA and Limited Soil Assessment are incorporated herein by reference and included as Appendix H to this Draft EIR.

#### ENVIRONMENTAL SETTING

##### Existing Project Site Development

The project site is located within the City of Lancaster, at the northwest corner of 60<sup>th</sup> Street West and Avenue L. The project site is an approximately 40 acre square lot. The project site is currently undeveloped but shows some signs of past grading activities, and was previously used for the planting of row crops.

##### Existing Surrounding Properties

The project site is bound by Avenue L to the south, 60<sup>th</sup> Street West to the east, undeveloped land followed by residential development to the north, and an undeveloped lot to the west. Across 60<sup>th</sup> Street West a residential development has recently been developed. Quartz Hill High School is located to the south across Avenue L.

##### Sensitive Receptors

The Antelope Valley Air Quality Management District (AVAQMD) generally considers the following land uses to be sensitive receptors with respect to air quality impacts: long-term health care facilities, rehabilitation centers, convalescent centers, retirement homes, residences, schools, playgrounds, child care centers, and athletic facilities. Sensitive receptors are people or institutions with people that are particularly sensitive to illness from environmental pollution. Therefore, to provide a conservative analysis, this section identifies the following uses surrounding the project site to be sensitive receptors with respect to hazardous material exposure:

- Sensitive Receptor No. 1 – Single-family residences located approximately 150 feet north and east of the project site (across 60<sup>th</sup> Street West).
- Sensitive Receptor No. 2 – Quartz Hill High School, located approximately 100 feet to the south of the project site (across Avenue L).

Other than the residential and school uses discussed above, there are no other identified sensitive receptors in the immediately surrounding the project site.

### **Site Topography**

Based on the review of the United States Geological Survey (USGS) 7.5 Minute Series, Lancaster West, Topographic Quadrangle Map, dated 1958 and photorevised in 1974, the site elevation is approximately 2,420 feet above mean sea level (msl). The general topography is flat. Regional drainage generally follows topography and flows to the northeast in the site vicinity.

### **Site Geology**

Based on information from the City of Lancaster's General Plan, the site is located in the Mojave Desert Geomorphic Province of California. The Mojave Desert in California is a wedge-shaped block bounded by the San Andreas Fault Zone on the southwest, the Garlock Fault Zone on the northwest, and the Colorado River on the east. The area is also bounded to the south by the San Gabriel Mountains to the south and the Tehachapi Mountains to the north, which were uplifted due to the activity on the faults. The San Andreas Fault is located approximately four miles south of the project site. The dominant rock types on the site are crystalline rocks of Pre-Tertiary age, volcanic and sedimentary rocks of Tertiary age, and alluvial sedimentary rocks of Quaternary age.

### **Site Hydrology**

According to the City of Lancaster's General Plan, the site is located within the Antelope Valley Groundwater Basin. The general plan reports the depth to groundwater at approximately 100 feet below the ground surface (bgs) in the general site vicinity. Groundwater levels can fluctuate due to seasonal variations, groundwater withdrawal or injection, and other factors. The regional groundwater flow direction is estimated to be toward the northeast based on information provided by the Department of Toxic Substance Control as it is related to a case that is located immediately west of 60<sup>th</sup> Street West.

### **Historical Review**

A review of historical records regarding the project site and neighboring properties was conducted as part of the Phase I ESA. This included a review of available historical topographic maps, aerial photographs, historical building permits on file at the City of Lancaster Building Department, and city (reverse) telephone directories.

From the 1952 to 2002, the site was utilized for the planting of row crops. During this period, several buildings associated with agricultural use of the site and single-family residences were located on the site. Between 1994 and 2002 the planting of row crops ceased and the land was allowed to remain fallow. Currently no structures are located on the site, and no agricultural uses including row crops are present.

### ***Historical Aerial Photographs***

Historical and aerial photographs were provided by Environmental Data Resources, Inc. (EDR), of Milford, Connecticut. Aerial photographs were available for the site for the years 1952, 1968, 1989, 1994, and 2002. Notable observations from each photograph are presented below.

#### 1952

The site appears to be primarily utilized for agricultural purposes for the cultivation of row crops. What appears to be a residential structure and six associated out buildings are located in the south-central portion of the subject site, north of West Avenue L. Agricultural land adjoins the subject site to the north. What appears to be a residential structure and a rectangular shaped retention basin adjoin the northeast corner of the subject site to the north. What appears to be a two-lane unpaved road (60<sup>th</sup> Street West) adjoins the site to the east, beyond which is vacant land. Agricultural land adjoins the subject site to the west.

#### 1968

The site and adjoining properties appear as they did in the 1952 aerial photograph with the exception of the development of the single family residential structure at 6125 Avenue L and the construction of Quartz Hill High School adjoining south across Avenue L.

#### 1989

The site and adjoining properties appear as they did in the 1968 aerial photograph.

#### 1994

The site and adjoining properties appear as they did in the 1989 aerial photograph with the exception of the apparent demolition of four of the on-site out buildings and the increased residential development south and southeast of the site.

#### 2002

The subject site and adjoining properties appear as they did in the 1994 aerial photograph with the exception that the subject site appears to be fallow agricultural land.

### ***Local Government Agency Record Review***

The Lancaster Building Department has a number of building permits on file. In 1955 a building permit was obtained for construction of new living quarters for employees. Also that same year two plumbing permits were filed for acquired for the addition of a water closet, bathtub, sink, and sewer connection to a private septic tank. In 1957 a permit was obtained for installation of a gas system. In 1982 two permits were filed for construction of a 400 square foot swimming pool, and a heating system for the pool.

### ***Historical City Directories***

Haines Criss-Cross and Polk Guide Directories dated 1971 through 2005 were ascertained for the site addresses of 6105 and 6125 West Avenue L in Lancaster, California. According to the Haines Criss-Cross and Polk Guide Directories reviewed, the subject site address at 6105 Avenue L has been occupied by a residential structure from at least 1985 through 2005. The site address at 6125 Avenue L was not listed in the directories. No listings for activities or business anticipated being associated with hazardous materials handling, storage or disposal were noticed in the directories.

### **Site Reconnaissance**

On January 4, 2006, a reconnaissance-level visit was conducted to evaluate the present use and environmental conditions of the project site. The reconnaissance involved a tour of the site and visual observations of adjoining properties.

### ***Field Reconnaissance Observations***

#### Use and Storage of Hazardous Substances and Petroleum Products

Evidence of on-site hazardous substance or petroleum product storage was not observed during site reconnaissance.

#### Storage and Disposal of Hazardous Wastes

Evidence of on-site hazardous waste generation, storage, or disposal was not observed during the site reconnaissance.

#### Unidentified Substance Containers

Unidentified substance containers were not observed on site during the site reconnaissance.

#### Aboveground and Underground Storage Tanks (ASTs and USTs)

Two ASTs were located on the site at the time the Environmental Site Assessment was performed. These ASTs have since been removed. These tanks were approximately 1,000 gallon water storage tanks.

#### Evidence of Releases

No areas of stressed vegetation or soil staining were observed on the site during the site reconnaissance. Other evidence of chemical releases on site (i.e., odors, stains, leaks, pools of liquids, and spills) were not observed during the site reconnaissance.

#### Polychlorinated Biphenyls (PCBs)

No electrical transformers or any other possible PCB-containing equipment were noted on-site.

### Suspect Asbestos-Containing Materials (ACMs)

During the site reconnaissance performed for the Environmental Site Assessment (ESA) a single-family residence was observed. As access to the interior of the house was not obtained, and asbestos testing was not included in the scope of the ESA. Therefore, it is unknown if the residence contained ACMs; however all structures and all demolition debris have since been removed. As such, no ACMs are present on the site.

### Lead-Based Paint (LBP)

During site reconnaissance a single family house was observed. The paint on the house looked to be in fair condition. However, it is not know whether the paint contained lead. All structures have since been removed and all construction debris have been disposed.

### Wastewater Systems

City of Lancaster Building Department records indicated that sewer service has historically been provided to the site vicinity since the mid-1970's. According to the Lancaster Building Department records, a permit for the installation of a private septic system was issued for 6125 Avenue L in December 1955. No records of a known septic system are on file for the 6105 Avenue L address although a septic system was likely associated with this address. The locations of the septic systems are unknown. The presence of septic systems is not anticipated to adversely impact the subject site due to their use for domestic purposes only. If septic systems are identified during the redevelopment of the subject site, then the septic systems should be properly abandoned/closed or destroyed in accordance with local and state guidelines.

### Storm Water Systems

Storm water systems, such as catch basins and drains, were not observed on the site at the time of the reconnaissance.

### Wells

Although not observed during the Phase I ESA, five obsolete wells were discovered while preliminary work was being performed on the project site. All five wells have been abandoned. Four of the wells have received Los Angeles County Department of Health Services permit approval and one has approval pending. Detailed descriptions and locations for each well are provided in Appendix H of this Draft EIR.

### Other On-Site and Off-Site Potential Environmental Concerns

Based on the former use of the site for agriculture and ranching, the soil at the site may contain residual concentrations of pesticides and/or herbicides. As such, a Limited Soil Assessment (LSA) was performed on the project site, to identify environmentally-persistent pesticides and herbicides which may have been

used in previous onsite agricultural operations. As part of the LSA, 13 four-part composite soil samples were taken from random locations on the project site for the purpose of assessing the concentrations of environmentally persistent chlorinated pesticides and chlorinated herbicides. None of the soil samples contained concentrations of chlorinated pesticides or chlorinated herbicides above the respective laboratory reporting limits. Based on these results the soils on the project site do not appear to have been impacted by environmentally persistent pesticides or herbicides to a depth of two feet below ground surface.

### **Regulatory Database Review**

A computerized, environmental information database search was performed. The EDR database report included federal, state, and local databases. The review was conducted to evaluate whether the site or properties within the vicinity of the site have been reported as having experienced releases of hazardous substances or other events with potentially adverse environmental effects. No unmapped properties were determined to be located within the search radii.

The following describes the databases that contain noted properties of environmental concern and include a discussion of the regulatory status of the facilities and potential environmental impact to the project site:

- **NPL Listing:** The National Priorities List (NPL) is the United States Environmental Protection Agency's (USEPA's) database of uncontrolled or abandoned hazardous waste sites identified for priority remedial actions under the Superfund program.

Neither the project site nor properties located within a one-mile radius of the site were listed on this database.

- **NPL Delisted:** The NPL Delisted is the USEPA database of uncontrolled or abandoned hazardous waste properties that have been removed from the Superfund program.

Neither the project site nor properties located within a ½-mile radius of the site were listed on this database.

- **CERCLIS Listing:** The Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) database contains properties which are either proposed or on the NPL, and properties which are in the screening and assessment phase for possible inclusion on the NPL.

Neither the project site nor properties located within a ½-mile radius of the site were listed on this database.

- **CERCLIS-NFRAP Listing:** The Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) No Further Remedial Action Planned (NFRAP) database contains properties that were removed from the CERCLIS database.

Neither the project site nor properties located within a ½-mile radius of the site were listed on this database.

- **CORRACTS Listing:** The USEPA maintains the Corrective Action Report (CORRACTS) database of Conservation and Recovery Act (RCRA) facilities that are undergoing corrective action. A corrective action order is issued when there has been a release of hazardous waste or constituents into the environment from a RCRA facility.

Neither the project site nor properties located within a one-mile radius of the site were listed on this database.

- **RCRIS TSD Listing:** The Resource Conservation and Recovery Information System (RCRIS) Treatment, Storage, and Disposal (TSD) database is a compilation by the USEPA of facilities that report generation, storage, transportation, treatment, or disposal of hazardous waste.

Neither the project site nor properties located within a ½-mile radius of the site were listed on this database.

- **RCRA Generators List – Large and Small Quantity Generator:** This list identifies sites that generate hazardous waste as defined by the RCRA. Inclusion on these lists is for permitting purposes is not indicative of a release.

Neither the project site nor adjacent properties were listed on this database.

- **ERNS Listing:** The Emergency Response Notification System (ERNS) database contains information of reported releases of oil and hazardous substances.

Neither the project site nor adjacent properties were listed on this database.

- **United States Engineering Controls Listing:** This is an EPA listing of sites with engineering controls in place, such as various forms of caps, building foundations, liners, and treatment methods intended to eliminate pathways for regulated substances to enter environmental media or affect human health.

Neither the project site nor properties located within a ½-mile radius of the site were listed on this database.

- **United States Institutional Controls Listing:** This is an EPA listing of sites with institutional controls in place, such as administrative measures, groundwater use restrictions, construction restrictions, property use restrictions, and post remediation care requirements, intended on preventing exposure to contaminants remaining on site.

Neither the project site nor properties located within a ½-mile radius of the site were listed on this database.

- **United States Brownfields Listing:** This is an EPA listing of Brownfields properties addressed by Cooperative Agreement Recipients (CAR) and Brownfields properties addressed by Targeted Brownfields Assessments (TBA).

Neither the project site nor properties located within a ½-mile radius of the site were listed on this database.

- **Calsites Listing:** The Calsites database is maintained by the California Environmental Protection Agency (Cal-EPA), DTSC. This database contains information on annual work plan sites (AWP) and both known and potentially contaminated properties. Two-thirds of these properties have been classified, based on available information, as needing no further action (NFA) by the DTSC. The remaining properties are in the various stages of review and remediation to determine if a problem exists.

Neither the project site nor properties located within a one-mile radius of the site were listed on this database.

- **SLIC Listing:** The Spills, Leaks, Investigation, and Cleanup (SLIC) cost recovery database, maintained by the USEPA, provides a record of any contaminated site that impacts groundwater or has the potential to impact groundwater.

Neither the project site nor adjacent properties were listed on this database.

- **SWF/LS Listing:** The Solid Waste Facilities/Landfill Sites (SWF/LS) database consists of open and closed solid waste disposal facilities and transfer stations. The data comes from the Integrated Waste Management Board's (IWMB's) Solid Waste Information System (SWIS) and the State Water Resources Control Board's (SWRCB's) Waste Management Unit Database (WMUD).

Neither the project site nor properties located within a ½-mile radius of the site were listed on this database.

- **LUST Listing:** The EDR database of Leaking Underground Storage Tank (LUST) information system is obtained from the SWRCB and the Regional Water Quality Control Board (RWQCB).

The project site was not listed on this database. Two facilities located within a ½-mile radius of the site were listed on this database.

Quartz Hill High School, located at 6040 West Avenue L, is located approximately 0.28 mile west-southwest to and crossgradient from the project site. The case was reportedly opened on April 18, 1990. The constituent of concern was listed as "miscellaneous motor vehicle fuels," and the media

affected was listed as “soil only.” The regulatory status was listed as “case closed” as of April 29, 1991. A report provided by the DTSC, regarding the case, indicated that two USTs used to store waste oil were located on the facility. The report indicated that the DTSC granted closure in the case in April 1991.

ARCO products, at 42420 60<sup>th</sup> Street West, is located approximately 0.43 mile south of and upgradient from the site. The case was reportedly opened on August 13, 2001. The constituent of concern was listed as “gasoline,” and the media affected was listed as “undefined.” The regulatory status was listed as “case closed” as of September 18, 2002.

Based on the distance from the site and regulatory status of the facilities, these listings would not be considered an environmental concern to the project site.

- **UST and AST Listing:** Underground Storage Tank (UST) and Aboveground Storage Tank (AST) databases are provided by the SWRCB. Inclusion on these lists is for permitting purposes and is not indicative of a release.

Quartz Hill High School at 6040 West Avenue L, was listed on the SWEEPS UST and Los Angeles County’s Hazardous Material System databases as having registered USTs. The previously discussed LUST database listing for Quartz Hill High School indicated that the case was closed in April 1991. Due to the regulatory status, there is a low likelihood that this facility presents an environmental concern to the project site.

- **DEED Restriction Listing:** California DTSC maintains a list of deed-restricted sites – properties where the DTSC has placed limits or requirements on the future use of the property due to varying levels of cleanup possible, practical, necessary at the site.

Neither the project site nor properties located within a ½-mile radius of the site were listed on this database.

- **State Voluntary Cleanup Listing:** The DTSC maintains a database of facilities that have voluntarily agreed to agency oversight for their properties.

One site with a reported release of hazardous materials to the subsurface was reported within one-quarter mile of the subject site. The Quartz Hill High School, located adjoining the subject site to the south, was identified on the Facility and Manifest Data (HAZNET), as having an unauthorized release of miscellaneous motor vehicle fuels in April 1990 which impacted soil only at the property. In general only hazardous materials released from facilities located approximately up-gradient and within a few hundred feet of the site, or in a cross-gradient direction close to the site are judged to have a reasonable potential of migrating to the site. Therefore, the unauthorized release of motor oil from the Quartz Hill High School is deemed to have a low potential to environmentally impact the project site.

## ENVIRONMENTAL IMPACTS

In accordance with Appendix G to the State CEQA Guidelines, a project would have a significant effect on the environment if it would:

- a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment;
- e) For a project located within an airport land use plan, or, where such a plan has not been adopted, within two miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area;
- f) For a project located within the vicinity of a private airport strip, result in a safety hazard for people residing or working in the project area;
- g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan;
- h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residence are intermixed with wildlands.

### Project Impacts

As discussed in Section IV.A, Impacts Found Less Than Significant of this Draft EIR, the proposed project would have no impacts with respect to Thresholds e) through f), and h) as listed above. As such, no further analyses of these topics are required. The following impact analysis addresses Thresholds a) through d), and g) listed above.

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***Routine, Transport, Use, Disposal, or Release of Hazardous Materials******Construction***

During the temporary construction phase, the proposed project is anticipated to require the routine, transport, use and disposal of cleaning solvents, fuels, and other hazardous materials commonly associated with construction projects. All hazardous materials encountered or used during the grading/excavation, and construction activities would be handled in accordance with all applicable local, state, and federal regulations, which include requirements for disposal of hazardous materials at a facility licensed to accept such wastes. As such, impacts with respect to routine transport, use, and disposal of hazardous materials during construction would be less than significant.

***Operation***

During the operation of the proposed project, the proposed retail uses would require, at most, minimal amounts of hazardous materials for routine cleaning and would not pose any substantial potential for accident conditions involving the release of hazardous materials. The proposed project would be required to comply with applicable local, state and federal regulations, regarding the storage and retail sale of potentially hazardous materials such as pesticides, fertilizers, and paint products at the project site. Transportation, storage, and disposal/recycling of such products are extensively regulated at the local, state, and federal levels. Further, the potential for explosion or release of pesticides, fertilizer, paint products, etc. available at retail outlets is considered to be negligible given that all materials would be pre-packaged in limited quantities for retail consumption and use. Therefore, potential impacts associated with the emission of hazardous materials during the operational phase of the proposed project would be less than significant.

**Wells**

Although not observed during the Phase I ESA, five obsolete wells were discovered while preliminary work was being performed on the project site. All five wells have been abandoned. Four of the wells have received Los Angeles County Department of Health Services permit approval and one has approval pending. Permit approval by the Los Angeles County Department of Health Services indicates that the well has been properly abandoned and would not have the potential to impact the project site. Therefore, with approval from the Los Angeles County Department of Health Services, impacts would be less than significant.

***Sensitive Receptors, Including Schools******Construction***

The project site is located immediately north of Quartz Hill High School (separated by Avenue L) as well as in the immediate vicinity of residences that have been identified as sensitive receptors with respect to hazardous materials. During the temporary construction phase, the proposed project is anticipated to require the routine transport, use, and disposal of cleaning solvents, fuels, and other hazardous materials commonly

associated with construction projects. All hazardous materials encountered or used during the grading/excavation, and construction activities would be handled in accordance with all applicable local, state, and federal regulations, which include requirements for disposal of hazardous materials at a facility licensed to accept such waste. With the implementation of the identified mitigation measures, such materials would not be expected to endanger sensitive receptors in the project vicinity. In addition, the transport of potentially hazardous materials off-site would be conducted in accordance with all applicable laws and regulations to ensure the health and safety of the general public as well as any sensitive receptors along the haul route, resulting in a less than significant impact.

### *Operation*

The project site is located immediately north of Quartz Hill High School (separated by Avenue L) as well as in the immediate vicinity of residences that have been identified as sensitive receptors with respect to hazardous materials. As discussed above, operation of the proposed project would not involve substantial quantities of hazardous materials. As such, no substantial quantities of hazardous materials would be used, transported or disposed of in conjunction with the routine day-to-day operations of the proposed project, and such materials would not be expected to endanger sensitive receptors in the project vicinity. Therefore, impacts would be less than significant.

### *Hazardous Material Sites*

As discussed previously, the project site was not listed as a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, no impact would occur.

### *Emergency Response/Evacuation*

Implementation of the proposed project would not substantially impede public access or travel upon public rights-of-way and would not interfere with any adopted emergency response plan or emergency evacuation plan. Furthermore, the construction phase of the proposed project would not substantially impede public access or travel on public rights-of-way, and would not interfere with any adopted emergency response plan or emergency evacuation plan. No impact would occur to emergency response plans with implementation of the proposed project.

## **CUMULATIVE IMPACTS**

Development of the proposed project in conjunction with the development of the 82 related projects has the potential to increase the risk for accidental release of hazardous materials. These projects in combination with the proposed project would greatly intensify the land usage in the immediate project area. While the development of the related projects in conjunction with the proposed project would greatly intensify the land usage in the immediate project area, the identified uses of these related projects are primarily residential in nature and therefore would not involve uses that typically use, store, transport, or treat hazardous materials with the exception of the nearby related project Lane Ranch Towne Center.

This related project would involve similar uses and transport of hazardous materials like the proposed project though combination of related project Lane Ranch Towne Center and the proposed project would greatly intensify the use and transport of hazardous materials in the immediate project area. These materials would not pose any substantial potential for accident conditions as previously discussed. Furthermore, each of the related projects would require evaluation for potential threats to public safety, including those associated with the accidental release of hazardous materials into the environment during construction and operation, transport/use/disposal of hazardous materials, and hazards to sensitive receptors (including schools). Because hazardous materials and risk of upset conditions are largely site-specific, this would occur on a case-by-case basis for each individual project affected, in conjunction with the development proposals on these properties. In addition, each related project would be required to follow local, state, and federal laws regarding hazardous materials. Therefore, cumulative impacts with respect to hazardous materials would be less than significant.

### **MITIGATION MEASURES**

While project related impacts would be less than significant, the following Mitigation Measure is recommended to further reduce impacts.

H-1 If historic septic systems or cesspools are discovered during site development, they shall be abandoned by the project applicant in general accordance with current county and state regulations.

### **LEVEL OF SIGNIFICANCE AFTER MITIGATION**

With implementation of Mitigation Measure H-1, project impacts associated with hazards and hazardous materials would be less than significant.

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## IV. ENVIRONMENTAL IMPACT ANALYSIS

### I. HYDROLOGY/WATER QUALITY

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This section includes a summary of the results of the Hydrology Report for The Commons at Quartz Hill, prepared for the project site by Hunsaker & Associates, Los Angeles, Inc., on September 9, 2008. The hydrology report is incorporated herein by reference and is included as Appendix I to this Draft EIR.

#### ENVIRONMENTAL SETTING

The project site located at the northwest corner of the intersection of 60<sup>th</sup> Street West and Avenue L, and is approximately 40 acres in size and rectangular in shape. The project site is bound by Avenue L to the south, 60<sup>th</sup> Street West to the east, undeveloped lots to the west, and on the north with single-family residential development north of the adjacent undeveloped land. The project site is vacant, but has reportedly had some grading operations performed to it in the past, including the planting of row crops. No surface water exists on the project site. Vegetation on the site consists of grasses, a few bushes, and scattered trees. The site is relatively level and slopes gently downwards to the northeast, varying from an approximate elevation of 2,420 feet above mean sea level near the south side of the site to an approximate elevation of 2,410 above mean sea level near the north side of the project site.

#### Surface Water Hydrology

The project site is located within the Antelope Valley Drainage Basin. The Basin straddles the Los Angeles-Kern County Line and encompasses approximately 1,200 square miles of Los Angeles County.<sup>1</sup> Numerous streams originating in the mountains and foothills, surrounding the Antelope Valley flow across the valley floor and eventually pond in the dry lakes adjacent to the Los Angeles County line. The Antelope Valley lacks defined natural channels outside of the foothills and is subject to unpredictable sheet flow patterns. There are no significant sources of surface water in the immediate vicinity of the project site. The nearest surface waters are Elizabeth Lake, Bouquet Reservoir and Lake Palmdale, all of which are approximately 9.3 miles from the project site.

The project site is within the Portal Ridge Flood Control Planning Area of the Antelope Valley Master Plan of Drainage. This area encompasses 67 square miles in the southwestern portion of the City of Lancaster. According to the City's Draft Master Environmental Assessment (MEA), planned improvements for this planning area include the addition of concrete channels and storm drains.

The City of Lancaster is located within a high desert climate. Temperatures range from over 100 degrees in the summer to occasional light snow in the winter. The average annual rainfall is approximately eight

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<sup>1</sup> Los Angeles County Department of Public Works website: <http://ladpw.org/wmd/watershed/av/>, accessed April 17, 2007

inches.<sup>2</sup> Streets in the City of Lancaster are generally used to convey storm water, which tends to sheet flow over paved areas and collect in low-lying areas. According to the City's MEA, existing City streets are designed to accommodate 10 to 25 year storm flows within the right-of-way.

A hydrologic analysis was prepared for the proposed project to understand the existing hydrology and drainage of the project site and its contributing tributary watersheds. Research was done at the City of Lancaster to obtain information on the surrounding site conditions. A field reconnaissance of the project site helped to further understand the existing hydrology of the site.

Currently, offsite flows from the areas southeast of the project site are routed in an existing storm drain located in 57<sup>th</sup> Street West. The existing storm drain extends northerly past Avenue L and then westerly to an existing detention basin. The detention basin is located at the northwest corner of Avenue L and 57<sup>th</sup> Street West. The existing drain then continues northerly in 57<sup>th</sup> Street West, then westerly in Avenue K-12 to the northeast corner of the project site, then northerly in 60<sup>th</sup> Street West. Offsite flows from the areas south of the site are routed in an existing 60-inch storm drain which conveys flows northerly in 60<sup>th</sup> Street West to the intersection with Avenue L. The storm drain then turns west along Avenue L extending past the project site. Existing runoff from the project site drains to the northeasterly corner of the site.

## **Groundwater**

According to the City of Lancaster's General Plan, the site is located within the Antelope Valley Groundwater Basin. The General Plan reports the depth to groundwater at 100 feet or more below the ground surface in the general site vicinity. The historic high groundwater level in the vicinity of the site is reported by the California Geological Survey to be at a depth of approximately 225 feet.

Groundwater levels may be influenced by seasonal variations, precipitation, irrigation, soil/rock types, groundwater pumping, and other factors and are subject to fluctuations. Shallow perched conditions may be present in places.

## **Regulatory Framework**

### ***Lancaster Municipal Code***

To defray the cost of planned drainage facilities as described in the City of Lancaster's Master Plan of Drainage, the City has established drainage fees, which are allocated for future planned drainage facilities. The collection of these fees is codified in Article III of the Municipal Code. As per the Municipal Code, at the time of tentative map or parcel map approval for any subdivisions within the drainage area, the developer shall pay the City, prior to issuance of a building permit, the drainage fees established for the drainage area.

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<sup>2</sup> City of Lancaster, *Community Profile*, website: <http://www.cityoflancasterca.org/Modules/ShowDocument.aspx>, accessed October 2007.

### ***Clean Water Act***

In 1972, the Federal Water Pollution Control Act (also referred to as the Clean Water Act [CWA]) was amended to provide that the discharge of pollutants to Waters of the United States from any point source is unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. The 1987 amendments to the CWA added Section 402(p), which establishes a framework for regulating municipal and industrial storm water discharges under the NPDES Program. The Los Angeles County (municipal) Stormwater Ordinance is designed to protect the health and safety of the residents of the County by protecting the beneficial uses, marine habitats, and ecosystems of receiving waters within the County from pollutants carried by stormwater and non-stormwater discharges. In 1990, the U.S. Environmental Protection Agency (USEPA) published final regulations that establish storm water permit application requirements for specified categories of industries. The regulations provide that discharges of storm water to waters of the United States from construction projects that encompass five or more acres of soil disturbance are effectively prohibited unless the discharge is in compliance with an NPDES Permit. Regulations (Phase II Rule) that became final on December 8, 1999 expand the existing NPDES program to address storm water discharges from construction sites that disturb land equal to or greater than one acre and less than five acres (small construction activity).

In California, these permits are issued through the State Water Resources Control Board (SWRCB) and the nine Regional Water Quality Control Boards (RWQCBs). The project is within the jurisdiction of the Lahontan Regional Water Quality Control Board (LRWQCB). The City of Lancaster and the project site are, specifically, within the South Lahontan Basin. While federal regulations allow two permitting options for storm water discharges (individual permits and General Permits), the SWRCB has elected to adopt a Statewide General Permit for construction storm water discharges. Dischargers are required to submit a Notice of Intent (NOI) to obtain coverage under this General Permit. This General Permit requires all dischargers where construction activity disturbs one acre or more, to:

1. Develop and implement a Storm Water Pollution Prevention Plan (SWPPP) which specifies Best Management Practices (BMPs) that will prevent all possible construction pollutants from contacting storm water and with the intent of reducing or preventing products of erosion from moving off site into receiving waters.
2. Eliminate or reduce non-storm water discharges to storm sewer systems and other waters of the nation.
3. Perform inspections and maintenance of all BMPs, and perform sampling under certain circumstances.

## ENVIRONMENTAL IMPACTS

### Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines, the proposed project would have a potentially significant hydrological impact if it would:

- (a) Violate any water quality standards or waste discharge requirements.
- (b) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted);
- (c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site;
- (d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
- (e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
- (f) 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;
- (g) Place within a 100-year flood hazard area structures which would impede or redirect flood flows;
- (h) 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; or
- (i) Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow.

### Project Impacts

As discussed in Section IV.A., Impacts Found Less Than Significant of this Draft EIR, the proposed project would have no impact with respect to Thresholds f), h), and i) as listed above. As such, no further analyses of these topics are required. The following impact analysis addresses Thresholds a) through e), and g) listed above.

## ***Water Quality***

### *Construction*

Since the proposed project would include grading, the proposed project would require a General Construction Activity Storm Water Permit from the SWRCB prior to the start of construction. The General Permit requires that a Notice of Intent (NOI) be filed with the SWRCB. By filing an NOI, the project developer agrees to the conditions outlined in the General Permit. One of the conditions of the General Permit is the development and the implementation of a SWPPP. The SWPPP identifies which structural and nonstructural BMPs will be implemented, such as gravel bag barriers, temporary desilting basins, tracking controls, dust controls, employee training, masonry waste controls, spill prevention plans, litter controls, and general good housekeeping practices. These BMPs must be chosen and implemented to meet the best available control technology economically achievable standard (for non-conventional pollutants) and the best conventional pollutant control technology, so as to ensure flows from the project site do not cause or contribute to any exceedances of water quality standards. In addition, the proposed project would be required to obtain a grading permit from the Department of Building and Safety, which would further ensure the implementation of BMPs related to water quality. With implementation of the applicable grading and building permit requirements and the application of BMPs, the proposed project would not violate any water quality standards or waste discharge requirements. Therefore, impacts on water quality from construction activities would be less than significant.

### *Operation*

The project site is currently undeveloped, and as such, under existing conditions the project site is highly susceptible to erosion and sedimentation. The proposed project would develop the project site with pervious and impervious surfaces including structures, paved areas, and landscaping. As such, the proposed development on the project site would reduce the rate of erosion on the project site. Nonetheless, if not properly designed and constructed, the proposed development could increase the rate of urban pollutant introduction into storm water system. While some infiltration through landscape areas would occur, the project site would primarily rely on the implementation of treatment control BMPs to control storm water runoff contamination. Onsite water quality treatment could be performed by a number of methods, with the approval of the City of Lancaster Engineering Department, including water quality basins, bio-swales, bio-retention, continuous deflection systems, catch basin inserts, or other proprietary solutions. Runoff from the project site would also have the potential to create erosion off-site which would cause water quality impacts elsewhere. Proper management of the onsite water through BMPs would prevent this potential impact. Detailed plans for the project site would be submitted to the City as part of the development approval process prior to issuance of grading and building permits. With compliance with the CWA and the City's municipal code, the proposed project would not violate any water quality standards or waste discharge requirements. Therefore, the project's operational impacts would be less than significant.

### ***Groundwater***

As previously discussed, the groundwater table at the project site is 100 feet or more below the ground surface. Subsurface construction activities for the proposed project are anticipated to consist of relatively shallow excavations for building pads, foundations, and utilities. Based on the anticipated depth of these construction activities and reported depths to groundwater, the proposed project does not have the potential to intercept existing aquifers, nor would it involve additions (with the exception of normal water percolation from rainfall/landscape irrigation) or withdrawals of groundwater. In addition, as the project area receives little rainfall, it is not considered to be a substantial contribution to groundwater reserves in the project area, and the increase in impervious surfaces at the project site would not substantially interfere with groundwater recharge. In addition, recharge to the Antelope Valley is primarily accomplished by perennial runoff from the surrounding mountains and hills, not from rainfall on the Valley floor. Furthermore, no wells are proposed as part of the project. Therefore, the proposed project would result in less than significant impacts related to groundwater.

### ***Drainage***

Currently, surface water runoff from the project site drains toward the northeasterly corner of the project site. The proposed project would alter the existing drainage patterns on the project site, as the site would be developed with pervious and impervious surfaces including structures, paved areas, and landscaping. As such, the proposed project would result in an increase in runoff from the site, with an overall increase in debris. The proposed runoff for the project has been determined (as shown in the drainage report contained in Appendix I).

The project applicant will be required to construct a 60-inch storm drain along the site in Avenue L (approximately 1300 feet in length). At the terminus, the drain will connect into a proposed storm drain, or outlet through an energy dissipater structure. All onsite runoff would be outletted into the proposed storm drain in Avenue L or the existing storm drain in 60<sup>th</sup> Street West, with the approval of the City Engineer.

These improvements would assure that development of the proposed project would not redirect drainage patterns in a manner that would cause flooding or erosion elsewhere. However, some storm water infiltration through landscaped areas on the project site would occur. Detailed plans for the project site would be submitted to the City as part of the development plan approval process prior to issuance of building and grading permits. In addition, as per the municipal code, the applicant would be required to pay drainage fees, which were established to provide planned drainage improvements in the project area. However, as the project applicant is installing the 60-inch storm drain which is a part of the storm drain system, the project applicant would get a credit against the drainage fees (the cost of the 60-inch storm drain exceeds the fees). Thus, the project's impacts would be less than significant.

## ***Flooding***

As discussed above, the project site is located in an area susceptible to flooding. However, as much of the City of Lancaster is within federally-designated flood zones, the risk associated with flooding at the project site is essentially the same as with most other areas of the City. The City has adopted the Master Plan of Drainage to address such issues and has established drainage fees to fund additional flood control facilities. However, as discussed above, the project applicant will install a 60-inch storm drain in lieu of paying drainage fees. Additionally, detailed plans for the project site would be submitted to the City as part of the development plan approval process prior to issuance of building and grading permits.

Under the current conditions present on the project site, runoff from rainfall causes flooding on the streets surrounding the project site. Under proposed project conditions, the majority of the project site would be developed with impervious surfaces, decreasing the amount of water that the soils onsite would absorb. However, under the proposed project, most runoff from the site would be collected by drainage improvements which would then direct rainfall to the storm drain system and would therefore reduce the project site's contribution to the street flooding that occurs in the project area. In addition, the project site is not located in a FEMA flood zone. The nearest 100-year FEMA flood zone is located approximately 1.5 miles to the southeast of the project site (see Figure IV.I-1, FEMA Flood Zone Map), and therefore, the proposed project would not place structures in a 100-year flood zone that may redirect flood waters. As such, the project's impacts with respect to flooding would be less than significant.

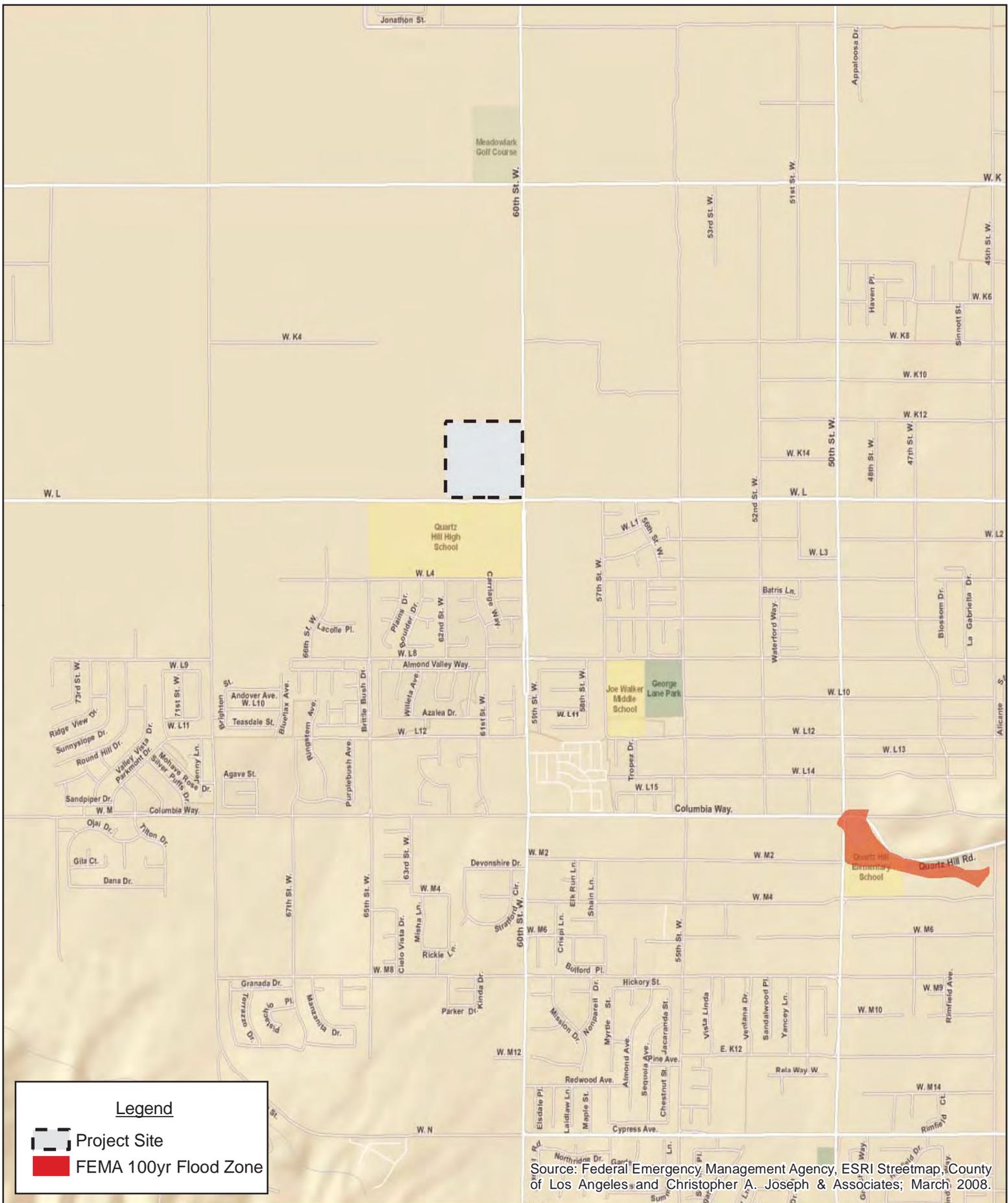
## **CUMULATIVE IMPACTS**

Development of the proposed project in conjunction with the 82 related projects listed in Section III, Environmental Setting, would impact storm drainage and water quality in the area. These projects in combination with the proposed project would greatly intensify the land use and impervious surfaces in the immediate project area and thus stormwater volume and rate would increase in the area. The proposed storm drainage system serving this area has been designed to accommodate runoff from this built-out environment. New developments would also be required to control the amount of storm water runoff coming from their respective sites as well as pay drainage fees to the City. Furthermore, the project applicant shall comply with Mitigation Measures I-4 and I-5, which would reduce the proposed project's drainage impact to less than significant levels. Thus, the proposed project would not contribute to a significant cumulative impact in the event that any off-site areas served by local storm drains were to increase peak flows to the system and no cumulatively considerable impacts to water runoff and water quality would occur.

## **MITIGATION MEASURES**

### **Code Required**

The following measures are required by the SRWQCB for development projects like the proposed project. The analysis presented in the preceding sections assumes compliance with these requirements.



- I-1 The project applicant shall prepare and submit a Notice of Intent (NOI) to comply with the Construction General Permit to the State Water Resources Control Board.
- I-2 The project applicant shall prepare a Stormwater Pollution Prevention Plan (SWPPP) and erosion control plan per the requirements of the Construction General NPDES Permit.
- I-3 The project applicant shall implement the following SWPPP BMPs:
- During construction and operation, all waste shall be disposed of in accordance with all applicable laws and regulations. Properly labeled recycling bins shall be utilized for recyclable construction materials including solvents, water-based paints, vehicle fluids, broken asphalt and concrete, wood, and vegetation. Non-recyclable materials and wastes must be taken to an appropriate landfill. Toxic wastes must be discarded at a licensed, regulated disposal site by a licensed waste hauler.
  - All leaks, drips and spills occurring during construction shall be cleaned up promptly and in compliance with all applicable laws and regulations to prevent contaminated soil on paved surfaces that can be washed away into the storm drains.
  - If materials spills occur, they should not be hosed down. Dry cleaning methods shall be employed whenever possible.
  - Construction dumpsters shall be covered with tarps or plastic sheeting if left uncovered for extended periods. All dumpsters shall be well maintained.
  - The project applicant/developer shall conduct street sweeping and truck wheel cleaning to prevent dirt in storm water.
  - The project applicant/developer shall provide regular sweeping of private streets and parking lots with equipment designed for removal of hydrocarbon compounds.
  - The amount of exposed soil shall be limited and erosion control procedures implemented for those areas that must be exposed.
  - Grading activities shall be phased so that graded areas are landscaped or otherwise covered, as quickly as possible after completion of activities.
  - Appropriate dust suppression techniques, such as watering or tarping, shall be used in areas that must be exposed.
  - The area shall be secured to control off-site migration of pollutants.
  - Construction entrances shall be designed to facilitate removal of debris from vehicles exiting the site, by passive means such as paved/graveled roadbeds, and/or by active means such as truck washing facilities.

- Truck loads shall be tarped.
- Roadways shall be swept or washed down to prevent generation of fugitive dust by local vehicular traffic.
- Simple sediment filters shall be constructed at or near the entrances to the storm drainage system wherever feasible.

### **Project-Specific Mitigation Measures**

The following mitigation measures are required to mitigate projected increase of runoff from the site:

- I-4 The project applicant shall construct the proposed 60-inch storm drain along the site in Avenue L. At the terminus, the drain shall connect into a proposed storm drain, or outlet through an energy dissipater structure. The onsite runoff can be outletted into the proposed drain in Avenue L, or the existing storm drain in 60<sup>th</sup> Street West, with the approval of the City Engineer.
- I-5 Detention shall be required to reduce the post development runoff to 85 percent of the pre-development runoff rate.

### **LEVEL OF SIGNIFICANCE AFTER MITIGATION**

With implementation of Mitigation Measures I-1 through I-5, impacts related to hydrology and water quality would be less than significant.

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## IV. ENVIRONMENTAL IMPACT ANALYSIS

### J. LAND USE PLANNING

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#### ENVIRONMENTAL SETTING

##### Existing On-Site Land Uses

The project site is located in the western part of the City of Lancaster at the northwest corner of the intersection of 60<sup>th</sup> Street West and Avenue L (see Figure II-1 and Figure II-2 in Section II, Project Description). The approximately 40 acre project site is bound by Avenue L to the south, 60<sup>th</sup> Street West to the east, undeveloped land followed by residential development to the north, and an undeveloped lot to the west. The project site is approximately 4.5 miles west of the Antelope Valley Freeway (SR-14/SR-138) and is currently vacant with no existing structures.

##### Surrounding Land Uses

The area surrounding the project site consists primarily of residential uses and undeveloped land. To the south of the project site is Quartz Hill High School. To the north of the project site is vacant land, and a newly constructed residential subdivision. East of the project site is a new residential subdivision and west of the project site is vacant land. Photographs of these surrounding land uses are provided in Figures III-4 and III-5 in Section III, Environmental Setting.

##### Applicable Land Use Policies and Regulations

The following local and regional land use documents are applicable to the project site and are discussed in more detail below:

- City of Lancaster General Plan;
- Zoning Code (Title 17 of the Lancaster Municipal Code);
- Southern California Association of Governments Regional Comprehensive Plan and Guide;
- Antelope Valley Air Quality Management District 2004 Ozone Attainment Plan; and
- County of Los Angeles Congestion Management Plan.

##### *City of Lancaster General Plan*

The California Government Code requires each city and county to have a planning agency to develop a General Plan. Each General Plan lays out the planning goals for the locale, identifies specific districts with special features, such as historic districts or market districts, and outlines what uses are consistent with the General Plan goals. The City of Lancaster General Plan was adopted in 1997 and has been

periodically amended. It sets forth goals and policies for the future development of the City and designates the location of desired future land uses within the City.

The General Plan Land Use designation for the Commons at Quartz Hill project site is currently Urban Residential (UR), which allows for 2.1 to 6.5 dwelling units per acre. The proposed project includes a request for a General Plan Amendment to redesignate the project site to Commercial (C). The C designation includes a broad spectrum of uses including, regional, community, neighborhood, and highway-oriented uses with floor area ratios ranging from 0.5 to 1.0.

The General Plan consists of an Introduction and eight sections that address specific issues. Of these eight sections, the following include goals and policies that are pertinent to the development of the proposed site: Plan for the Natural Environment, Plan for the Public Health and Safety, Plan for Physical Mobility, Plan for Municipal Services and Facilities, Plan for Economic Development and Vitality, and Plan for Physical Development. The objectives and policies which would be applicable to the development of the proposed project are analyzed in further detail in the Environmental Impacts discussion, Table IV.J-1.

### ***Zoning Designation***

The development of the proposed project is also governed by the applicable land use, zoning, and subdivision regulations in the Lancaster Municipal Code, particularly Title 17, Zoning Ordinance. The Zoning Ordinance includes the development standards for the various zoning in the City of Lancaster. The project site is zoned R-7,000 and R-10,000 (single-family residential, minimum lot sizes 7,000 and 10,000 square feet, respectively). Approximately 853,057 square feet is zoned R-7,000 and approximately 787,986 square feet is zoned R-10,000. The proposed project includes a request to rezone the project site to Commercial Planned Development (CPD). The CPD designation intends to provide for the daily commercial needs of residents of the City, adjoining areas, visitors and businesses in an urban environment with full urban services.<sup>1</sup>

The following development standards set forth in the Zoning Ordinance apply to the Commercial Planned Development (CPD) proposed zoning:<sup>2</sup>

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<sup>1</sup> City of Lancaster Municipal Code, Section 17.08.040.

<sup>2</sup> City of Lancaster Municipal Code, Section 17.08.100.

**CPD**

<b>Lot Dimensions:</b>	10,000 sf minimum net area, 100 sf minimum lot width, 100 sf minimum lot depth
<b>FAR:</b>	Maximum 1.0
<b>Front Yard Setback:</b>	30 feet (20 feet when fully landscaped)
<b>Corner Side Yard Setback:</b>	30 feet (major street, 10 foot minimum)
<b>Height:</b>	50 feet
<b>Parking:</b>	5:1,000 sq.ft

Zoning to the north, west and east of the project site includes R-7,000 and R-10,000. Properties to the south of the project site are zoned Open Space (O).

***Regional Comprehensive Plan and Guide***

The Southern California Association of Governments' (SCAG) Regional Comprehensive Plan and Guide (RCPG) was adopted in 1994 (amended 1996) by the member agencies of SCAG to set broad goals for the Southern California region and identify strategies for agencies at all levels of government to use in guiding their decision-making. It includes input from each of the 13 subregions that make up the Southern California region (comprised of Los Angeles, Orange, San Bernardino, Riverside, Imperial and Ventura Counties).

Adopted RCPG policies related to land use are contained primarily in Chapter 3 of the RCPG, entitled "Growth Management." The purpose of the Growth Management chapter is to present forecasts that establish the socio-economic parameters for the development of the Regional Mobility and Air Quality Chapters of the RCPG, and to address issues related to growth and land consumption by encouraging local land use actions which could ultimately lead to the development of an urban form that would help minimize development costs, save natural resources, and enhance the quality of life in the region. Impacts associated with air quality and regional mobility are discussed in Sections IV.D (Air Quality) and IV.N (Transportation and Traffic), respectively.

Specific Growth Management Chapter policies are divided into four main categories: (1) growth forecasts; (2) improving the regional standard of living; (3) maintaining the regional quality of life; and (4) providing social, political and cultural equity. Growth Management policies that are pertinent to the proposed project are discussed under the "Project Impacts" subheading below.

### ***Antelope Valley Air Quality Management District 2004 Ozone Attainment Plan***

The proposed project is also located within the Mojave Desert Air Basin (MDAB) and is therefore within the jurisdiction of the Antelope Valley Air Quality Management District (AVAQMD). In conjunction with SCAG, the AVAQMD is responsible for formulating and implementing air pollution control strategies. The AVAQMD's 2004 Ozone Attainment Plan is an update of the Antelope Valley portion of the South Coast Air Quality Management District's Air Quality Management Plan (AQMP), which establishes a plan to implement, maintain, and enforce the measures necessary to bring the MDAB into attainment with the state and federal O<sub>3</sub> standards. Furthermore, the AQMP is intended to establish a comprehensive regional air pollution control program leading to the attainment of state and federal air quality standards in the MDAB area. Air quality impacts of the proposed project and consistency of the project impacts with the AQMP are analyzed in greater detail in Section IV.D (Air Quality) of this Draft EIR.

### ***Congestion Management Program***

The Congestion Management Program (CMP) is a state-mandated program enacted by the state legislature to address the increasing concern that urban congestion is affecting the economic vitality of the state and diminishing the quality of life in many communities. As a new approach to addressing congestion concerns, the CMP was created to: 1) link land use, transportation, and air quality decisions; 2) develop a partnership among transportation decision makers on devising appropriate transportation solutions that include all modes of travel; and 3) propose transportation projects which are eligible to compete for state gas tax funds.

The CMP, as adopted in 1992 and revised in 2004, includes a system of highways and roadways with minimum level of service (LOS) standards, transit standards, a trip reduction and travel demand management element, a program to analyze the impacts of local land use decisions on the regional transportation system, a seven-year capital improvement program, and a countywide computer model to evaluate traffic congestion and recommend relief strategies and actions. The CMP incorporates procedures for meeting deficiency plan requirements, or strategies that mitigate or improve congestion and air quality. The proposed project, which has the potential to affect the designated CMP network (mostly main-line freeway segments), is required to identify and mitigate its adverse effects on the network. Section IV.N, Transportation and Traffic, provides an analysis of the proposed project's potential impact on the CMP network.

## **ENVIRONMENTAL IMPACTS**

### **Thresholds of Significance**

In accordance with Appendix G of the State CEQA Guidelines, a project may have a significant environmental impact if it would:

- (a) Physically divide an established community;

- (b) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental impact; or
- (c) Conflict with any applicable habitat conservation plan or natural community conservation plan.

### **Project Impacts**

Development on the project site would include approximately 344,550 square feet of commercial retail facilities. The two anchor tenants would be located along the west side of the project site. The inline retail structure and anchors would be oriented toward 60<sup>th</sup> Street West and Avenue L, pad buildings would front the perimeter of the project site along 60<sup>th</sup> Street West and wrap the corner to Avenue L, and surface parking would be provided at the interior of the site. Development on the project site would include approximately 1,728 parking spaces, and access to the development would be provided via both 60<sup>th</sup> Street West and Avenue L.

### ***Requested Discretionary Applications or Actions***

In order to permit development of the proposed project, the City may require approval of one or more of the following discretionary actions:

- General Plan Amendment for redesignation of the project site from Urban Residential to Commercial.
- Zone Change for the project site from R-7,000 and R-10,000 to CPD.
- Tentative Parcel Map.
- Conditional Use Permit for commercial development.
- Conditional Use Permit(s) for alcohol sales.
- Other permits, ministerial or discretionary, may be necessary in order to execute and implement the project. Such approvals may include, but are not limited to: landscaping approvals, exterior approvals, permits for driveway curb cuts, storm water discharge permits, grading permits, installation and hookup approvals for public utilities and related permits. Additional discretionary or ministerial action may include sewer and water hook-up permits from Los Angeles County Sanitation District 14 and Los Angeles County Waterworks District 40, respectively.

### ***Community Division***

The potential for the proposed project to physically divide an established community is based on comparison of the existing land uses on and adjacent to the project site. As previously discussed, the project site is currently undeveloped. The project site is situated at the northwest corner of 60<sup>th</sup> Street West and Avenue L, both of which are arterial streets. In addition, the project site is currently surrounded to the north and east by single-family residential neighborhoods and to the south by Quartz Hill High School. West of the project site is vacant land. Therefore, the proposed project would not physically divide any established community or uses and impacts would be less than significant.

### ***Conflict with any Applicable Conservation Plan or Natural Community Conservation Plan***

There are no habitat conservation plans or natural community conservation plans that are applicable to the proposed project. Therefore, the proposed project would not conflict with any habitat conservation plan or community conservation plan and impacts would be less than significant.

### ***Consistency with City of Lancaster General Plan***

The City of Lancaster General Plan is the primary policy-planning document, which guides land uses in the City. The project applicant is requesting a General Plan Amendment (GPA) for the project site. The Amendment would allow for commercial development on a portion of the property which is currently designated for residential uses.

### ***Project Site***

The proposed General Plan designation would be Commercial (C). The GPA would change the development density on a portion of the project site from the UR designation of 0.75 floor area ratio to a C designation with permitted floor area ratios ranging from 0.5-1.0.

The proposed C designation would permit up to 1,748,935 square feet of commercial development on the entire project site. The proposed project would include 344,550 square feet of commercial development on the project site. This would be consistent with the use and density requirements of the C designation, if the GPA is approved by City Council.

### ***Project Consistency with the General Plan Designations***

Project consistency is dependent upon City Council approval of the proposed GPA. With the GPA approval, the Commons at Quartz Hill project uses would be considered consistent with the Commercial (C) development standards.

### ***Consistency with City of Lancaster General Plan Objectives and Policies***

The City of Lancaster General Plan is a policy-planning document, which guides land uses in the City. As discussed previously, the project applicant has requested a GPA. Existence of an inconsistency

between a proposed project and an applicable general plan is a legal determination, vested in the City Council and subject to court review if challenged. Inconsistency is not an impact under CEQA – plan inconsistencies in and of themselves are not significant impacts on the environment under CEQA. The site redesignation and rezoning would not substantially conflict with applicable policies of the Lancaster General Plan and would work to implement a number of those policies as discussed below in Table IV.J-1.

### ***Consistency with City Zoning Classification***

As part of project implementation, the project site would require a zone change corresponding to the proposed General Plan land use designations. This would allow the proposed construction of the Commons at Quartz Hill project. The Zoning Map is consistent with the City's General Plan Land Use Map. The zoning districts correspond to the land use designations.

### ***Project Site***

Consistent with the proposed land use designation of C, the project site is being proposed as a Commercial Planned Development (CPD) zone. The permitted uses within this designation include: car repair; church facilities; communication facilities; eating and drinking establishments; financial institutions; office-business (government or professional); rental establishments; retail sales establishments; and schools (business and professional). The CPD zone is intended to be applied to land and/or development which involve a special consideration, such as proximity to residential neighbors, which merits the attention of the planning commission and applications of special conditions to deal with such concerns. The proposed commercial uses would be permitted uses within this zoning designation subject to approval by Planning Commission.

### **Density**

The project site is approximately 40 acres and is zoned R-7,000 and R-10,000. The proposed project includes a request to rezone the project site to CPD. The proposed project would also require a Conditional Use Permit (CUP) for commercial development on a site larger than two acres. Therefore, development of 344,550 square feet of commercial uses would be subject to approval by Planning Commission.

### **Height**

The CPD zone has a maximum height limit of 50 feet or two stories. The proposed commercial buildings would have a maximum height of 38.5 feet with tower elements up to 41.6 feet in height. Final height is subject to approval by the Planning Commission. Therefore, the proposed project would be within the allowable height limit for this zone.

**Table IV.J-1  
Project Consistency with Applicable General Plan Policies**

Objectives	Policies	Consistency Discussion
<i>Plan for Natural Environment</i>		
<p><b>Objective 3.2:</b> Reduce the per capita of water consumption in the City Lancaster.</p>	<p><b>3.2.1:</b> Promote the use of water conservation measures in the landscape plans of new developments.</p>	<p>Section IV.O.2, Water, examines the amount of water that would be required for the proposed project and measures it against the existing water supply. Concluded therein, impacts with respect to existing water supply would be less than significant. Furthermore, low flow fixtures would be used throughout the development, reducing the amount of water required for the proposed project. Therefore, the development of the proposed project would be consistent with these policies, as is feasible.</p>
	<p><b>3.2.2:</b> Consider the potential impact of new development projects on the existing water supply.</p>	
	<p><b>3.2.5:</b> Promote the use of water conservation measures in the design of new developments.</p>	
<p><b>Objective 3.3:</b> Preserve acceptable air quality by striving to attain and maintain national and state air quality standards.</p>	<p><b>3.3.1:</b> Minimize the amount of vehicular travel generated by new development.</p>	<p>Section IV.N, Transportation and Traffic, includes mitigation measures that address traffic flow. The traffic study incorporated into this EIR includes mitigation measures designed to maintain appropriate levels of service at intersections to ensure that traffic delays are kept to a minimum by requiring roadway improvements and efficient design of new project driveways. Therefore, the development of the proposed project would be consistent with these policies.</p> <p>The proposed on-site circulation plan and traffic mitigation measures have been prepared according to City of Lancaster standards to ensure that no there would no significant traffic impacts that would affect air quality at sensitive uses. Further, air quality mitigation measures have been provided in accordance with AVAQMD Rule 403 to reduce construction emissions to a less than significant level. Therefore, the development of the proposed project would be consistent with these policies.</p>
	<p><b>3.3.3:</b> Minimize air pollutant emissions generated by new and existing developments.</p>	
	<p><b>3.3.4:</b> Protect sensitive uses, homes, schools and medical facilities, from the impacts of air pollution.</p>	
<p><b>Objective 3.4:</b> Identify, preserve and maintain biological systems within the Antelope Valley, and educate the general public about these resources, which include the Joshua Tree-</p>	<p><b>3.4.5:</b> Ensure that development proposals, including City sponsored projects, are analyzed for short- and long-term impacts to biological resources and that appropriate mitigation measures are implemented.</p>	<p>Section IV.E, Biological Resources, includes mitigation to make sure that no active nests are disturbed and that Burrowing Owls are not affected, during either construction or operation of the proposed project. Therefore, impacts to biological resources would be less than significant and the</p>

**Table IV.J-1 (Continued)  
Project Consistency with Applicable General Plan Policies**

Objectives	Policies	Consistency Discussion
California Juniper Woodlands, areas that support endangered or sensitive species, and other natural areas of regional significance.		proposed project would be consistent with this policy.
<b>Objective 3.5:</b> Preserve land resources through the application of appropriate soils management techniques and the protection and enhancement of surrounding landforms and open space.	<b>3.5.1:</b> Minimize erosion problems resulting from development activity.	As described in Section IV.I, Hydrology and Water Quality, the proposed project would be required to comply with the Standard Urban Stormwater Mitigation Plan (SUSMP), which includes erosion control. Therefore, the development of the project site would be consistent with this policy.
	<b>3.5.2:</b> Since certain soils in the Lancaster study area have exhibited shrink-swell behavior and a potential for fissuring, and subsidence may exist in other areas, minimize the potential for damage resulting from the occurrence of soils movement.	As described in Section IV.G, Geology and Soils, the project site is not within the Fissure Study Boundary. In addition, according to the City of Lancaster’s General Plan, the project site is located in an area of low shrink-swell potential. Therefore, development of the project site would be consistent with this policy.
<b>Objective 3.6:</b> Encourage efficient use of energy resources through the promotion of efficient land use patterns and the incorporation of energy conservation systems into new and existing development, and encourage use of alternative energy.	<b>3.6.2:</b> Encourage innovative building, site design, and orientation techniques which minimize energy use.	As discussed in Section IV.O.5, Electricity, the proposed project would be designed and developed in accordance with all applicable Title 24 regulations. The proposed structures would include energy conservation measures such as low flush toilets and energy efficient lighting and HVAC systems. Also, the proposed Wal-Mart would include specific energy efficiency design standards as identified in Section II, Project Description. As such, the proposed project would be consistent with this policy.
<b>Objective 3.8:</b> Preserve and enhance important views within the City, and significant visual features which are visible from the City of Lancaster.	<b>3.8.1:</b> Preserve views of surrounding ridgelines, slope areas and hilltops, as well as other scenic vistas.	Important scenic resources in the City of Lancaster include local views of surrounding buttes, Quartz Hill, and long distance panoramas of the San Gabriel Mountains (located approximately 7 miles south of the project site) and desert expanses. As is demonstrated in Section IV.B. Aesthetics, the proposed project would be comprised of buildings up to approximately 42 feet tall at the highest points. Therefore, construction of the proposed project would not block significant views of surrounding ridgelines and hilltops. As such, the proposed project would be consistent with this policy.

**Table IV.J-1 (Continued)  
Project Consistency with Applicable General Plan Policies**

Objectives	Policies	Consistency Discussion
<b>Plan for Public Health and Safety</b>		
<b>Objective 4.1:</b> Minimize the potential for loss of life, physical injury, property damage, and social disruption resulting from seismic groundshaking and other geological events.		Any development on the site would be required to conform to all seismic safety requirements of the Building Code to minimize exposure to seismic hazards and would not conflict with any emergency response plans. The proposed project would be consistent with this policy.
<b>Objective 4.2:</b> Minimize the potential for loss of life, physical injury, property damage, and social disruption resulting from a 100-year flood.		As discussed in Section IV.I. Hydrology, the project site is not located within a 100-year floodplain. Therefore, development of the project site would be consistent with this policy.
<b>Objective 4.3:</b> Promote noise compatible land use relationships by implementing the noise standards identified in Table III-1, to be utilized for design purposed in new development, and establishing a program to attenuate existing noise problems.	<b>4.3.1:</b> Ensure that noise-sensitive land uses and noise generators are located and designed in such a manner that City noise objectives will be achieved.	The single-family residences located north and east of the project site, and Quartz Hill High School located south of the project site, would not be exposed to construction noise levels exceeding 80 dBA. Therefore, no significant short-term noise impacts from construction would occur at these locations.
	<b>4.3.2:</b> Wherever feasible, manage noise generation of single event noise levels (SENL) from motor vehicles, trains, aircraft, commercial, industrial, construction, and other activities such that SENL levels are no greater than 15 dBA above the noise objectives included in the Plan for Public Health and Safety.	
	<b>4.3.3:</b> Ensure that the provision of noise attenuation does not create significant negative visual impacts.	As discussed in Section IV.K, Noise, development of the proposed project would include mitigation measures to decrease noise impacts on surrounding sensitive uses. Any noise attenuation would be screened from highly visible areas. Therefore, the proposed project would be consistent with this policy.
<b>Objective 4.5:</b> Protect life and property from potential detrimental effects (short and long term) of the transportation, storage, treatment, and disposal of hazardous materials and wastes in the City of Lancaster.	<b>4.5.1:</b> Ensure the activities within the City of Lancaster transport, use, store, and dispose of hazardous materials in a responsible manner which protects the public health and safety.	Any hazardous materials utilized by potential development would be utilized in compliance with all applicable laws and regulations. Therefore, the proposed project would be consistent with this policy.
<b>Objective 4.6:</b> Reduce the risk of crime and provide residents with security through maintenance of an adequate force of peace officers,	<b>4.6.2:</b> Ensure that the design of new development discourages opportunities for criminal activities to the maximum extent possible.	As part of approval of a building permit, the project applicant would be required to submit the proposed project plans to the Sheriff Department for review. During this review, the Sheriff Department would confirm that the design of the project meets

**Table IV.J-1 (Continued)  
Project Consistency with Applicable General Plan Policies**

Objectives	Policies	Consistency Discussion
physical planning strategies that maximize surveillance, minimize opportunities for crimes, and by creating a high level of public awareness and support for crime prevention.		all of the Departments' standards for safety, including landscaping and lighting. The project applicant would be required to incorporate any additional requirements into the project design. Therefore, the proposed project would be consistent with this policy.
<b>Objective 4.7:</b> Ensure that development occurs in a manner that minimizes the risk of structural and wildland fire.	<b>4.7.3:</b> Ensure that the design of new development minimizes the potential for fire.	The Fire Department has reviewed and commented on the proposed project and has required mitigation measures (refer to IV.M.1, Public Services, Fire Protection) that would ensure fire protection. Further, as part of approval of a building permit, the project applicant would be required to submit the proposed project plans to the Fire Department for review. During this review, the Fire Department would determine the need for additional enforcement or requirements. Therefore, the proposed project would be consistent with this policy.
<b>Plan for Physical Mobility</b>		
<b>Objective 14.1:</b> Maintain a hierarchal system which balances the need for free traffic flow with economic realities, such that streets are designed to handle normal traffic flows with tolerances to allow for potential short-term delays at peak hours.	<b>14.1.3:</b> Require that the cost of constructing or improving and maintaining arterials which connect outlying urban nodes to the City core and to other nodes be borne by the developments which create the need for them.	Section IV.N, Transportation and Traffic, includes mitigation measures that address traffic flow. The traffic study incorporated into this EIR includes mitigation measures designed to maintain appropriate levels of service at intersections to ensure that traffic delays are kept to a minimum by requiring roadway improvements. To implement these mitigation measures, the project applicant would be required to provide a fair share contribution.
	<b>14.1.4:</b> Encourage the design of roads and traffic controls to optimize safe traffic flow by minimizing turning, curb parking, uncontrolled access, and frequent stops.	As is demonstrated in Section IV.N. Transportation and Traffic, project access would be provided via three proposed driveways on 60 <sup>th</sup> Street and three driveways on Avenue L. Therefore, the proposed project would be consistent with this policy.
<b>Objective 14.3:</b> Achieve a balance between the supply of parking and demand for parking, recognizing the desirability and availability of alternatives to the use of the private automobile.	<b>14.3.2:</b> Provide safe and convenient parking that has minimal impacts on the natural environment, community image, or quality of life.	The proposed project would provide 1,728 parking spaces which would exceed the requirements of the City Code requiring five spaces per 1,000 square feet. Therefore, the proposed project would be consistent with this policy.

**Table IV.J-1 (Continued)  
Project Consistency with Applicable General Plan Policies**

Objectives	Policies	Consistency Discussion
<i>Plan for Economic Development and Vitality</i>		
<b>Objective 16.3:</b> Maintain development patterns and growth which contributes to, rather than detracts from net fiscal gains to the City.	<b>16.3.2:</b> Encourage the early development of revenue-generating non-residential land uses, particularly those which service the entire Antelope Valley area.	The proposed project would include approximately 344,550 square feet of commercial retail and restaurant space, within eight individual structures on the project site. Specifically, the commercial development would include a Wal-Mart and other retail shops and restaurants designed to serve the local community and adjacent areas within the Antelope Valley area. Therefore, the proposed project would be consistent with these policies.
<b>Objective 16.4:</b> Promote the intensification of municipal revenue generating potential (including sales tax) of commercial, office and industrial uses within Lancaster.	<b>16.4.2:</b> Promote regional, community and neighborhood retail development needed to serve growing retail demand generated by population growth.	
<b>Objective 16.7:</b> Ensure that new development pays for all the infrastructure, public facilities and differential service costs associated with new development.	<b>16.7.1:</b> Require new development to construct and/or pay for new on-site capital improvements necessitated by their project, consistent with performance criteria identified in Objective 15.1.	As discussed in Sections IV.M, Public Services, IV.N, Transportation and Traffic, and IV.O, Utilities and Service Systems, the proposed project would comply with all development fees and service costs as implemented by the applicable City departments. Therefore, the proposed project would be consistent with these policies.
	<b>16.7.2:</b> Require new development to ensure that all new off-site capital improvements necessitated by their project are available, consistent with performance criteria identified in Objective 15.1.	
	<b>16.7.3:</b> Ensure that new development provides for municipal services consistent with the performance criteria identified in Objective 15.1.	
	<b>16.7.4:</b> Ensure that new development does not result in any long-term reduction in the level of municipal services provided to existing development.	As discussed in Sections IV.M, Public Services, IV.N, Transportation and Traffic, and IV.O, Utilities and Service Systems, the proposed project would comply with all development fees and service costs as implemented by the applicable City departments. These development fees would ensure that the proposed project does not result in the reduction of the level of municipal services provided by the City departments or increase the cost of these municipal services. Therefore, the proposed project would be consistent with these policies.
	<b>16.7.5:</b> Ensure that new development does not result in any substantial, short-term reduction in the level of municipal services provided to existing development.	
	<b>16.7.6:</b> Ensure that new development does not substantially increase the cost of municipal services provided to existing development.	
	<b>16.7.7:</b> Ensure that the system used to recoup the costs of new development is not used to influence	

**Table IV.J-1 (Continued)**  
**Project Consistency with Applicable General Plan Policies**

Objectives	Policies	Consistency Discussion
	the rate of growth, but to ensure that services are provided in an equitable manner.	
<b><i>Plan for Physical Community</i></b>		
<b>Objective 17.1:</b> Design adequate land for a balanced mix of rural and urban residential and non-residential uses.	<b>17.1.3:</b> Provide a hierarchical pattern of attractive commercial developments which serve regional, community, and neighborhood functions with maximum efficiency and accessibility.	The proposed development would introduce high quality retail opportunities and enhance the choice of existing retail opportunities available to the adjacent neighborhoods and surrounding community, in an area of the city that is developing and presently does not include such uses. Therefore, the proposed project would be consistent with this policy.
<b>Objective 18.1:</b> Prevent future discordant land uses, and where possible reconcile existing discordant land uses, by establishing appropriate interface among conflicting uses and functions.	<b>18.1.3:</b> Ensure that land use map designations are compatible with adjacent proposed land uses, surrounding developments, existing infrastructure, the roadway system, and Redevelopment Project Area Plans.	The redesignation and rezoning of the project site would allow for the development of the site into new shopping/retail opportunities for the surrounding area. Subject to approval by City Council, the proposed project includes commercial uses which represent increased density compared to the existing surrounding single-family residential and educational uses.
<b>Objective 18.2:</b> Encourage the location of new urban growth so that the provision of services to new development is not a burden to existing residents.	<b>18.2.1:</b> Encourage appropriate infill development.	The surrounding area would benefit from a commercial project, which includes a Wal-Mart, and other retail shops and restaurants. Moreover, the proposed development would take place on a project site adjacent to a heavily traveled intersection that would be able to accommodate the project traffic with provided mitigation measures. As discussed in Sections IV.M, Public Services, IV.N, Transportation and Traffic, and IV.O, Utilities and Service Systems, the proposed project would comply with all development fees and service costs as implemented by the applicable City departments. Therefore, the proposed project would be consistent with these policies.
	<b>18.2.2:</b> Encourage appropriate development to locate so that municipal services can be efficiently provided.	
<b>Objective 19.1:</b> Ensure that all new development with the City of Lancaster yields a pleasant living, working or shopping environment, and attracts the interest of residents, workers, shoppers, and visitors as a result of consistent	<b>19.1.1:</b> Promote high quality projects and facilitate innovation in building design, land use mixes and site planning, and by encouraging mixed use developments that contain, when appropriate, pedestrian scale and uses that encourage a sense of place.	Conceptual architectural design and site planning has been proposed for the project and would be subject to approval by the Planning Commission. All site design and architecture proposed will be reviewed and approved by the City of Lancaster Planning Department. The site design and architecture proposed and discussed in detail in Section IV.B.

**Table IV.J-1 (Continued)  
Project Consistency with Applicable General Plan Policies**

Objectives	Policies	Consistency Discussion
exemplary site, architectural, and landscape design.	<b>19.1.2:</b> Encourage building design and site planning that is sensitive to the natural environment.	Aesthetics is consistent with surrounding uses. In addition, as discussed above, the proposed project has been designed to be compatible with the surrounding community and the physical attributes of the proposed project have been designed in a style complementary to the surrounding community. Therefore, the proposed project would be consistent with these policies.
	<b>19.1.4:</b> Ensure that new development or the expansion of existing development is viewed not only as free standing objects, but also as part of the adjacent street, surrounding neighborhood, and total community as a whole.	
	<b>19.1.5:</b> Ensure that physical attributes of new developments, such as walls and fences, lighting, building design, and signage are attractive and consistent with the overall urban form and/or design theme of the area.	
<i>Source: Lancaster General Plan and Christopher A. Joseph &amp; Associates, 2007.</i>		

Setbacks

The CPD zone has 30 feet setbacks for the Front Yard and Corner Side Yard. As shown in Figure II-4, in Section II, Project Description, the commercial buildings have been proposed with these setbacks and would therefore be within the allowable setbacks for this zone subject to approval by Planning Commission.

**Consistency with Regional Comprehensive Plan and Guide (RCPG)**

The RCPG includes several policies which could be potentially applicable to the proposed project. Consistency of the site rezoning and development with these policies is discussed in Table IV.J-2. Based upon the discussion presented in Table IV.J-2, the proposed Commons at Quartz Hill project would be consistent with the RCPG.

**Table IV.J-2  
Comparison of The Commons at Quartz Hill Project to RCPG Policies**

<b>Policies and Guides</b>	<b>Characteristics of the Site</b>
<p><u>Consistency with Growth Management Chapter Policies Related to Growth Forecasts</u> 3.01 The population, housing, and job forecasts, which are adopted by SCAG’s Regional Council and that reflect local plans and policies, shall be used by SCAG in all phases of implementation and review.</p>	<p>The analysis of population, housing, and employment impacts contained in this EIR utilizes forecast data provided by SCAG and is consistent with these forecasts (See Section IV.I). The proposed project would be consistent with this RCPG policy.</p>
<p>3.03 The timing, financing, and location of public facilities, utility systems, and transportation systems shall be used by SCAG to implement the region’s growth policies.</p>	<p>The development of the proposed project would add approximately 927 jobs to the local economy. Impacts to utilities and transportation systems have been addressed in Sections IV.O and IV.N, respectively. Therefore, the proposed project would be consistent with this RCPG policy.</p>
<p><u>Consistency with Growth Management Chapter Policies Related to the RCPG Goal to Improve the Regional Standard of Living</u> 3.05 SCAG shall encourage patterns of urban development and land use which reduce costs on infrastructure construction and make better use of existing facilities.</p>	<p>The proposed project is located in an urbanized area of the City of Lancaster. Furthermore, the project site contains existing utility infrastructure. The existing infrastructure system has the capacity to accommodate the buildout of the site. Therefore, the proposed project would be consistent with this RCPG policy.</p>
<p>3.09 SCAG shall support local jurisdictions efforts to minimize cost of infrastructure and public service delivery, and efforts to seek new sources of funding for development and the provision of services.</p>	<p>The project site is located within an urbanized area already served by utility, public service, and transportation systems. The proposed project would connect to the existing infrastructure. Therefore, development of the proposed project would be consistent with this RCPG policy.</p>
<p><u>Consistency with Growth Management Chapter Policies Related to the RCPG Goal to Improve the Regional Quality of Life</u> 3.12 SCAG shall encourage existing or proposed local jurisdictions programs aimed at designing land uses which encourage the use of</p>	<p>The development of the proposed project would locate a retail development within immediate walking distance of an Antelope Valley Transit (ATV) line, which runs along 60<sup>th</sup> Street West. This would enable pedestrians to access the project site by transit. As such, development on the site would reduce the need for roadway expansion and reduce</p>

**Table IV.J-2 (Continued)**  
**Comparison of the Lane Ranch Towne Center Project to RCPG Policies**

Policies and Guides	Characteristics of the Site
transit and thus reduce the need for roadway expansion, reduce the number of auto trips and vehicle miles traveled, and create opportunities for residents to walk and bike.	auto trips and vehicle miles traveled. By creating a development close to transit, it would further facilitate access by modes other than the automobile. This development would be consistent with this RCPG policy.
3.13 SCAG shall encourage local jurisdictions' plans that maximize the use of existing urbanized areas accessible to transit through infill and redevelopment.	The development of the proposed project would provide retail uses in an urbanized setting through the development of a site that is currently vacant. This area is located near public transit (e.g., bus lines). Therefore, the development of the site would be consistent with this RCPG policy.
3.14 SCAG shall support local plans to increase density of future development located at strategic points along the regional commuter rail, transit systems and activity center.	Development of the proposed project would locate retail uses near existing public transit bus lines. The development of proposed project would be consistent with this RCPG policy.
3.16 SCAG shall encourage developments in and around activity centers, transportation corridors, underutilized infrastructure systems and areas needing recycling and redevelopment.	The proposed project is located in an urbanized area and in close proximity to several bus stops. The development of the project site would redevelop an area that was formerly vacant. Therefore, the development of project site would be consistent with this RCPG policy.
3.18 SCAG shall encourage planned development in locations least likely to cause adverse environmental impact.	While the project site is located in an urbanized portion of the City with existing infrastructure, development of the project site has the potential to generate environmental impacts to a variety of resource areas. However, mitigation measures have been provided to reduce these impacts to less than significant levels. Therefore, the development of the project site would be generally consistent with this RCPG policy.
3.20 Support the protection of vital resources such as wetlands, groundwater recharge areas, woodlands, production lands, and land containing unique and endangered plants and animals.	The project site potentially contains Burrowing Owl. Therefore, mitigation measures have been provided to reduce the impacts to less than significant. Therefore, the development of the proposed project would be consistent with RCPG policy.
3.21 SCAG shall encourage the implementation of measures aimed at the preservation and protection of recorded and unrecorded cultural resources and archaeological sites.	No known cultural or archaeological resources exist on the project site. It is not anticipated that any cultural or archaeological resources would be encountered during project activities. No impacts to these resources are anticipated, however mitigation measures have been provided in the event any are discovered. Therefore, the development of the proposed project would be consistent with RCPG policy.
3.22 SCAG shall discourage development, or encourage the use of special design requirements, in areas with steep slopes, high fire, flood, and seismic hazards.	The project site does not include steep slopes or high fire hazards. As discussed in Section III, Environmental Setting, the project site is not located within a 100-year floodplain. However, the project site is not subject to seismic hazards beyond those that are present in Southern California. Therefore, development of the project site would be consistent with this RCPG policy.

**Table IV.J-2 (Continued)  
Comparison of the Lane Ranch Towne Center Project to RCPG Policies**

Policies and Guides	Characteristics of the Site
<p>3.23 SCAG shall encourage mitigation measures that reduce noise in certain locations, measures aimed at preservation of biological and ecological resources, measures that would reduce exposure to seismic hazards, minimize earthquake damage and to develop emergency response and recovery plans.</p>	<p>Development of the project site would include mitigation measures to address construction noise and biological resources impacts. Any development on the site would be required to conform to all seismic safety requirements of the Building Code to minimize exposure to seismic hazards and would not conflict with any emergency response plans. Therefore, the proposed project would be consistent with this RCPG policy.</p>
<p><u>Consistency with Regional Transportation Plan (RTP) Policies</u> 4.01 Transportation investments shall be based on SCAG’s adopted Regional Performance Indicators (this policy then sets forth numerical performance indicators in 8 areas which apply to transportation projects, but are not applicable on a project level since the objectives are based on performance of the regional systems as a whole.)</p>	<p>The numerical objectives presented in this policy do not apply to this project. The development of the proposed project would be commercial in nature and would contribute to localized improvements to certain intersections which would be significantly impacted by the future development. The development of the site would be supportive of the listed policies which are pertinent to the development of the site including:</p> <p><u>Mobility and Accessibility:</u> Future development would improve regional mobility and accessibility by its location near transit bus stops which would encourage use of the transit system by employees and visitors; use of the transit system would reduce automobile trips and reduce traffic congestion.</p> <p><u>Environment:</u> Any development on the site would include mitigation measures to reduce environmental impacts to the maximum extent feasible.</p> <p><u>Livable Communities:</u> Development on the project site would provide job opportunities to residents of the City of Lancaster.</p> <p><u>Equity:</u> Development of the project site would provide employment opportunities which would be available to all ethnic, age, and income groups.</p> <p>The development of the project site would be supportive, to the maximum extent applicable, with this RTP policy regarding the direction of Transportation Investments in the region.</p>
<p>4.02 Transportation investments shall mitigate environmental impacts to an acceptable level.</p>	<p>Although the proposed project is a development project, rather than a transportation investment, mitigation measures would be incorporated to reduce environmental impacts to less than significant levels, to the maximum extent feasible. Development of the project site would be consistent with the intent of this RTP policy.</p>

**Table IV.J-2 (Continued)**  
**Comparison of the Lane Ranch Towne Center Project to RCPG Policies**

Policies and Guides	Characteristics of the Site
4.04 Transportation Control Measures shall be a priority.	Development of the project site would include contribution to improvements at local intersections and the proposed project is also located near transit bus stops which would help reduce automobile trip generation. Therefore, the development of the project site would be consistent with this RTP policy.
4.16 Maintaining and operating the existing transportation system will be a priority over expanding capacity.	Development of the project site would support the existing regional transit systems by locating a major commercial development project near a transit station and providing pedestrian connections to encourage transit access to the project, without expanding the existing transportation system and would be consistent with the intent of this RTP policy.
<u>Consistency with Air Quality Chapter Core Actions</u>	
5.07 Determine specific programs and associated actions needed (e.g., indirect source rules, enhanced use of telecommunications, provision of community-based shuttle services, provision of demand management based programs, or VMT/emission fees) so that options to command and control regulation can be assessed.	This policy is not directly applicable to the development of the project site as it is related to the development of programs to address air quality conditions in the region. All feasible mitigation measures (see Section IV.D) which have been adopted by the Antelope Valley Air Quality Management District and other agencies, would be implemented to minimize air emissions. The development of the project site would be consistent with this Air Quality Chapter action, to the degree applicable.
5.11 Through its environmental document review process, SCAG should help ensure that plans at all levels of government (regional, air basin, county, subregional, and local) consider air quality, land use, transportation and economic relationships to ensure consistency and minimize conflicts.	This EIR addresses consistency with applicable regional and local plans and policies related to air quality, land use and transportation. The development of the project site would be consistent with all applicable policies and would be consistent with this Air Quality Chapter action.
11.07 Encourage water reclamation throughout the region where it is cost-effective, feasible, and appropriate to reduce reliance on imported water and wastewater discharges. Current administrative impediments to increased use of wastewater should be addressed.	Low flow fixtures would be used throughout the development, reducing the amount of water required. Therefore, the development of the project site would be consistent with this policy.
<i>Source: Christopher A. Joseph &amp; Associates, September 2007</i>	

### ***Land Use Compatibility***

The redesignation of the project site from Urban Residential to Commercial would allow for the development of commercial/retail uses. Compatibility with the surrounding land uses (institutional and residential) would be ensured through compliance with development standards. More specifically, the design, height, and massing of the buildings included within the proposed project would be consistent with the existing development in the area and would present a desirable image for the area. The proposed structures are compatible with the surrounding one- to two-story residential and institutional buildings. In addition, developing residential neighborhoods surrounding the project site would benefit from a commercial project, which includes a Wal-Mart and other retail shops and restaurants. Through its proposed uses and architectural urban form, the proposed project would become fully integrated into the

existing streetscape and community. In addition, as discussed above, the proposed general plan amendment and zone change would not introduce land uses that would be inconsistent with the policies and intent of the General Plan. Thus, no significant land use compatibility impacts related to the scale and massing of the proposed project would occur.

### **CUMULATIVE IMPACTS**

Cumulative land use impacts could occur if other related projects in the vicinity of the project site would result in land use impacts in conjunction with the proposed project. Development of the proposed project in conjunction with the related projects listed in Section III, Environmental Setting, would result in further development of various land uses in the City of Lancaster. In particular, seven projects are all located within approximately two blocks of the project site. These projects in combination with the proposed project would greatly intensify the land usage in the immediate project area.

These projects would be required to either generally conform to the zoning and land use designations for each site or be subject to specific findings and conditions which are based on maintaining general conformance with the land use plans applicable to the area. As such, development of the proposed project and related projects is not anticipated to substantially conflict with the intent of the City's General Plan regarding the future development of Lancaster, or with other land use regulations required to be consistent with the General Plan, such as the Planning and Zoning Code. Development of the proposed project, in conjunction with related projects, would not be expected to result in cumulatively considerable effects with respect to land use regulations.

### **MITIGATION MEASURES**

No mitigation measures are required.

### **LEVEL OF SIGNIFICANCE AFTER MITIGATION**

Impacts to land use associated with the proposed project would be less than significant.

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## IV. ENVIRONMENTAL IMPACT ANALYSIS

### K. NOISE

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#### ENVIRONMENTAL SETTING

This section evaluates the potential for noise and groundborne vibration impacts resulting from implementation of the proposed project. This includes the potential for the proposed project to result in impacts associated with a substantial temporary and/or permanent increase in ambient noise levels in the vicinity of the project site; exposure of people in the vicinity of the project site to excessive noise levels, groundborne vibration, or groundborne noise levels; and whether this exposure is in excess of standards established in the local general plan or noise ordinance. Finally, mitigation measures intended to reduce impacts to noise and vibration are proposed, where appropriate, to avoid or reduce significant impacts of the proposed project.

Data used to prepare this analysis were obtained from the City of Lancaster General Plan, the City of Lancaster Municipal Code, and by measuring and modeling existing and future noise levels at the project site and the surrounding land uses. Traffic information contained in the traffic study prepared for the proposed project was used to prepare the noise modeling for vehicular sources. Appendix J provides copies of the noise calculations.

#### Fundamentals of Sound and Environmental Noise

Sound is technically described in terms of amplitude (loudness) and frequency (pitch). The standard unit of sound amplitude measurement is the decibel (dB). The decibel scale is a logarithmic scale that describes the physical intensity of the pressure vibrations that make up any sound. The pitch of the sound is related to the frequency of the pressure vibration. Since the human ear is not equally sensitive to a given sound level at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted decibel scale (dBA) provides this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear.

Noise, on the other hand, is typically defined as unwanted sound. A typical noise environment consists of a base of steady ambient noise that is the sum of many distant and indistinguishable noise sources. Superimposed on this background noise is the sound from individual local sources. These can vary from an occasional aircraft or train passing by to virtually continuous noise from, for example, traffic on a major highway. Table IV.K-1, Representative Environmental Noise Levels, illustrates representative noise levels for the environment.

Several rating scales have been developed to analyze the adverse effect of community noise on people. Since environmental noise fluctuates over time, these scales consider that the effect of noise upon people is largely dependent upon the total acoustical energy content of the noise, as well as the time of day when the noise occurs. Those that are applicable to this analysis are as follows:

**Table IV.K-1  
Representative Environmental Noise Levels**

Common Outdoor Activities	Noise Level (dBA)	Common Indoor Activities
	—110—	Rock Band
Jet Fly-over at 100 feet		
	—100—	
Gas Lawnmower at 3 feet		
	—90—	
		Food Blender at 3 feet
Diesel Truck going 50 mph at 50 feet	—80—	Garbage Disposal at 3 feet
Noisy Urban Area during Daytime		
Gas Lawnmower at 100 feet	—70—	Vacuum Cleaner at 10 feet
Commercial Area		Normal Speech at 3 feet
Heavy Traffic at 300 feet	—60—	
		Large Business Office
Quiet Urban Area during Daytime	—50—	Dishwasher in Next Room
Quiet Urban Area during Nighttime	—40—	Theater, Large Conference Room (background)
Quiet Suburban Area during Nighttime		
	—30—	Library
Quiet Rural Area during Nighttime		Bedroom at Night, Concert Hall (background)
	—20—	
		Broadcast/Recording Studio
	—10—	
Lowest Threshold of Human Hearing	—0—	Lowest Threshold of Human Hearing

*Source: California Department of Transportation, 1998.*

- $L_{eq}$ , the equivalent energy noise level, is the average acoustic energy content of noise for a stated period of time. Thus, the  $L_{eq}$  of a time-varying noise and that of a steady noise are the same if they deliver the same acoustic energy to the ear during exposure. For evaluating community impacts, this rating scale does not vary, regardless of whether the noise occurs during the day or the night.
- CNEL, the Community Noise Equivalent Level, is a 24-hour average  $L_{eq}$  with a 10 dBA “penalty” added to noise during the hours of 10:00 PM to 7:00 AM, and an additional 5 dBA penalty during the hours of 7:00 PM to 10:00 PM to account for noise sensitivity in the evening and nighttime. The logarithmic effect of these additions is that a 60 dBA 24-hour  $L_{eq}$  would result in a measurement of 66.7 dBA CNEL.

Noise environments and consequences of human activities are usually well represented by median noise levels during the day, night, or over a 24-hour period. Environmental noise levels are generally considered low when the CNEL is below 45 dBA, moderate in the 45–60 dBA range, and high above 60 dBA. Noise levels greater than 85 dBA can cause temporary or permanent hearing loss. Examples of low daytime levels are isolated natural settings with noise levels as low as 20 dBA and quiet suburban

residential streets with noise levels around 40 dBA. Noise levels above 45 dBA at night can disrupt sleep. Examples of moderate level noise environments are urban residential or semi-commercial areas (typically 55–60 dBA) and commercial locations (typically 60 dBA). People may consider louder environments adverse, but most will accept the higher levels associated with more noisy urban residential or residential-commercial areas (60–75 dBA) or dense urban or industrial areas (65–80 dBA). Generally, a difference of 3 dBA over 24 hours is a barely-perceptible increase to most people. A 5 dBA increase is readily noticeable, while a difference of 10 dBA would be perceived as a doubling of loudness.

Noise levels from a particular source generally decline as distance to the receptor increases. Other factors such as the weather and reflecting or shielding also intensify or reduce the noise level at any given location. A commonly used rule of thumb for roadway noise is that for every doubling of distance from the source, the noise level is reduced by about 3 dBA. Noise from stationary or point sources is reduced by about 6 dBA for every doubling of distance. Noise levels may also be reduced by intervening structures; generally, a single row of buildings between the receptor and the noise source reduces the noise level by about 5 dBA, while a solid wall or berm reduces noise levels by 5 to 10 dBA. The manner in which older homes in California were constructed generally provides a reduction of exterior-to-interior noise levels of about 20 dBA with closed windows. The exterior-to-interior reduction of newer homes is generally 30 dBA or more.

### **Existing Ambient Daytime Noise Levels**

The area surrounding the project site consists primarily of residential uses and undeveloped land. To the south of the project site is Avenue L, followed by Quartz Hill High School. To the east of the project site is 60<sup>th</sup> Street West, followed by residential development. To the west of the project site is undeveloped land. Finally, to the north of the project site is undeveloped land followed by single-family residential uses.

Existing daytime noise levels were monitored at three off-site locations in order to identify representative noise levels in various areas on Wednesday September 19, 2007 between the hours of 11:30 AM and 1:15 PM in order to capture average daytime noise levels during average traffic volumes.<sup>1</sup> The noise survey was conducted using the Larson-Davis 831 precision noise meter, which meets and exceeds the minimum industry standard performance requirements for “Type 1” standard instruments as defined in the American National Standard Institute (ANSI) S1.4.

At the noise measurement locations, listed in Table IV.K-2, the sound level meter was programmed to record the average sound level ( $L_{eq}$ ) over a cumulative period of 15 minutes. The average noise levels and sources of noise monitored at each location are shown in Table IV.K-2, Existing Daytime Noise Levels at

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<sup>1</sup> *Ambient noise readings are taken during mid-day weekdays in order to capture ambient noise levels. While traffic is considered part of the overall noise environment, during heavy peak hours, noise from traffic is actually reduced due to the slowly affect that traffic has on itself and therefore the reduce noise levels generated by vehicular traffic.*

Selected Onsite and Offsite Locations, with the locations identified in Figure IV.K-1. The daytime noise levels listed in Table IV.K-2 are characteristic of a typical urban residential environment.

**Table IV.K-2  
Existing Daytime Noise Levels at Selected Onsite and Offsite Locations**

Noise Measurement Location	Primary Noise Sources	Noise Level Statistics		
		L <sub>eq</sub>	L <sub>min</sub>	L <sub>max</sub>
1. Approximately 25 feet in front of Quartz Hill High School, facing Avenue L.	Vehicular Traffic on 60 <sup>th</sup> Avenue	67.1	53.1	78.0
2. Approximately 10 feet in front of school building near main parking lot, facing 60 <sup>th</sup> Street West.	Vehicular Traffic on 60 <sup>th</sup> Street	56.1	49.9	68.5
3. Approximately 25 feet from Avenue L, in backyard of new single family residential development.	Vehicular Traffic on Avenue L, Flags associated with new development	70.7	61.0	78.1

*Source: Christopher A Joseph and Associates, 2008*

### Existing Roadway Noise Levels Offsite

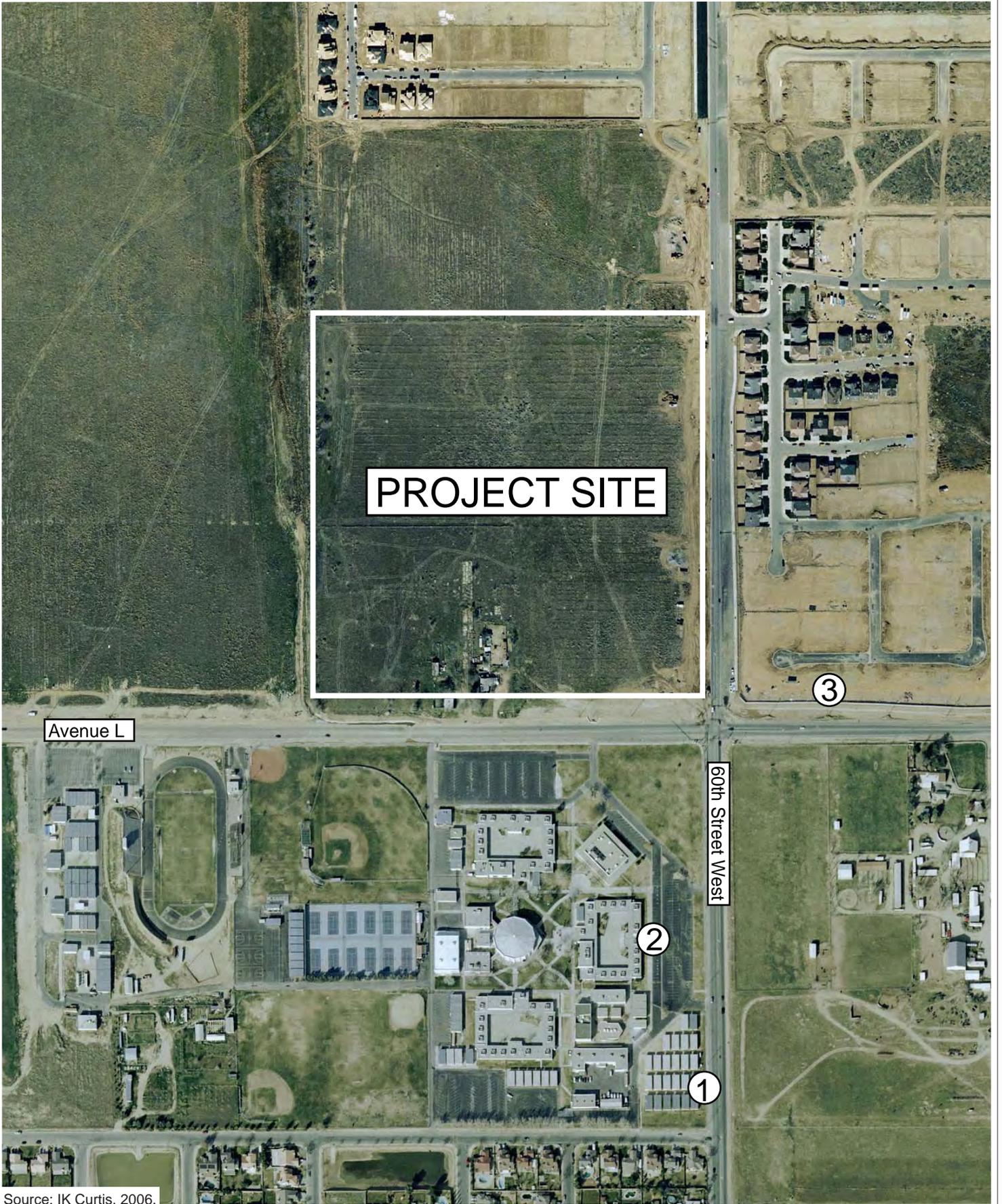
Existing roadway noise levels were calculated for 41 roadway segments located in close proximity of the project site. This task was accomplished using the Federal Highway Administration Highway Noise Prediction Model (FHWA-RD-77-108) and traffic volumes from the project traffic analysis. The model calculates the average noise level at specific locations based on traffic volumes, average speeds, roadway geometry, and site environmental conditions. The average vehicle noise rates (energy rates) utilized in the FHWA Model have been modified to reflect average vehicle noise rates identified for California by Caltrans. The Caltrans data show that California automobile noise is 0.8 to 1.0 dBA higher than national levels and that medium and heavy truck noise is 0.3 to 3.0 dBA lower than national levels. The average daily noise levels along these roadway segments are presented in Table IV.K-3, Existing Roadway Noise Levels Offsite (Weekday).

In addition, due to the expectation that the proposed project may attract more customers during the weekend peak hour than during the week day peak hour, existing Saturday peak hour roadway noise levels were calculated for the roadway links, which were identified in the traffic study, in the project vicinity with nearby noise-sensitive uses. The average daily noise levels along these roadway segments are presented in Table IV.K-4, Existing Roadway Noise Levels Offsite (Saturday).

## REGULATORY FRAMEWORK

### *Federal*

The City of Lancaster has not adopted any thresholds for groundborne vibration impacts. Therefore, this analysis uses the Federal Railway Administration's vibration impact thresholds during construction and



Source: IK Curtis, 2006.



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Figure IV.K-1  
Noise Monitoring  
Location Map

**Table IV.K-3  
Existing Roadway Noise Levels Offsite (Weekday)**

<b>Roadway</b>	<b>Roadway Segment</b>	<b>Land Uses</b>	<b>dBA CNEL</b>
60 <sup>th</sup> Street West	North of Avenue J	Open Space	64.1
	Avenue J to Avenue J-8	Residential	62.6
	South of Avenue J-8	Church	63.3
	North of Avenue K	Residential	61.4
	South of Avenue K	Residential	59.5
	North of Avenue K-8	Residential	59.4
	South of Avenue K-8	Residential	59.5
	North of Avenue K-12	Residential	59.5
	South of Avenue K-12	Residential	59.5
	North of Avenue L	Residential	59.2
	South of Avenue L	School	59.8
	North of Avenue L-4	School	61.8
	South of Avenue L-4	Residential	61.6
	North of Avenue L-8	Residential	61.7
	South of Avenue L-8	Residential	61.0
North of Avenue M	Residential	61.3	
Avenue J	West of 60 <sup>th</sup> Street West	Open Space	62.0
	East of 60 <sup>th</sup> Street West	Residential	60.5
Avenue L-8	West of 60 <sup>th</sup> Street West	Residential	56.3
	East of 60 <sup>th</sup> Street West	Residential	47.6
Avenue K	West of 60 <sup>th</sup> Street West	Residential	56.7
	East of 60 <sup>th</sup> Street West	Residential	59.4
Avenue K-8	West of 60 <sup>th</sup> Street West	Residential	51.1
	East of 60 <sup>th</sup> Street West	Residential	42.3
Avenue K-12	East of 60 <sup>th</sup> Street West	Residential	48.9
Avenue L	70 <sup>th</sup> Street to 65 <sup>th</sup> Street West	Residential	51.3
	65 <sup>th</sup> Street to 60 <sup>th</sup> Street West	School	52.7
	60 <sup>th</sup> Street to 57 <sup>th</sup> Street West	Residential	59.3
	57 <sup>th</sup> Street to 55 <sup>th</sup> Street West	Residential	59.4
	East of 55 <sup>th</sup> Street West	Residential	60.5
	West of 50 <sup>th</sup> Street West	Residential	60.5
	East of 50 <sup>th</sup> Street West	Residential	61.6
	West of 45 <sup>th</sup> Street West	Residential	61.8
	East of 45 <sup>th</sup> Street West	Residential	62.8
West of 40 <sup>th</sup> Street West	Residential	63.1	
Avenue L-4	West of 60 <sup>th</sup> Street West	Residential	53.6
Avenue L-8	West of 60 <sup>th</sup> Street West	Residential	56.8
	East of 60 <sup>th</sup> Street West	Residential	56.8
Avenue M	West of 60 <sup>th</sup> Street West	Residential	58.8
	East of 60 <sup>th</sup> Street West	Residential	59.2

*Source: Christopher A. Joseph and Associates, 2008. Calculation data and results are provided in Appendix J.*

**Table IV.K-4  
Existing Roadway Noise Levels Offsite (Saturday)**

<b>Roadway</b>	<b>Roadway Segment</b>	<b>Land Uses</b>	<b>dBA CNEL</b>
60 <sup>th</sup> Street West	North of Avenue J	Open Space	63.4
	Avenue J to Avenue J-8	Residential	61.5
	South of Avenue J-8	Church	62.3
	North of Avenue K	Residential	60.3
	South of Avenue K	Residential	58.2
	North of Avenue K-8	Residential	58.0
	South of Avenue K-8	Residential	58.1
	North of Avenue K-12	Residential	58.2
	South of Avenue K-12	Residential	58.4
	North of Avenue L	Residential	58.5
	South of Avenue L	School	58.8
	North of Avenue L-4	Residential	60.6
	South of Avenue L-4	Residential	60.3
	North of Avenue L-8	Residential	60.5
	South of Avenue L-8	Residential	59.5
North of Avenue M	Residential	59.9	
Avenue J	West of 60 <sup>th</sup> Street West	Open Space	58.9
	East of 60 <sup>th</sup> Street West	Residential	58.9
Avenue L-8	West of 60 <sup>th</sup> Street West	Residential	54.2
	East of 60 <sup>th</sup> Street West	Residential	41.3
Avenue K	West of 60 <sup>th</sup> Street West	Residential	56.8
	East of 60 <sup>th</sup> Street West	Residential	59.4
Avenue K-8	West of 60 <sup>th</sup> Street West	Residential	51.3
	East of 60 <sup>th</sup> Street West	Residential	40.8
Avenue K-12	East of 60 <sup>th</sup> Street West	Residential	49.6
Avenue L	70 <sup>th</sup> Street West to 65 <sup>th</sup> Street West	Residential	50.5
	65 <sup>th</sup> Street West to 60 <sup>th</sup> Street West	School	51.1
	60 <sup>th</sup> Street West to 57 <sup>th</sup> Street West	Residential	59.0
	57 <sup>th</sup> Street West to 55 <sup>th</sup> Street West	Residential	59.0
	East of 55 <sup>th</sup> Street West	Residential	60.0
	West of 50 <sup>th</sup> Street West	Residential	60.1
	East of 50 <sup>th</sup> Street West	Residential	61.3
	West of 45 <sup>th</sup> Street West	Residential	61.6
	East of 45 <sup>th</sup> Street West	Residential	62.3
	West of 40 <sup>th</sup> Street West	Residential	61.8
Avenue L-4	West of 60 <sup>th</sup> Street West	Residential	51.6
Avenue L-8	West of 60 <sup>th</sup> Street West	Residential	57.2
	East of 60 <sup>th</sup> Street West	Residential	56.3
Avenue M	West of 60 <sup>th</sup> Street West	Residential	58.0
	East of 60 <sup>th</sup> Street West	Residential	58.1

*Source: Christopher A. Joseph and Associates, 2008. Calculation data and results are provided in Appendix J.*

operation for sensitive buildings. The Federal Railway Administration has developed vibration impact thresholds for sensitive buildings, residences, and institutional land uses. These thresholds are 80 VdB

(velocity decibels) at residences and buildings where people normally sleep (e.g., nearby residences and day care facility) and 83 VdB at institutional buildings. These thresholds apply to conditions where there are an infrequent number of events per day.<sup>2</sup>

### ***State***

Title 24 of the California Code of Regulations codifies Sound Transmission Control requirements, which establishes uniform minimum noise insulation performance standards for new hotels, motels, dormitories, apartment houses, and dwellings other than detached single-family dwellings. Specifically, Title 24 states that interior noise levels attributable to exterior sources shall not exceed 45 dBA  $L_{eq}$  in any habitable room of new multi-family dwellings. Dwellings are to be designed so that interior noise levels will meet this standard for at least 10 years from the time of building permit application.

### ***Local***

#### *City of Lancaster Noise Regulations*

The City of Lancaster is the local agency responsible for adopting and implementing policies as they relate to noise levels and its effect on land uses within its jurisdiction. Both acceptable and unacceptable noise levels associated with construction activities, roadway noise levels and ambient noise levels must all be defined and quantified. Chapter 8.24 (Noise Regulations) of the City of Lancaster Municipal Code identifies noise standards for various sources, specific noise restrictions, exemptions, and variances for sources of noise within the City.

In particular, Section 8.24.040 in Chapter 8.24 of the City's Municipal Code prohibits construction or repair work of any kind within 500 feet of an occupied dwelling, apartment, hotel, mobile home, or other place of residence that makes loud noises at any time on Sunday or any day between the hours of 8:00 PM and sunrise. Under Section 8.24.050, exceptions to the restrictions under Section 8.24.040 can be granted by the City Engineer if a finding of public interest, undue hardship, or emergency need can be made.

#### *City of Lancaster General Plan*

Under the Plan for Public Health and Safety chapter of the City of Lancaster General Plan, the City's land use compatibility guidelines for noise are defined and standards ensuring an appropriately quiet environment for the various land uses proposed within the City's General Plan study area are set. Table IV.K-5, Noise Compatible Land Use Objectives, lists the noise compatibility guidelines for land uses within the City of Lancaster.

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<sup>2</sup> "Infrequent events" is defined by the Federal Railroad Administration as being fewer than 70 vibration events per day.

**Table IV.K-5  
Noise Compatible Land Use Objectives**

<b>Land Use</b>	<b>Maximum Exterior CNEL</b>	<b>Maximum Interior CNEL</b>
Rural, Single-family, Multiple Family Residential	65 dBA	45 dBA
Schools:		
Classrooms	65 dBA	45 dBA
Playgrounds	70 dBA	--
Libraries	--	50 dBA
Hospitals/Convalescent Facilities		
Living Areas	--	50 dBA
Sleeping Areas	--	40 dBA
Commercial and Industrial	70 dBA	--
Office Areas	--	50 dBA

*Source: City of Lancaster Plan for Public Health and Safety, 1997.*

The noise objectives and policies for land development in the City's General Plan that are applicable to the proposed project are identified in Section IV.J, Land Use Planning, of this EIR, with an analysis of project consistency.

### **Existing Groundborne Vibration**

Aside from seismic events, the greatest regular sources of groundborne vibration at the project site and immediate vicinity are roadway truck and bus traffic on 60<sup>th</sup> Street and Avenue L. Trucks and buses typically generate groundborne vibration velocity levels of around 63 VdB. These levels could reach 72 VdB where trucks and buses pass over bumps in the road.<sup>3</sup>

## **ENVIRONMENTAL IMPACTS**

### **Methodology**

Implementation of the proposed project could result in the introduction of noise levels that may exceed permitted City noise levels. The primary sources of noise associated with the proposed project would be construction activities at the project site and project-related traffic volumes associated with operation of the proposed commercial development. Secondary sources of noise would include new stationary sources (such as heating, ventilation, and air conditioning units) and increased human activity throughout the project site. The net increase in project site noise levels generated by these activities and other sources have been quantitatively estimated and compared to the applicable noise standards and thresholds of significance.

<sup>3</sup> Federal Railroad Administration, *Federal Register*, 1998.

Aside from noise levels, groundborne vibration would also be generated during the construction phase of the proposed project by various construction-related activities and equipment. Thus, the groundborne vibration levels generated by these sources have also been quantitatively estimated and compared to applicable thresholds of significance.

### ***Construction Noise Levels***

Construction noise levels were estimated by data published by the United States Environmental Protection Agency (USEPA). Potential noise levels are identified for off-site locations that are sensitive to noise, including existing residences.

### ***Roadway Noise Levels***

Roadway noise levels have been calculated for selected study intersection locations around the project site. The noise levels were calculated using the FHWA-RD-77-108 model and traffic volumes from the project traffic analysis. The average vehicle noise rates (energy rates) utilized in the FHWA Model have been modified to reflect average vehicle noise rates identified for California by the State Department of Transportation (Caltrans).

### ***Groundborne Vibration Associated with Construction Equipment***

Groundborne vibration levels resulting from construction activities occurring within the project site were estimated by data published by Harris Miller Miller & Hanson Inc. for the Federal Transit Administration. Potential vibration levels resulting from construction of the proposed project are identified for off-site locations that are sensitive to vibration, including existing residences.

### **Thresholds of Significance**

In accordance with Appendix G to the State CEQA Guidelines, a significant noise impact may occur if the proposed project would result in any of the following conditions:

- (a) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- (b) Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels;
- (c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project;
- (d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project;

- (e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airstrip, expose people residing or working in the project area to excessive noise levels; and
- (f) For a project within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels.

As discussed in Section IV.A, Impacts Found Less Than Significant, of this Draft EIR, the project would not expose people residing or working in the project area to excessive noise levels associated with an airport or private airstrip. Therefore, because the project site would not be exposed to excessive noise levels from nearby airports or private airstrips, the proposed project would have no impacts with respect to Thresholds e) and f) as listed above. As such, no further analysis of these topics is required.

In terms of noise associated with construction, Policy 4.3.2 of the City's General Plan states that, wherever feasible, the generation of single event noise levels (SENL) from construction activities should be managed such that SENL levels are no greater than 15 dBA above the noise objectives included in the Plan for Public Health and Safety chapter of the City General Plan, which are shown in Table IV.K-5.

The State CEQA Guidelines do not define the levels at which groundborne vibration or groundborne noises are considered "excessive." This analysis uses the Federal Railway Administration's vibration impact thresholds for sensitive buildings, residences, and institutional land uses under conditions where there are an infrequent number of events per day during construction of the proposed project. These thresholds are 65 VdB at buildings where vibration would interfere with interior operations, 80 VdB at residences and buildings where people normally sleep, and 83 VdB at other institutional buildings.<sup>4</sup> The 65 VdB threshold applies to typical land uses where vibration would interfere with interior operations, including vibration-sensitive research and manufacturing facilities, hospitals with vibration-sensitive equipment, and institutional uses such as university research operations. Vibration-sensitive equipment includes, but is not limited to, electron microscopes, high-resolution lithographic equipment, and normal optical microscopes. The 80 VdB threshold applies to all residential land uses and any buildings where people sleep, such as hotels and hospitals. The 83 VdB threshold applies 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. No uses employing vibration-sensitive equipment are located in the vicinity of the project site. Therefore the 80 VdB threshold for residential uses was used as the threshold of significance for construction vibration in this EIR.

The CEQA Guidelines also do not define the levels at which temporary and permanent increases in ambient noise are considered "substantial." As discussed previously in this section, a noise level increase of 3 dBA is barely perceptible to most people, a 5 dBA increase is readily noticeable, and a difference of

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<sup>4</sup> United States Department of Transportation. Federal Railroad Administration, *High-Speed Ground Transportation Noise and Vibration Impact Assessment*, December 1998.

10 dBA would be perceived as a doubling of loudness. Based on this information, a significant off-site roadway noise impact could occur if project traffic would cause daily average roadway noise levels to increase by 3 dBA or greater. This is consistent with Section 8.0, Noise, of the Final EIR for the City's General Plan.

## **Project Impacts**

### ***Construction Noise***

Construction of the proposed project would require the use of heavy equipment for site grading, installation of utilities, paving, and building fabrication. Development activities would also involve the use of smaller power tools, generators, and other sources of noise. During each stage of development, there would be a different mix of equipment operating and noise levels would vary based on the amount of equipment in operation and the location of the activity.

The USEPA has compiled data regarding the noise generating characteristics of typical construction equipment. Table IV.K-6, Maximum Noise Levels Generated by Typical Construction Equipment,  $L_{max}$ , lists the maximum construction noise levels for individual pieces of construction equipment. As shown in Table IV.K-6, construction equipment used for the proposed project could produce maximum noise levels of 72 to 86 dBA at a distance of 50 feet from the source. These noise levels would diminish rapidly with distance from the construction site at a rate of approximately 6 dBA per doubling of distance. For example, a noise level of 86 dBA  $L_{eq}$  measured at 50 feet from the noise source to the receptor would reduce to 80 dBA  $L_{eq}$  at 100 feet from the source to the receptor, and reduce by another 6 dBA  $L_{eq}$  to 74 dBA  $L_{eq}$  at 200 feet from the source to the receptor.

During construction, two basic types of activities would be expected to occur and generate noise at the project site. The first activity would involve the preparation and grading of the project site to accommodate the building foundations for the proposed project. The second activity that would generate noise during construction would involve the physical construction and finishing of the new proposed commercial/retail buildings.

In general, the site preparation and grading activities at the project site, which would involve the use of scrapers, would generate the loudest noise levels during construction of the proposed project. As shown in Table IV.K-6, the operation of scrapers could generate a maximum noise level of 86 dBA at 50 feet. During construction of the proposed project, the nearest and most notable off-site sensitive receptors to the project site include the following:

- Quartz Hill High School located approximately 100 feet south of the project site; and
- Single-family residential uses located approximately 150 feet east and north of the project site.

**Table IV.K-6**  
**Maximum Noise Levels Generated by Typical Construction Equipment,  $L_{max}$**

Type of Equipment	Sound Levels at Maximum Engine Power with Mufflers (dBA at 50 feet)
Air Compressor	81
Backhoe	85
Concrete Mixer	72
Crane, Mobile	83
Dozer	80
Generator	78
Grader	85
Jack Hammer	82
Loader	79
Paver	80
Pneumatic Tool	85
Pump	76
Roller	74
Saw	78
Scraper	86
Truck	81

*Sources: USEPA; Bolt, Beranek, and Newman, Noise Control for Buildings and Manufacturing Plants, 1987; Cowan, James P., Handbook of Environmental Acoustics, 1994.*

Due to the use of construction equipment during the construction phase, the proposed project would expose the surrounding off-site sensitive receptors to increased ambient exterior noise levels. Table IV.K-7, Exterior Noise at Off-site Sensitive Uses from Project Construction, shows the construction noise levels that would occur at the surrounding off-site sensitive uses during construction at the project site.

As shown in Table IV.K-7, the construction noise levels experienced by the off-site sensitive receptors would range from 71.4 dBA  $L_{max}$  at the single family residential uses to the east and north to 75.1 dBA  $L_{max}$  at the nearest portions of Quartz Hill High School located to the south of the project site, with the use of mufflers on the construction equipment.

Based on Policy 4.3.2 of the City's General Plan, the generation of a SENL from construction activities should be managed such that SENL levels are no greater than 15 dBA above the noise objectives shown in Table IV.K-5. As such, for single-family residences and schools, the maximum allowable construction noise level would be 80 dBA. In addition, as discussed previously under Regulatory Framework, Section 8.24.040 in Chapter 8.24 of the City's Municipal Code prohibits construction or repair work of any kind within 500 feet of an occupied dwelling, apartment, hotel, mobile home, or other place of residence that makes loud noises at any time on Sunday or any day between the hours of 8:00 p.m. and sunrise. The construction activities associated with the proposed project would comply with the noise regulations established in Sections 8.24.040 of the City's Municipal Code. Therefore, significant short-term noise

impacts from construction would not occur at any off-site locations as construction noise levels would not exceed 80 dBA and these construction noise impacts would be less than significant.

**Table IV.K-7  
Exterior Noise at Off-site Sensitive Uses From Project Construction**

Off-site Sensitive Land Uses	Location	Distance to Project Site (ft.)	Estimated Construction Noise Levels (dBA $L_{max}$ ) <sup>a</sup>
1. Quartz Hill High School	Nearest school building located south of the project site.	100	75.1
2. Single Family Residential	Buildings located east and north of the project site.	150	71.4 <sup>b</sup>

<sup>a</sup> The noise levels were determined with the following equation from Harris Miller Miller & Hanson Inc.'s (HMMH) Transit Noise and Vibration Impact Assessment, Final Report:  $Leq = Leq \text{ at } 50 \text{ ft.} - 20 \text{ Log}(D/50)$ , where  $Leq$  = noise level of noise source,  $D$  = distance from the noise source to the receiver,  $Leq \text{ at } 50 \text{ ft.}$  = noise level of source at 50 feet.

<sup>b</sup> The construction noise level includes a 5 dBA noise reduction resulting from the presence of a sound wall.

Source: Christopher A Joseph and Associates, 2008.

### **Construction-Related Groundborne Vibration**

Construction activities that would occur within the project site would include grading, which would have the potential to generate low levels of groundborne vibration. Table IV.K-8, Vibration Source Levels for Construction Equipment, identifies various vibration velocity levels for the types of construction equipment that would operate during the construction of the proposed project. Based on the information presented in Table IV.K-8, vibration levels could reach as high as approximately 87 VdB within 25 feet of the project site from the operation of construction equipment.

**Table IV.K-8  
Vibration Source Levels for Construction Equipment**

Construction Equipment	Approximate VdB at 25 feet
Large Bulldozer	87
Caisson Drilling	87
Loaded Trucks	86
Jackhammer	79
Small Bulldozer	58

Source: Harris Miller Miller Hanson, Transit Noise and Vibration Impact Assessment, May 2006.

Construction activities would have the potential to impact the nearest off-site sensitive receptors to the project site, which include the single family residences located approximately 150 feet to the east and north of the project site and the Quartz Hill High School located approximately 100 feet to the south of

the project site. As discussed under Thresholds of Significance above, the 80 VdB threshold for residences and buildings where people normally sleep was utilized in this analysis.

Due to the use of construction equipment during the construction phase, the proposed project would expose the surrounding off-site sensitive uses to groundborne vibration levels. Such equipment could include large bulldozers, loaded trucks and small bulldozers, which would generate the vibration levels shown in Table IV.K-8. Caisson drilling and use of jackhammers are not expected to be required on the project site. Table IV.K-9, Groundborne Vibration Levels at Off-site Sensitive Uses from Project Construction, shows the maximum construction-related groundborne vibration levels that would occur at the identified off-site sensitive uses during construction of the proposed project. These projected vibration levels represent the levels of groundborne vibration that would be experienced at these locations when equipment is operating at the property line immediately adjacent to the sensitive receptor.

**Table IV.K-9  
Groundborne Vibration Levels at Off-site Sensitive Uses From Project Construction**

Off-site Sensitive Land Uses	Location	Distance to Project Site (feet)	Estimated Construction-Related Groundborne Vibration Levels (VdB) <sup>a</sup>
1. Quartz Hill High School	Nearest school building located south of the southwest portion of the project site.	100	76.1
2. Single Family Residential	Building located east and north of the project site.	150	77.4

<sup>a</sup> The vibration levels at the off-site sensitive uses are determined with the following equation from Harris Miller Miller & Hanson Inc.'s (HMMH) Transit Noise and Vibration Impact Assessment, Final Report:  $L_v(D) = L_v(25 \text{ ft}) - 30 \log(D/25)$ , where  $L_v$  = vibration level of equipment,  $D$  = distance from the equipment to the receiver,  $L_v(25 \text{ ft})$  = vibration level of equipment at 25 feet.

Source: Christopher A Joseph and Associates, 2008.

As shown in Table IV.K-9, the existing off-site sensitive uses could be exposed to groundborne vibration levels ranging from up to 76.1 VdB at Quartz Hill High School to up to 77.4 VdB at the single-family residences located to the east and north of the project site. As the identified off-site sensitive receptors are located at a distance where the vibration levels from the project site would be attenuated to a level below the Federal Railway Administration's thresholds of 80 VdB for residences and 83 VdB for institutional uses, the vibration impact at these off-site sensitive uses would be considered less than significant.

#### **Operational Noise – Vehicular (Weekday)**

Long-term noise concerns from the development of the proposed project may have the potential to affect offsite locations, resulting primarily from vehicular traffic utilizing the local roadways along affected roadway segments analyzed in the project traffic study. These concerns were addressed using the FHWA

Highway Traffic Noise Prediction Model (FHWA-RD-77-108) which calculates the CNEL noise level for a particular reference set of input conditions, based on site-specific traffic volumes, distances, speeds and/or noise barriers. Based on the traffic report prepared for the proposed project in conjunction with an analysis of the surrounding land uses, roadway noise levels were forecasted to determine if the proposed project's vehicular traffic would result in a significant impact at offsite noise-sensitive receptor locations.

Offsite locations in the vicinity would experience increased noise caused by traffic generated by the proposed project. The increases in noise levels at noise-sensitive locations along the study-area roadway segments are identified in Table IV.K-10, Future Project Traffic Noise Impacts (Weekday). As shown, the proposed project would increase local noise levels by a maximum of 1.8 dBA CNEL for the roadway segments of 60<sup>th</sup> Street West, north of Avenue J, when compared with the future traffic volumes without the project. Because this is below the 3.0 dBA threshold, this impact would be less than significant.

#### ***Operational Noise – Vehicular (Saturday)***

Similar to the weekday peak hour, long-term noise concerns from the development of the proposed project may have the potential to affect offsite locations, resulting primarily from vehicular traffic utilizing the local roadways along affected roadway segments analyzed in the project traffic study during the Saturday peak hour. Based on the traffic report prepared for the proposed project in conjunction with an analysis of the surrounding land uses, roadway noise levels were forecasted to determine if the proposed project's vehicular traffic would result in a significant impact at offsite noise-sensitive receptor locations.

Offsite locations in the vicinity would experience increased noise caused by traffic generated by the proposed project. The increases in noise levels at noise-sensitive locations along the study-area roadway segments are identified in Table IV.K-11, Future Project Traffic Noise Impacts (Saturday). As shown, the proposed project would increase local noise levels by a maximum of 1.8 dBA CNEL for the roadway segments of Avenue M, east of 60<sup>th</sup> Street West, when compared with the future traffic volumes without the project. Because this is below the 3.0 dBA threshold, this impact would be less than significant.

**Table IV.K-10  
Future Project Traffic Noise Impacts (Weekday)**

Roadway	Roadway Segment	Noise Levels in dBA CNEL			Significance Threshold
		Future Without Project Traffic	Future Plus Project Traffic	Increase	
60 <sup>th</sup> Street West	North of Avenue J	66.1	67.9	1.8	3.0
	Avenue J to Avenue J-8	66.4	67.4	1.0	3.0
	South of Avenue J-8	66.8	67.6	0.8	3.0
	North of Avenue K	65.1	65.2	0.1	3.0
	South of Avenue K	63.5	64.7	1.2	3.0
	North of Avenue K-8	63.6	64.7	1.1	3.0
	South of Avenue K-8	64.0	65.0	1.0	3.0
	North of Avenue K-12	63.9	64.9	1.0	3.0

**Table IV.K-10 (Continued)**  
**Future Project Traffic Noise Impacts (Weekday)**

Roadway	Roadway Segment	Noise Levels in dBA CNEL			Significance Threshold
		Future Without Project Traffic	Future Plus Project Traffic	Increase	
	South of Avenue K-12	63.9	64.6	0.7	3.0
	North of Avenue L	64.5	65.2	0.7	3.0
	South of Avenue L	64.0	65.0	1.0	3.0
	North of Avenue L-4	65.5	66.4	0.9	3.0
	South of Avenue L-4	65.4	66.3	0.9	3.0
	North of Avenue L-8	65.4	66.3	0.9	3.0
	South of Avenue L-8	65.1	66.0	0.9	3.0
	North of Avenue M	65.2	66.1	0.9	3.0
Avenue J	West of 60 <sup>th</sup> Street West	65.0	65.4	0.4	3.0
	East of 60 <sup>th</sup> Street West	63.2	63.7	0.5	3.0
Avenue J-8	West of 60 <sup>th</sup> Street West	58.8	58.8	0.0	3.0
	East of 60 <sup>th</sup> Street West	52.2	52.2	0.0	3.0
Avenue K	West of 60 <sup>th</sup> Street West	62.9	63.2	0.3	3.0
	East of 60 <sup>th</sup> Street West	64.2	64.7	0.5	3.0
Avenue K-8	West of 60 <sup>th</sup> Street West	56.4	56.4	0.0	3.0
	East of 60 <sup>th</sup> Street West	57.0	57.0	0.0	3.0
Avenue K-12	East of 60 <sup>th</sup> Street West	49.2	49.2	0.0	3.0
Avenue L	70 <sup>th</sup> Street to 65 <sup>th</sup> Street West	55.6	56.3	0.7	3.0
	65 <sup>th</sup> Street to 60 <sup>th</sup> Street West	57.0	58.3	1.3	3.0
	60 <sup>th</sup> Street to 57 <sup>th</sup> Street West	63.1	63.2	0.1	3.0
	57 <sup>th</sup> Street to 55 <sup>th</sup> Street West	62.8	63.4	0.5	3.0
	East of 55 <sup>th</sup> Street West	63.4	63.9	0.5	3.0
	West of 50 <sup>th</sup> Street West	63.4	63.9	0.5	3.0
	East of 50 <sup>th</sup> Street West	63.9	64.3	0.4	3.0
	West of 45 <sup>th</sup> Street West	63.4	64.3	0.9	3.0
	East of 45 <sup>th</sup> Street West	63.9	65.0	1.1	3.0
	West of 40 <sup>th</sup> Street West	64.8	65.1	0.3	3.0
Avenue L-4	West of 60 <sup>th</sup> Street West	53.9	53.9	0.0	3.0
Avenue L-8	West of 60 <sup>th</sup> Street West	57.6	57.6	0.0	3.0
	East of 60 <sup>th</sup> Street West	56.5	57.1	0.6	3.0
Avenue M	West of 60 <sup>th</sup> Street West	61.2	61.6	0.4	3.0
	East of 60 <sup>th</sup> Street West	62.1	62.7	0.6	3.0
<i>Source: Christopher A. Joseph and Associates, 2008</i> <i>Traffic Information Source: Overland Traffic Consultants, Inc.</i>					

**Table IV.K-11  
Future Project Traffic Noise Impacts (Saturday)**

Roadway	Roadway Segment	Noise Levels in dBA CNEL			
		Future Without Project Traffic	Future Plus Project Traffic	Increase	Significance Threshold
60 <sup>th</sup> Street West	North of Avenue J	67.6	68.3	0.7	3.0
	Avenue J to Avenue J-8	66.9	68.0	1.1	3.0
	South of Avenue J-8	67.3	68.2	0.9	3.0
	North of Avenue K	65.5	66.5	1.0	3.0
	South of Avenue K	64.6	66.0	1.4	3.0
	North of Avenue K-8	64.2	65.5	1.3	3.0
	South of Avenue K-8	64.5	65.6	1.1	3.0
	North of Avenue K-12	64.4	65.0	0.6	3.0
	South of Avenue K-12	64.5	64.9	0.4	3.0
	North of Avenue L	65.4	66.1	0.7	3.0
	South of Avenue L	64.6	65.8	1.2	3.0
	North of Avenue L-4	65.8	66.9	1.1	3.0
	South of Avenue L-4	65.7	66.8	1.1	3.0
	North of Avenue L-8	65.8	66.8	1.0	3.0
	South of Avenue L-8	65.4	66.5	1.1	3.0
North of Avenue M	65.5	66.0	0.5	3.0	
Avenue J	West of 60 <sup>th</sup> Street West	64.2	64.7	0.5	3.0
	East of 60 <sup>th</sup> Street West	63.0	63.7	0.7	3.0
Avenue L-8	West of 60 <sup>th</sup> Street West	58.4	58.4	0.0	3.0
	East of 60 <sup>th</sup> Street West	50.5	50.5	0.0	3.0
Avenue K	West of 60 <sup>th</sup> Street West	63.7	63.8	0.1	3.0
	East of 60 <sup>th</sup> Street West	64.5	65.6	1.1	3.0
Avenue K-8	West of 60 <sup>th</sup> Street West	56.2	56.2	0.0	3.0
	East of 60 <sup>th</sup> Street West	56.8	56.8	0.0	3.0
Avenue K-12	East of 60 <sup>th</sup> Street West	50.0	50.0	0.0	3.0
Avenue L	70 <sup>th</sup> Street to 65 <sup>th</sup> Street West	55.8	56.8	0.0	3.0
	65 <sup>th</sup> Street to 60 <sup>th</sup> Street West	57.0	58.7	1.7	3.0
	60 <sup>th</sup> Street to 57 <sup>th</sup> Street West	63.6	64.6	1.0	3.0
	57 <sup>th</sup> Street to 55 <sup>th</sup> Street West	63.1	63.4	0.3	3.0
	East of 55 <sup>th</sup> Street West	63.5	64.2	0.7	3.0
	West of 50 <sup>th</sup> Street West	63.4	64.1	0.7	3.0
	East of 50 <sup>th</sup> Street West	63.9	64.4	0.5	3.0
	West of 45 <sup>th</sup> Street West	64.1	64.6	0.5	3.0
	East of 45 <sup>th</sup> Street West	64.5	65.0	0.5	3.0
West of 40 <sup>th</sup> Street West	64.1	64.6	0.5	3.0	
Avenue L-4	West of 60 <sup>th</sup> Street West	51.9	51.9	0.0	3.0
Avenue L-8	West of 60 <sup>th</sup> Street West	57.9	57.9	0.0	3.0
	East of 60 <sup>th</sup> Street West	56.6	56.6	0.0	3.0
Avenue M	West of 60 <sup>th</sup> Street West	61.0	61.5	0.5	3.0
	East of 60 <sup>th</sup> Street West	60.9	62.7	1.8	3.0

Source: Christopher A. Joseph and Associates, 2008  
Traffic Information Source: Overland Traffic Consultants, Inc.

## ***Operational Noise - Periodic***

### *Loading Dock and Solid Waste Collection Noise*

Intermittent noise levels would occur in association with delivery vehicle operations, loading dock activities and solid waste collection for the proposed commercial/retail uses at the project site. The primary noise sources associated with the loading docks include heavy trucks stopping (air brakes), backing into the loading dock (back-up alarm), and pulling out of the loading dock (engine noise). Once a truck has backed into the dock, it is typically unloaded from the inside of the store using a forklift or hand cart, and most of the unloading noise is contained within the building and truck trailer. Loading activities (e.g., idling, backing, and using hydraulic liftgates) involving small to medium-sized trucks generate noise in the range of 60 to 65 dBA at 50 feet from the source, while larger trucks generate noise in the range of 70 to 75 dBA at 50 feet. Trash collection activities typically also generate noise levels ranging from 70 to 75 dBA at 50 feet.

As shown in Figure II-3, Site Plan, the loading docks and trash collection equipment would be located on the backside of the proposed retail center with ingress and egress points for delivery trucks and trash collection trucks located along 60<sup>th</sup> Street and the proposed Avenue K-12. The nearest and most notable sensitive receptor which may be affected by the operation of the daily use of the loading dock and solid waste collection facilities would be the single family residents located approximately 150 feet to the north and east of the project site. According to Policy 4.3.2 of the City's General Plan, the generation of single event noise levels (SENL) from motor vehicles, trains, aircraft, commercial, industrial, construction, and other activities should, wherever feasible, be managed so that SENL levels are no greater than 15 dBA above the noise objectives included in the Plan for Public Health and Safety chapter of the City General Plan, which are shown in Table IV.K-5. As such, for single-family residences, the maximum noise level allowed would be 80 dBA.<sup>5</sup> Consequently, the noise levels generated by loading dock activities involving small to large-sized delivery trucks at the proposed loading dock with an estimated 70 to 75 dBA at 50 feet, as well as trash collecting activities, would therefore, not exceed the maximum noise level allowed for single events at the single-family residences.

### *HVAC*

Temporary or periodic increases in ambient noise levels may occur from the heating, ventilation, and air conditioning (HVAC) systems which may be installed for the new commercial buildings located within the project site. The operation of these types of commercial ventilation systems could result in noise levels that average between 50 and 65 dBA  $L_{eq}$  at 50 feet from the source. As 24-hour CNEL noise levels are about 6.7 dBA greater than 24-hour  $L_{eq}$  measurements, the HVAC equipment associated with the

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<sup>5</sup> According to Table IV.K-5, rural single-family, multiple-family maximum exterior CNEL would be 65 dBA. Policy 4.3.2 of the General Plan allows an additional 15 dBA above this noise level, resulting in an 80 dBA threshold.

proposed project could generate noise levels that average between 57 to 72 dBA CNEL at 50 feet when the equipment is operating continuously over a 24-hour period. However, as part of the proposed project design the equipment needed to drive the ventilation process would be located within recessed areas on the rooftops of each of the proposed buildings. Therefore, the ventilation equipment would be screened from view by parapets as well as being provided with proper shielding to reduce noise. The shielding installed around these systems would typically reduce noise levels by approximately 15 dBA. Thus, the noise levels from these systems could be reduced to approximately 50 dBA  $L_{eq}$  at 50 feet from the equipment. As 24-hour CNEL noise levels are about 6.7 dBA greater than 24-hour  $L_{eq}$  measurements, the HVAC units could generate noise levels of approximately 56.7 dBA CNEL if the equipment is operating continuously over a 24-hour period. Therefore, these future noise levels would be similar to existing noise levels, as outlined above in Table IV.K-3 and would also not exceed thresholds outlined above in Table IV.K-5 for residential and school uses. As such, impacts from commercial HVAC units would be less than significant.

## CUMULATIVE IMPACTS

This cumulative impact analysis 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.

Future construction associated with the related projects could result in a cumulatively significant impact with respect to temporary or periodic increases in ambient noise levels. 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 related project to the project sites is the proposed retail project located at 60<sup>th</sup> Street & Avenue L, (related project No. 78 as shown in Table III-3). However, at the time of this analysis the construction timeframe of related project No. 78 is unknown. Nonetheless, because there is a possibility that the construction phase of related project No. 78 and the construction phase of the proposed project may occur simultaneously and impacts from construction of the related project No. 78 are already significant, cumulative noise impacts may be significant and unavoidable for the existing single-family residential units located east of 60<sup>th</sup> Street West across the street from the project site, as well as existing single-family residences to the north of the project site. Noise impacts cumulatively would be significant and unavoidable for residents to the east and north of the project site.

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 the future year 2012 cumulative base traffic volumes on the roadway segments in the project vicinity. The noise levels associated with existing traffic volumes and cumulative base traffic volumes with the

proposed project (i.e., future cumulative traffic volumes) are identified in Table IV.K-12, Cumulative Project Roadway Noise Impacts with Proposed Project. As shown, cumulative development along with the proposed project would increase local noise levels by a maximum of 16.8 dBA CNEL at Avenue K-8, east of 60<sup>th</sup> Street West. However, the traffic generated by the operation of the proposed project would only contribute a maximum of 1.7 dBA CNEL for the roadway segment of Avenue L, between 65<sup>th</sup> Street West and 60<sup>th</sup> Street West, when compared with the future traffic volumes without the project. Because this is below the 3.0 dBA threshold, this impact would be less than significant.

**Table IV.K-12  
Cumulative Project Roadway Noise Impacts with Proposed Project**

Roadway	Roadway Segment	Noise Levels in dBA CNEL						
		Existing Traffic Volumes	Future Without Project Traffic	Future Plus Project Traffic	Cumulative Increase	Project Contribution	Significance Threshold	Significant?
60 <sup>th</sup> Street West	North of Avenue J	63.4	67.6	68.3	4.9	0.7	3.0	No
	Avenue J to Avenue J-8	61.5	66.9	68.0	6.5	1.1	3.0	No
	South of Avenue J-8	62.3	67.3	68.2	5.9	0.9	3.0	No
	North of Avenue K	60.3	65.5	66.5	6.2	1.0	3.0	No
	South of Avenue K	58.2	64.6	66.0	7.8	1.4	3.0	No
	North of Avenue K-8	58.0	64.2	65.5	7.5	1.3	3.0	No
	South of Avenue K-8	58.1	64.5	65.6	7.5	1.1	3.0	No
	North of Avenue K-12	58.2	64.4	65.0	6.8	0.6	3.0	No
	South of Avenue K-12	58.4	64.5	64.9	6.5	0.4	3.0	No
	North of Avenue L	58.5	65.4	66.1	7.6	0.7	3.0	No
	South of Avenue L	58.8	64.6	65.8	7.0	1.2	3.0	No
	North of Avenue L-4	60.6	65.8	66.9	6.3	1.1	3.0	No
	South of Avenue L-4	60.3	65.7	66.8	6.5	1.1	3.0	No
	North of Avenue L-8	60.5	65.8	66.8	6.3	1.0	3.0	No
South of Avenue L-8	59.5	65.4	66.5	7.0	1.1	3.0	No	
North of Avenue M	59.9	65.5	66.0	6.1	0.5	3.0	No	
Avenue J	West of 60 <sup>th</sup> Street West	58.9	64.2	64.7	5.8	0.5	3.0	No
	East of 60 <sup>th</sup> Street West	58.9	63.0	63.7	4.8	0.7	3.0	No
Avenue L-8	West of 60 <sup>th</sup> Street West	54.2	58.4	58.4	4.2	0.0	3.0	No
	East of 60 <sup>th</sup> Street West	41.3	50.5	50.5	9.2	0.0	3.0	No
Avenue K	West of 60 <sup>th</sup> Street West	56.8	63.7	63.8	7.0	0.1	3.0	No
	East of 60 <sup>th</sup> Street West	59.4	64.5	65.6	6.2	1.1	3.0	No
Avenue K-8	West of 60 <sup>th</sup> Street West	51.3	56.2	56.2	4.9	0.0	3.0	No
	East of 60 <sup>th</sup> Street West	40.8	56.8	56.8	16.8	0.0	3.0	No
Avenue K-12	East of 60 <sup>th</sup> Street West	49.6	50.0	50.0	0.4	0.0	3.0	No
Avenue L	70 <sup>th</sup> Street to 65 <sup>th</sup> Street West	50.5	55.8	56.8	6.3	0.0	3.0	No
	65 <sup>th</sup> Street to 60 <sup>th</sup> Street West	51.1	57.0	58.7	7.6	1.7	3.0	No
	60 <sup>th</sup> Street to 57 <sup>th</sup> Street West	59.0	63.6	64.6	5.6	1.0	3.0	No
	57 <sup>th</sup> Street to 55 <sup>th</sup> Street West	59.0	63.1	63.4	4.4	0.3	3.0	No
	East of 55 <sup>th</sup> Street West	60.0	63.5	64.2	4.2	0.7	3.0	No
	West of 50 <sup>th</sup> Street West	60.1	62.3	62.9	2.4	0.6	3.0	No
	East of 50 <sup>th</sup> Street West	61.3	63.1	63.5	1.8	0.4	3.0	No
	West of 45 <sup>th</sup> Street West	61.7	63.1	63.5	1.8	0.4	3.0	No
	East of 45 <sup>th</sup> Street West	62.8	64.0	64.3	1.5	0.3	3.0	No

**Table IV.K-12 (Continued)**  
**Cumulative Project Roadway Noise Impacts with Proposed Project**

Roadway	Roadway Segment	Noise Levels in dBA CNEL						
		Existing Traffic Volumes	Future Without Project Traffic	Future Plus Project Traffic	Cumulative Increase	Project Contribution	Significance Threshold	Significant?
	West of 40 <sup>th</sup> Street West	63.0	64.2	64.8	1.8	0.6	3.0	No
Avenue L-4	West of 60 <sup>th</sup> Street West	53.5	54.1	54.1	0.5	0.0	3.0	No
Avenue L-8	West of 60 <sup>th</sup> Street West	56.8	58.0	58.0	1.2	0.0	3.0	No
	East of 60 <sup>th</sup> Street West	56.7	57.1	57.1	0.4	0.0	3.0	No
Avenue M	West of 60 <sup>th</sup> Street West	58.8	61.0	61.4	2.6	0.4	3.0	No
	East of 60 <sup>th</sup> Street West	59.1	62.1	62.1	3.0	0.0	3.0	No
<i>Note: As shown in <b>Error! Not a valid result for table.</b> and Table IV.K-11, weekday noise levels were calculated to be higher than Saturday peak hour level. Therefore, only cumulative weekday peak hour noise levels were calculated.</i>								
<i>Source: Christopher A. Joseph and Associates, 2008</i>								
<i>Traffic Information Source: Overland Traffic Consultants, Inc.</i>								

## MITIGATION MEASURES

Mitigation measures are not required.

## LEVEL OF SIGNIFICANCE AFTER MITIGATION

Project-specific impacts from noise and vibration during construction would be less than significant. Project-specific impacts from off-site vehicular noise associated with operation of the proposed project would be less than significant. Project-specific impacts from on-site non-vehicular noise associated with operation of the proposed project would be less than significant.

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## IV. ENVIRONMENTAL IMPACT ANALYSIS

### L. POPULATION AND HOUSING

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#### ENVIRONMENTAL SETTING

##### North Los Angeles County Subregion

As part of its comprehensive planning process for the Southern California region, the Southern California Association of Governments (SCAG) has divided the region into 14 subregions. The project site is located within the North Los Angeles County Subregion. The North Los Angeles County Subregion includes the Cities of Lancaster, Palmdale, Santa Clarita, and the northern part of the Los Angeles County unincorporated area.

##### *City of Lancaster*

In 2000, the City of Lancaster had a population of 119,416 persons, 38,289 households, and employment for 52,119 persons (see Table IV.L-1).<sup>1</sup> SCAG forecasts that by the year 2010, the City of Lancaster will have a total population of 168,032 (an increase of 40.7 percent from 2000), 51,418 households (an increase of 34.3 percent from 2000), and will provide employment for 59,684 persons (an increase of 14.5 percent from 2000). For the period of 2010 to 2015, forecasted growth in the City of Lancaster continues; the citywide population is expected to reach 191,912 persons (an increase of 14.2 percent), 58,980 households (an increase of 14.7 percent), and employment will total 62,937 jobs (an increase of 5.5 percent). For the period of 2015 to 2020, SCAG forecasts continue to anticipate growth in the City of Lancaster; the citywide population is expected to reach 215,468 persons (an increase of 12.3 percent), 66,591 households (an increase of 12.9 percent), and employment will total 66,081 jobs (an increase of 5.0 percent).

##### Project Site

Currently, the project site is vacant and undeveloped. Therefore, there is no population, housing, or employment related to the project site. The proposed project involves the construction of approximately 344,550 square feet of retail and restaurant uses.

#### ENVIRONMENTAL IMPACTS

##### Thresholds of Significance

In accordance with Appendix G to the State CEQA Guidelines, a project would have a significant impact on the environment on population and housing if it would:

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<sup>1</sup> SCAG Forecast 2004. This is the most current forecast adopted by SCAG and reflects the 2000 Census data from the U.S. Census Bureau.

**Table IV.L-1  
Population, Housing and Employment Forecasts for the  
City of Lancaster**

Area	Population	Housing	Employment
<b>City of Lancaster</b>			
2000 Census <sup>a</sup>	119,416	38,289	52,119
SCAG Forecasts <sup>b</sup>			
2010	168,032	51,418	59,684
2015	191,912	58,980	62,937
2020	215,468	66,591	66,081
2025	238,048	74,058	69,026
2030	259,696	81,403	71,816
Area	Population	Housing	Employment
Percent Change			
2000 to 2010 <sup>c</sup>	+40.7%	+34.3%	+14.5%
2010 to 2015	+14.2%	+14.7%	+5.5%
2015 to 2020	+12.3%	+12.9%	+5.0%
2020 to 2025	+10.5%	+11.2%	+4.5%
2025 to 2030	+9.1%	+9.9%	+4.0%
<sup>a</sup> SCAG 2004 Growth Projection, City Projections, <a href="http://www.scag.ca.gov/forecast/downloads/2004GF.xls">http://www.scag.ca.gov/forecast/downloads/2004GF.xls</a>			
<sup>b</sup> Ibid.			
<sup>c</sup> Represents a 10-year difference and increase rather than a 5-year difference as represented by other years. This is because 2000 census numbers are available, whereas current year 2006 (or 2005) numbers are not as accurate.			
Source (table): Christopher A. Joseph & Associates, July 2007.			

- (a) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure);
- (b) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere; or
- (c) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

### **Project Impacts**

As discussed in Section IV.A, Impacts Found Less Than Significant of this Draft EIR, the proposed project would have less than significant impacts with respect to Thresholds (b) and (c), listed above. As such, no further analysis of these topics is required.

#### *Extension of Infrastructure*

The vicinity of the project site is a rapidly urbanizing area of the City of Lancaster. It is possible that construction of the proposed project could result in the need for the extension of roads or other

infrastructure to the site. If extensions of infrastructure are required as a result of the proposed project, the project applicant would be responsible for these upgrades. As such, potential indirect impacts to population growth in the area would be less than significant.

### *Construction*

Construction of the proposed project is expected to last for approximately 12 months and would result in increased employment opportunities in the construction field, which could potentially result in increased permanent population and demand for housing in the vicinity of the project site. The economic impact analysis prepared for the proposed project estimates that construction of the proposed project would generate 865 total full time and part time jobs. However, the employment patterns of construction workers in Southern California are such that it is not likely that they would relocate their households as a consequence of the construction employment associated with the project site. The construction industry differs from most other industry sectors in several ways:

- There is no regular place of work. Construction workers regularly commute to job sites that change many times over the course of a year. Their sometimes lengthy daily commutes are facilitated by the off-peak starting and ending times of the typical construction workday.
- Many construction workers are highly specialized (e.g., crane operators, steelworkers, masons, etc.) and move from job site to job site as dictated by the demand for their skills.
- The work requirements of most construction projects are highly specialized. Workers remain at a job site only for the time frame in which their specific skills are needed to complete a particular phase of the construction process.

Therefore, project-related construction workers would not be likely to relocate their place of residence as a consequence of working on the proposed project site, and significant housing or population impacts would not result from construction of the project.

### *Operation*

#### Employment

Operation of the proposed project, consisting of approximately 344,550 square feet of commercial development, and according to the economic impact analysis prepared for the proposed project, would provide full and part time employment for approximately 927 persons. As stated above, SCAG predicts approximately 7,565 new jobs in the City of Lancaster between 2000 and 2010. The proposed project's estimated employment generation therefore represents approximately 12 percent of this increase. As the proposed project requires a zone change and General Plan Amendment to allow for commercial uses on the project site, the job producing potential of the project site was not likely considered by SCAG in determining job projections. However, as discussed in the economic impact analysis, there is currently a job/housing imbalance in the City of Lancaster with an expected 40 percent growth in housing and only

14.5 percent growth in jobs. As the estimated employment generation of the project site represents approximately 12 percent of the increase forecast by SCAG, and as the jobs generated by the proposed project would lessen the current job/housing imbalance, the jobs created by the proposed project would result in a beneficial impact. Therefore, as the employment generation of the proposed project is within the SCAG projections, and as the jobs generated by the proposed project would help remedy the current job/housing imbalance, the proposed project would result in a less than significant impact regarding employment.

### Housing

The proposed project proposes a general plan amendment to redesignate the site from Urban Residential (UR) to Commercial (C) and a zone change from single-family residential, minimum lot size 10,000 square feet and 7,000 square feet (R-10,000 and R-7,000) to Commercial Planned Development (CPD). The General Commercial (C) designation permits neighborhood, community, regional, and travel-oriented retail uses. The proposed project would not include development of any housing units. The proposed project is expected to generate approximately 927 new jobs compared to current conditions on the project site. For several reasons, the proposed project is not expected to generate a demand for 927 housing units. While some of the employees will be management level employees who may relocate to the project area, typical skills required for many of the uses proposed by the project (i.e., retail, restaurant, fast food) are of the type that are filled by workers and students who are already present in the local labor force. It is reasonable to expect, therefore, that many of the new employees would be drawn from the local labor force and student population readily available in the immediate area and surrounding communities. In addition, the Related Projects listing includes 78 new housing developments (of the 82 related projects), which would add an additional 11,130 homes in the project area, potentially adding an additional 34,069 residents in the project vicinity<sup>2</sup>. Furthermore, as discussed above, there is currently a job/housing imbalance in the City of Lancaster with an expected 40 percent housing growth and only a 14.5 percent job growth. As such, the employment opportunities generated as a result of the proposed project would actually help offset the current job/housing imbalance. Therefore the proposed project would not result in a direct demand for new housing in the area beyond that which is already proposed and as such, impacts regarding housing would be less than significant.

### Population

The proposed project would develop approximately 344,550 square feet of commercial/retail uses; the proposed project would not include the development of residential uses and therefore would not directly induce population growth. As discussed above, the jobs created by the proposed project would not likely create a demand for additional housing in the project vicinity, and similarly would not result in population

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<sup>2</sup> Based on an average of 3.061 persons per household, State of California, Department of Finance, E-5 Population and Housing Estimates, for Cities, Counties, and the State, 2001–2006, with 2000 Benchmark, at <http://www.dof.ca.gov/HTML/DEMOGRAP/ReportsPapers/Estimates/E5/E5-06/E-5text2.asp>.

growth. Thus, the proposed project would not result in a direct increase in population and impacts regarding population would be less than significant.

## **CUMULATIVE IMPACTS**

### **Employment**

The proposed project would generate approximately 927 new employees. This represents a net increase of approximately 927 new jobs in the City of Lancaster, as the proposed project would develop new commercial uses on a site, which is currently undeveloped. There are 82 related projects in proximity to the project site, although not all of the related projects are located within the City of Lancaster. These projects would, if approved and constructed, result in additional employees, residents and housing units in the City of Lancaster and the surrounding communities. As discussed above, the proposed project would account for approximately 12 percent of the employment growth projected by SCAG for the City of Lancaster between 2000 and 2010. The proposed project is therefore well within these projections, and has a less than significant direct effect.

Development of the proposed project, in conjunction with the various related projects in the area would further increase employment opportunities in the City of Lancaster and surrounding areas. Out of the 82 related projects, 78 projects are residential in nature. Therefore, it is highly likely the job/housing balance would continue in the future, even if not all of the related residential projects are developed as a result of the current mortgage crisis. Job growth is considered a beneficial effect and, therefore, the jobs created by the proposed project and related projects would be beneficial and would help remedy the job/housing imbalance. As the project's incremental contribution to regional job growth would be not considered cumulatively considerable, such job growth would not be considered a significant cumulative impact. Additionally, as previously discussed, the proposed project would not likely result in the relocation and addition of permanent residents to fill the jobs generated by the commercial uses proposed with the possible exception of management level employees, and the job growth would actually help remedy the current job/housing imbalance. Therefore, the incremental contribution associated with the proposed project would be less than significant, and the proposed project would not contribute substantially to a significant cumulative impact on population growth and housing demand.

### **Housing**

The proposed project would not result in the development of any housing units. There are 82 related projects in the City of Lancaster and surrounding communities that are in close proximity to the project site. These projects would, if approved and constructed, result in additional employees, residents and housing units in the City of Lancaster and the surrounding areas. As discussed above, the City of Lancaster housing inventory included approximately 38,289 housing units in 2000. SCAG forecasts that the City of Lancaster housing inventory will include 51,418 housing units by the year 2010, 58,980 housing units by the year 2015, and 66,591 housing units by 2020 (see Table IV.L-1). As the proposed

project would not result in the development of any new housing units, the proposed project would not contribute to a cumulative impact on population growth and housing demand.

### **Population**

The proposed project would develop approximately 344,550 square feet of commercial/retail uses; the proposed project would not include the development of residential uses and therefore would not directly induce population growth. As discussed above, the jobs created by the proposed project would not likely create a demand for additional housing in the project vicinity, and similarly would not result in population growth. Thus the proposed project would not result in a direct increase in population and impacts regarding population would be less than significant. There are 82 related projects in the City of Lancaster and surrounding area that are in close proximity to the project site. These projects would, if approved and constructed, result in additional employees, residents and housing units in the City of Lancaster and surrounding areas. As discussed above, the population of the City of Lancaster was 119,416 in 2000. SCAG forecasts that the population of the City of Lancaster will reach 168,032 persons by the year 2010, 191,912 persons by the year 2015, and 215,468 persons by 2020 (see Table IV.L-1). As the proposed project would not result in the development of any new housing units, the proposed project would not contribute to a cumulative impact on population growth.

### **MITIGATION MEASURES**

No mitigation measures are required.

### **LEVEL OF SIGNIFICANCE AFTER MITIGATION**

The proposed project would result in less than significant impacts to employment, housing, and population.

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**IV. ENVIRONMENTAL IMPACT ANALYSIS**  
**M. PUBLIC SERVICES**  
**1. FIRE**

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**ENVIRONMENTAL SETTING**

Fire prevention, fire suppression, and life safety services are provided throughout the City of Lancaster by the Los Angeles County Fire Department (LACFD). Fire protection and paramedic services to the project site would be provided by the LACFD from Fire Station No. 84 located approximately 1.8 miles southeast of the project site at 5070 West Avenue L-14 in Quartz Hill. Station No. 84 is staffed by Engine Company 84 and Squad 84. Approximate response time to the project site would be 5.4 minutes.

Other LACFD units that would serve the project site are Engine 134 and Urban Search and Rescue (USAR) Engine 134 located 4 miles from the project site with an estimated response time of 12 minutes, and Engine 130 and Haz Mat Engine 130 located 4.2 miles from the project site with an estimated response time of 12 minutes.

The adequacy of fire protection for a given area is based on required fire flow, response time from existing fire stations, and the LACFD's judgment in assessing the needs of a given area. The required fire flow is closely related to the type and size of land use. The quantity of water necessary for fire protection varies with the type of development, life hazard, occupancy, and the degree of fire hazard. The established fire flow requirement for commercial structures is 5,000 gallons per minute (gpm) at 20 pounds per square inch for up to a five-hour duration.<sup>1</sup>

The Los Angeles County Department of Public Works (LACDPW) currently provides fire flow for the project site. Fire flows are supplied by the same water mains as the domestic water system, including the lines located in local streets and major roadways. Please refer to section IV.O.2, Water, for a complete discussion of water service infrastructure. Fire hydrants and building fire water service systems connect directly to local water mains.

**Regulatory Framework**

***General Plan***

Chapter III, Plan for Public Health and Safety, of the City's General Plan contains objectives and policies with respect to fire prevention and suppression services.<sup>2</sup> These objectives and policies pertain to the

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<sup>1</sup> Written correspondence with Chief Debbie S. Aguirre, Planning Division, Los Angeles County Fire Department, July 31, 2007.

<sup>2</sup> The City's existing General Plan was prepared in 1997 and is currently in the process of being updated.

regulation of new development in natural fire hazard areas and the provision of adequate fire facilities. The General Plan also sets forth performance objectives for the level of service provided. The current performance objective for fire protection is a five minute maximum response time to emergency calls within urban areas and a seven minute maximum response time to emergency calls within rural areas.

### ***Municipal Code***

The City of Lancaster has adopted the Los Angeles County Fire Code (Title 32) as the City's Fire Code. The Fire Code (Section 15.32 of the Municipal Code) establishes requirements with respect to fire protection and prevention. The municipal code also establishes fire protection fees (Section 15.76), which are intended to mitigate impacts of new development on the level of fire service capacity in existing facilities. All new residential, commercial, or industrial developments are required to pay fire protection fees prior to issuance of a building permit. However, consideration in lieu of the fire protection fees required may be accepted provided that either an acceptable substitute is proposed that has a value equal to or greater than the required fees, or, a developer or property owner elects to construct an identified capital improvement.

## **ENVIRONMENTAL IMPACTS**

### **Thresholds of Significance**

In accordance with Appendix G to the State CEQA Guidelines, a proposed project may have significant impact if it would:

- (a) Result in substantial adverse physical impacts associated with the provision of new or physically altered fire protection facilities, or need for new or physically altered fire protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives of the fire department.

### **Project Impacts**

#### ***Construction***

Construction of the proposed project would increase the potential for accidental on-site fires from such sources as the operation of mechanical equipment, use of flammable construction materials, and from carelessly discarded cigarettes. In most cases, the implementation of "good housekeeping" procedures by the construction contractors and the work crews would minimize these hazards. Good housekeeping procedures that would be implemented during construction of the proposed project include: the maintenance of mechanical equipment in good operating condition; careful storage of flammable materials in appropriate containers; and the immediate and complete cleanup of spills of flammable materials when they occur.

Construction activities also have the potential to affect fire protection services, such as emergency vehicle response times, by adding construction traffic to the street network and by partial lane closures during

street improvements and utility installations. These impacts, while potentially adverse, are considered to be less than significant because partial lane closures would not greatly affect emergency vehicles, the drivers of which normally have a variety of options for avoiding traffic, such as using their sirens to clear a path of travel or driving in the lanes of opposing traffic. Additionally, if there are partial closures to streets surrounding the project site, flagmen would be used to facilitate the traffic flow until construction is complete.

Project construction would not be expected to tax fire fighting and emergency services to the extent that there would be a need for new or expanded fire facilities, in order to maintain acceptable service ratios, response times, or other performance objectives of the LACFD. Therefore, construction-related impacts to fire protection services would be less than significant.

### *Operational*

The proposed project is estimated to introduce a net increase of 927 employees, as well as retail customers to the project site. Thus, an increase in the demand for fire protection services is anticipated. The LACFD has indicated that staffing and resources are inadequate to meet the project area's proposed demand for fire and emergency services.<sup>3</sup> The following discussion analyzes the major criteria for determining the proposed project's impacts to fire protection services, including response distance, emergency access/evacuation, and fire flows.

### *Response Distance*

As previously mentioned, the project site is within a 1.8-mile radius of a LACFD fire station housing a Fire Engine Company and Fire Squad. In addition, the project site is within a 4-mile radius of a LACFD fire station housing another Fire Engine Company and USAR Engine Company. The proposed project's distance from these fire stations does not meet the LACFD's requirement of one mile for an engine company. The Fire Department's current facilities plan includes a future fire station in the vicinity of Avenue K and 70<sup>th</sup> Street; however, the station is not currently funded for construction and would not be within one mile of the project site. Therefore, the project site's proximity to its jurisdictional fire station is inadequate and is considered a potentially significant impact. As the proposed project is not within LACFD's required distance, the project applicant will therefore be required to install a fire sprinkler system, in order to stop the spread of a fire before the LACFD could arrive. The construction of a new fire station would require a separate environmental review process outside of the EIR to evaluate the potential effects of the proposed new fire station.

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<sup>3</sup> Written correspondence with Chief Debbie S. Aguirre, Planning Division, Los Angeles County Fire Department, July 31, 2007.

### *Emergency Access*

As discussed in Section IV.A, Impacts Found To Be Less Than Significant, traffic impacts during operation of the proposed project would not result in a significant impact on any nearby roadways or intersections, which could thereby impede emergency access. The proposed project would not involve any other activities during its operational phase that could impede public access or travel upon public rights-of-way or would interfere with an adopted emergency response or evacuation plan. Thus, project implementation would not require the construction or expansion of fire stations or other fire protection facilities and impacts would be less than significant.

### *Fire Flows*

As determined by the LACFD, the overall fire flow requirement for the proposed project is 5,000 gpm from fire hydrants flowing with a 20 PSI minimum residual pressure.<sup>4</sup> For a complete discussion of the proposed project's provision of water service for fire flows and domestic purposes, refer to Section IV.O.2 (Utilities and Service Systems: Water).

The Waterworks Division of the Los Angeles County Department of Public Works would perform a fire flow study at the time of permit review in order to ascertain whether further water system or site-specific improvements would be necessary. Hydrants, water lines, and water tanks would be installed per Fire Code requirements and would be based upon the specific land uses of the proposed project. Therefore, with respect to fire flows, fire protection would be adequate.

### *LACFD Review*

Based on the existing staffing levels, equipment, facilities, and most importantly, response distance from existing stations, LACFD would not be able to accommodate the proposed project's demand for fire protection service without the addition of manpower, equipment and facilities.<sup>5</sup> With the payment of the required developer fees, the impacts to LACFD would be less than significant.

## **CUMULATIVE IMPACTS**

Implementation of the proposed project in combination with the related projects listed in Section III, Environmental Setting, would increase the demand for fire protection services in the project area. Specifically, there would be increased demands for additional LACFD staffing, equipment, and facilities over time. This need would be funded via existing mechanisms (i.e., developer fees, property taxes, government funding) to which the applicants of the proposed projects and related projects would be required to contribute. In addition, similar to the proposed project, each of the related projects would be individually subject to LACFD review, and would be required to comply with all applicable fire safety

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<sup>4</sup> *Ibid.*

<sup>5</sup> *Ibid.*

requirements of the LACFD and City of Lancaster in order to adequately mitigate fire protection impacts. Therefore, cumulative impacts on fire protection would be less than significant.

## MITIGATION MEASURES

The following mitigation measures are required to ensure impacts to fire protection are less than significant:

- M.1-1 The development of this project shall comply with all applicable code and ordinance requirements for construction, access, water mains, fire flows and fire hydrants.
- M.1-2 Every building constructed shall be accessible to Fire Department apparatus by way of access roadways, with an all-weather surface of not less than the prescribed width. The roadway shall be extended to within 150 feet of all portions of the exterior walls when measured by an unobstructed route around the exterior of the building.
- M.1-3 Fire sprinkler systems are required in most commercial occupancies. For those occupancies not requiring fire sprinkler systems, fire sprinkler systems shall be installed.
- M.1-4 The development may require fire flows up to 5,000 gallons per minute at 20 pounds per square inch residual pressure for up to a five-hour duration. Final fire flows will be based on the size of the buildings, their relationship to other structures, property lines, and types of construction used.
- M.1-5 Fire hydrant spacing shall be 300 feet and shall meet the following requirements:
  - a. No portion of lot frontage shall be more than 200 feet via vehicular access from a public fire hydrant.
  - b. No portion of a building shall exceed 400 feet via vehicular access from a properly spaced fire hydrant.
  - c. Additional hydrants will be required if hydrant spacing exceeds specified distances.
  - d. When cul-de-sac depth exceeds 200 feet on a commercial street, hydrants shall be required at the corner and mid-block.
  - e. A cul-de-sac shall not be more than 500 feet in length, when serving land zoned for commercial use.
- M.1-6 Turning radii shall not be less than 32 feet. This measurement shall be determined at the centerline of the road. A Fire Department approved turning area shall be provided for all driveways exceeding 150 feet in length and at the end of all cul-de-sacs.

- M.1-7 All on-site driveways/roadways shall provide a minimum unobstructed width of 28 feet, clear-to-sky. The on-site driveway is to be within 150 feet of all portions of the exterior wall of the first story of any building. The centerline of the access driveway shall be located parallel to, and with 30 feet of an exterior wall on one side of the proposed structure.
- M.1-8 Driveway width for non-residential developments shall be increased when any of the following conditions will exist:
- a. Provide 34 feet in width, when parallel parking is allowed in one side of the access roadway/driveway. Preference is that such parking is not adjacent to the structure.
  - b. Provide 42 feet in width, when parallel parking is allowed on each side of the access roadway/driveway.
  - c. Any access way less than 34 feet in width shall be labeled “Fire Lane” on the final recording map, and final building plans.
  - d. For streets or driveway with parking restrictions: The entrance to the street/driveway and intermittent spacing distances of 150 feet shall be posted with Fire Department approved signs stating “NO PARKING – FIRE LANE” in three-inch high letters. Driveway labeling is necessary to ensure access for Fire Department use.
- M.1-9 Prior to the issuance of a building permit, the applicant shall pay fire protection fees to the City of Lancaster pursuant to Section 15.76 of the Municipal Code.

## **LEVEL OF SIGNIFICANCE AFTER MITIGATION**

Mitigation measures M.1-1 through M.1-9 are required to ensure project impacts would remain less than significant. Due to the proximity to existing fire facilities, recommended service response times for fire safety cannot be met and project impacts would be significant. With inclusion of sprinklers in the project buildings in accordance with Mitigation Measure M.1-3, above, impacts with respect to service response times would be reduced to less than significant. With the payment of developer’s fees at the time a building permit is issued, the proposed project will have fully satisfied its requirement to fund the LACFD proportionate to its demand for fire protection services. LACFD would then have the option to add the additional manpower, equipment and facilities needed to meet the needs of the proposed project. The implementation of the required Mitigation Measure M.1-9 would reduce the proposed project’s impact, and its contribution to a cumulative impact, to less than significant, as the payment of the developer fees fully mitigates all potential impacts to fire services.

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**IV. ENVIRONMENTAL IMPACT ANALYSIS**  
**M. PUBLIC SERVICES**  
**2. POLICE**

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**ENVIRONMENTAL SETTING**

Los Angeles County Sheriff’s Department (LACSD) provides police protection services for the City of Lancaster on a contractual basis. The proposed project is within the jurisdiction of the Lancaster Station which is located at 501 West Lancaster Boulevard, approximately six and one-half miles from the project site. Lancaster Station has 216 sworn personnel and 61 civilian personnel assigned. Station personnel cover an area of more than 600 square miles, including the City of Lancaster, and the communities of Lake Los Angeles, Quartz Hill, and Antelope Acres. Law enforcement services are provided for over 190,000 residents with a service ratio of one officer per 833 citizens. This ratio is considered adequate to meet the current demand for police services. In 2006 deputies from the Lancaster Station responded to 55,030 calls for service, 3,328 emergency calls, 10,605 priority calls and 41,097 routine calls.

The crime rate, which represents the number of crimes reported, affects the “needs” projection for staff and equipment for the LACSD. To some extent, it is logical to anticipate that the crime rate in a given area will increase as the level of activity or population, along with the opportunities for crime increases. However, because a number of other factors also contribute to the resultant crime rate such as police presence, crime prevention measures, and on-going legislation/funding, the potential for increased crime rates is not necessarily directly proportional to increases in land use activity. Table IV.M-1 shows the number of crimes committed by type, per 10,000 people, in the City of Lancaster during the year 2006.

**Table IV.M-1**  
**2006 Crime Statistics for the City of Lancaster**

Type of Crime	No. of Crimes – Per 10,000
Homicide	1
Rape	4
Robbery	32
Assault	57
Burglary	115
Larceny/Theft	182
Auto Theft	78
Arson	3
<b>Total</b>	<b>472</b>

*Source: Written correspondence from Captain Gordon E. Carn, Los Angeles County Sheriffs Department, June 21, 2007.*

Unlike fire protection services, police units are often in a mobile state; hence actual distance between a headquarters facility and the project site is often of little relevance. Instead, the number of officers on the

street is more directly related to the realized response time. Response time is defined as the total time from when a call requesting assistance is placed until the time that a police unit responds to the scene. Telephone calls for police assistance are prioritized based on the nature of the call. The average response time for emergency calls in the City of Lancaster for 2006 was 5.5 minutes.

## **Regulatory Framework**

### ***General Plan***

Chapter III, Plan for Public Health and Safety, of the City's General Plan contains objectives and policies with respect to crime prevention and protection services.<sup>6</sup> These objectives and policies identify strategic design features for new development which can be used to discourage criminal activity and, thereby, reduce the need for officers and facilities. The General Plan also sets forth performance objectives for the level of service provided. The current performance objective for police protection is a seven minute average response time to emergency calls within urban areas and a nine minute average response time to emergency calls within rural areas.

### ***Municipal Code***

The City's Municipal Code (Section 15.64.130) establishes Sheriff's substation facilities fees. The Sheriff's substation facilities fee is imposed on all new development in the City. The sheriff's substation facilities fee shall be used to finance land acquisition, design, construction, equipping, and related capital costs for sheriff substation facilities.

## **ENVIRONMENTAL IMPACTS**

### **Thresholds of Significance**

In accordance with Appendix G to the State CEQA Guidelines, a project would have a significant impact if it would:

- (a) Result in substantial adverse physical impacts associated with the provision of new or physically altered police protection facilities, or need for new or physically altered police protection facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives of the police department.

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<sup>6</sup> The City's existing General Plan was prepared in 1997 and is currently in the process of being updated.

## **Project Impacts**

### ***Construction Impacts***

Construction sites can be sources of attractive nuisances, providing hazards, and inviting theft and vandalism. Therefore, when not properly secured, construction sites can become a distraction for local law enforcement from more pressing matters that require their attention. Consequently, developers typically take precautions to prevent trespassing through construction sites. As such, temporary fencing would be installed around the construction site to keep out unauthorized persons. Construction of the proposed project is not expected to cause significant congestion at the local study intersections (see Section IV.N, Transportation and Traffic, for further discussion). Although minor traffic delays may occur during construction, particularly during the construction of utilities and street improvements, impacts to police response time would be minimal and temporary. Therefore, the proposed project's construction-related impacts to police protection services would be less than significant.

### ***Long-Term Operational Impacts***

As the project site is currently undeveloped, the proposed project is expected to create a substantial increase of activity on the project site. An increase of 927 employees (see Section IV.L, Population and Housing) plus retail customers is expected to occur with the proposed development of the project site. Thus, an increase in the demand for police protection services is anticipated. The juxtaposition of the proposed project near sensitive uses such as residences and schools could potentially result in additional crime to the area. Therefore, the number of requests for assistance for police response to retail burglaries, vehicle burglaries, damage to vehicles, traffic-related incidents, and crimes against persons would be anticipated to increase with the greater onsite activity and increased traffic on adjacent streets and arterials. However, while the number of calls for police services is expected to increase with development of the proposed project, such calls are typical of problems experienced in existing commercial and residential neighborhoods in the project area and in the City of Lancaster in general, and do not represent unique law enforcement issues specific to the proposed project.

The LACSD has stated that the Lancaster Station is staffed and equipped to provide full service to the City of Lancaster, which includes the project site, and that the proposed project would not result in the need for construction or expansion of police stations or other police protection facilities to maintain current service demand, the construction of which could cause a significant environmental impact.<sup>7</sup> As such, no new or expanded police stations would be needed as a result of the proposed project, and there would be no long-term operational impacts to police protection services. Therefore, impacts would be less than significant.

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<sup>7</sup> *Written Correspondence from Captain Gordon E. Carn, Los Angeles County Sheriff's Department, June 21, 2007.*

## CUMULATIVE IMPACTS

The geographic context for cumulative analysis pertaining to police protection services entails the Lancaster Station service area. As most of the 82 related projects identified in the related projects list (see Table III-1) are located within the Lancaster Station's service area, these projects would be provided police protection service by LACSD Lancaster Station.

The proposed project, in combination with the related projects, would increase the demand for police protection services in the project area. As discussed above, the proposed project is located within the Lancaster Station's service area, which has an existing police service population of approximately 190,000 persons.<sup>8</sup> As discussed in Section IV.L, Population and Housing, the proposed project, combined with the 82 related projects located within the Lancaster Station's service area, would result in a cumulative increase (including residents and employees) in the police service population in the Lancaster Station's Service Area. The related projects in combination with the proposed project would greatly intensify the land use in the immediate project area, and would increase the demand for police protection services.

Any new or expanded police station would be funded via existing mechanisms (i.e., sales taxes, government funding) to which the proposed project and related projects would contribute. Furthermore, similar to the proposed project, each of the related projects would be individually subject to LACSD review, and would be required to comply with all applicable safety requirements of the LACSD and the City of Lancaster in order to adequately address police protection service demands. While the proposed project in combination with the related projects would increase the demand for police protection services in the project area, the proposed project's contribution to this demand would not be cumulatively considerable, and impacts would be less than significant.

## MITIGATION MEASURES

The following mitigation measures are recommended to ensure impacts to police protection services are less than significant.

### Construction Impacts

M.2-1 The applicant shall fence off the project site during the construction phase.

### Operational Impacts

M.2-2 The building and layout design of the proposed project shall include crime prevention features, such as nighttime security lighting, and building security systems.

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<sup>8</sup> *Ibid.*

## **LEVEL OF SIGNIFICANCE AFTER MITIGATION**

Impacts on police protection services would be less than significant without mitigation. The implementation of the recommended Mitigation Measures M.2-1 and M.2-2 would further reduce the less than significant impacts associated with the proposed project.

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**IV. ENVIRONMENTAL IMPACT ANALYSIS**  
**M. PUBLIC SERVICES**  
**3. SCHOOLS**

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**ENVIRONMENTAL SETTING**

Public schools in the western portion of the City of Lancaster are under the jurisdiction of the Westside Union School District for elementary and middle schools, and the Antelope Valley Joint Union High School District (AVUHSD) for high schools. The Westside Union School District schools that currently serve the project site include: Joe Walker Middle School located at 5632 Avenue L-8, Quartz Hill, CA 93536 and Quartz Hill Elementary School located at 41820 North 50<sup>th</sup> Street West, Quartz Hill, CA 93536. The AVUHSD school that currently serves the project site is Quartz Hill High School located at 6040 Avenue L, Quartz Hill, CA 93536. The 2006-2007 enrollments, enrollment design capacities, and number of students above/below capacity for each of these schools are listed in Table IV.M-2, below.

**Table IV.M-2**  
**Capacity and Enrollment of Schools Serving the Project Site**

School	Design Enrollment Capacity	2006-2007 Enrollment	(-)Under / (+) Over Capacity
Quartz Hill Elementary School <sup>a</sup>	750	947	+197
Joe Walker Middle School <sup>a</sup>	1200	887	-313
Quartz Hill High School <sup>b</sup>	1,800	3,512	+1,712
<sup>a</sup> Source: Written correspondence from Robert Abel, Assistant Superintendent, Westside Union School District, July 16, 2007.			
<sup>b</sup> Source: Written correspondence from Matt Havens, Director of Facility Acquisition and Development, AVUHSD, August 6, 2007.			

As shown in Table IV.M-2, Joe Walker Middle School is currently operating under capacity, while Quartz Hill Elementary School and Quartz Hill High School are currently operating over design capacity. There are new Westside Union School District schools that are planned for construction in the project vicinity.<sup>9</sup> A new high school is also planned for the project area; however, AVUHSD lacks the District funding for the project.<sup>10</sup>

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<sup>9</sup> Written correspondence from Robert Abel, Assistant Superintendent, Westside Union School District, July 16, 2007.

<sup>10</sup> Written correspondence from Matt Havens, Director of Facility Acquisition and Development, AVUHSD, August 6, 2007.

## **Open Enrollment Policy**

The open enrollment policy is a State-mandated policy that enables students anywhere in the appropriate school district to apply to any regular, grade-appropriate school with designated “open enrollment” seats. The number of open enrollment seats is determined annually. Each individual school is assessed based on the principal’s knowledge of new housing and other demographic trends in the attendance area. Open enrollment seats are granted through an application process that is completed before the school year begins. Students living in a particular school’s attendance area are not displaced by a student requesting an open enrollment transfer to that school.<sup>11</sup>

## **School Facilities Fees**

California Education Code Section 17620(a)(1) states that the governing board of any school district is authorized to levy a fee, charge, dedication, or other requirement against any construction within the boundaries of the district, for the purpose of funding the construction or reconstruction of school facilities. The AVUHSD School Facilities Needs Analysis has been prepared to support the school district’s levy of the fees authorized by Section 17620 of the California Education Code.<sup>12</sup>

The Leroy F. Greene School Facilities Act of 1998 (SB 50) sets a maximum level of fees a developer may be required to pay to mitigate a project’s impacts on school facilities. The maximum fees authorized under SB 50 apply to zone changes, general plan amendments, zoning permits and subdivisions. The provisions of SB 50 are deemed to provide full and complete mitigation of school facilities impacts, notwithstanding any contrary provisions in CEQA or other State or local laws (Government Code Section 65996).

## **ENVIRONMENTAL IMPACTS**

### **Thresholds of Significance**

In accordance with Appendix G to the State CEQA Guidelines, a project would have a significant impact if it would:

- (a) Result in substantial adverse physical impacts associated with the provision of new or physically altered school facilities, or need for new or physically altered school facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives of the school district.

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<sup>11</sup> News Release, Los Angeles Unified School District, Office of Communications, April 17, 2000.

<sup>12</sup> AVUHSD, School Facilities Needs Analysis, September 11, 2006.

## Project Impacts

Implementation of the proposed project would involve the development of a commercial shopping center consisting of 344,550 square feet of retail and restaurant uses. The project site is currently undeveloped and therefore no student generation currently occurs from the project site. As indicated in Table IV.M-3, Proposed Project Student Generation, the proposed commercial uses are estimated to generate a total of 11 elementary students, 7 middle school students, and 2 high school students.

**Table IV.M-3  
Proposed Project Student Generation**

Land Use	Size	Elementary School Students	Middle School Students	High School Students	Total
Commercial	344,550	11	7	2	20
<b>Proposed Project Total</b>		<b>11</b>	<b>7</b>	<b>2</b>	<b>20</b>
<p><i>Note: sf = square feet</i>  <i>Source: Phone conversation with Nellie Thomas, Secretary of the Assistant Superintendent, WUSD, Aug, 15, 2007.</i>  <sup>a</sup> <i>Elementary student generation rates are as follows: 0.0331 students per 1,000 sf retail/ service uses</i>  <sup>b</sup> <i>Middle school student generation rates are as follows: 0.0208 students per 1,000 sf retail/service uses</i>  <i>Source: LAUSD, School Facilities Needs Analysis, 2006.</i>  <sup>c</sup> <i>AVUHSD does not have student generation rates for commercial properties. For a conservative analysis generation rates for Los Angeles Unified School District will be used instead. High school student generation rates are as follows: 0.0067 students per 1,000 square feet of retail/restaurant uses.</i></p>					

While it is likely that some of the students generated by the proposed project would already reside in areas served by the Westside Union School District and AVUHSD and would already be enrolled in schools within those districts, for a conservative analysis, it is assumed that all students generated by the proposed project would be new to Westside Union School District and AVUHSD. As shown in Table IV.M-4, only Joe Walker Middle School would have adequate capacity to accommodate the students generated by the proposed project. Therefore impacts would be less than significant with respect to Joe Walker Middle School. However, as shown in Table IV.M-4, Quartz Hill Elementary School and Quartz Hill High School are currently operating over the design enrollment capacity, and the addition of project-generated students would result in a potentially significant impact.

As AVUHSD has adopted school fees, the proposed project would be required to pay school fees as per SB 50. The payment of which is considered to provide full and complete mitigation of school facilities impacts. With payment of the required fees, impacts to schools would be less than significant.

As Quartz Hill High School is located adjacent to the project site, the AVUSD has indicated that there may be a significant impact, with regards to traffic from the project site, affecting access to the school and the safety of the students. These concerns are addressed in Section IV.N, Transportation/Traffic.

**Table IV.M-4  
Proposed Project Impacts on Schools**

School	Enrollment Capacity	Project Generated Students	Current Enrollment	Future Enrollment with Project	(-)Under/ (+) Over Capacity
Quartz Hill Elementary	750	11	947	958	+ 208
Joe Walker Middle School	1,200	7	887	894	- 306
Quartz Hill High School	1,800	2	3,512	3,514	+ 1,714

*Source: Written correspondences with Matt Havens, Director of Facilities and Development, AVUHSD, August 6, 2007, and written correspondence with Robert Abel, Assistant Superintendent, WUSD, July 16, 2007.*

## CUMULATIVE IMPACTS

Implementation of the proposed project, in combination with the related projects, is expected to result in a cumulative increase in the demand for school services. The related projects evaluated in this cumulative impacts analysis comprise the planned or projected development identified in the related projects list (see Table III-1). As shown in Table IV.M-5, Cumulative Student Generation, the 82 related projects would generate approximately 8,589 students. However, cumulative impacts are expected to be less than significant for the reasons discussed below.

**Table IV.M-5  
Cumulative Student Generation**

No.	Land Use	Size	Elementary School Students <sup>a</sup>	Middle School Students <sup>a</sup>	High School Students <sup>b</sup>	Total Students
1	Single Family Homes	111 du	48	15	32	95
2	Single Family Homes	183 du	79	25	53	157
3	Single Family Homes	300 du	130	42	88	260
4	Single Family Homes	204 du	89	28	60	177
5	Single Family Homes	62 du	27	9	18	54
6	Single Family Homes	64 du	28	9	19	56
7	Single Family Homes	2 du	1	0	1	2
8	Active Adult (senior community)	600 du	0	0	0	0
9	Active Adult (senior community)	600 du	0	0	0	0
10	Single Family Homes	23 du	10	0	7	17
11	Single Family Homes	207 du	90	29	60	179
	Single Family Homes	31 du	14	4	9	27
12	Single Family Homes	245 du	106	34	72	212
13	Single Family Homes	59 du	26	8	17	51
	Single Family Homes	59 du	26	8	17	51
14	Single Family Homes	176 du	76	24	51	151
15	Single Family Homes	56 du	24	8	16	48
16	Single Family Homes	1,594 du	691	221	466	1,378
	Park	28.05 acres	0	0	0	0

**Table IV.M-5 (Continued)**  
**Cumulative Student Generation**

No.	Land Use	Size	Elementary School Students <sup>a</sup>	Middle School Students <sup>a</sup>	High School Students <sup>b</sup>	Total Students
	School <sup>c</sup>	500 students	0	0	0	0
17	Single Family Homes	84 du	36	12	25	73
18	Single Family Homes	77 du	33	11	23	67
19	Single Family Homes	21 du	9	3	6	18
20	Single Family Homes	77 du	33	11	23	67
21	Single Family Homes	36 du	16	5	11	32
22	Single Family Homes	19 du	8	3	6	17
23	Single Family Homes	49 du	21	7	14	42
24	Single Family Homes	36 du	16	5	11	32
25	Single Family Homes	650 du	282	90	190	562
26	Single Family Homes	104 du	45	14	30	89
27	Single Family Homes	32 du	14	4	9	27
28	Single Family Homes	41 du	18	6	12	36
29	Single Family Homes	112 du	49	16	33	98
30	Single Family Homes	85 du	37	12	25	74
31	Single Family Homes	33 du	14	5	10	29
32	Single Family Homes	40 du	17	6	12	35
33	Single Family Homes	58 du	25	8	17	50
34	Single Family Homes	41 du	18	6	12	36
35	Single Family Homes	43 du	19	6	13	38
36	Single Family Homes	156 du	68	22	46	136
37	Single Family Homes	86 du	37	12	25	74
38	Single Family Homes	58 du	25	8	17	50
39	Single Family Homes	58 du	25	8	17	50
40	Single Family Homes	60 du	26	8	18	52
41	Single Family Homes	254 du	110	35	74	219
42	Single Family Homes	22 du	10	3	6	19
43	Single Family Homes	106 du	46	15	31	92
44	Single Family Homes	73 du	32	10	21	63
45	Single Family Homes	108 du	47	15	32	94
46	Single Family Homes	73 du	32	10	21	63
47	Single Family Homes	20 du	9	3	6	18
48	Single Family Homes	42 du	18	6	12	36
49	Single Family Homes	152 du	66	21	44	131
50	Single Family Homes	65 du	28	9	19	56
51	Single Family Homes	78 du	34	11	23	68
52	Single Family Homes	39 du	17	5	11	33
53	Single Family Homes	88 du	38	12	26	76
54	Single Family Homes	38 du	17	5	11	33
55	Middle School	700 students	0	0	0	0
56	Single Family Homes	215 du	93	30	63	186
57	Single Family Homes	54 du	23	8	16	47
58	Single Family Homes	307 du	133	43	90	266
59	Single Family Homes	95 du	41	13	28	82
60	Single Family Homes	20 du	9	3	6	18
61	Single Family Homes	169 du	73	23	49	145
62	Single Family Homes	34 du	15	5	10	30

**Table IV.M-5 (Continued)**  
**Cumulative Student Generation**

No.	Land Use	Size	Elementary School Students <sup>a</sup>	Middle School Students <sup>a</sup>	High School Students <sup>b</sup>	Total Students
63	Single Family Homes	101 du	44	14	30	88
64	Single Family Homes	29 du	13	4	9	26
65	Single Family Homes	116 du	50	16	34	100
66	Single Family Homes	87 du	38	12	25	75
67	Single Family Homes	242 du	105	34	71	210
68	Single Family Homes	61 du	27	8	18	53
69	Single Family Homes	94 du	41	13	28	82
70	Single Family Homes	240 du	104	33	70	207
71	Single Family Homes	61 du	27	8	18	53
72	Single Family Homes	19 du	8	3	6	17
73	Single Family Homes	77 du	33	11	23	67
74	Single Family Homes	74 du	32	10	22	64
75	Single Family Homes	61 du	27	8	18	53
76	Single Family Homes	450 du	195	62	131	388
77	Single Family Homes	650 du	282	90	190	562
78	Commercial	394,575 sf	13	8	3	24
79	Single Family Homes	9 du	4	1	3	8
80	Retail <sup>c</sup>	14,112 sf	1	0	0	1
81	Senior Housing	75 du	0	0	0	0
82	Retail <sup>c</sup>	267,494 sf	9	6	2	17
<b>Subtotal Related Projects</b>						<b>8,569</b>
<b>Subtotal Proposed Project</b>						<b>20</b>
<b>Cumulative Total</b>						<b>8,589</b>
<p><i>Notes:</i>  du=dwelling unit; sf=square feet  <sup>a</sup> Source: Phone conversation with Nellie Thomas, Secretary of the Assistant Superintendent, WUSD, Aug, 15, 2007.  Elementary student generation rates are as follows: 0.0331 students per 1,000 sf retail/ service uses, 0.4337 students per dwelling unit of single family residences (detached).  Middle school student generation rates are as follows: 0.0208 students per 1,000 sf retail/service uses, 0.1383 students per dwelling unit of single family residences (detached).  <sup>b</sup> Source: AVUHSD, School Facilities Needs Analysis, 2006  High School student generation rates are as follows: 0.292 students per dwelling unit of single family homes (detached)  <sup>c</sup> Source: LAUSD, School Facilities Needs Analysis, 2006.  AVUHSD does not have student generation rates for commercial properties. For a conservative analysis, generation rates for Los Angeles Unified School District will be used instead. High school student generation rates are as follows: 0.0067 students per 1,000 square feet of retail/restaurant uses  <sup>d</sup> California Department of Education, School Facility Recommendations for Class Size Reduction, website: <a href="http://www.cde.ca.gov/ls/cs/k3/recommend.asp">http://www.cde.ca.gov/ls/cs/k3/recommend.asp</a>, August 18, 2005. Calculated based on an average of 1 student/30 sf of school uses. Current California Code of Regulations, Title 5, Section 14030(g)(1)(A) states that classrooms be "960 sq. ft. or an equivalent space that provides not less than 30 sq. ft. per student." The current Title 5 regulations are based on an average of 30 students per classroom. In addition, revisions to the Title 5 Regulations are being pursued that would establish 960 sf as the standard for all grade 1-6 classrooms. As a conservative estimate, this 1 student/30 sf factor was utilized for calculating day care center and school sf for all levels</p>						

The related projects in combination with the proposed project would greatly intensify the land use in the immediate project area. Similar to the proposed project, it is likely that some of the students generated by the related projects would already reside in areas served by the Westside Union School District and AVUHSD, and would already be enrolled in schools within these districts. Additionally as the related project list comprises an area covered by multiple schools it is likely that many of the students would attend schools other than the ones serving the proposed project. However, for a conservative analysis, it is assumed that all the students generated by the related projects would attend school within the Westside Union School District and AVUHSD.

None of the public schools that would serve the proposed project and the related projects would have adequate capacity to accommodate the cumulative student generation. Therefore, new or expanded schools may be needed, which would result in a potentially significant cumulative impact. However, two of the projects on the related projects list (project numbers 16 and 55) involve the addition of school space. As such, these projects would not involve the generation of students, but would instead increase available school space. Additionally, as for the proposed project, the applicants of the related commercial and residential projects would be expected to pay required developer school fees to the Westside Union School District and AVUHSD (pursuant to SB 50) to help reduce any impacts they may have on school services. The provisions of SB 50, discussed above, are deemed to provide full and complete mitigation of school facilities impacts. The payment of these fees by the related projects would be mandatory and would ensure that cumulative impacts upon school services remain less than significant. Therefore, the proposed project's impact on schools would not be cumulatively considerable and cumulative impacts would be less than significant.

## **MITIGATION MEASURES**

No mitigation measures are required.

## **LEVEL OF SIGNIFICANCE AFTER MITIGATION**

The mandatory payment of school fees in conformance with SB 50, would address the proposed project's and cumulative projects' potentially significant impacts on Quartz Hill Elementary School and Quartz Hill High School. Furthermore, in accordance with SB 50, payment of school fees is deemed to provide full and complete mitigation to impacts to schools, pursuant to CEQA. Therefore, with payment of required developer fees, the proposed project's impact, and its contribution to a cumulative impact, on schools would be reduced to less than significant.

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**IV. ENVIRONMENTAL IMPACT ANALYSIS**  
**M. PUBLIC SERVICES**  
**4. PARKS**

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**ENVIRONMENTAL SETTING**

The City of Lancaster Department of Parks, Recreation and Arts manages all municipally owned and operated recreation and park facilities within the City. The City of Lancaster Department of Parks, Recreation and Arts operates and maintains 561.2 acres of parkland.<sup>13</sup> Thus, with 140,300 residents served by the City of Lancaster Department of Parks, Recreation and Arts the City's parkland ratio is four acres of parkland per 1,000 residents.<sup>14</sup> A Master Plan for Parks, Recreation and Arts for the City has recently been completed and approved. The existing park facilities are categorized into five groups: neighborhood, community, linear, conservation area/open space, and special use areas. The definitions of these groupings will be further refined in the Master Plan. The City of Lancaster currently has five neighborhood parks, six community parks, one linear park, one open space area, and six special use areas.<sup>15</sup> In addition, there are two County parks in the Lancaster area, the Apollo County Park in Lancaster and the George Lane County Park in Quartz Hill. The Master Plan for Parks, Recreation and Arts provides standards for the provision of recreational facilities throughout the City and will include Local Recreation Standards. The City's General Plan sets the acreage standard at five acres per 1,000 residents. Therefore, the City has not yet met its acreage standard for parks. This is attributed to the City's fast growing population.<sup>16</sup>

George Lane Park currently serves the project site (and is located less than one mile from the site). However, since the project is a commercial development and does not include any residential uses, no park is needed to serve the project site.

The City of Lancaster only requires fees from residential development. As the proposed project is a commercial development no fees would be required.

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<sup>13</sup> *Written correspondence with Bob Greene, Assistant Director, Lancaster Department of Parks, Recreation and Arts, July 17, 2007.*

<sup>14</sup> *Ibid.*

<sup>15</sup> *City of Lancaster, Existing Conditions Summary Report, 2006.*

<sup>16</sup> *Ibid.*

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## ENVIRONMENTAL IMPACTS

### Thresholds of Significance

In accordance with Appendix G to the State CEQA Guidelines, a significant impact would occur if a project would:

- (a) Result in substantial adverse physical impacts associated with the provision of new or physically altered parks, or need for new or physically altered parks, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives of the parks department;
  - Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or
  - Include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment.

### Project Impacts

Typically, residential developments have the greatest potential to result in impacts to parks and recreation facilities. This is a result of residential developments generating a permanent increase in the population. In general, employees are not likely to have the time to use parks and recreational facilities during working hours, and are more likely to use parks and recreational facilities near their homes during non-work hours. George Lane Park is located less than one mile from the project site. However, it is unlikely that many employees would have time to travel to a park during work hours. The proposed project would not result in an increase of permanent residents to the project site, as is discussed in Section IV.L, Population and Housing. Therefore the proposed project is not likely to increase park usage. Although there is a need for increased parkland in the Lancaster area, the proposed project would not contribute to this deficit and therefore would result in no impact with respect to parks and recreational facilities.

## CUMULATIVE IMPACTS

The proposed project, in combination with the related projects, would be expected to increase the cumulative demand for parks and recreational facilities in the project area. Of the 82 related projects, 78 projects would generate residents and, therefore, would create a cumulative demand for parkland in the project area. In general, the other five related projects would generate employees and/or students, who would not be expected to use local park or recreational facilities to a great extent, as they typically would not have long periods of time during their work or school days to visit parks and recreational facilities, and would be more likely to patronize park and recreational facilities near their homes during non-work or non-school hours.

As discussed in Section IV.L, Population and Housing, the proposed project and the residential related projects would generate a cumulative population increase. This would result in an increased demand for parkland and recreational facilities. However, as the proposed project would result in no impact with respect to parks and recreational facilities, the proposed project's contribution would not be cumulatively considerable and impacts would be less than significant.

### **MITIGATION MEASURES**

No mitigation measures are required.

### **LEVEL OF SIGNIFICANCE AFTER MITIGATION**

The proposed project would have no impact with respect to parks and recreational facilities.

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**IV. ENVIRONMENTAL IMPACT ANALYSIS**  
**M. PUBLIC SERVICES**  
**5. LIBRARIES**

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**ENVIRONMENTAL SETTING**

**Existing Facilities**

Library services in the City of Lancaster are provided by County of Los Angeles Public Libraries (County Libraries). The County Libraries provide library service to over 3.5 million residents living in unincorporated areas and to residents of 51 incorporated cities in Los Angeles County. The service area extends over 3,000 square miles. Library services are provided by 84 Regional and Community Libraries. The County Library uses the standard of 2.75 library material items per person and 0.5 gross square feet (sf) per person to determine a library's service adequacy to its community. The project site is approximately six miles away from the Lancaster Library and approximately one mile away from the Quartz Hill Library.

***Lancaster Library***

The Lancaster Library is located at 601 Lancaster Boulevard. The current collection totals 365,989 items with 325,537 books, 15,154 audio recordings, 16,773 video recordings, federal and state publications, 280 magazine and newspaper subscriptions, and other special materials. The library, with an area of 48,721 square feet, features the following major areas: an adult reading room, a separate children's area, a young adult area, a circulation desk with 10 check-out terminals, and a meeting room with a capacity of 176 persons.<sup>17</sup> The Lancaster library does not currently meet its service standards.

***Quartz Hill Library***

The Quartz Hill Library is located at 42018 North 50<sup>th</sup> Street West. Quartz Hill is located adjacent to the City of Lancaster and is part of the unincorporated County of Los Angeles. The collection consists of 68,479 books, 5,220 audio recordings including compact discs and books-on-tape, telephone directories, 5,670 video recordings, auto manuals, pamphlets, 53 newspapers and magazines for adults and children, and English language learning materials. Quartz Hill Library is 3,500 square feet in size and includes a separate room for children's programs. The Quartz Hill Library does not currently meet its service standards.

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<sup>17</sup> County of Los Angeles Public Library, Lancaster Regional Library, website: <http://colapublib.org/libs/lancaster/>, accessed June 28, 2007.

## **Regulatory Framework**

### ***General Plan***

Chapter IV, Plan for the Living Environment, of the City's General Plan contains objectives and policies with respect to library facilities.<sup>18</sup> These objectives and policies promote the continued adequate provision of library facilities and service levels. The General Plan also sets forth performance objectives for the level of service provided. The current performance objective for library facilities is 0.35 square feet of library space and 2.0 loanable material items per capita.

### ***Municipal Code***

The City's municipal code (Section 15.64.140) establishes library facilities fees. The library facilities fee is imposed on all new development in the City. The library facilities fee are used to finance land acquisition, design, construction, equipping, and related capital costs for local library facilities.

## **ENVIRONMENTAL IMPACTS**

### **Thresholds of Significance**

In accordance with Appendix G to the State CEQA Guidelines, a significant impact would occur if a project would:

- (a) Result in substantial adverse physical impacts associated with the provision of new or physically altered library facilities, or need for new or physically altered library facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios or other performance objectives for library services.

### **Project Impacts**

Development of the proposed project is a commercial development and would not bring new permanent residents to the area as discussed in Section IV.L, Population and Housing. The proposed project would result in a net increase of 927 employees; however, in general, employees of commercial sites are not likely to patronize libraries during working hours, as they are more likely to use libraries near their homes during non-work hours. Therefore, the proposed project would not generate the need for additional library space or the addition of volumes to the library collection. As the proposed project would not require the need for new or altered library facilities, the proposed project would result in no impact with respect to library facilities.

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<sup>18</sup> The City's existing General Plan was prepared in 1997 and is currently in the process of being updated.

## **CUMULATIVE IMPACTS**

The proposed project, in combination with the related projects, would be expected to increase the cumulative demand for library services in the project area. Of the 82 related projects, 78 projects would generate residents and, therefore, would create a cumulative demand for library services in the project area. In general, the other five related projects would generate employees and/or students, who would not be expected to use library facilities to a great extent, as they typically would not have long periods of time during their work or school days to visit library facilities, and would be more likely to libraries near their homes during non-work or non-school hours.

As discussed in Section IV.L, Population and Housing, the proposed project and the residential related projects would generate a cumulative population increase. This would result in an increased demand for library facilities. However, as the proposed project would result in no impact with respect to library services, the proposed project's contribution would not be cumulatively considerable and impacts would be less than significant.

## **MITIGATION MEASURES**

No mitigation measures are required.

## **LEVEL OF SIGNIFICANCE AFTER MITIGATION**

The proposed project would have no impact with respect to library services.

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## IV. ENVIRONMENTAL IMPACT ANALYSIS

### N. TRANSPORTATION/TRAFFIC

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The following summarizes the information provided in the traffic report prepared by Overland Traffic Consultants, Inc. entitled, Traffic Impact Analysis For The Commons at Quartz Hill Shopping Center, dated October 2008. The traffic impact analysis is included in Appendix K of this Draft EIR.

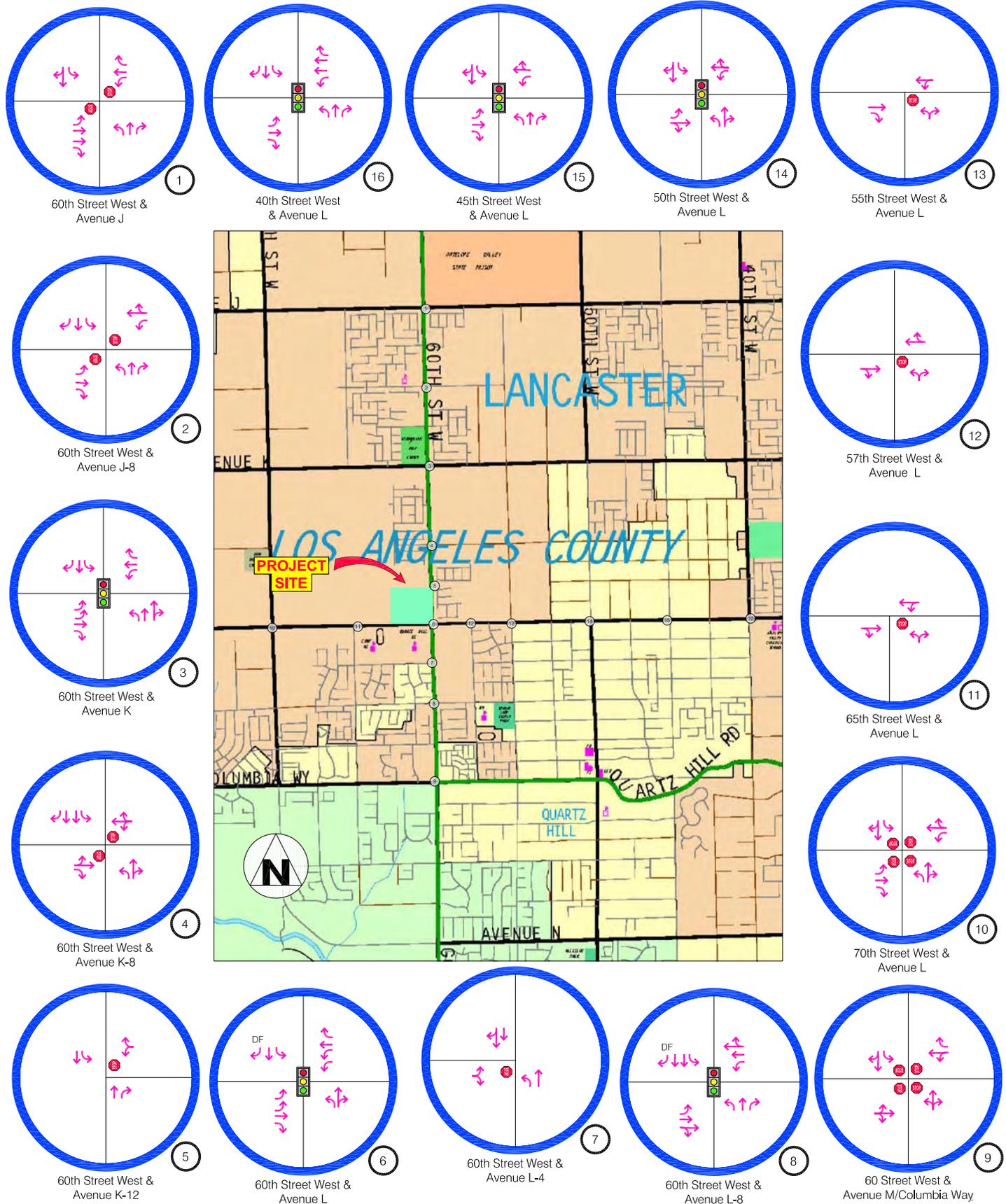
#### ENVIRONMENTAL SETTING

The project site is located in the City of Lancaster at the intersection of 60<sup>th</sup> Street West and Avenue L. Based on discussions with City of Lancaster staff, 16 intersections and eight street segments within the project's sphere of influence have been included in the traffic impact analysis for the AM and PM peak hours. These intersections and freeway segments are summarized in the following list and are shown on Figure IV.N-1, below:

- |  |  |
|--|--|
| 1. 60 <sup>th</sup> Street West & Avenue J               | 13. 55 <sup>th</sup> Street West & Avenue L                                      |
| 2. 60 <sup>th</sup> Street West & Avenue J-8             | 14. 50 <sup>th</sup> Street West & Avenue L                                      |
| 3. 60 <sup>th</sup> Street West & Avenue K               | 15. 45 <sup>th</sup> Street West & Avenue L                                      |
| 4. 60 <sup>th</sup> Street West & Avenue K-8             | 16. 40 <sup>th</sup> Street West & Avenue L                                      |
| 5. 60 <sup>th</sup> Street West & Avenue K-12            | 17. 60 <sup>th</sup> Street West between Avenue K-14 & Avenue L                  |
| 6. 60 <sup>th</sup> Street West & Avenue L               | 18. 60 <sup>th</sup> Street West between Avenue K-8 & Avenue K-14                |
| 7. 60 <sup>th</sup> Street West & Avenue L-4             | 19. 60 <sup>th</sup> Street West between Avenue L & Avenue L-4                   |
| 8. 60 <sup>th</sup> Street West & Avenue L-8             | 20. 60 <sup>th</sup> Street West between Avenue L-8 & Avenue L-4                 |
| 9. 60 <sup>th</sup> Street West & Avenue M/ Columbia Way | 21. Avenue L between 55 <sup>th</sup> Street & 57 <sup>th</sup> Street           |
| 10. 70 <sup>th</sup> Street West & Avenue L              | 22. Avenue L between 57 <sup>th</sup> Street & and 60 <sup>th</sup> Street West  |
| 11. 65 <sup>th</sup> Street West & Avenue L              | 23. Avenue L between 60 <sup>th</sup> Street West & 62 <sup>nd</sup> Street West |
| 12. 57 <sup>th</sup> Street West & Avenue L              | 24. Avenue L between 62 <sup>nd</sup> Street West & 65 <sup>th</sup> Street West |

#### *Streets and Highways*

The nearest regional facility serving the project site is the Antelope Valley Freeway (Highway 14), which is under the jurisdiction of the California Department of Transportation (Caltrans). The Antelope Valley Freeway is located approximately four and a half miles east of the project site. This north-south freeway provides two to three mixed-flow lanes in each direction in the project vicinity. The freeway originates along the Golden State Freeway at the north end of the San Fernando Valley and extends through Santa Clarita, Palmdale, Lancaster, and further north.



Source: Overland Traffic Consultants, October 2008.



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Environmental Planning and Research

Figure IV.N-1  
Study Intersection Characteristics

Avenue J is an east-west roadway designated as a Major Arterial (defined by the City of Lancaster as a roadway with ultimate width of 84 feet in 100 feet right-of-way). Avenue J is located north of the project site. It is an increased capacity intersection in the east-west direction at 60<sup>th</sup> Street West which requires provisions for dual left turn lanes, separate right turn lanes plus the future amount of through travel lanes and bike lanes as required. Currently, Avenue J provides two eastbound and one westbound lane at 60<sup>th</sup> Street West.

Avenue J-8 is designated as a Secondary Arterial (defined by the City of Lancaster as a roadway with ultimate width of 68 feet in 84 feet right-of-way) and is situated north of the project site. This discontinuous roadway extends from west of 65<sup>th</sup> Street West to east of 57<sup>th</sup> Street West in the immediate project area. The roadway provides one lane in each direction in the vicinity of the project.

Avenue K is designated as a Major Arterial roadway. Avenue K provides one lane in each direction in the immediate project vicinity. This east-west roadway is designated as increased capacity intersections at most major intersections.

Avenue K-8 is designated as a Secondary Arterial and operates in the east-west direction but is currently a discontinuous roadway. Avenue K-8 is located north of the project site and provides one lane in each direction in the project vicinity.

Avenue L is designated as a Major Arterial from 110<sup>th</sup> Street West to 60<sup>th</sup> Street West and as a Regional Arterial from 60<sup>th</sup> Street West to the City boundary. Regional Arterials require 106 foot roadways within 120 foot right-of-ways. Avenue L at 60<sup>th</sup> Street West is an increased capacity intersection which requires additional right-of-way to provide dual left turn lanes in all directions and right turn lanes and bike lanes as required. This roadway creates the southern boundary of the project. Currently, there is only one through lane in each direction but dual east and westbound lanes with east and westbound right turn lanes.

Avenue L-4 is designated as a local roadway which requires a 42 foot roadway within a 60 foot right-of-way. Currently Avenue L-4 is discontinuous and provides one lane in each direction.

Avenue L-8 is designated as a Secondary Highway from 70<sup>th</sup> Street West to 20<sup>th</sup> Street West. One lane in each direction is provided in the east-west direction in the project vicinity.

Avenue M/Columbia Way is designated as a Major Arterial. Portions of Avenue M/Columbia Way are a mountainous road with horizontal and vertical elements. One lane in each direction is provided in the vicinity of the project.

70<sup>th</sup> Street West is a north-south Major Arterial. In the project vicinity this roadway operates with one lane in each direction.

65<sup>th</sup> Street West is a north-south Secondary Arterial from Avenue J to Avenue M/Columbia Way. This roadway is discontinuous north of Avenue L.

60<sup>th</sup> Street West is a north-south Major Arterial from Avenue G to Rosamond Boulevard in Kern County, and from Avenue L to the southern City boundary. Between Avenue G and Avenue L, 60<sup>th</sup> Street West is designated as a Regional Arterial. 60<sup>th</sup> Street West creates the eastern boundary of the project site. It is an Increased Capacity Intersection in all directions at Avenue G, Avenue H, Avenue I, Avenue K, and Avenue L. It is an Increased Capacity Intersection in the east-west direction only at Avenue J.

57<sup>th</sup> Street West is a north-south discontinuous local roadway. One lane in each direction is provided in the project vicinity with a terminus northbound at Avenue L.

55<sup>th</sup> Street West is a north-south Secondary Arterial between Avenue G and Avenue I and between Avenue J to Avenue M. 55<sup>th</sup> Street West provides one lane in each direction at Avenue L and is discontinuous north of Avenue L.

50<sup>th</sup> Street West is a north-south discontinuous Major Arterial from the northern City boundary to the southern City boundary. Currently, the roadway terminates north of Avenue G.

45<sup>th</sup> Street West is a north-south roadway designated as a Secondary Arterial between Avenue G and Avenue K. Currently, the roadway terminates at Avenue I. One lane in each direction is provided in the project vicinity.

40<sup>th</sup> Street West is a north-south roadway designated as a Major Arterial from the northerly City boundary to Avenue F and then from Avenue G to the southern City boundary. The roadway currently terminates north of Avenue I and south of Avenue L. Currently, one lane in each direction is provided in the project vicinity.

### ***Public Transit***

Public transportation in the project area is provided by the Antelope Valley Transit Authority (AVTA). AVTA operates several routes throughout the community including Route 7 which operates from the Palmdale Transportation Center (Metrolink Station) to/from the Senior Center at Avenue I and 10<sup>th</sup> Street West. Route 7 runs along 60<sup>th</sup> Street West along the project frontage. Metrolink provides rail service from Lancaster through Palmdale, Santa Clarita, Burbank, and Los Angeles. A rail station is provided on Sierra Highway south of Lancaster Boulevard located northeast of the project site. Bus lines connect to the rail station. In addition, AVTA operates several commuter bus lines including Route 785 to Los Angeles, Route 786 to Century City and West Los Angeles, and Route 787 to the West San Fernando Valley. Santa Clarita Transit provides bus service between Santa Clarita and the Antelope Valley.

### **Existing Traffic Conditions**

Traffic volume data used in the following peak hour intersectional analysis were based on traffic counts conducted during 2007 by an independent count company (NDS Data Services) while schools were in session and there were no holidays. The weekday AM and PM peak period counts were conducted manually from 7:00 AM to 9:00 AM and 4:00 PM to 6:00 PM, on the following days: Wednesday, May

30, 2007; Thursday May 31, 2007; Wednesday, June 6, 2007; Tuesday, August 23, 2007; and Tuesday, August 28, 2007. The Saturday counts were conducted from 12:00 noon to 2:00 PM, on Saturday, June 2, 2007. Traffic counts were conducted by counting the number of vehicles at each of the study intersections making each allowed move. The peak-hour volume for each intersection was then determined by finding the four highest consecutive 15-minute volumes for all movements combined. The counts were increased by 2% to account for current year 2008 traffic conditions.

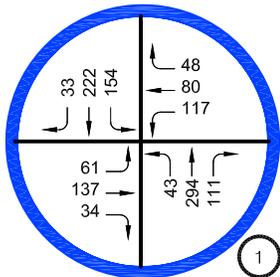
The existing (2008) peak hour traffic volume at each study intersection is illustrated in Figure IV.N-2 for the weekday AM peak hour, Figure IV.N-3 for the weekday PM peak hour, and Figure IV.N-4 for the mid-day Saturday rush hour. The driveway locations are not yet intersections and are therefore determined based on the counts from the adjacent intersections.

The traffic conditions analysis was then conducted using the Intersection Capacity Utilization (ICU) method for the signalized intersections, and Highway Capacity Manual (HCM) for two-way and four-way stopped intersections method (delay) for the unsignalized intersections. The HCM two-way stopped intersection methodology does not evaluate conditions where there are more than two through lanes on the major roadway. Therefore, the unsignalized locations where there are three through lanes were evaluated using the HCM methodology with third through lane incorporated into the analysis as a dedicated right turn lane to simulate the activity at the intersection.

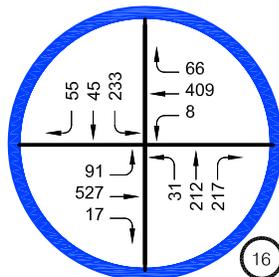
The study intersections were evaluated using these methodologies pursuant to the criteria established by the City of Lancaster. The baseline peak hour traffic counts were used along with intersection lane configurations and traffic controls to determine the intersection's operating condition.

The peak hour traffic counts were used along with current intersection lane configurations to determine the intersection's operating condition. The available capacity for key intersection movements is directly related to traffic demand. The capacity per hour of green time for each approach is calculated based upon ICU methodology at signalized locations. A lane capacity of 1,600 vehicles per hour per lane (reduced to 2,880 vehicles per hour for dual left turn lanes) and 10% yellow clearance time were used. To calculate capacity, the proportion of total signal time needed by key traffic movement is determined and compared to the total available time. The key movements are the opposing movements whose combined green time demands are the greatest, and the conflicting key movements are added and expressed as a decimal fraction. The resulting ICU displays the proportion of the total hour required to meet the intersection demand volumes in the key conflicting traffic movements.

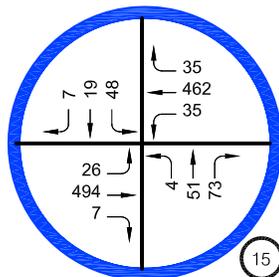
The HCM methodology for two-way and four-way stopped intersections evaluates the amount of delay based upon the intersection traffic volumes. The minor street/driveways typically provide access to residential or business areas. The major road traffic is typically operating free-flow with the exception of the right and left turns. Operation performance (delay) is measured at the minor roadways based upon the traffic volumes.



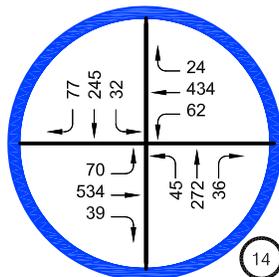
60TH STREET WEST & AVENUE J



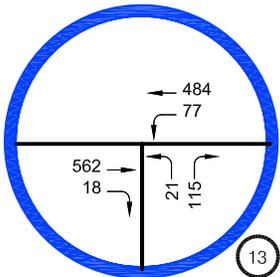
40TH STREET WEST & AVENUE L



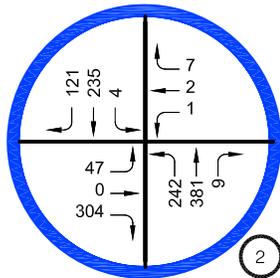
45TH STREET WEST & AVENUE L



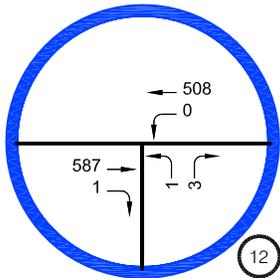
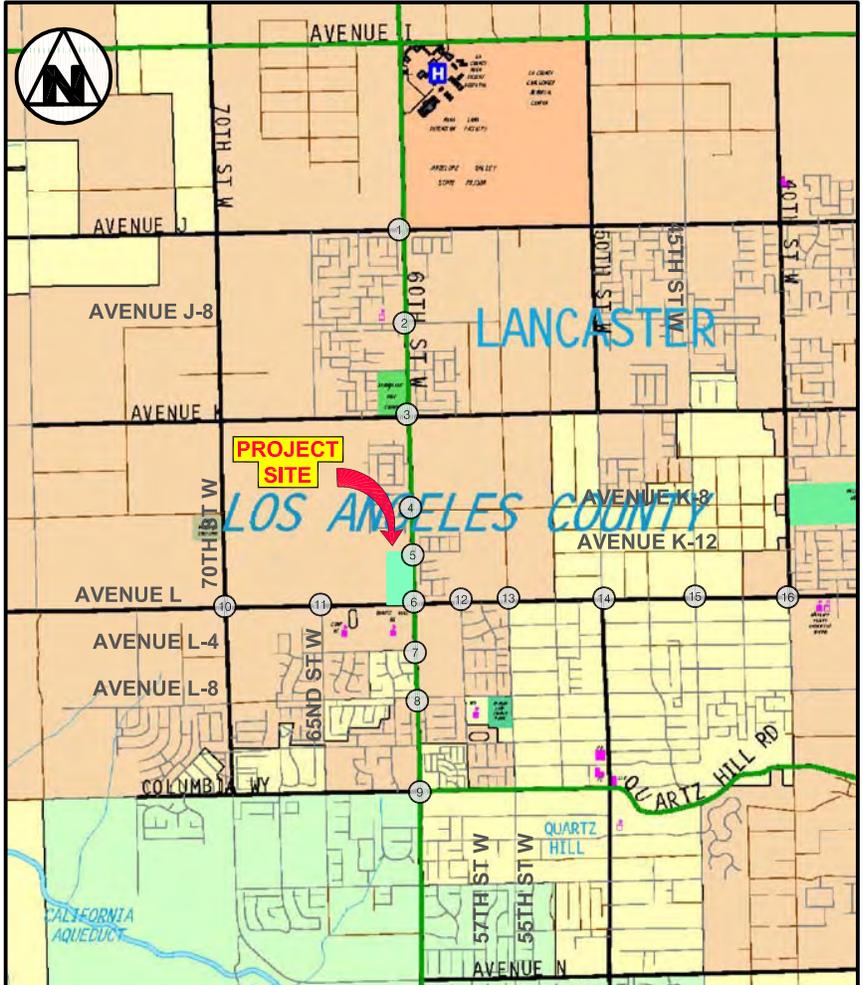
50TH STREET WEST & AVENUE L



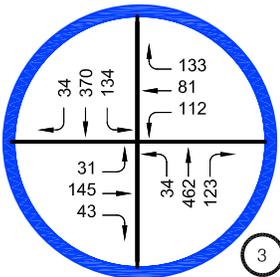
55TH STREET WEST & AVENUE L



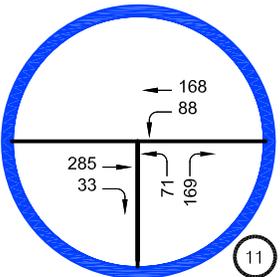
60TH STREET WEST & AVENUE J-8



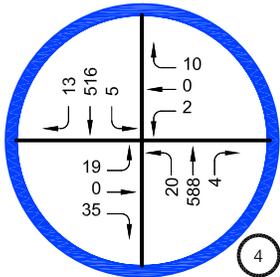
57TH STREET WEST & AVENUE L



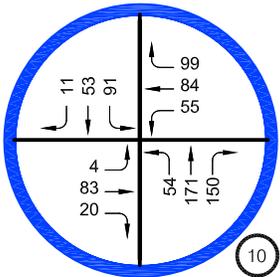
60TH STREET WEST & AVENUE K



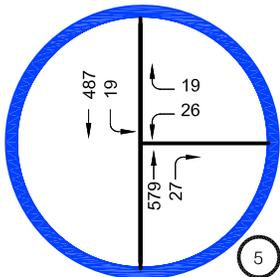
65TH STREET WEST & AVENUE L



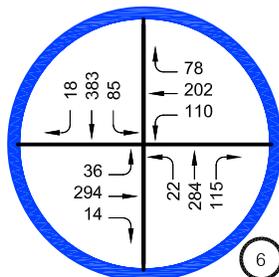
60TH STREET WEST & AVENUE K-8



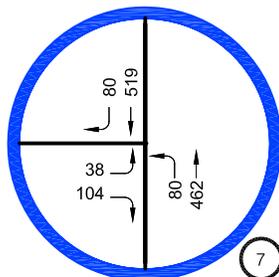
70TH STREET WEST & AVENUE L



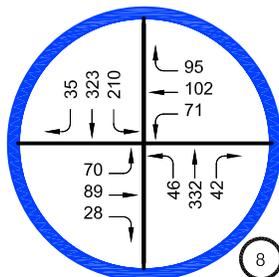
60TH STREET WEST & AVENUE K-12



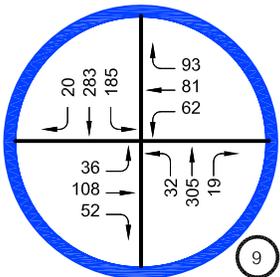
60TH STREET WEST & AVENUE L



60TH STREET WEST & AVENUE L-4



60TH STREET WEST & AVENUE L-8



60TH STREET WEST & AVENUE M/COLUMBIA

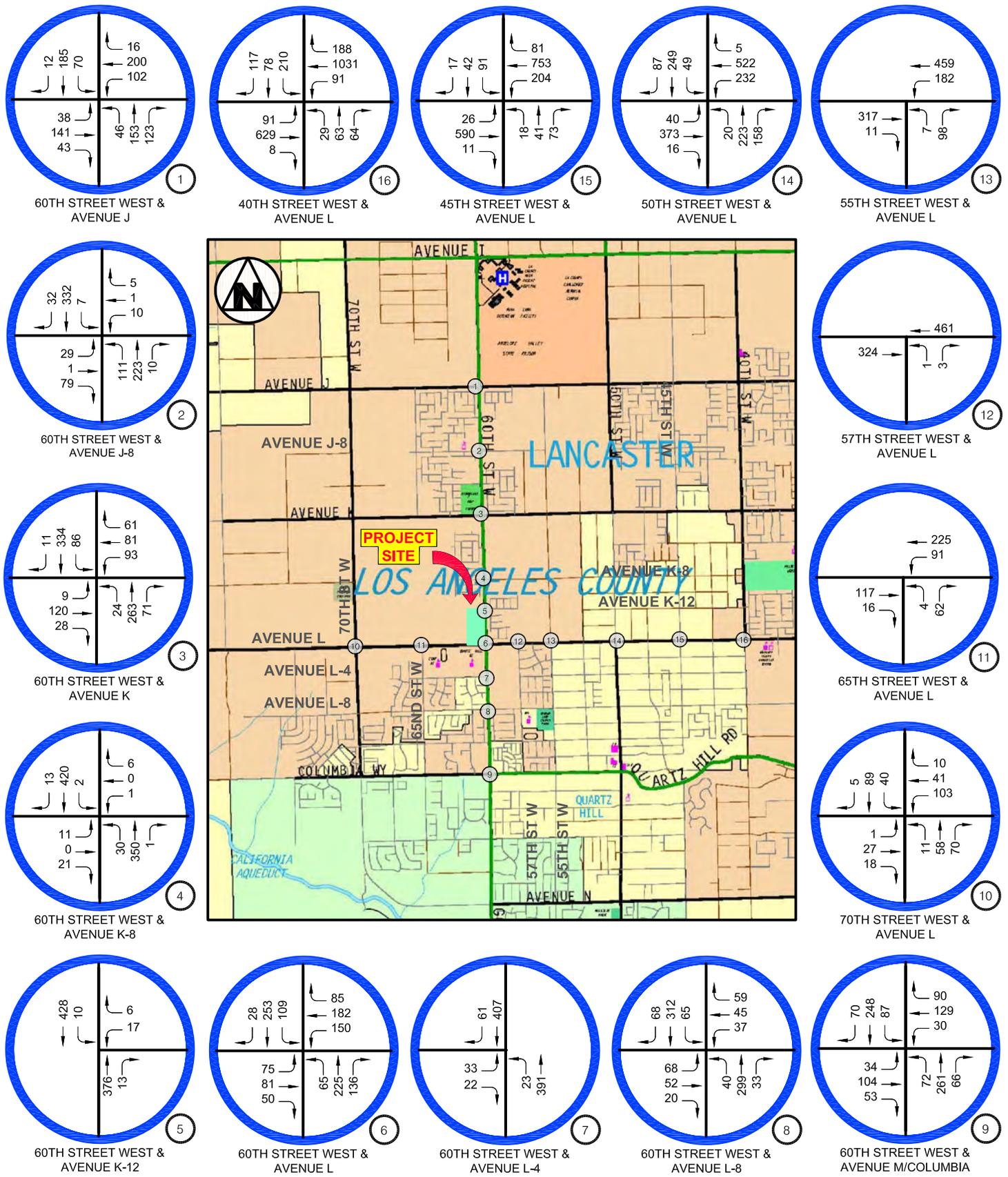
Source: Overland Traffic Consultants, October 2008.



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Figure IV.N-2  
Existing Traffic Volume  
AM Peak Hour



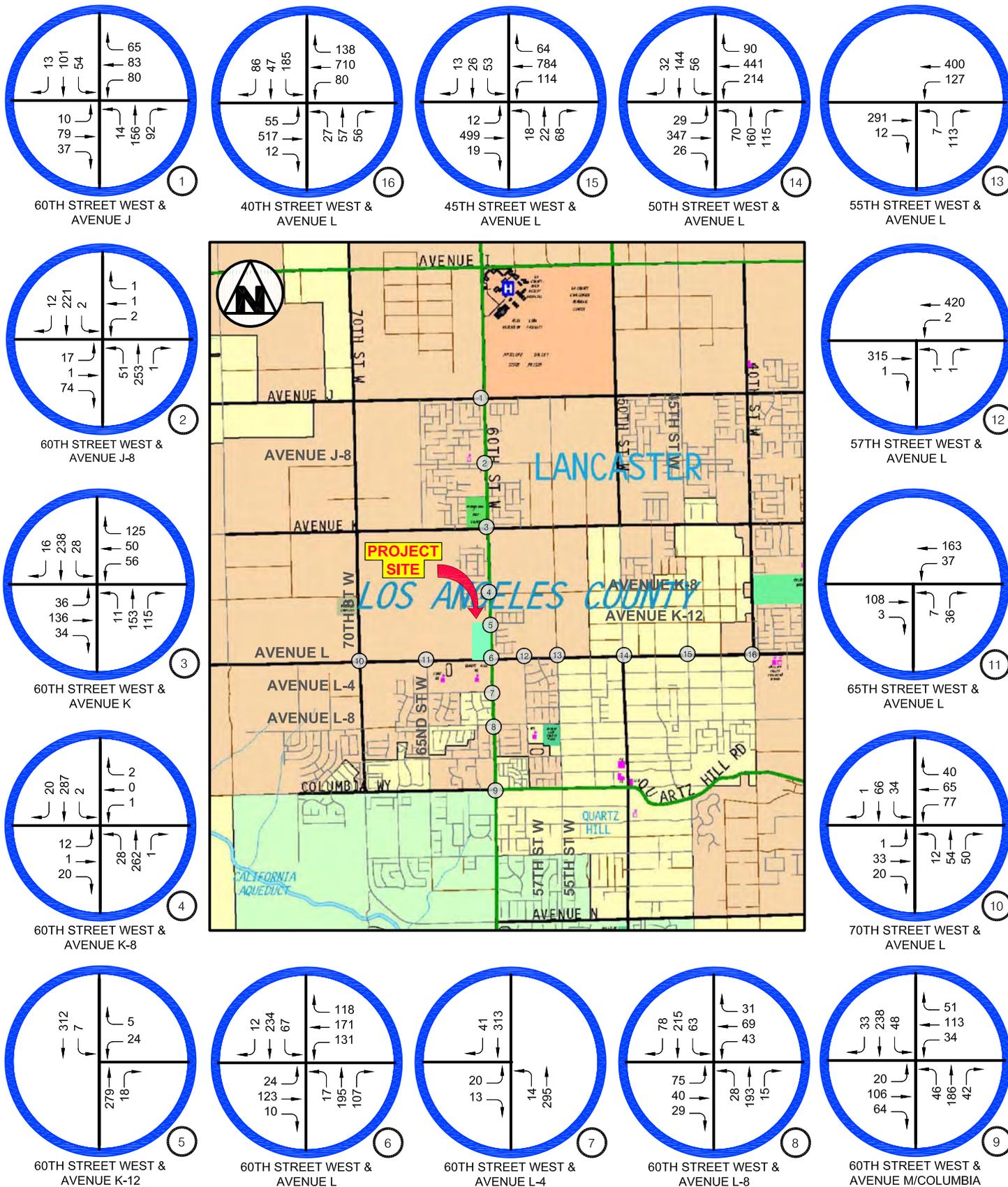
Source: Overland Traffic Consultants, October 2008.



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Figure IV.N-3  
Existing Traffic Volume  
PM Peak Hour



Source: Overland Traffic Consultants, October 2008.



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Environmental Planning and Research



Figure IV.N-4  
Existing Traffic Volume  
Saturday Peak Hour

Once the ICU/HCM value has been calculated, operating characteristics are assigned a level of service grade (A through F) to estimate the level of congestion and stability of the traffic flow. The term “Level of Service” (LOS) is used by traffic engineers to describe the quality of traffic flow. Definitions of the LOS grades are shown in Table IV.N-1 for signalized locations and Table IV.N-2 for unsignalized locations.

By applying these procedures to the intersection data, the ICU/HCM values and the corresponding LOS for existing traffic conditions were determined for each intersection.

The ICU/HCM and LOS values are summarized in Table IV.N-3. The driveway locations do not have existing data since they do not currently exist.

**Table IV.N-1  
ICU Level of Service Definitions**

<b>Level of Service</b>	<b>Description of Operating Condition</b>	<b>ICU Value</b>
A	No loaded cycles and few are even close. No approach phase is fully utilized with no delay.	0.00 - 0.60
B	A stable flow of traffic.	0.61 - 0.70
C	Stable operation continues. Loading is intermittent. Occasionally drivers may have to wait more on red signal and backups may develop behind turning vehicles.	0.71 - 0.80
D	Approaching instability. Delays may be lengthy during short times within the peak hour. Vehicles may be required to wait through more than one cycle.	0.81 - 0.90
E	At or near capacity with possible long queues for left-turning vehicles. Full utilization of every signal cycle is seldom attained.	0.91 - 1.00
F	Gridlock conditions with stoppages of long duration.	> 1.00

*Source: Overland Traffic Consultants, Inc., October 2008.*

**Table IV.N-2  
HCM Level of Service Definitions**

<b>Level of Service</b>	<b>Delay (sec.)</b>
A	Less than or equal to 10
B	10 – 15
C	16 – 25
D	26 – 35
E	36 – 50
F	Greater than 50

*Source: Overland Traffic Consultants, Inc., October 2008.*

**Table IV.N-3  
Intersection Capacity Utilization and Delay  
Analysis Summary Existing Conditions**

No.	Intersection	Peak Hour	Direction <sup>a</sup>	Existing (2008)	
				ICU/Delay	LOS
1	60 <sup>th</sup> Street West & Avenue J	AM	WB	117.7	F
			EB	27.6	D
		PM	WB	24.4	C
			EB	17.2	C
		SAT	WB	13.0	B
			EB	11.8	B
2	60 <sup>th</sup> Street West & Avenue J-8	AM	WB	14.3	B
			EB	13.4	B
		PM	WB	14.3	B
			EB	11.8	B
		SAT	WB	12.0	B
			EB	10.1	B
3	60 <sup>th</sup> Street West & Avenue K	AM	-	0.528	A
		PM	-	0.457	A
		SAT	-	0.376	A
4	60 <sup>th</sup> Street West & Avenue K-8	AM	WB	12.9	B
			EB	14.9	B
		PM	WB	10.6	B
			EB	11.8	B
		SAT	WB	10.3	B
			EB	10.7	B
5	60 <sup>th</sup> Street West & Avenue K-12	AM	WB	15.3	C
			EB	N/A	
		PM	WB	12.8	B
			EB	N/A	
		SAT	WB	11.5	B
			EB	N/A	
6	60 <sup>th</sup> Street West & Avenue L	AM	-	0.624	B
		PM	-	0.533	A
		SAT	-	0.453	A
7	60 <sup>th</sup> Street West & Avenue L-4	AM	WB	15.7	C
			EB	N/A	
		PM	WB	13.7	B
			EB	N/A	
		SAT	WB	11.5	B
			EB	N/A	
8	60 <sup>th</sup> Street West & Avenue L-8	AM	-	0.544	A
		PM	-	0.404	A
		SAT	-	0.339	A
9	60 <sup>th</sup> Street West & Avenue M/Columbia	AM	-	17.80	C
		PM	-	19.76	C
		SAT	-	13.21	B

**Table IV.N-3 (Continued)**  
**Intersection Capacity Utilization and Delay**  
**Analysis Summary Existing Conditions**

No.	Intersection	Peak Hour	Direction <sup>a</sup>	Existing (2008)	
				ICU/Delay	LOS
10	70 <sup>th</sup> Street West & Avenue L	AM	-	11.12	B
		PM	-	8.68	A
		SAT	-	8.47	A
11	65 <sup>th</sup> Street West & Avenue L	AM	NB	13.2	B
		PM	NB	9.2	A
		SAT	NB	9.1	A
12	57 <sup>th</sup> Street West & Avenue L	AM	NB	14.1	B
		PM	NB	11.2	B
		SAT	NB	12.2	B
13	55 <sup>th</sup> Street West & Avenue L	AM	NB	17.8	C
		PM	NB	12.1	B
		SAT	NB	11.4	B
14	50 <sup>th</sup> Street West & Avenue L	AM	-	0.726	C
		PM	-	0.758	C
		SAT	-	0.662	B
15	45 <sup>th</sup> Street West & Avenue L	AM	-	0.507	A
		PM	-	0.740	C
		SAT	-	0.719	C
16	40 <sup>th</sup> Street West & Avenue L	AM	-	0.716	C
		PM	-	0.721	C
		SAT	-	0.624	B

<sup>a</sup> Direction used for two-way stopped control delay analysis only (unsignalized intersections).  
Source: Overland Traffic Consultants, Inc., October 2008.

## ENVIRONMENTAL IMPACTS

### Thresholds of Significance

Traffic Impacts would be considered significant if the proposed project:

- a) Caused an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e. result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio on roads, or congestion at intersections);
- b) Exceeded, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways;
- c) Resulted in a change in air traffic patterns, including either an increase in traffic levels or change in location that results in substantial safety risks;

- d) Substantially increased hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment);
- e) Resulted in inadequate emergency access;
- f) Resulted in inadequate parking capacity; or,
- g) Conflicted with adopted policies, plans, or programs supporting alternative transportation (e.g. bus turnouts, bicycle racks).

According to the standards adopted by the City of Lancaster, a traffic impact is considered significant if the project related increase in the ICU/HCS value degrades an intersection currently operating at an acceptable level of service (LOS A – D) to a deficient level (LOS E or F) or if the project related increase in the ICU value equals or exceeds the thresholds shown in Table IV.N-4 below for signalized and unsignalized intersections.

**Table IV.N-4  
Significant Impact Criteria for Signalized and Unsignalized  
Intersections**

Pre-Project LOS	Signalized Intersections – Project V/C Increase	Unsignalized Intersections – Project Percentage Delay Increase
E	0.02	2%
F	0.02	2%

*Source: Overland Traffic Consultants, Inc., October 2008.*

### **Project Impacts**

As discussed in Section IV.A, Impacts Found Less Than Significant of this Draft EIR, the proposed project would have no impact with respect to Threshold c), Threshold d), Threshold e), and Threshold g) listed above. The following impact analysis addresses Threshold a), b), and f) as listed above.

### ***Trip Generation***

Trip generation rates for the proposed project were obtained from published rates contained in the Institute of Transportation Engineers (ITE) Trip Generation, 7<sup>th</sup> Edition. This publication of traffic generation studies has become the industry standard for estimating traffic generation of different land uses.

- (a) On the basis of the ITE trip generation rates contained in the traffic study (included as Appendix K of this Draft EIR), estimates of the project's traffic were calculated and are summarized in Table IV.N-5 (weekday) and Traffic in (c) + the proposed traffic and mitigation, if necessary.

Table IV.N-6 (weekend). Since both Avenue L and 60<sup>th</sup> Street West are arterial roadways, it would be reasonable to assume that some of the patrons to the shopping center would already be utilizing the roadways (not new vehicle trips) on the way to/from other destinations and make a stop at the project as part of another trip. The Trip Generation Handbook, An ITE Recommended Practice identifies a range of pass-by trips from about 8% to 68% of the trips for shopping centers. Typically, the smaller the shopping center, the larger the pass-by reduction. A conservative to average 25% reduction in the vehicle trips was incorporated into the analysis to reflect the pass-by activity for the proposed project. No pass-by reductions were taken at the site adjacent intersection of 60<sup>th</sup> Street West and Avenue L, or at the driveways. Interaction between the land uses where one person stops at more than one venue would be expected for a shopping center of this size. According to the ITE Recommended Practice reference noted above, internal capture differs based on the land uses. As a large anchor, a conservative 10% internal capture was applied to the super discount store, a 30% internal capture was applied to the fast food restaurants, a 25% internal capture was applied to the bank, and a 20% internal capture was applied to the pharmacy and restaurants. The internal capture rate is already represented in the shopping center rate so it is not applied a second time.

**Table IV.N-5**  
**Estimated Weekday Project Traffic Generation**

Description	Size	Daily Traffic	AM Peak Hour			PM Peak Hour		
			Total	In	Out	Total	In	Out
Bldg 1 – Super Discount Store	195,906 sf	9,641	360	184	176	758	372	386
Internal Capture	10%	(964)	(36)	(18)	(18)	(76)	(37)	(39)
<b>Subtotal Building 1</b>	<b>195,906 sf</b>	<b>8,677</b>	<b>324</b>	<b>166</b>	<b>158</b>	<b>682</b>	<b>335</b>	<b>347</b>
Bldg 3 - Fast Food	2,448 sf	1,215	130	66	64	85	44	41
Bldg 5 – Fast Food	1,750 sf	868	93	47	46	61	32	29
Internal Capture	30%	(625)	(67)	(34)	(33)	(44)	(23)	(21)
<b>Subtotal Buildings 3 &amp; 5</b>	<b>4,198 sf</b>	<b>1,458</b>	<b>156</b>	<b>79</b>	<b>77</b>	<b>102</b>	<b>53</b>	<b>49</b>
Bldg 6A – Restaurant	3,200 sf	407	37	19	18	35	21	14
Bldg 6B – Restaurant	7,895 sf	1,004	91	47	44	87	53	34
Internal Capture	20%	(282)	(25)	(13)	(12)	(25)	(15)	(10)
<b>Subtotal Buildings 6A &amp; 6B</b>	<b>11,095 sf</b>	<b>1,129</b>	<b>103</b>	<b>53</b>	<b>50</b>	<b>97</b>	<b>59</b>	<b>38</b>
Bldg 4 – Pharmacy	14,740 sf	1,299	39	22	17	127	62	65
Internal Capture	20%	(260)	(7)	(4)	(3)	(25)	(12)	(13)
<b>Subtotal Building 4</b>	<b>14,470 sf</b>	<b>1,039</b>	<b>32</b>	<b>18</b>	<b>14</b>	<b>102</b>	<b>50</b>	<b>52</b>
Bldg 2 – Retail	89,911 sf	6,337	147	90	57	584	280	304
Bldg 8 – Retail	20,000 sf	2,386	60	37	23	216	104	112
Bldg 6A - Retail	3,200 sf	725	20	12	8	65	31	34
<b>Subtotal Buildings 2, 8, 6A</b>	<b>113,111 sf</b>	<b>9,448</b>	<b>227</b>	<b>139</b>	<b>88</b>	<b>865</b>	<b>415</b>	<b>450</b>
Bldg 7 – Bank	5,500 sf	1,356	68	38	30	252	126	126
Internal Capture	25%	(339)	(18)	(10)	(8)	(64)	(32)	(32)
<b>Subtotal Building 7</b>	<b>5,500 sf</b>	<b>1,017</b>	<b>52</b>	<b>29</b>	<b>23</b>	<b>190</b>	<b>95</b>	<b>95</b>
<b>Proposed Project Subtotal</b>	<b>344,550 sf</b>	<b>22,768</b>	<b>894</b>	<b>484</b>	<b>410</b>	<b>2,038</b>	<b>1,007</b>	<b>1,031</b>
Pass-By Discount	25%	(5,692)	(224)	(121)	(103)	(510)	(252)	(258)
<b>TOTAL</b>	<b>344,550 sf</b>	<b>17,076</b>	<b>670</b>	<b>363</b>	<b>307</b>	<b>1,528</b>	<b>755</b>	<b>773</b>

Source: Overland Traffic Consultants, Inc., October 2008.

- (b) As shown in Table IV.N-5 and Traffic in (c) + the proposed traffic and mitigation, if necessary.

Table IV.N-6, the proposed project would be expected to add an average of 17,076 daily vehicle trips with 670 weekday AM peak hour trips, 1,528 weekday PM peak hour trips, and 2,012 midday Saturday trips to the roadway network. Figure IV.N-5 through Figure IV.N-7 illustrate the AM, PM and Saturday peak hour turn volumes for the proposed project.

### ***Trip Distribution***

A primary factor affecting trip direction is the location of the origination points of the patrons and employees of the shopping center. The estimated project directional trip distribution used in this analysis was based on the location of the employment and population centers and the available freeways and surface streets used to access the project site. Figure IV.N-8 illustrates the trip distribution used for the proposed project.

### ***Background Traffic Conditions***

Future traffic volume projections have been developed to analyze the traffic conditions after completion of other planned land developments including the proposed project. Pursuant to the LA County and City of Lancaster traffic impact guidelines, the following scenarios have been analyzed:

- (c) Existing traffic + ambient growth (added two percent per year ambient growth to 2012 study year);
- (d) Existing traffic + ambient growth + related projects (“without project” scenario);
- (e) Traffic in (b) + the proposed project traffic (“with project” scenario);
- (f) Traffic in (c) + the proposed traffic and mitigation, if necessary.

**Table IV.N-6  
Estimated Weekend Project Traffic Generation**

Description	Size	Saturday Daily	Saturday Mid-Day Peak Hour		
			Total	In	Out
Bldg 1 – Super Discount Store	195,906 sf	11,265	982	502	480
Internal Capture	10%	(1,127)	(98)	(50)	(48)
<b>Subtotal Building 1</b>	<b>195,906 sf</b>	<b>10,139</b>	<b>884</b>	<b>452</b>	<b>432</b>
Bldg 3 - Fast Food	2,448 sf	1,768	145	74	71
Bldg 5 – Fast Food	1,750 sf	1,264	104	53	51
Internal Capture	30%	(910)	(75)	(38)	(37)
<b>Subtotal Buildings 3 &amp; 5</b>	<b>4,198 sf</b>	<b>2,122</b>	<b>174</b>	<b>89</b>	<b>85</b>
Bldg 6A – Restaurant	3,200 sf	2,310	64	40	24

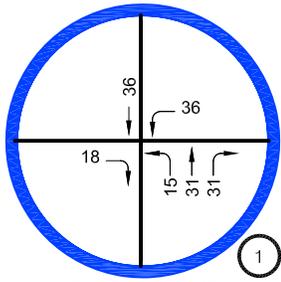
**Table IV.N-6 (Continued)**  
**Estimated Weekend Project Traffic Generation**

Description	Size	Saturday Daily	Saturday Mid-Day Peak Hour		
			Total	In	Out
Bldg 6B – Restaurant	7,895 sf	1,250	157	99	58
Internal Capture	20%	(712)	(44)	(28)	(16)
<b>Subtotal Buildings 6A &amp; 6B</b>	<b>11,095 sf</b>	<b>2,848</b>	<b>177</b>	<b>111</b>	<b>66</b>
Bldg 4 – Pharmacy	14,740 sf	1,157	116	58	58
Internal Capture	20%	(231)	(24)	(12)	(12)
<b>Subtotal Building 4</b>	<b>14,470 sf</b>	<b>926</b>	<b>92</b>	<b>46</b>	<b>46</b>
Bldg 2 – Retail	89,911 sf	8,641	808	420	388
Bldg 8 – Retail	20,000 sf	3,352	304	158	146
Bldg 6A - Retail	3,200 sf	1,057	92	48	44
<b>Subtotal Buildings 2, 8, 6A</b>	<b>113,111 sf</b>	<b>13,050</b>	<b>1,204</b>	<b>626</b>	<b>578</b>
Bldg 7 – Bank	5,500 sf	392	204	104	100
Internal Capture	25%	(98)	(51)	(26)	(25)
<b>Subtotal Building 7</b>	<b>5,500 sf</b>	<b>294</b>	<b>153</b>	<b>78</b>	<b>75</b>
<b>Proposed Project Subtotal</b>	<b>344,550 sf</b>	<b>29,379</b>	<b>2,684</b>	<b>1,402</b>	<b>1,282</b>
Pass-By Discount	25%	(7,345)	(672)	(351)	(321)
<b>TOTAL</b>	<b>344,550 sf</b>	<b>22,034</b>	<b>2,012</b>	<b>1,051</b>	<b>961</b>

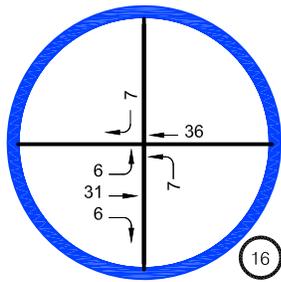
*Source: Overland Traffic Consultants, Inc., October 2008.*

Ambient growth represents projects being developed outside the analysis area or projects not currently identified which may add traffic to the area intersections. An increase of 2% per year has been identified by the City of Lancaster as the applicable rate of ambient growth for current development in the City. Existing conditions with the ambient growth is displayed in Table IV.N-7 below.

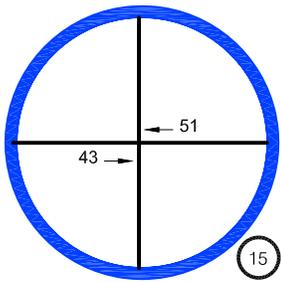
Comparing the changes in the traffic conditions between the scenarios provides the necessary information to determine if the added traffic volume creates a significant impact on the study intersections, based on the significance criteria described above.



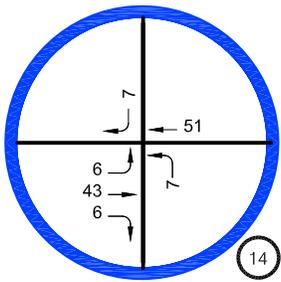
60TH STREET WEST & AVENUE J



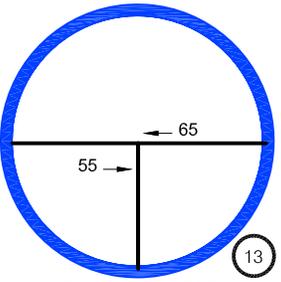
40TH STREET WEST & AVENUE L



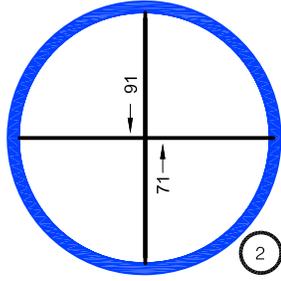
45TH STREET WEST & AVENUE L



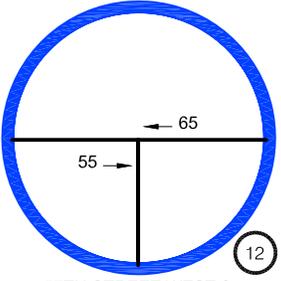
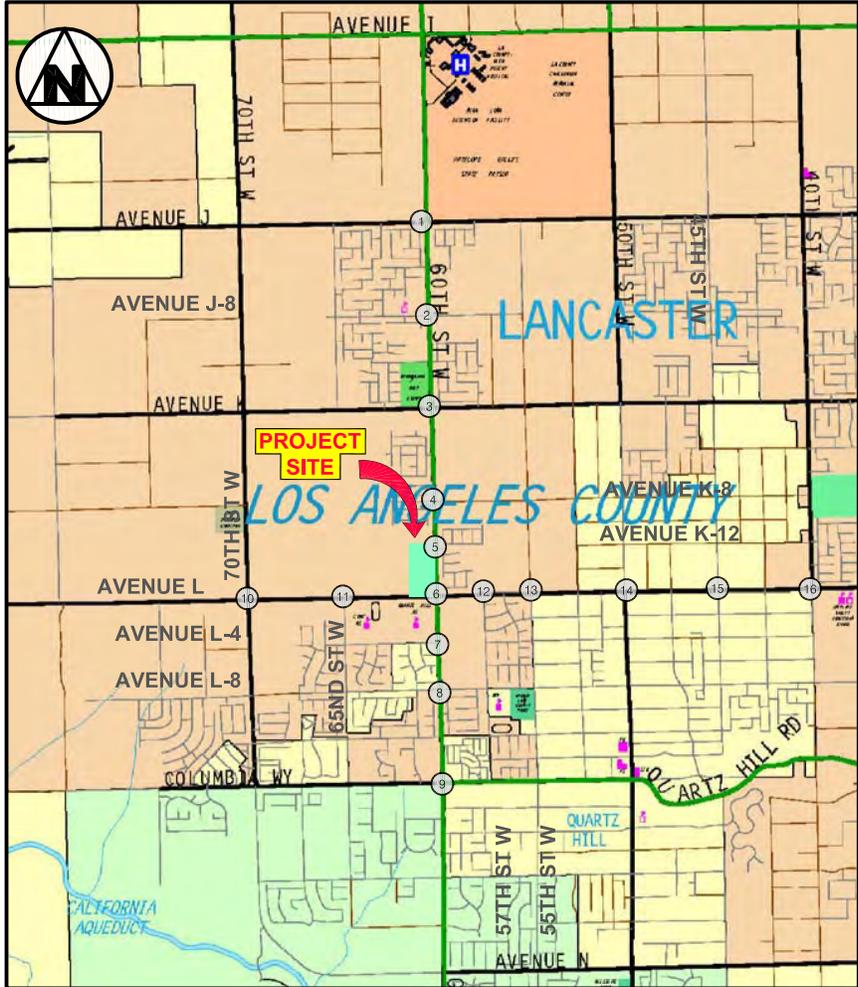
50TH STREET WEST & AVENUE L



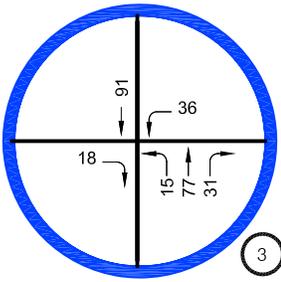
55TH STREET WEST & AVENUE L



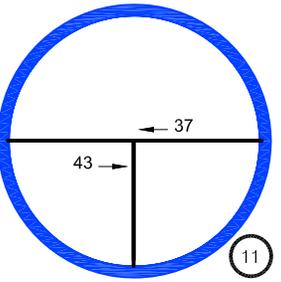
60TH STREET WEST & AVENUE J-8



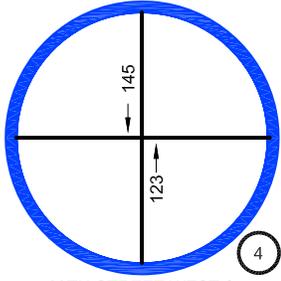
57TH STREET WEST & AVENUE L



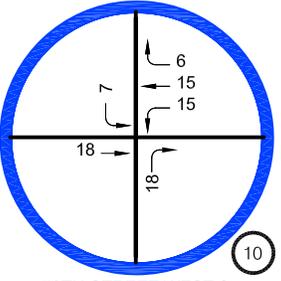
60TH STREET WEST & AVENUE K



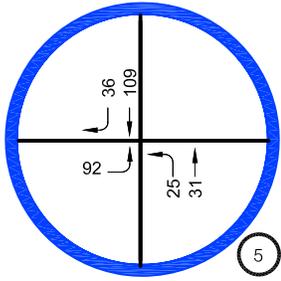
65TH STREET WEST & AVENUE L



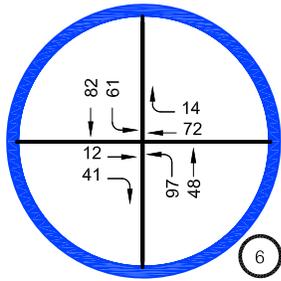
60TH STREET WEST & AVENUE K-8



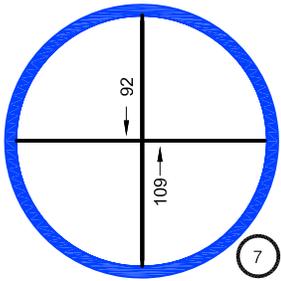
70TH STREET WEST & AVENUE L



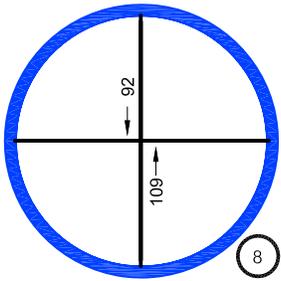
60TH STREET WEST & AVENUE K-12



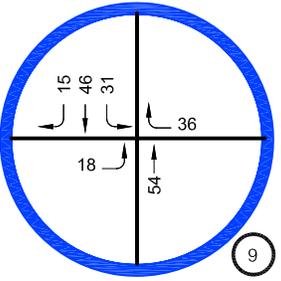
60TH STREET WEST & AVENUE L



60TH STREET WEST & AVENUE L-4



60TH STREET WEST & AVENUE L-8



60TH STREET WEST & AVENUE M/COLUMBIA

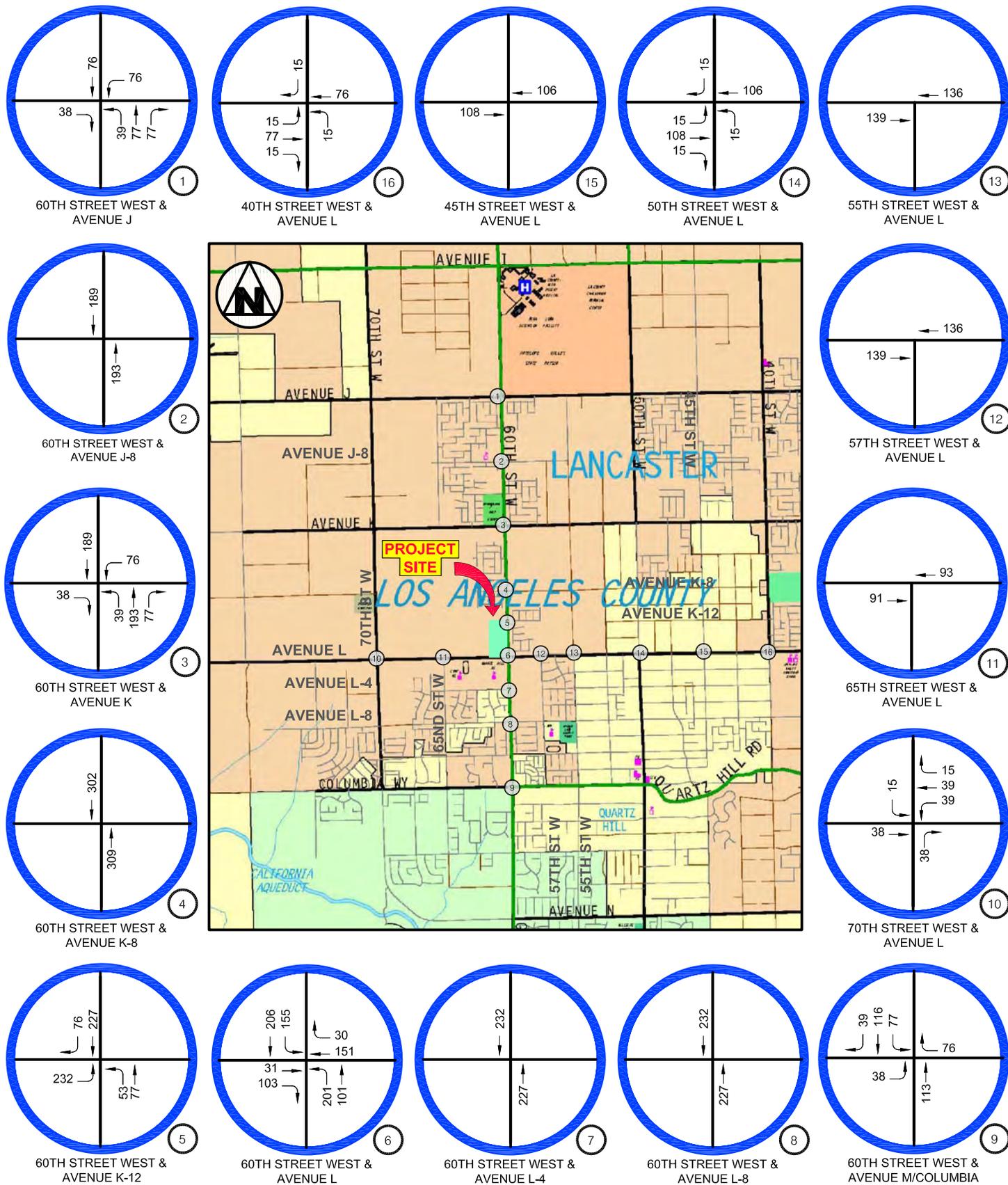
Source: Overland Traffic Consultants, October 2008.



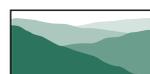
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Environmental Planning and Research



Figure IV.N-5  
Project Traffic Volume  
AM Peak Hour



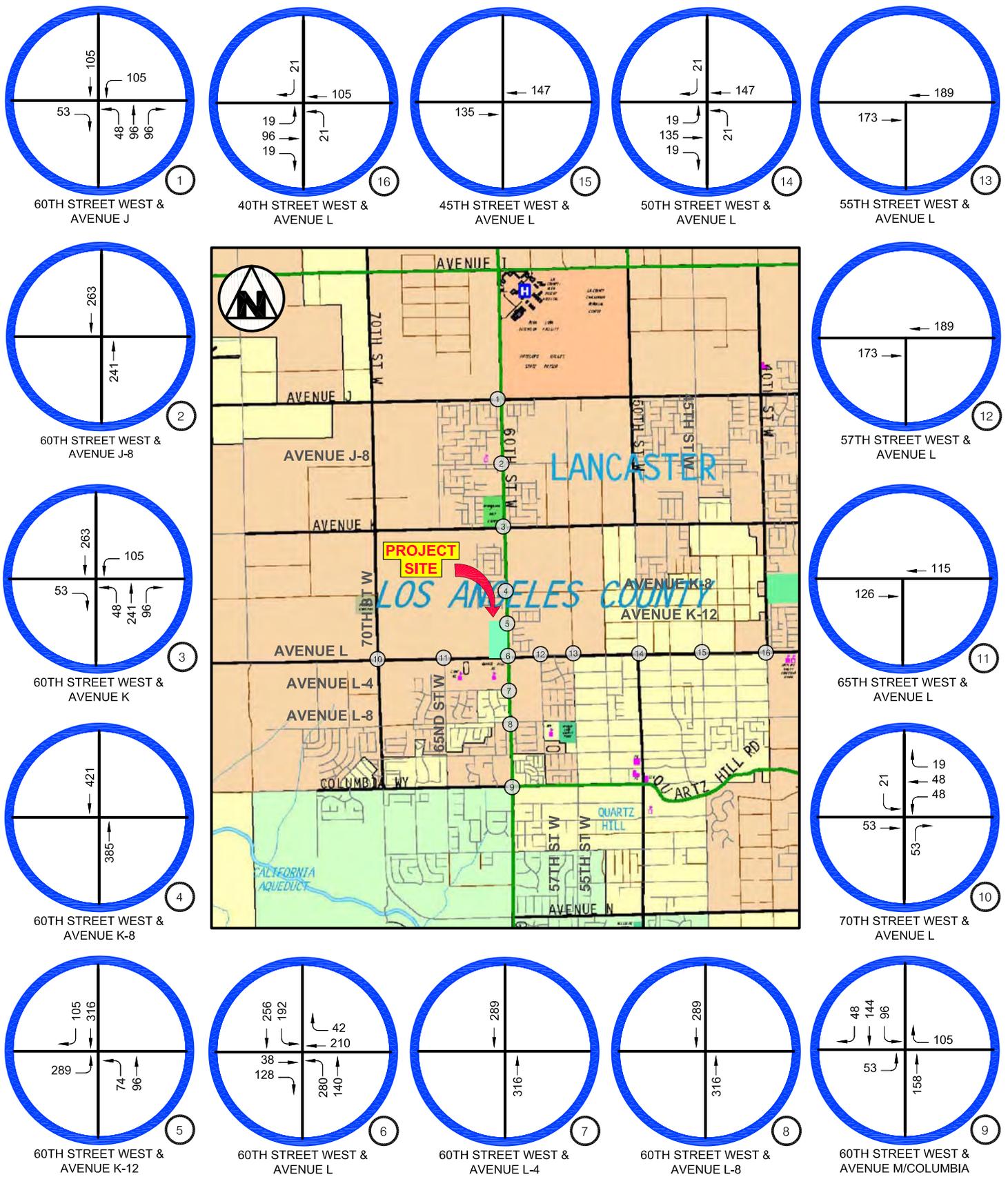
Source: Overland Traffic Consultants, October 2008.



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Figure IV.N-6  
Project Traffic Volume  
PM Peak Hour



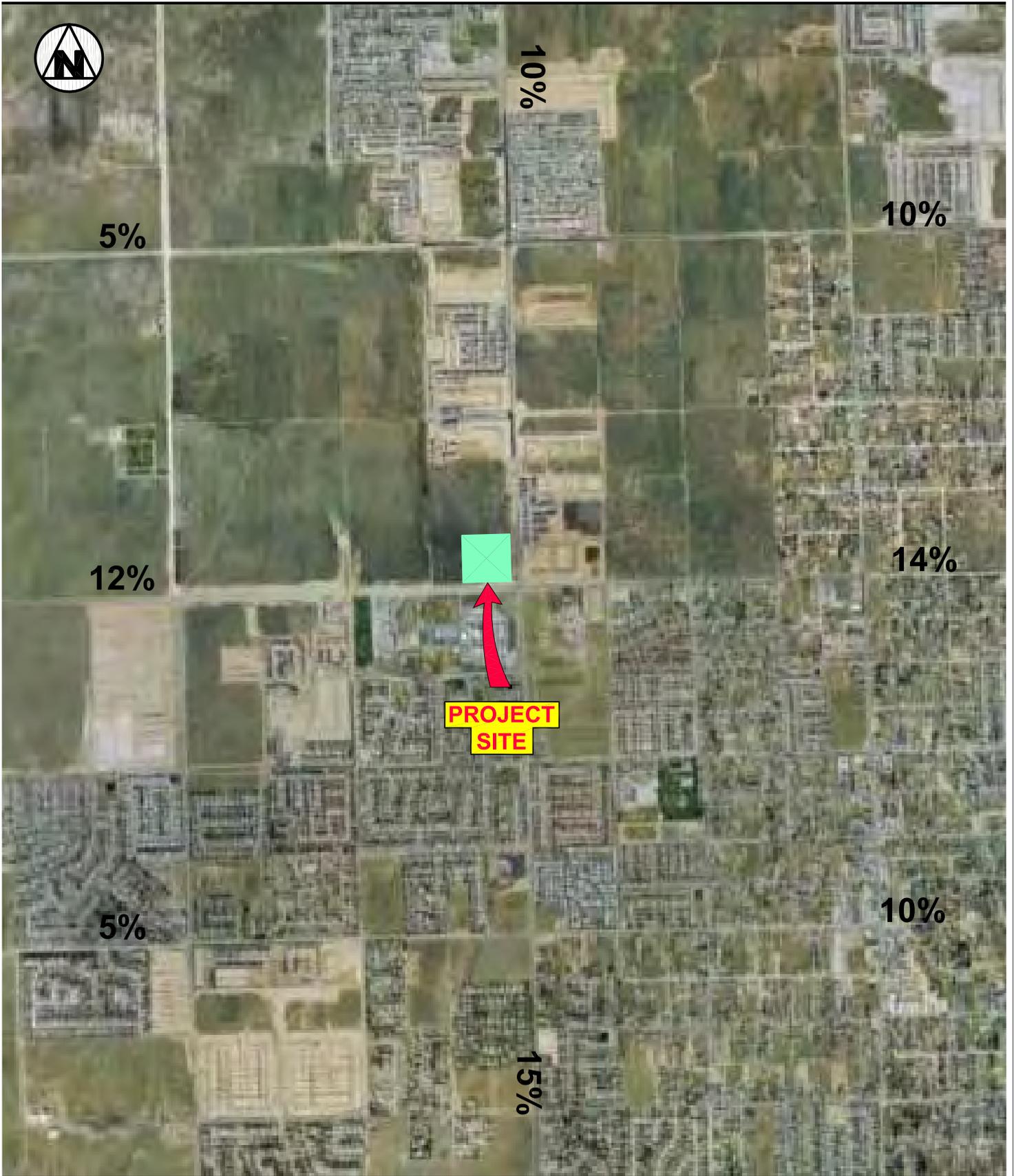
Source: Overland Traffic Consultants, October 2008.



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Environmental Planning and Research



Figure IV.N-7  
Project Traffic Volume  
Saturday Peak Hour



Source: Overland Traffic Consultants, October 2008.



**Table IV.N-7  
Traffic Conditions Existing + Ambient Growth**

No.	Intersection	Peak Hour	Direction	2008 Existing		Existing + Ambient	
				ICU/Delay	LOS	ICU/Delay	LOS
1	60 <sup>th</sup> Street West & Avenue J	AM	WB	117.7	F	268.8	F
			EB	27.6	D	34.3	D
		PM	WB	24.4	C	31.1	D
			EB	17.2	C	19.8	C
		Sat	WB	13.0	B	13.7	B
			EB	11.8	B	12.2	B
2	60 <sup>th</sup> Street West & Avenue J-8	AM	WB	14.3	B	14.9	B
			EB	13.4	B	14.5	B
		PM	WB	14.3	B	15.4	C
			EB	11.8	B	12.3	B
		Sat	WB	12.0	B	12.4	B
			EB	10.1	B	10.3	B
3	60 <sup>th</sup> Street West & Avenue K	AM	-	0.528	A	0.562	A
		PM	-	0.457	A	0.486	A
		Sat	-	0.376	A	0.399	A
4	60 <sup>th</sup> Street West & Avenue K-8	AM	WB	12.9	B	13.4	B
			EB	14.9	B	16.4	C
		PM	WB	10.6	B	10.8	B
			EB	11.8	B	12.3	B
		Sat	WB	10.3	B	10.5	B
			EB	10.7	B	11.1	B
5	60 <sup>th</sup> Street West & Avenue K-12	AM	WB	15.3	C	16.4	C
			EB	N/A	-	N/A	-
		PM	WB	12.8	B	13.4	B
			EB	N/A	-	N/A	-
		Sat	WB	11.5	B	11.9	B
			EB	N/A	-	N/A	-
6	60 <sup>th</sup> Street West & Avenue L	AM	-	0.624	B	0.665	B
		PM	-	0.533	A	0.569	A
		Sat	-	0.453	A	0.481	A
7	60 <sup>th</sup> Street West & Avenue L-4	AM	EB	15.7	C	17.4	C
			-	N/A	-	N/A	-
		PM	EB	13.7	B	14.5	B
			WB	N/A	-	N/A	-
		Sat	EB	11.5	B	12.0	B
			WB	N/A	-	N/A	-
8	60 <sup>th</sup> Street West & Avenue L-8	AM	-	0.544	A	0.581	A
		PM	-	0.404	A	0.427	A
		Sat	-	0.339	A	0.358	A
9	60 <sup>th</sup> Street West & Avenue M/Columbia	AM	-	17.80	C	21.85	C
		PM	-	19.76	C	25.69	D
		Sat	-	13.21	B	14.65	B
10	70 <sup>th</sup> Street West & Avenue L	AM	-	11.12	B	11.86	B
		PM	-	8.68	A	8.84	A
		Sat	-	8.47	A	8.60	A

**Table IV.N-7 (Continued)**  
**Traffic Conditions Existing + Ambient Growth**

No.	Intersection	Peak Hour	Direction	2008 Existing		Existing + Ambient	
				ICU/Delay	LOS	ICU/Delay	LOS
11	65 <sup>th</sup> Street West & Avenue L	AM	NB	13.2	B	14.2	B
		PM	NB	9.2	A	9.3	A
		Sat	NB	9.1	A	9.2	A
12	57 <sup>th</sup> Street West & Avenue L	AM	NB	14.1	B	15.0	B
		PM	NB	11.2	B	11.6	B
		Sat	NB	12.2	B	12.6	B
13	55 <sup>th</sup> Street West & Avenue L	AM	NB	17.8	C	20.4	C
		PM	NB	12.1	B	12.8	B
		Sat	NB	11.4	B	12.0	B
14	50 <sup>th</sup> Street West & Avenue L	AM	-	0.726	C	0.776	C
		PM	-	0.758	C	0.810	D
		Sat	-	0.662	B	0.708	C
15	45 <sup>th</sup> Street West & Avenue L	AM	-	0.507	A	0.539	A
		PM	-	0.740	C	0.791	C
		Sat	-	0.719	C	0.768	C
16	40 <sup>th</sup> Street West & Avenue L	AM	-	0.716	C	0.766	C
		PM	-	0.721	C	0.772	C
		Sat	-	0.624	B	0.667	B

*Notes:*  
*Dir = Direction, used for two-way stopped control delay analysis only (unsignalized locations)*  
*No Data = No information available as there is a system failure in the direction of analysis*  
*N/A = Not applicable*  
*ICU = Intersection capacity utilization which is the intersection's volume/capacity*  
*Delay = Calculated using Highway Capacity Method which is seconds of delay per vehicle.*  
*Source: Overland Traffic Consultants, Inc., October 2008.*

The future cumulative analysis includes other development projects located within the study area that are either under construction or planned. As part of this analysis, development projects were researched and project lists were obtained from the City of Lancaster. These lists were reviewed and 82 related projects were identified that could produce additional traffic at the study intersections. Cumulative impacts analyzed in this traffic analysis were conservatively assessed. Some of the cumulative projects may be downsized or may not be approved, and some approved projects may not be developed. In addition, many of the related projects have been or will be subject to traffic mitigation measures that will reduce the traffic impacts associated with those projects. However, these mitigation measures have not been taken into account in projecting the environmental impact of the related projects. Therefore, the cumulative analysis provided is conservative and would result in greater impacts than actually anticipated. It should be noted that the proposed project, or any actions taken by the City regarding the proposed project, does not have a direct bearing on these other related projects. The locations of the related projects are shown in Figure IV.N-9.

To evaluate future traffic conditions with the related projects, estimates of the peak hour trips generated by the projects have been calculated by applying ITE traffic generation rates. The potential traffic

impacts created by the ambient traffic growth and related projects are shown in Table IV.N-8 below, and in Figure IV.N-10 through Figure IV.N-12.

### ***Future with Project Traffic Volumes***

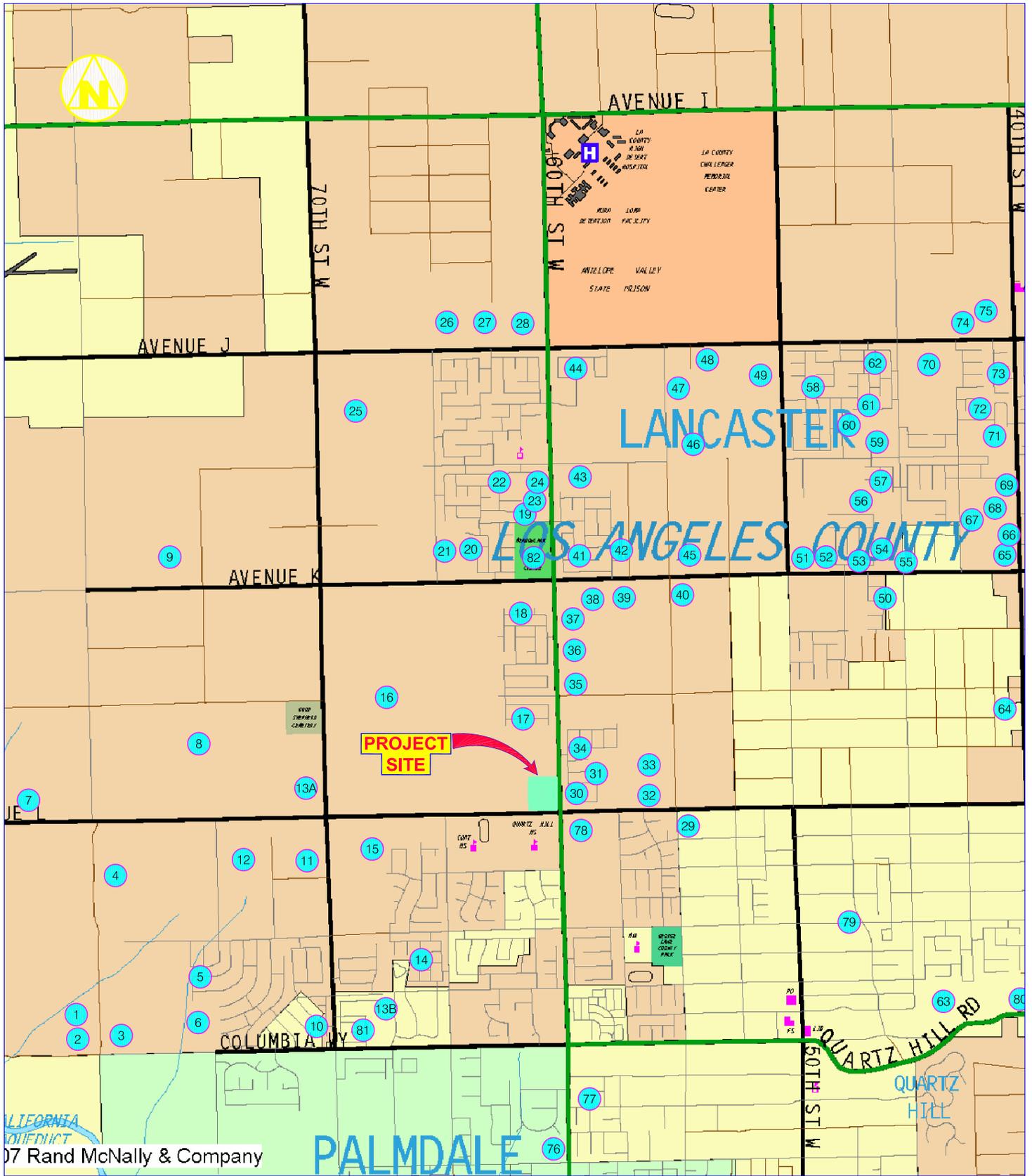
It should be noted that the impact analysis does not consider any changes to the existing intersection configuration (i.e., future highway dedications or roadway improvements) in the “without project” conditions. However, in the “with project” conditions, the roadway improvements which would be required of the project to meet City roadway standards adjacent to the site are included. The intersection of 60<sup>th</sup> Street West and Avenue L is shown improved by this project with the southbound leg expanded from the existing single left and shared through/right turn lane to dual lefts, three through lanes and a right turn lane. The eastbound leg was expanded from dual lefts, a single through lane and a right turn lane to dual lefts, three through lanes and a right turn lane. The eastbound leg was expanded from dual lefts, a single through lane, and a right turn lane to dual lefts, three through lanes, and a right turn lane. The eastbound leg of Avenue K-12 at 60<sup>th</sup> Street West was expanded from a driveway to a left and shared right/through lane.

Table IV.N-9 contains the results of the traffic impact analysis with the full development of the project. Future traffic volumes with project are shown in Figure IV.N-13 through Figure IV.N-15. As shown, ten significant traffic impacts are created by the project.

Many of the intersections operate at poor levels of service in the “without project” condition where considered projects are incorporated into the analysis but any traffic improvements required of them are not. The addition of the project traffic further degrades the traffic conditions. Traffic mitigation has been identified which will reduce the significant impact to a level of insignificance if sufficient right of way is available.

### ***Street Segment Analysis***

A street analysis was conducted for the street segment of 60<sup>th</sup> Street West between Avenue K-14 and Avenue L, between Avenue K-8 and Avenue K-14, between Avenue L and Avenue L-4, and between Avenue L-4 and L-8. A street segment analysis was also conducted along Avenue L between 57<sup>th</sup> Street West and 55<sup>th</sup> Street West, between 60<sup>th</sup> Street West and 57<sup>th</sup> Street West, between 62<sup>nd</sup> Street West and 60<sup>th</sup> Street West, and between 65<sup>th</sup> Street West and 62<sup>nd</sup> Street West. The analysis was conducted according to County of Los Angeles guidelines for segment analysis of multi-lane highways. Existing counts were conducted in 2007 and increased by 2% to reflect growth to the current year. Future project conditions were evaluated based upon the number of vehicles using the roadway segment versus capacity



Source: Overland Traffic Consultants, October 2008.



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Figure IV.N-9  
Related Projects Location Map

**Table IV.N-8  
Traffic Future (2012) Conditions Without Project**

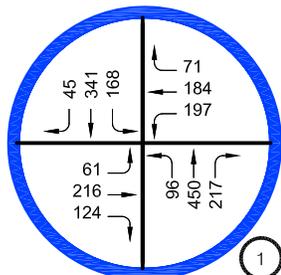
No.	Intersection	Peak Hour	Direction	Existing + Ambient		Existing + Ambient + Related Project	
				ICU/Delay	LOS	ICU/Delay	LOS
1	60 <sup>th</sup> Street West & Avenue J	AM	WB	268.8	F	393.2	F
			EB	34.3	D	286.7	F
		PM	WB	31.1	D	574.0	F
			EB	19.8	C	283.7	F
		Sat	WB	13.7	B	318.0	F
EB	12.2	B	183.5	F			
2	60 <sup>th</sup> Street West & Avenue J-8	AM	WB	14.9	B	49.3	E
			EB	14.5	B	200.4	F
		PM	WB	15.4	B	95.8	F
			EB	12.3	B	181.0	F
		Sat	WB	12.4	B	79.1	F
EB	10.3	B	242.2	F			
3	60 <sup>th</sup> Street West & Avenue K	AM	-	0.562	A	0.935	E
		PM	-	0.486	A	1.122	F
		Sat	-	0.399	A	1.247	F
4	60 <sup>th</sup> Street West & Avenue K-8	AM	WB	13.4	B	1349.0	F
			EB	16.4	B	NO DATA	
		PM	WB	10.8	B	NO DATA	
			EB	12.3	B	NO DATA	
		Sat	WB	10.5	B	NO DATA	
EB	11.0	B	NO DATA				
5	60 <sup>th</sup> Street West & Avenue K-12	AM	WB	16.4	C	157.4	F
			EB	N/A	-	105.0	F
		PM	WB	13.4	B	209.4	F
			EB	N/A	-	133.6	F
		Sat	WB	11.9	B	637.6	F
EB	N/A	-	216.8	F			
6	60 <sup>th</sup> Street West & Avenue L	AM	-	0.665	B	1.139	F
		PM	-	0.569	A	1.330	F
		Sat	-	0.481	A	1.486	F
7	60 <sup>th</sup> Street West & Avenue L-4	AM	EB	17.4	C	160.0	F
		PM	EB	14.5	B	159.5	F
		Sat	EB	12.0	B	138.6	F
8	60 <sup>th</sup> Street West & Avenue L-8	AM	-	0.581	A	0.793	C
		PM	-	0.427	A	0.809	D
		Sat	-	0.358	A	0.868	D
9	60 <sup>th</sup> Street West & Avenue M/Columbia	AM	-	21.85	C	175.39	F
		PM	-	25.69	D	314.23	F
		Sat	-	14.65	B	330.53	F
10	70 <sup>th</sup> Street West & Avenue L	AM	-	11.86	B	36.24	E
		PM	-	8.84	A	21.88	C
		Sat	-	8.60	A	21.97	C

**Table IV.N-8 (Continued)**  
**Traffic Future (2012) Conditions Without Project**

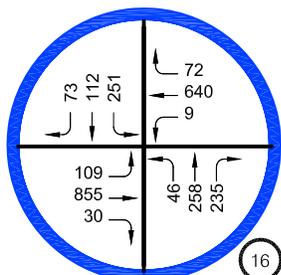
No.	Intersection	Peak Hour	Direction	Existing + Ambient		Existing + Ambient + Related Project	
				ICU/Delay	LOS	ICU/Delay	LOS
11	65 <sup>th</sup> Street West & Avenue L	AM	NB	14.2	B	33.3	D
		PM	NB	9.3	A	12.8	B
		Sat	NB	9.2	A	14.0	B
12	57 <sup>th</sup> Street West & Avenue L	AM	NB	15.0	B	19.8	C
		PM	NB	11.6	B	18.5	C
		Sat	NB	12.6	B	21.0	C
13	55 <sup>th</sup> Street West & Avenue L	AM	NB	20.4	C	93.2	F
		PM	NB	12.8	B	49.4	E
		Sat	NB	12.0	B	50.2	F
14	50 <sup>th</sup> Street West & Avenue L	AM	-	0.776	C	1.003	F
		PM	-	0.810	D	1.085	F
		Sat	-	0.708	C	1.022	F
15	45 <sup>th</sup> Street West & Avenue L	AM	-	0.539	A	0.737	C
		PM	-	0.791	C	1.028	F
		Sat	-	0.768	C	1.054	F
16	40 <sup>th</sup> Street West & Avenue L	AM	-	0.766	C	0.958	E
		PM	-	0.772	C	1.046	F
		Sat	-	0.667	B	0.954	E

*Notes:*  
*Dir = Direction, used for two-way stopped control delay analysis only (unsignalized locations)*  
*No Data = No information available as there is a system failure in the direction of analysis*  
*N/A = Not applicable*  
*ICU = Intersection capacity utilization which is the intersection's volume/capacity*  
*Delay = Calculated using Highway Capacity Method which is seconds of delay per vehicle.*  
*Source: Overland Traffic Consultants, Inc., October 2008.*

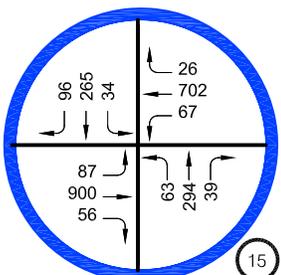
of the roadway similar to the intersection analysis. Traffic generated by other projects in the vicinity which will add traffic to the roadway and ambient growth of 2% per year (the same as the intersection analysis) were added to determine future “without project” conditions. The potential project trips were then added to this future “without project” condition. A comparison of the future without and future with project conditions was then conducted by the percent increase in traffic as shown in Table IV.N-10. Note that future conditions without the project are sufficient to degrade the roadway systems to poor operations.



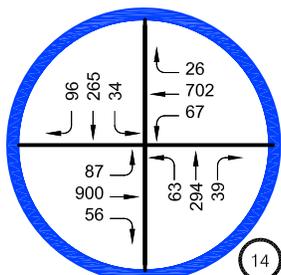
60TH STREET WEST & AVENUE J



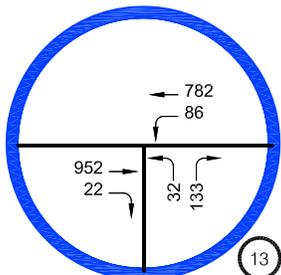
40TH STREET WEST & AVENUE L



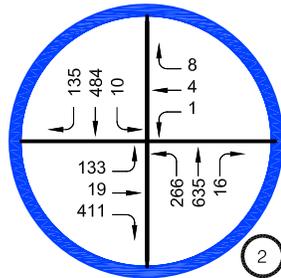
45TH STREET WEST & AVENUE L



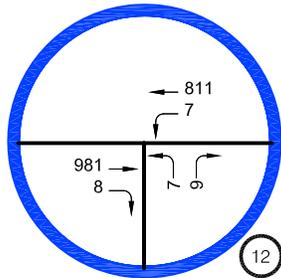
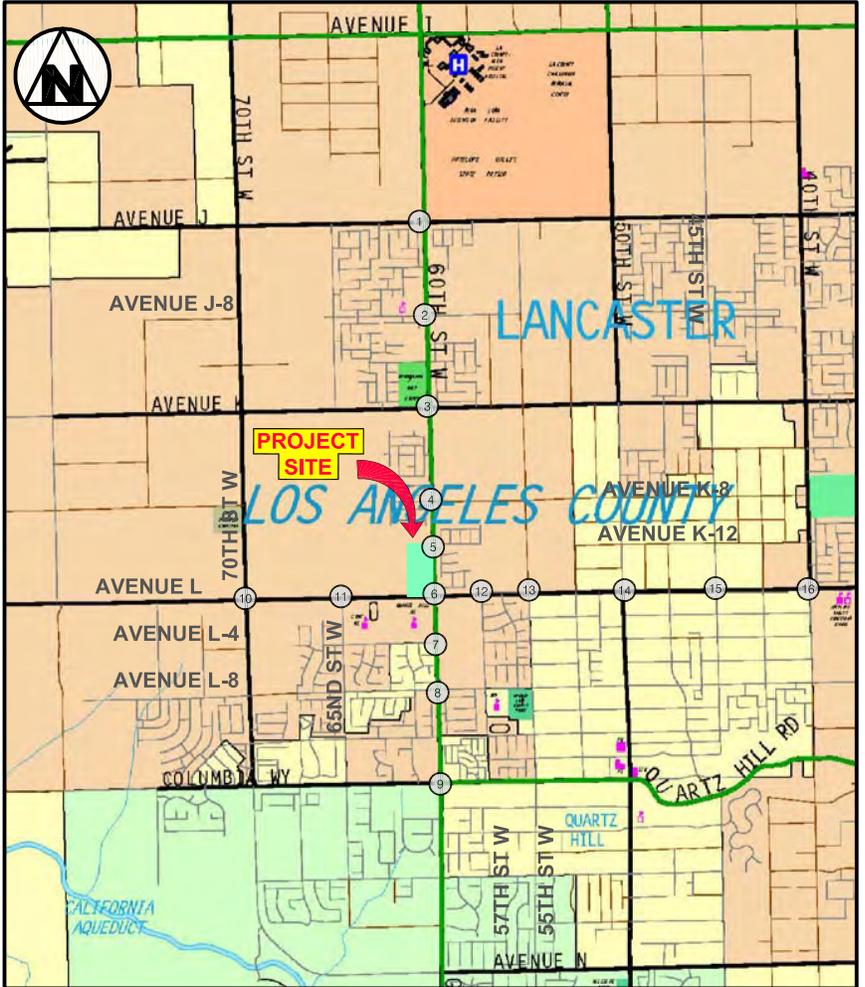
50TH STREET WEST & AVENUE L



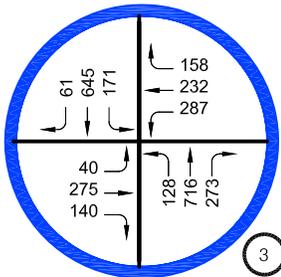
55TH STREET WEST & AVENUE L



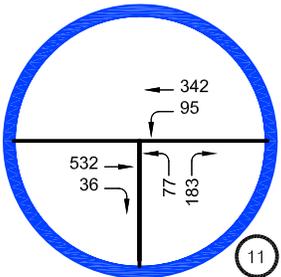
60TH STREET WEST & AVENUE J-8



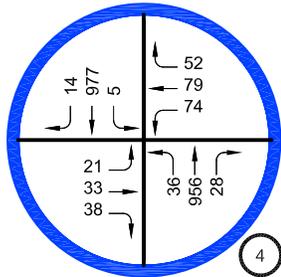
57TH STREET WEST & AVENUE L



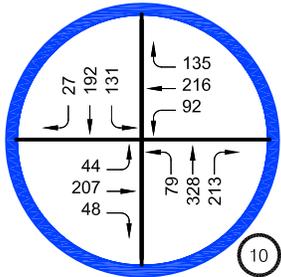
60TH STREET WEST & AVENUE K



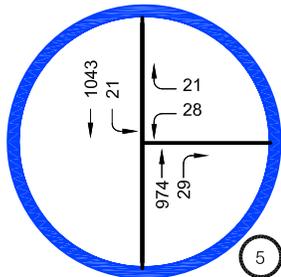
65TH STREET WEST & AVENUE L



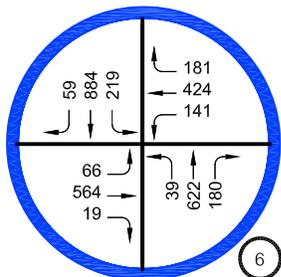
60TH STREET WEST & AVENUE K-8



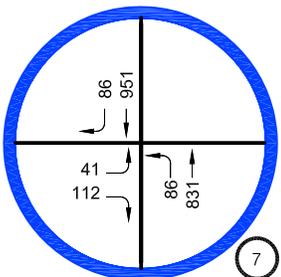
70TH STREET WEST & AVENUE L



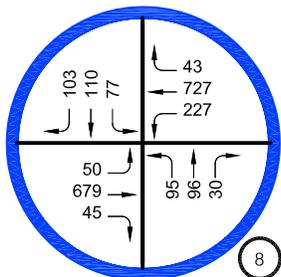
60TH STREET WEST & AVENUE K-12



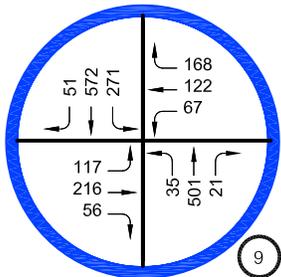
60TH STREET WEST & AVENUE L



60TH STREET WEST & AVENUE L-4



60TH STREET WEST & AVENUE L-8



60TH STREET WEST & AVENUE M/COLUMBIA

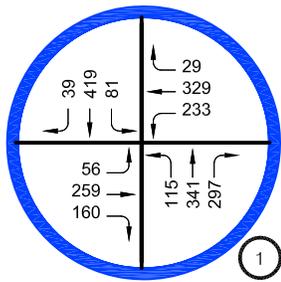
Source: Overland Traffic Consultants, October 2008.



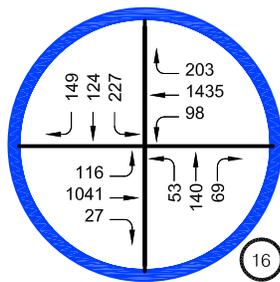
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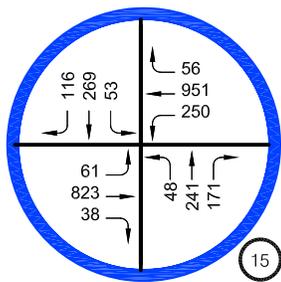
Figure IV.N-10  
Future (2012) Traffic Volume  
Without Project  
AM Peak Hour



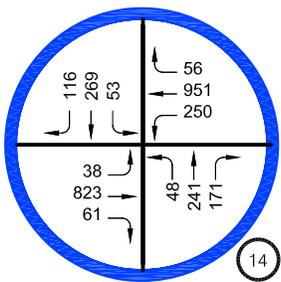
60TH STREET WEST & AVENUE J



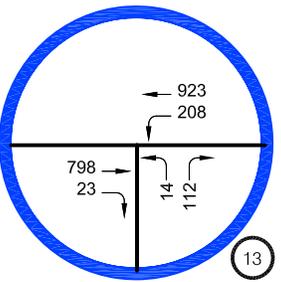
40TH STREET WEST & AVENUE L



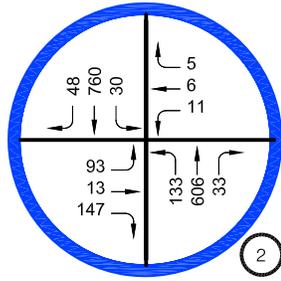
45TH STREET WEST & AVENUE L



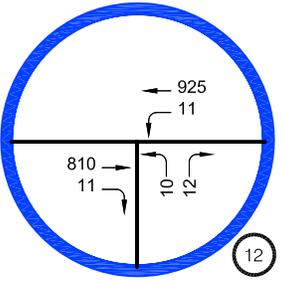
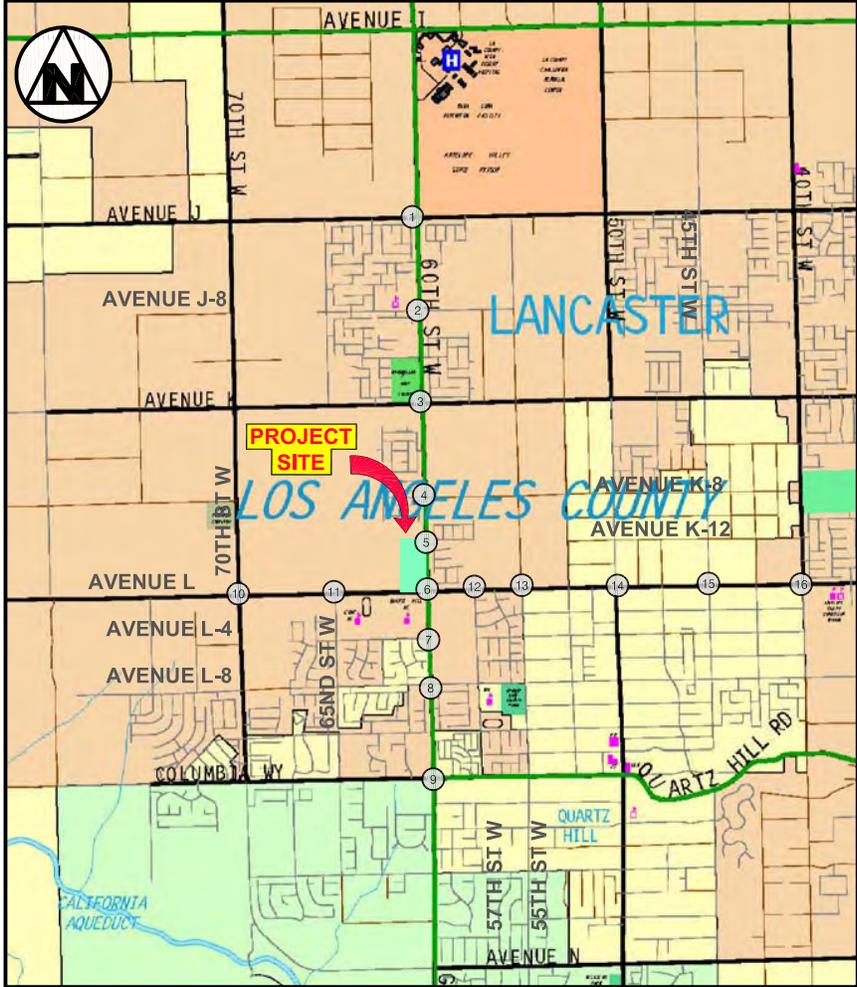
50TH STREET WEST & AVENUE L



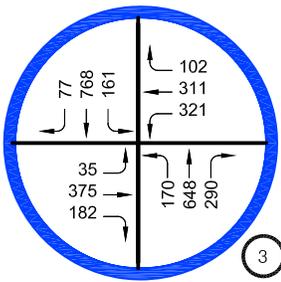
55TH STREET WEST & AVENUE L



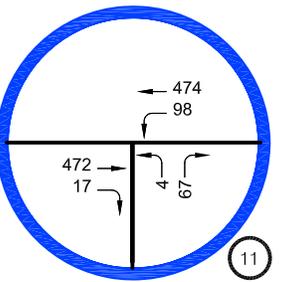
60TH STREET WEST & AVENUE J-8



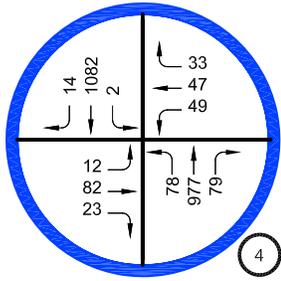
57TH STREET WEST & AVENUE L



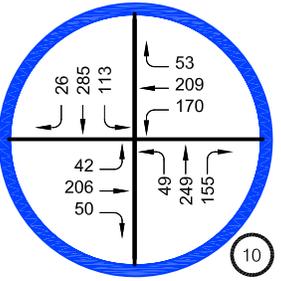
60TH STREET WEST & AVENUE K



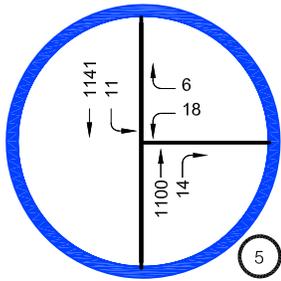
65TH STREET WEST & AVENUE L



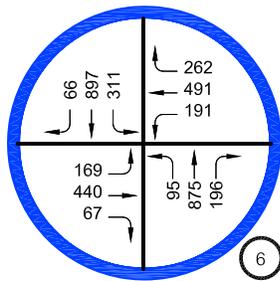
60TH STREET WEST & AVENUE K-8



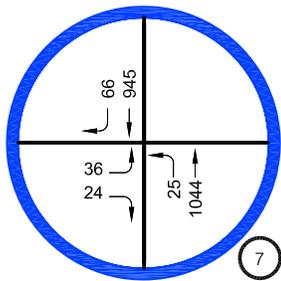
70TH STREET WEST & AVENUE L



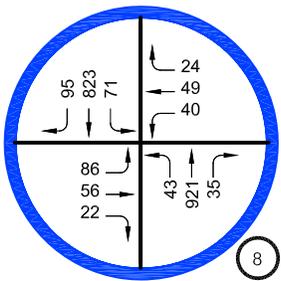
60TH STREET WEST & AVENUE K-12



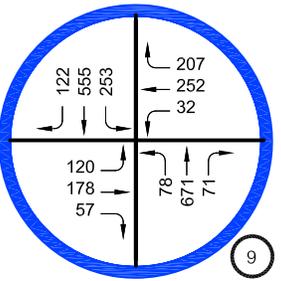
60TH STREET WEST & AVENUE L



60TH STREET WEST & AVENUE L-4



60TH STREET WEST & AVENUE L-8



60TH STREET WEST & AVENUE M/COLUMBIA

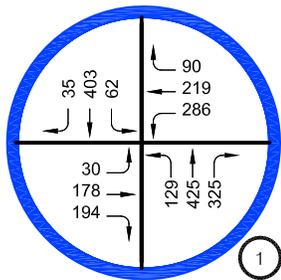
Source: Overland Traffic Consultants, October 2008.



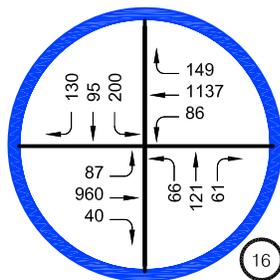
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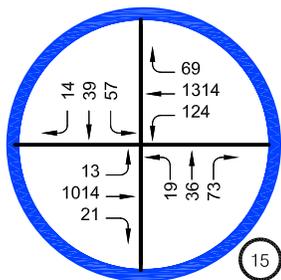
Figure IV.N-11  
Future (2012) Traffic Volume  
Without Project  
PM Peak Hour



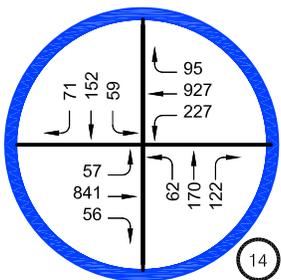
60TH STREET WEST & AVENUE J



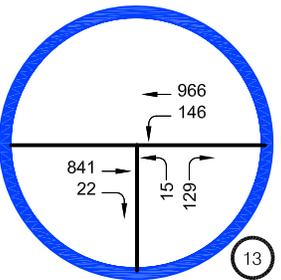
40TH STREET WEST & AVENUE L



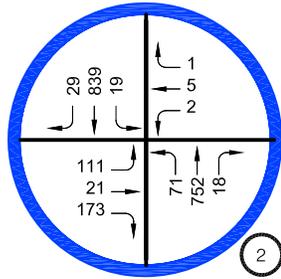
45TH STREET WEST & AVENUE L



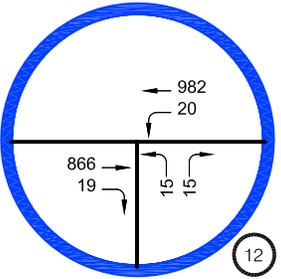
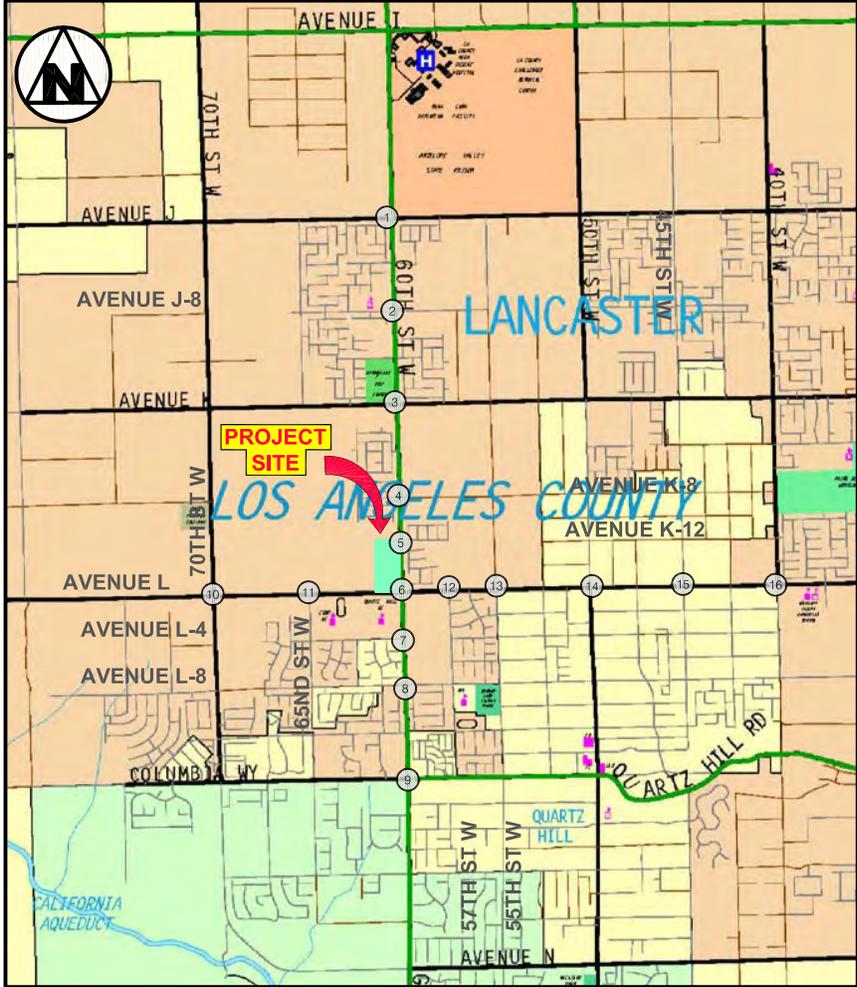
50TH STREET WEST & AVENUE L



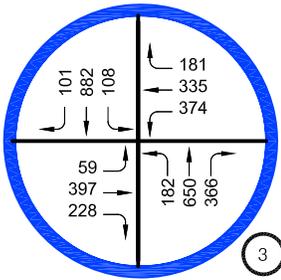
55TH STREET WEST & AVENUE L



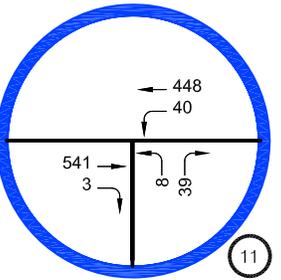
60TH STREET WEST & AVENUE J-8



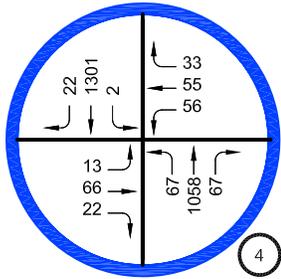
57TH STREET WEST & AVENUE L



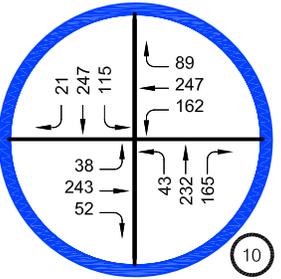
60TH STREET WEST & AVENUE K



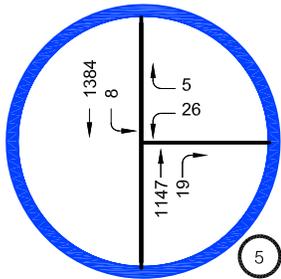
65TH STREET WEST & AVENUE L



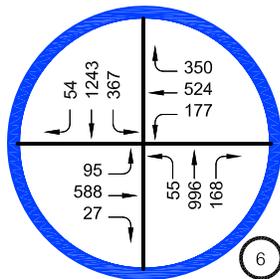
60TH STREET WEST & AVENUE K-8



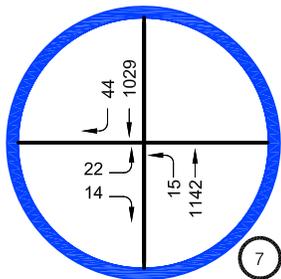
70TH STREET WEST & AVENUE L



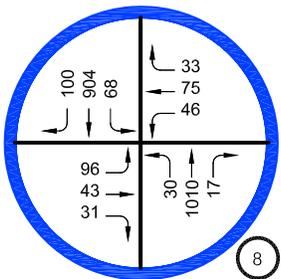
60TH STREET WEST & AVENUE K-12



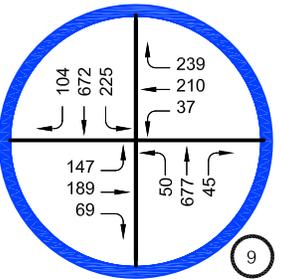
60TH STREET WEST & AVENUE L



60TH STREET WEST & AVENUE L-4



60TH STREET WEST & AVENUE L-8



60TH STREET WEST & AVENUE M/COLUMBIA

Source: Overland Traffic Consultants, October 2008.



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Figure IV.N-12  
Future (2012) Traffic Volume  
Without Project  
Saturday Peak Hour

**Table IV.N-9  
Future Traffic Conditions With Project**

No.	Intersection	Peak Hour	Direction	Existing + Ambient + Related Project		Future With Project		Impact	% Impact	Significant Impact?	
				ICU/Delay	LOS	ICU/Delay	LOS				
1	60 <sup>th</sup> Street West & Avenue J	AM	WB	393.2	F	532.0	F	138.8	35.3%	Yes	
			EB	286.7	F	423.7	F	137.0	47.8%	Yes	
		PM	WB	574.0	F	1033.0	F	459.0	80.0%	Yes	
			EB	283.7	F	673.8	F	390.1	137.5%	Yes	
		Sat	WB	318.0	F	778.3	F	460.3	144.7%	Yes	
			EB	183.5	F	620.5	F	437.0	238.1%	Yes	
2	60 <sup>th</sup> Street West & Avenue J-8	AM	WB	49.3	E	86.2	F	36.9	74.8%	Yes	
			EB	200.4	F	305.8	F	105.4	52.6%	Yes	
		PM	WB	95.8	F	155.5	F	59.7	62.3%	Yes	
			EB	181.0	F	228.7	F	47.7	26.4%	Yes	
		Sat	WB	79.1	F	394.6	F	315.5	398.9%	Yes	
			EB	242.2	F	829.8	F	587.6	242.6%	Yes	
3	60 <sup>th</sup> Street West & Avenue K	AM		0.935	E	1.024	F	0.089	9.5%	Yes	
		PM		1.122	F	1.311	F	0.189	16.8%	Yes	
		Sat		1.247	F	1.507	F	0.260	20.9%	Yes	
4	60 <sup>th</sup> Street West & Avenue K-8	AM	WB	1349.0	F	3711.0	F	2362.0	175.1%	Yes	
			EB	NO DATA		NO DATA					Yes
		PM	WB	NO DATA		NO DATA					Yes
			EB	NO DATA		NO DATA					Yes
		Sat	WB	NO DATA		NO DATA					Yes
			EB	NO DATA		NO DATA					Yes
5	60 <sup>th</sup> Street West & Avenue K-12	AM	WB	157.4	F	316.5	F	159.1	101.1%	Yes	
			EB	105.0	F	1528.0	F	1423.0	1355.2%	Yes	
		PM	WB	209.4	F	687.7	F	478.3	228.4%	Yes	
			EB	133.6	F	8860.0	F	8726.4	6531.7%	Yes	
		Sat	WB	637.6	F	20142.0	F	19504.4	3059.0%	Yes	
			EB	216.8	F	NO DATA					Yes

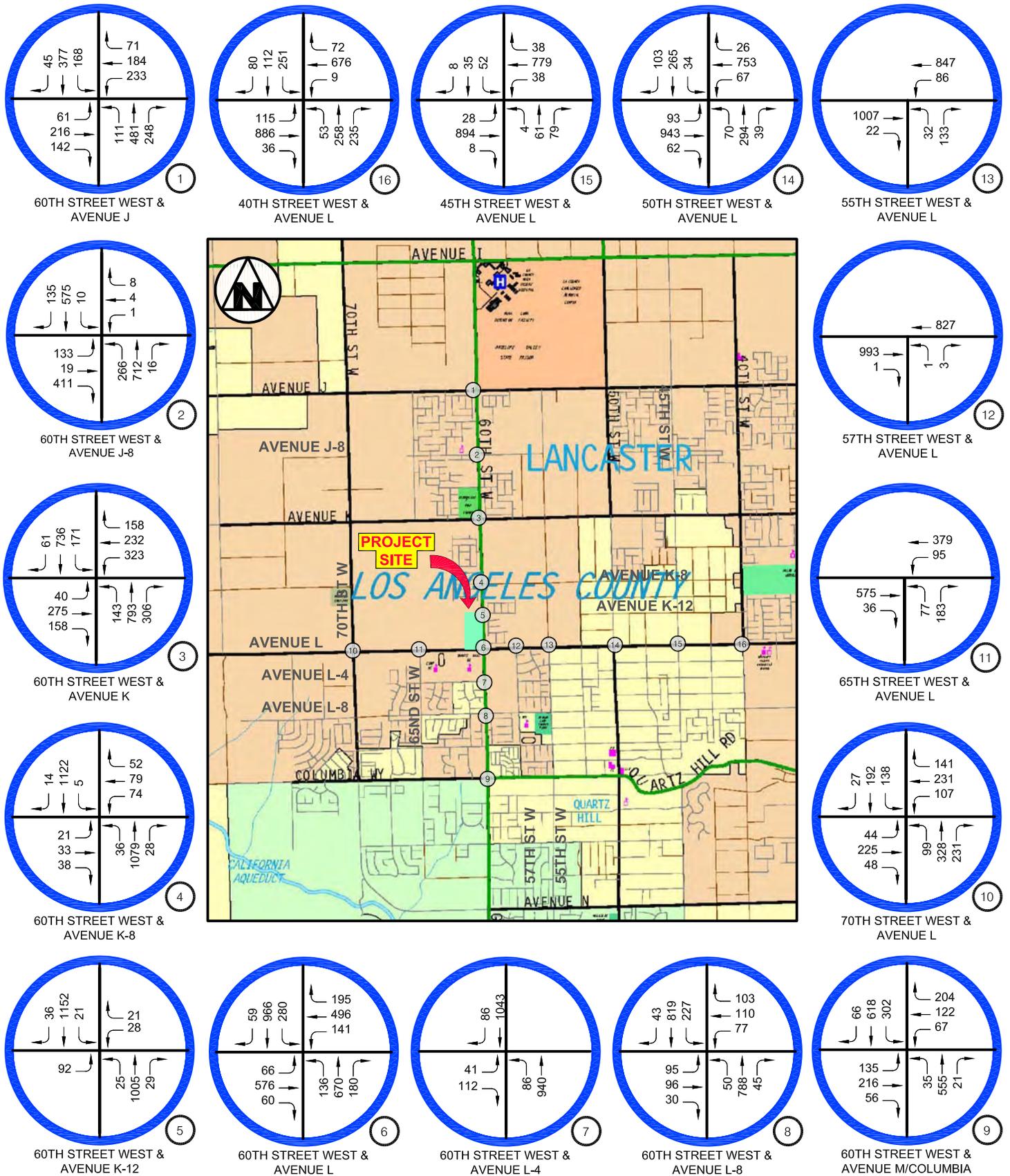
**Table IV.N-9 (Continued)**  
**Future Traffic Conditions With Project**

No.	Intersection	Peak Hour	Direction	Existing + Ambient + Related Project		Future With Project		Impact	% Impact	Significant Impact?
				ICU/Delay	LOS	ICU/Delay	LOS			
6	60 <sup>th</sup> Street West & Avenue L	AM		1.139	F	1.137	F	-0.002	-0.2%	No
		PM		1.330	F	1.355	F	0.025	1.9%	No
		Sat		1.486	F	1.563	F	0.077	5.2%	Yes
7	60 <sup>th</sup> Street West & Avenue L-4	AM	EB	160.0	F	317.6	F	157.6	98.5%	Yes
		PM	EB	159.5	F	592.9	F	433.4	271.7%	Yes
		Sat	EB	138.6	F	687.3	F	548.7	395.9%	Yes
8	60 <sup>th</sup> Street West & Avenue L-8	AM		0.793	C	0.861	D	0.068	8.6%	No
		PM		0.809	D	0.951	E	0.142	17.6%	Yes
		Sat		0.868	D	1.066	F	0.198	22.8%	Yes
9	60 <sup>th</sup> Street West & Avenue M/Columbia	AM		175.39	F	220.20	F	44.81	25.5%	Yes
		PM		314.23	F	421.14	F	106.91	34.0%	Yes
		Sat		330.53	F	481.15	F	150.62	45.6%	Yes
10	70 <sup>th</sup> Street West & Avenue L	AM		36.24	E	43.62	E	7.38	20.4%	Yes
		PM		21.88	C	30.61	D	8.73	39.9%	No
		Sat		21.97	C	35.66	E	13.69	62.3%	Yes
11	65 <sup>th</sup> Street West & Avenue L	AM	NB	33.3	D	41.0	E	7.7	23.1%	Yes
		PM	NB	12.8	B	14.2	B	1.4	10.9%	No
		Sat	NB	14.0	B	16.6	C	2.6	18.6%	No
12	57 <sup>th</sup> Street West & Avenue L	AM	NB	19.8	C	21.1	C	1.3	6.6%	No
		PM	NB	18.5	C	21.6	C	3.1	16.8%	No
		Sat	NB	21.0	C	29.9	D	8.9	42.4%	No
13	55 <sup>th</sup> Street West & Avenue L	AM	NB	93.2	F	134.7	F	41.5	44.5%	Yes
		PM	NB	49.4	E	106.9	F	57.5	116.4%	Yes
		Sat	NB	50.2	F	136.1	F	85.9	171.1%	Yes
14	50 <sup>th</sup> Street West & Avenue L	AM		1.003	F	1.043	F	0.040	4.0%	Yes
		PM		1.085	F	1.162	F	0.077	7.1%	Yes
		Sat		1.022	F	1.118	F	0.096	9.4%	Yes

**Table IV.N-9 (Continued)**  
**Future Traffic Conditions With Project**

No.	Intersection	Peak Hour	Direction	Existing + Ambient + Related Project		Future With Project		Impact	% Impact	Significant Impact?
				ICU/Delay	LOS	ICU/Delay	LOS			
15	45 <sup>th</sup> Street West & Avenue L	AM		0.737	C	0.764	C	0.027	3.7%	No
		PM		1.028	F	1.094	F	0.066	6.4%	Yes
		Sat		1.054	F	1.146	F	0.092	8.7%	Yes
16	40 <sup>th</sup> Street West & Avenue L	AM		0.958	E	0.978	E	0.020	2.1%	Yes
		PM		1.046	F	1.094	F	0.048	4.6%	Yes
		Sat		0.954	E	1.014	F	0.060	6.3%	Yes

*Notes:**Dir = Direction, used for two-way stopped control delay analysis only (unsignalized locations)**No Data = No information available as there is a system failure in the direction of analysis**N/A = Not applicable**ICU = Intersection capacity utilization which is the intersection's volume/capacity**Delay = Calculated using Highway Capacity Method which is seconds of delay per vehicle.**Source: Overland Traffic Consultants, October 2008.*



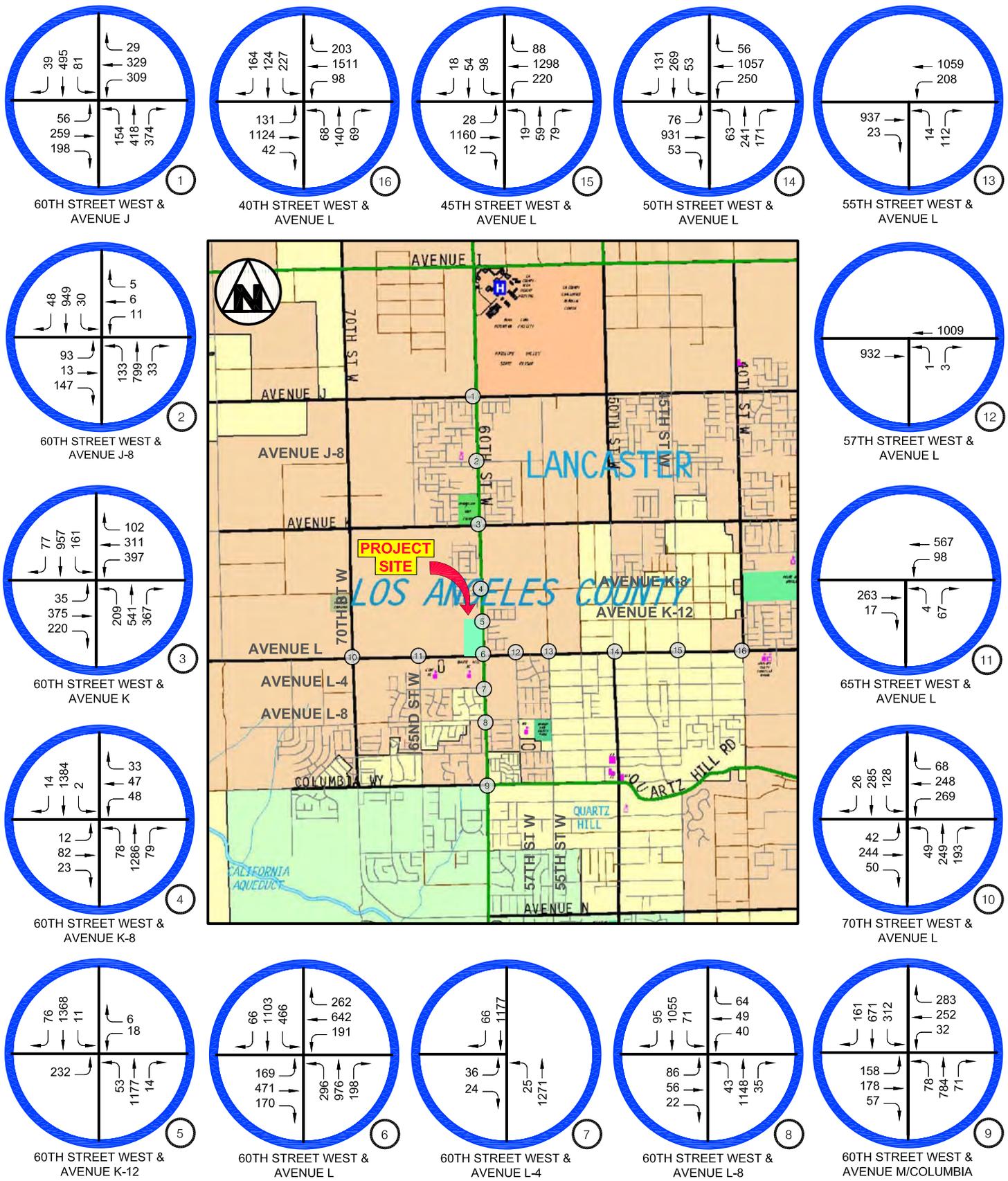
Source: Overland Traffic Consultants, October 2008.



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Figure IV.N-13  
Future (2012) Traffic Volume  
With Project  
AM Peak Hour



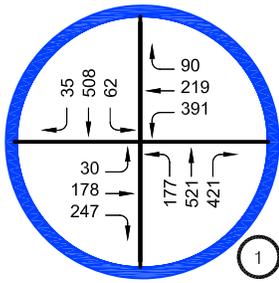
Source: Overland Traffic Consultants, October 2008.



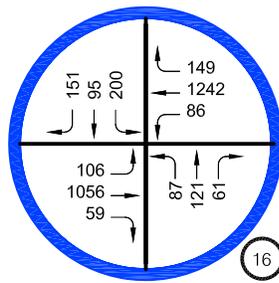
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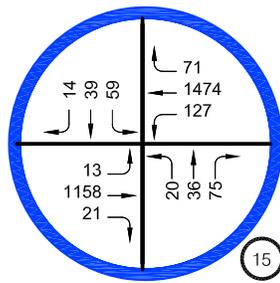
Figure IV.N-14  
Future (2012) Traffic Volume  
With Project  
PM Peak Hour



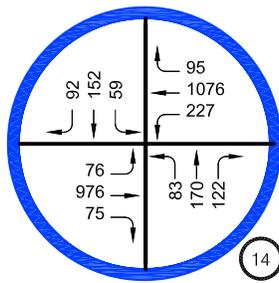
60TH STREET WEST & AVENUE J



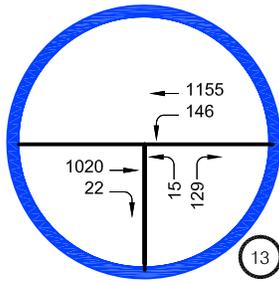
40TH STREET WEST & AVENUE L



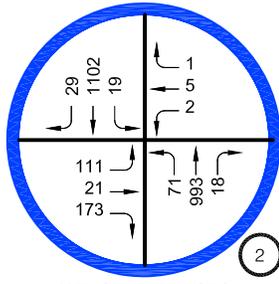
45TH STREET WEST & AVENUE L



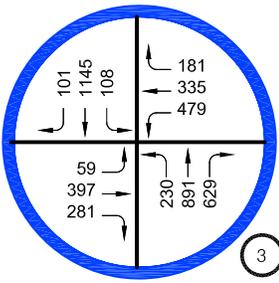
50TH STREET WEST & AVENUE L



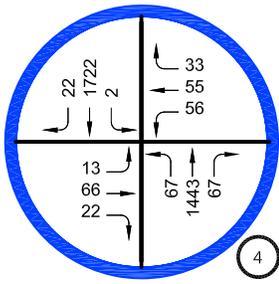
55TH STREET WEST & AVENUE L



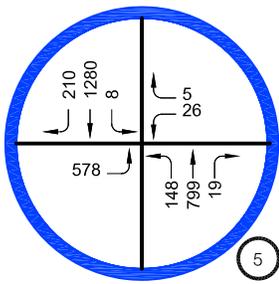
60TH STREET WEST & AVENUE J-8



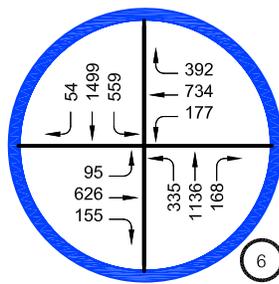
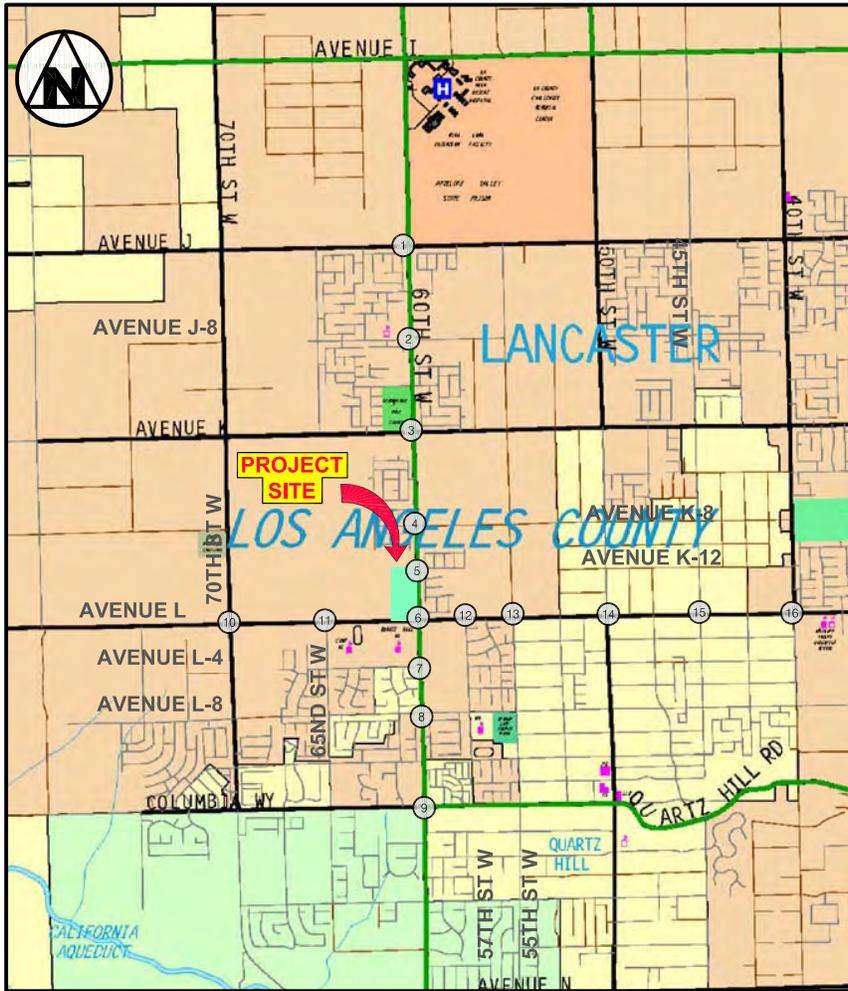
60TH STREET WEST & AVENUE K



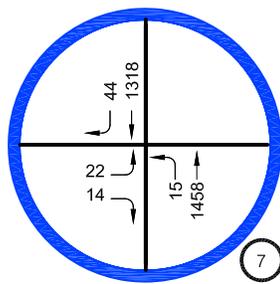
60TH STREET WEST & AVENUE K-8



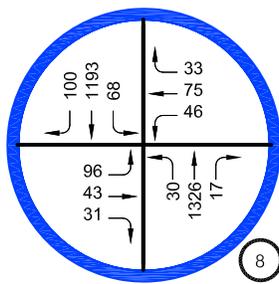
60TH STREET WEST & AVENUE K-12



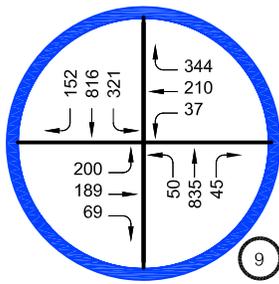
60TH STREET WEST & AVENUE L



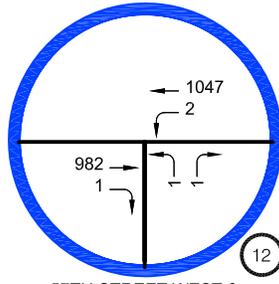
60TH STREET WEST & AVENUE L-4



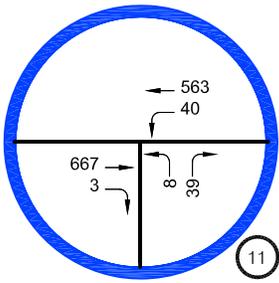
60TH STREET WEST & AVENUE L-8



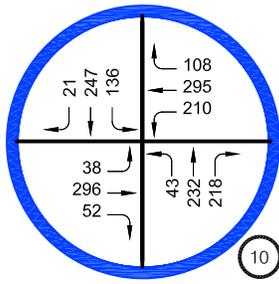
60TH STREET WEST & AVENUE M/COLUMBIA



57TH STREET WEST & AVENUE L



65TH STREET WEST & AVENUE L



70TH STREET WEST & AVENUE L

Source: Overland Traffic Consultants, October 2008.



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Figure IV.N-15  
Future (2012) Traffic Volume  
With Project  
Saturday Peak Hour

**Table IV.N-10  
Street Segment Analysis**

Peak Hour	# of Lanes	Roadway Capacity	Existing 2008			Future Without Project 2012					Future With Project + Mitigation				% Incr	Sig. Impact?		
			Vol.	V/C	LOS	With Ambient	Related Only	Total	V/C	LOS	% In	% Out	Vol.	Total			V/C	LOS
<b>Location: AVENUE L BETWEEN 57TH STREET &amp; 55TH STREET</b>																		
AM	2	2,000	1,087	0.543	A	88	980	2,155	1.077	F	18%	18%	120	2,275	1.137	F	11.0%	Yes
PM	2	2,000	1,109	0.555	A	90	1,358	2,557	1.279	F	18%	18%	275	2,832	1.416	F	24.8%	Yes
<b>Location: AVENUE L BETWEEN 60TH STREET &amp; 57TH STREET</b>																		
AM	2	2,000	1,103	0.552	A	89	980	2,172	1.086	F	18%	18%	120	2,292	1.146	F	10.9%	Yes
PM	2	2,000	1,064	0.532	A	86	1,358	2,508	1.254	F	18%	18%	275	2,783	1.391	F	25.9%	Yes
<b>Location: AVENUE L BETWEEN 62ND STREET &amp; 60TH STREET</b>																		
AM	2	2,000	591	0.295	A	48	980	1,619	0.809	D	35%	13%	167	1,786	0.893	D	28.3%	Yes
PM	2	2,000	672	0.336	A	54	1,358	2,084	1.042	F	35%	13%	365	2,449	1.224	F	54.3%	Yes
<b>Location: AVENUE L BETWEEN 65TH STREET &amp; 62ND STREET</b>																		
AM	2	2,000	627	0.314	A	51	980	1,658	0.829	D	12%	12%	80	1,738	0.869	D	12.8%	Yes
PM	2	2,000	491	0.245	A	40	1,358	1,889	0.944	E	12%	12%	183	2,072	1.036	F	37.3%	Yes
<b>Location: 60TH STREET BETWEEN AVENUE K-14 &amp; AVENUE L</b>																		
AM	2	2,000	936	0.468	A	76	980	1,992	0.996	E	37%	10%	165	2,157	1.079	F	17.8%	Yes
PM	2	2,000	914	0.457	A	74	1,358	2,346	1.173	F	37%	10%	357	2,703	1.352	F	39.1%	Yes
<b>Location: 60TH STREET WEST BETWEEN AVENUE K-8 &amp; AVENUE K-14</b>																		
AM	2	3,000	952	0.317	A	77	980	2,009	0.670	B	40%	40%	268	2,277	0.759	C	28.2%	Yes
PM	2	3,000	882	0.294	A	71	1,358	2,311	0.770	C	40%	40%	611	2,922	0.974	E	69.3%	Yes
<b>Location: 60TH STREET WEST BETWEEN AVENUE L &amp; AVENUE L-4</b>																		
AM	2	2,000	1,015	0.508	A	82	980	2,077	1.039	F	30%	30%	201	2,278	1.139	F	19.8%	Yes
PM	2	2,000	1,322	0.661	A	107	1,358	2,787	1.394	F	30%	30%	446	3,233	1.617	F	33.7%	Yes
<b>Location: 60TH STREET WEST BETWEEN AVENUE L-4 &amp; AVENUE L-8</b>																		
AM	2	3,000	1,236	0.412	A	100	980	2,316	0.579	C	30%	30%	201	2,517	0.839	D	16.3%	Yes
PM	2	3,000	1,230	0.410	A	99	1,358	2,687	0.537	D	30%	30%	446	3,133	1.044	F	36.3%	Yes

Notes:  
V/C = Volume/Capacity, Incr = Increase, Pk Hr = Peak Hour.  
Source: Overland Traffic Consultants, Inc., October 2008.

The combined project will create a significant impact along all of the roadway segments with the project based upon the impact criteria established by the County of Los Angeles. The impact criteria is the percentage increase in the passenger cars per hour by the project based on the pre-project LOS C cannot exceed 4%, cannot exceed 2% at pre-project LOS D, or cannot exceed 1% with a pre-project LOS of E or F. All of the existing conditions are at LOS A. All of the pre-project levels of service and future with project conditions exceed the above LOS requirements. However, these impacts can be mitigated to a level of insignificance through roadway widening and improving mass transit amenities in the immediate area.

### ***Access and Parking***

Project access for the shopping center is proposed with three driveways on 60<sup>th</sup> Street West, three driveways on Avenue L, and two driveways on Avenue K-12 proposed extension. The project proposes traffic signals at the middle driveway on 60<sup>th</sup> Street West and the middle driveway on Avenue L. It is further proposed that the remaining driveways on 60<sup>th</sup> Street West and Avenue L be restricted to right turns only in and out. The access locations have been evaluated for potential traffic signals as proposed. While traffic signals may be warranted on 60<sup>th</sup> Street West north of Avenue L, progression along 60<sup>th</sup> Street West may be best served without this traffic signal, as a signal is also proposed at Avenue K-12 and is also warranted. Project driveways are proposed along Avenue K-12.

City of Lancaster Municipal Code 17.12.220(E) dictates that shopping centers provide five spaces per 1,000 square feet of floor area when the land area is over two acres unless the eating, drinking, or entertainment venues exceed 10% (34,455 square feet for the proposed project) of the overall development. The project proposes 1,728 parking stalls in the current concept plan. The City parking requirement is shown in Table IV.N-11 below.

**Table IV.N-11  
Project Parking The Commons at Quartz Hill**

<b>Use</b>	<b>Size</b>	<b>Code Requirement*</b>	<b>Number of Spaces</b>
Shopping Center	344,550 sf	5/1,000 sf	1,723

*Source: Overland Traffic Consultants, October 2008.*

As the project does not currently propose over 10% of the shopping center to be eating, drinking, or entertainment venues, the project would exceed the City's parking requirement by five parking spaces. No potential parking impacts are anticipated with the project. Should the shopping center exceed 10% eating, drinking, or entertainment venues, any amount over 10% would be required to provide parking at the established rate for that venue. For example, eating and drinking places would be required to provide 10 spaces per 1,000 square feet over the 10%.

The proposed project should also meet the requirements of the American Disabilities Act (ADA) standard for accessible parking as well as the City of Lancaster's requirement for preferential parking. The number

of accessible parking spaces should follow the formula of  $20 + (1 \text{ per } 100 \text{ over } 1000)$ , requiring 27 accessible parking spaces. The ADA also requires that 1 in every 8 accessible parking spaces must be a van accessible space with an 8 foot wide across aisle.

### ***Impacts on Regional Transportation System***

The Congestion Management Program (CMP) was enacted by Los Angeles County to monitor regional traffic growth and related transportation improvements. The intent of the CMP is to provide the analytical basis for transportation decisions through the State Transportation Improvement Program (STIP) process. The Countywide approach includes designating a facilities network that includes all state highways and principal arterials with the County and monitoring the network's Level of Service standards. This monitoring of the CMP network is one of the responsibilities of local jurisdictions. If Level of Service standards deteriorate, then local jurisdictions must prepare a deficiency plan to be in conformance with the Countywide plan.

For purposes of the CMP, a substantial change in freeway segments are defined as an increase 2% in the demand to capacity ratio and a change in LOS. In general, a CMP traffic impact analysis is required if a project will add 150 or more trips, in either direction during either the AM or PM weekday peak hour. A freeway evaluation was conducted and shows a 1.1% increase at LOS D in traffic on the Antelope Valley Freeway (14 Freeway) in Table 13 of the traffic study (included as Appendix K to this Draft EIR). No freeway impacts are therefore anticipated as a result of the proposed project.

The CMP also indicates that CMP monitoring locations be evaluated for significant traffic impacts if 50 or more trips will travel through the location during the morning or afternoon peak periods. There are no CMP roadway segments or intersections near the project site, and as such, no impact would occur.

### ***Transit***

The available transit services available in the community are discussed above. No specific transit impact criteria have been developed by the City. However, a transit impact evaluation has been conducted. The project is anticipated to generate 837 daily transit trips with 33 during the AM peak hour and 75 during the PM peak hour. The transit trips are anticipated to be staggered throughout the day due to the nature of the project. A summary of the anticipated transit trips is discussed below.

The proposed project is forecast to generate approximately 17,076 weekday daily trips with 670 trips during the AM peak hour and 1,528 trips during the PM peak hour. As per CMP 2004 guidelines, person trips can be estimated by multiplying the total trips generated by 1.4. The trips assigned to transit may be calculated by multiplying the person trips generated by 3.5% (the calculations are contained in Table 4 of the Traffic Study contained in Appendix K to this Draft EIR).

The transit route fronting the project is Route 7 along 60<sup>th</sup> Street West. The established bus route operates approximately once per hour during the peak hours. The additional ridership may constitute a burden on the existing system necessitating a reduced headway and/or more frequent stops in the project area.

## **CUMULATIVE IMPACTS**

The 82 related projects are incorporated into the Future (2012) without Project and Future (2012) with Project traffic generation scenarios and, therefore, cumulative impacts are considered throughout the traffic section.

## **MITIGATION MEASURES**

The following improvements are required to mitigate traffic impacts to less than significant levels. The applicant shall pay their fair share of the improvements as determined by the Director of Public Works.

### **60<sup>th</sup> Street West and Avenue J**

- N-1 Currently 60<sup>th</sup> Street West and Avenue J is not signalized. The intersection warrants a traffic signal in future conditions without and with the project. Therefore, the project applicant shall provide fair share contribution towards this improvement.
- N-2 Currently the southbound direction provides a left turn lane and a shared lane for the through and right turn directions. The project applicant shall provide fair share contribution for a second southbound through lane.

### **60<sup>th</sup> Street West and Avenue J-8**

- N-3 Currently 60<sup>th</sup> Street West and Avenue J-8 is not signalized. The intersection warrants a traffic signal in future conditions without and with the project. The southbound and eastbound directions currently provide a left, through, and right turn lane. The project applicant shall provide fair share contribution for a second southbound through lane.

### **60<sup>th</sup> Street West and Avenue K**

- N-4 Currently 60<sup>th</sup> Street West and Avenue K is signalized. The southbound direction currently provides a single left, through, and right turn lane. The project applicant shall provide fair share contribution for a second southbound through lane.
- N-5 Currently the westbound direction provides a single left, through, and right turn lane. The project applicant shall provide fair share contribution for a second left turn lane.

### **60<sup>th</sup> Street West and Avenue K-8**

- N-6 Currently 60<sup>th</sup> Street West and Avenue K-8 is not signalized. The intersection warrants a traffic signal in future conditions without and with the project. The project applicant shall provide fair share contribution towards this improvement.

N-7 Currently the southbound direction provides a single left, two through lanes, and right turn lane. The project applicant shall provide fair share contribution for replacement of the southbound right turn lane to a shared southbound through/right lane.

#### **60<sup>th</sup> Street West and Avenue K-12**

N-8 Currently 60<sup>th</sup> Street West and Avenue K-12 is not signalized. The intersection warrants a traffic signal in future conditions without and with the project. The project applicant shall provide fair share contribution towards this improvement.

N-9 Currently the northbound direction provides a through lane and a right turn lane. Future conditions with other projects indicate a need for a fourth leg to the intersection. The project applicant shall provide fair share contribution towards a second northbound through lane.

#### **60<sup>th</sup> Street West and Avenue L**

N-10 Currently 60<sup>th</sup> Street West and Avenue L is signalized. The northbound direction currently provides a left, through, and right turn lane. The project applicant shall provide fair share contribution to a second northbound through lane. Currently southbound 60<sup>th</sup> Street West at Avenue L provides a left turn lane, a through lane with the curb lane wide enough to provide a right turn movement out of the through lane. The southbound and eastbound ultimate roadway improvements were incorporated into this analysis. However, the project applicant shall provide fair share contribution toward an additional northbound through lane.

#### **60<sup>th</sup> Street West and Avenue L-4**

N-11 Currently 60<sup>th</sup> Street West and Avenue L-4 is not signalized. The intersection warrants a traffic signal in future conditions without and with the project. The project applicant shall provide fair share contribution towards this improvement.

N-12 Currently, the northbound direction provides a left turn lane and a through lane. The project applicant shall provide fair share contribution to a second northbound through lane.

#### **60<sup>th</sup> Street West and Avenue L-8**

N-13 Currently 60<sup>th</sup> Street West and Avenue L-8 is signalized. The northbound direction provides a left turn lane, a through lane, and a right turn lane. The project applicant shall provide fair share contribution to a second northbound through lane.

#### **60<sup>th</sup> Street West and Avenue M/Columbia**

N-14 Currently 60<sup>th</sup> Street West and Avenue M/Columbia is not signalized. The intersection warrants a traffic signal in future conditions without and with the project. The project applicant shall provide fair share contribution towards this improvement.

N-15 The north and eastbound directions provide a single travel lane. The westbound direction provides a shared through/left turn lane and right turn lane and the southbound direction provides a left and shared through/right turn lane. The lanes should be changed to provide left turn lanes in all directions with a second northbound through lane and in the westbound direction a left, through, through/right, and right turn lane. The project applicant shall provide a fair share contribution to this improvement.

#### **70<sup>th</sup> Street West and Avenue L**

N-16 Currently 70<sup>th</sup> Street West and Avenue L is not signalized. The intersection warrants a traffic signal in future conditions. The project applicant shall provide fair share contribution towards this improvement.

#### **65<sup>th</sup> West and Avenue L**

N-17 Currently 65<sup>th</sup> Street West at Avenue L is a single lane in the northbound direction. The project applicant shall provide fair share contribution to the separation of the right and left turn moves in the northbound lane, to their own lanes.

#### **55<sup>th</sup> Street West and Avenue L**

N-18 Currently 55<sup>th</sup> Street West and Avenue L is not signalized. The intersection warrants a traffic signal in future conditions without and with the project. The project applicant shall provide fair share contribution towards the improvement.

N-19 Currently the eastbound direction is a single lane and the westbound direction provides a through and right turn lane. The project applicant shall provide fair share contribution toward a second east and westbound through lane.

#### **50<sup>th</sup> Street West and Avenue L**

N-20 This intersection is currently signalized. Currently, there are single through lanes in the east and westbound direction. The project applicant shall provide fair share contribution toward an additional east and westbound through lane.

#### **45<sup>th</sup> Street West and Avenue L**

N-21 This intersection is currently signalized. Currently there is a single through lane in the eastbound direction. The project applicant shall provide fair share contribution toward an additional eastbound through lane.

**40<sup>th</sup> Street West and Avenue L**

N-22 This intersection is currently signalized. A single through lane is provided in the eastbound direction. The project applicant shall provide fair share contribution toward a second eastbound through lane.

**Street Segments**

N-23 The addition of one to three lanes will reduce the significant impacts along the study street segments. The project applicant shall provide fair share contribution to the improvement of Avenue L between 55<sup>th</sup> Street West to 60<sup>th</sup> Street West for three additional lanes, from 60<sup>th</sup> Street West to 62<sup>nd</sup> Street West for two additional lanes, and from 62<sup>nd</sup> Street West to 65<sup>th</sup> Street West for one additional lane. The project applicant shall provide fair share contribution to the improvement of 60<sup>th</sup> Street West between Avenue K-8 and Avenue L-8 for three additional lanes.

**LEVEL OF SIGNIFICANCE AFTER MITIGATION**

A summary of the results of the peak hour traffic signal warrant is provided in Table IV.N-12, below, and the project's traffic impact will be fully mitigated with the recommended improvement measures. Additionally, with the contribution to the improvement of Avenue L between 55<sup>th</sup> Street West to 60<sup>th</sup> Street West for three additional lanes, from 60<sup>th</sup> Street West to 62<sup>nd</sup> Street West for two additional lanes, from 62<sup>nd</sup> Street West to 65<sup>th</sup> Street West for one additional lane, and to the improvement of 60<sup>th</sup> Street West between Avenue K-8 to Avenue L-8 for three additional lanes, the project's street segment impact would be reduced to less than significant. Overall, with implementation of the required mitigation measures, all traffic impacts of the proposed project will be less than significant.

**Table IV.N-12  
Traffic Signal Warrant Summary Without and With Project  
Peak Hour Warrant**

I/S #		I/S	Condition	AM	Warrant Met?	PM	Warrant Met?	SAT	Warrant Met?
1	Major Street	60th Street West	WO Proj	452, 1317	Yes	591, 1292	Yes	595, 1379	Yes
	Minor Street	Avenue J	W Proj	488, 1430	Yes	667, 1561	Yes	700, 1724	Yes
2	Major Street	60th Street West	WO Proj	563, 1546	Yes	253, 1610	Yes	305, 1728	Yes
	Minor Street	Avenue J-8	W Proj	563, 1714	Yes	253, 1992	Yes	305, 2232	Yes
4	Major Street	60th Street West	WO Proj	205, 2016	Yes	129, 2232	Yes	144, 2517	Yes
	Minor Street	Avenue K-8	W Proj	205, 2284	Yes	119, 2832	Yes	144, 3323	Yes
5	Major Street	60th Street West	WO Proj	49, 2067	No	24, 2266	Yes	31, 2558	Yes
	Minor Street	Avenue K-12	W Proj	92, 2268	No	232, 2699	Yes	289, 3149	Yes
7	Major Street	60th Street West	WO Proj	153, 1954	Yes	60, 2080	No	36, 2230	No
	Minor Street	Avenue L-4	W Proj	153, 2155	Yes	60, 2539	No	36, 2835	No
9	Major Street	60th Street West	WO Proj	389, 1451	Yes	491, 1732	Yes	486, 1773	Yes
	Minor Street	Avenue M	W Proj	407, 1597	Yes	567, 2077	Yes	591, 2219	Yes
10	Major Street	Avenue L	WO Proj	620, 742	Yes	432, 877	Yes	498, 823	Yes
	Minor Street	70th Street West	W Proj	638, 796	Yes	525, 930	Yes	613, 897	Yes
13	Major Street	Avenue L	WO Proj	165, 1642	Yes	126, 1952	No	144, 1975	No
	Minor Street	55th Street West	W Proj	165, 2117	Yes	126, 2227	No	144, 2343	No
DWY 1	Major Street	Avenue L	W Proj	26, 1085	No	145, 1245	No	184, 1273	Yes
	Minor Street	1 <sup>st</sup> Driveway							
DWY 2	Major Street	60th Street West	W Proj	52, 2268	No	297, 2699	Yes	376, 3149	Yes
	Minor Street	2 <sup>nd</sup> Driveway							

Source: Overland Traffic Consultants, Inc., October 2008.

**Table IV.N-13  
Future Traffic Conditions with Project + Mitigation**

No.	Intersection	Peak Hour	Direction	Exist + Amb + Rel Proj		Future With Project		Future With Project Mitigation			
				ICU/Delay	LOS	ICU/Delay	LOS	ICU/Delay	LOS	Impact	Sig. Impact?
1	60 <sup>th</sup> Street West & Avenue J	AM	WB	393.2	F	532.0	F	0.741	C	N/A	No
			EB	286.7	F	423.7	F	-	-	-	-
		PM	WB	574.0	F	1033.0	F	0.729	C	N/A	No
			EB	283.7	F	673.8	F	-	-	-	-
		Sat	WB	318.0	F	778.3	F	0.863	D	N/A	No
			EB	183.5	F	620.5	F	-	-	-	-
2	60 <sup>th</sup> Street West & Avenue J-8	AM	WB	49.3	E	86.2	F	0.809	D	N/A	No
			EB	200.4	F	305.8	F	-	-	-	-
		PM	WB	95.8	F	155.5	F	0.717	C	N/A	No
			EB	181.0	F	228.7	F	-	-	-	-
		Sat	WB	79.1	F	394.6	F	0.842	D	N/A	No
			EB	242.2	F	829.8	F	-	-	-	-
3	60 <sup>th</sup> Street West & Avenue K	AM	-	0.935	E	1.024	F	0.835	D	-0.100	No
		PM	-	1.122	F	1.311	F	0.950	E	-0.172	No
		Sat	-	1.247	F	1.507	F	1.016	F	-0.231	No
4	60 <sup>th</sup> Street West & Avenue K-8	AM	WB	1349.0	F	3711.0	F	0.619	B	-	No
			EB	NO DATA	-	NO DATA	-	-	-	-	-
		PM	WB	NO DATA	-	NO DATA	-	0.665	B	-	No
			EB	NO DATA	-	NO DATA	-	-	-	-	-
		Sat	WB	NO DATA	-	NO DATA	-	0.785	C	-	No
			EB	NO DATA	-	NO DATA	-	-	-	-	-
5	60 <sup>th</sup> Street West & Avenue K-12	AM	WB	157.4	F	316.5	F	0.558	A	-	No
			EB	105.0	F	1528.0	F	-	-	-	-
		PM	WB	209.4	F	687.7	F	0.733	C	-	No
			EB	133.6	F	8860.0	F	-	-	-	-
		Sat	WB	637.6	F	20142.0	F	0.881	D	-	No
			EB	216.8	F	NO DATA	-	-	-	-	-

**Table IV.N-13 (Continued)**  
**Future Traffic Conditions with Project + Mitigation**

No.	Intersection	Peak Hour	Direction	Exist + Amb + Rel Proj		Future With Project		Future With Project Mitigation			
				ICU/Delay	LOS	ICU/Delay	LOS	ICU/Delay	LOS	Impact	Sig. Impact?
6	60 <sup>th</sup> Street West & Avenue L	AM	-	1.139	F	1.137	F	0.871	D	-0.268	No
		PM	-	1.330	F	1.355	F	0.989	E	-0.341	No
		Sat	-	1.486	F	1.563	F	1.155	F	-0.331	No
7	60 <sup>th</sup> Street West & Avenue L-4	AM	EB	160.0	F	317.6	F	0.603	B	-	No
		PM	EB	159.5	F	592.9	F	0.542	A	-	No
		Sat	EB	138.6	F	687.3	F	0.579	A	-	No
8	60 <sup>th</sup> Street West & Avenue L-8	AM	-	0.793	C	0.861	D	0.614	B	-0.179	No
		PM	-	0.809	D	0.951	E	0.597	A	-0.212	No
		Sat	-	0.868	D	1.066	F	0.651	B	-0.217	No
9	60 <sup>th</sup> Street West & Avenue M/Columbia	AM	-	175.39	F	220.20	F	0.681	B	-	No
		PM	-	314.23	F	421.14	F	0.779	C	-	No
		Sat	=	330.53	F	481.15	F	0.844	D	-	No
10	70 <sup>th</sup> Street West & Avenue L	AM	-	36.24	E	43.62	E	0.774	C	-	No
		PM	-	21.88	C	30.61	D	0.768	C	-	No
		Sat	-	21.97	C	35.66	E	0.806	D	-	No
11	65 <sup>th</sup> Street West & Avenue L	AM	NB	33.3	D	41.0	E	21.5	C	-	No
		PM	NB	12.8	B	14.2	B	-	-	-	-
		Sat	NB	14.0	B	16.6	C	-	-	-	-
13	55 <sup>th</sup> Street West & Avenue L	AM	NB	93.2	F	134.7	F	0.518	A	-	No
		PM	NB	49.4	E	106.9	F	0.575	A	-	No
		Sat	NB	50.2	F	136.1	F	0.597	A	-	No
14	50 <sup>th</sup> Street West & Avenue L	AM	-	1.003	F	1.043	F	0.729	C	-0.274	No
		PM	-	1.085	F	1.162	F	0.854	D	-0.231	No
		Sat	-	1.022	F	1.118	F	0.790	C	-0.232	No
15	45 <sup>th</sup> Street West & Avenue L	AM	-	0.737	C	0.764	C	0.477	A	-0.260	No
		PM	-	1.028	F	1.094	F	0.710	C	-0.318	No
		Sat	-	1.054	F	1.146	F	0.668	B	-0.386	No

**Table IV.N-13 (Continued)  
Future Traffic Conditions with Project + Mitigation**

No.	Intersection	Peak Hour	Direction	Exist + Amb + Rel Proj		Future With Project		Future With Project Mitigation			
				ICU/Delay	LOS	ICU/Delay	LOS	ICU/Delay	LOS	Impact	Sig. Impact?
16	40th Street West & Avenue L	AM	-	0.958	E	0.978	E	0.701	C	-0.257	No
		PM	-	1.046	F	1.094	F	0.884	D	-0.162	No
		Sat	-	0.954	E	1.014	F	0.754	C	-0.200	No

*Notes:*

*Dir = Direction, used for two-way stopped control delay analysis only (unsignalized locations)*

*No Data = No information available as there is a system failure in the direction of analysis*

*N/A = Not applicable*

*ICU = Intersection capacity utilization which is the intersection's volume/capacity*

*Delay = Calculated using Highway Capacity Method which is seconds of delay per vehicle.*

*Source: Overland Traffic Consultants, Inc., October 2008.*

**Table IV.N-14  
Street Segment Summary with Improvements**

Peak Hour	# of Lanes	Roadway Capacity	Future Without Project 2012			Future With Project + Mitigation						Sig. Impact?
			Total.	V/C	LOS	% In	% Out	Vol.	Total	V/C	LOS	
<b>Location: AVENUE L BETWEEN 57TH STREET &amp; 55TH STREET</b>												
AM	4	4,000	2,155	0.539	A	18%	18%	120	2,275	0.569	A	No
PM	4	4,000	2,557	0.639	A	18%	18%	275	2,832	0.708	B	No
<b>Location: AVENUE L BETWEEN 60TH STREET &amp; 57TH STREET</b>												
AM	4	4,000	2,172	0.543	A	18%	18%	120	2,292	0.573	A	No
PM	4	4,000	2,508	0.627	A	18%	18%	275	2,783	0.696	B	No
<b>Location: AVENUE L BETWEEN 62ND STREET &amp; 60TH STREET</b>												
AM	3	3,000	1,619	0.540	A	35%	13%	167	1,786	0.595	A	No
PM	4	4,000	2,084	0.521	A	35%	13%	365	2,449	0.612	A	No

**Table IV.N-14 (Continued)**  
**Street Segment Summary with Improvements**

Peak Hour	# of Lanes	Roadway Capacity	Future Without Project 2012			Future With Project + Mitigation						Sig. Impact?
			Total.	V/C	LOS	% In	% Out	Vol.	Total	V/C	LOS	
<b>Location: AVENUE L BETWEEN 65TH STREET &amp; 62ND STREET</b>												
AM	3	3,000	1,658	0.553	A	12%	12%	80	1,738	0.579	A	No
PM	3	3,000	1,889	0.630	B	12%	12%	183	2,072	0.691	B	No
<b>Location: 60TH STREET WEST BETWEEN AVENUE K-8 &amp; AVENUE K-14</b>												
AM	4	4,000	2,009	0.502	A	40%	40%	268	2,277	0.569	A	No
PM	5	5,000	2,311	0.462	A	40%	40%	611	2,922	0.584	A	No
<b>Location: 60TH STREET WEST BETWEEN AVENUE L &amp; AVENUE L-4</b>												
AM	4	4,000	2,077	0.519	A	30%	30%	201	2,278	0.570	A	No
PM	5	5,000	2,787	0.557	A	30%	30%	458	3,245	0.649	B	No
<b>Location: 60TH STREET WEST BETWEEN AVENUE L-4 &amp; AVENUE L-8</b>												
AM	4	4,000	2,316	0.579	A	30%	30%	201	2,517	0.629	B	No
PM	5	5,000	2,687	0.537	A	30%	30%	458	3,145	0.629	B	No
<i>Notes:</i> <i>V/C = Volume/Capacity, Incr = Increase, Pk Hr = Peak Hour.</i> <i>Source: Overland Traffic Consultants, Inc., October 2008.</i>												

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## IV. ENVIRONMENTAL IMPACT ANALYSIS

### O. UTILITIES

#### 1. WASTEWATER

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#### ENVIRONMENTAL SETTING

The County Sanitation Districts of Los Angeles County provide sewer conveyance infrastructure and wastewater treatment services to Los Angeles County. The project site is within the jurisdictional boundaries of the Los Angeles County Sanitation District No. 14, which serves the City of Lancaster, northern portions of the City of Palmdale, and surrounding areas of unincorporated Los Angeles County. Treatment of wastewater flow generated in District No. 14 is performed by the Lancaster Water Reclamation Plant (WRP), which is located approximately two miles north of the City of Lancaster. Currently the WRP serves a population of approximately 160,000 people. The WRP has a design capacity of 16 million gallons per day (mgd) and processes an average flow of 14.4 mgd.<sup>1</sup>

The project site is located in an area that is served by existing wastewater infrastructure. These sewers, owned by the City of Lancaster and maintained by the Los Angeles County Department of Public Works (DPW), empty into 21 trunk sewer lines representing approximately 64 miles of trunk lines in almost every developed portion of Lancaster. These trunk lines flow to the Rosamond Outfall Trunk Sewer, near Avenue H east of the Antelope Valley Freeway, which ultimately conveys wastewater in the City of Lancaster to the WRP.<sup>2</sup> Wastewater that has gone through the treatment process is then disposed of in the Piute Ponds located two miles east of the WRP on Edwards Air Force. Wastewater infrastructure in the immediate project vicinity consists of a local sewer line which would convey wastewater to the County's 15-inch diameter trunk sewer located under Avenue L at 52<sup>nd</sup> Street West.<sup>3</sup> This sewer line has a design capacity of 1.66 million gallons per day and conveyed a peak flow at capacity when last measured in 2006.<sup>4</sup>

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<sup>1</sup> Sanitation Districts of Los Angeles County, website.  
[http://www.lacsd.org/about/wastewater\\_facilities/antelope\\_valley\\_water\\_reclamation\\_plants/lancaster.asp](http://www.lacsd.org/about/wastewater_facilities/antelope_valley_water_reclamation_plants/lancaster.asp),  
accessed October 13, 2008.

<sup>2</sup> City of Lancaster, General Plan, Master Environmental Assessment Final EIR, 1997.

<sup>3</sup> Written correspondence from Ruth L. Franzen, Facilities Planning Department, County Sanitation Districts of Los Angeles County, June 7, 2007.

<sup>4</sup> Written correspondence from Ruth L. Franzen, Facilities Planning Department, County Sanitation Districts of Los Angeles County, September 27, 2006.

## ENVIRONMENTAL IMPACTS

### Thresholds of Significance

In accordance with Appendix G of the State CEQA Guidelines, a significant impact would occur if a project would:

- (a) Require or result in the construction of new wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; or
- (b) Result in a determination by the wastewater treatment provider which serves or may serve the project, that it doesn't have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

### Project Impacts

The proposed project consists of a retail/commercial development totaling approximately 344,550 square feet. Approximately 14,295 square feet of the development would be restaurant uses. A total of approximately 1,728 parking spaces are anticipated to be provided and access to the site would occur from Avenue L and 60<sup>th</sup> Street West. As the project site is currently undeveloped, no wastewater is currently generated on the project site.

As indicated in Table IV.O-1 below, Proposed Project Wastewater Generation, the proposed project is estimated to generate a total of 47,321 gpd or 0.05 mgd. This increase in wastewater generation is well within the 1.6 mgd of remaining capacity of wastewater that the LWRP currently is able to process.

**Table IV.O-1  
Proposed Project Wastewater Generation**

Land Use	Size	Generation Rate <sup>a</sup>	Total Wastewater Generation (gpd)
Retail	330,255 sf	100 gallons/1,000 sf/day	33,026
Restaurant	14,295 sf	1,000 gallons/1,000 sf/day	14,295
<b>Proposed Project Total</b>	<b>344,550 sf</b>		<b>47,321</b>
<i>Notes:</i>			
<i>sf. = square feet</i>			
<i><sup>a</sup> LACSD website <a href="http://www.lacsd.org/civica/filebank/blobdload.asp?BlobID=3531">http://www.lacsd.org/civica/filebank/blobdload.asp?BlobID=3531</a> and verbal correspondence with Ruth Frazen, Engineering Technician, Facilities and Planning Department, LACSD on July 12, 2007.</i>			

According to the Los Angeles County Sanitation Districts, the project site's contribution of sewage to the wastewater flows would continue to be served by the existing local sewers and the trunk sewer line conveying wastewater from the project site. Wastewater would continue to be conveyed to the Lancaster Water Reclamation Plant. As part of the proposed project permitting process, the project applicant would verify with the Los Angeles County Sanitation Department the 15-inch trunk line's capacity. If capacity

is lacking to accommodate the proposed project, the applicant would be required to pay their share of the necessary upgrades. If infrastructure upgrades are required, it is not expected to create a significant impact to the physical environment because (1) any disruption of service would be of a short-term nature, (2) replacement of the sewer lines would be within public rights-of-way, and (3) since existing infrastructure would be replaced with larger infrastructure, the physical environment has already been significantly disturbed. It should also be noted that any infrastructure upgrades that may be required would not significantly affect the existing disturbed condition. Furthermore, the WRP is currently upgrading its facilities to accommodate the growing demand for treatment services at its plant by adding another 2 million gpd in capacity. The WRP upgrade will also undergo the necessary CEQA process to complete its project outside of the context of this project. Additionally, water conservation measures as established by the General Plan of the City of Lancaster and the 2005 Integrated Urban Water Management Plan for the Antelope Valley (e.g., xeriscaping, improved irrigation systems, public education about conservation, etc.) would be implemented as feasible as part of the project design and would help reduce the amount of wastewater generated with respect to sewer service to a level below what is calculated in Table IV.O-1, above. Furthermore, the County Sanitation Districts are empowered by the California Health and Safety Code to charge a fee for the privilege of connecting (directly or indirectly) to the Districts' sewerage system or increasing the existing strength and/or quantity of wastewater attributable to a particular parcel. This connection fee is required to construct an incremental expansion of the sewerage system to accommodate the proposed project, which will mitigate the impact of this project on the present sewerage system. As such, project impacts to wastewater conveyance infrastructure and treatment capacity would be less than significant.

## **CUMULATIVE IMPACTS**

Implementation of the proposed project in conjunction with the 82 identified related projects in Section III, Environmental Setting, would further increase wastewater generation. The related projects in conjunction with the proposed project are anticipated to generate approximately 2,372,502 gpd of wastewater (see Table IV.O-2). The cumulative development in the project area would continue to increase wastewater flows in the project area and incrementally decrease the capacity at the Lancaster Water Reclamation Plant (WRP). It is assumed that all of the related projects would rely on the wastewater services provided by WRP. As previously discussed, the design capacity of the WRP is 16 million gpd and the WRP's current average wastewater flow is 14.4 million gpd. The WRP does not currently have sufficient capacity for the related projects and proposed project combined. However, the WRP is currently beginning the process of upgrading the WRP to accommodate a wastewater flow of up to 18 million gallons per day due to increasing demand for wastewater services. With the upgrades to the WRP, wastewater flows from these projects will not exceed capacity. With respect to the local trunk sewer line, as for the proposed project, the related projects would be required to verify available capacity of the local trunk sewer line, as part of their respective permitting processes, prior to development. Therefore, any upgrades required by the proposed project or any of the related projects would be the

**Table IV.O-2  
Cumulative Wastewater Generation**

<b>No.</b>	<b>Land Use</b>	<b>Size</b>	<b>Generation Rate <sup>a</sup></b>	<b>Total Wastewater Generation (gpd)</b>
1	Single Family Homes	111 du	230 gallons/du/day	25,530
2	Single Family Homes	183 du	230 gallons/du/day	42,090
3	Single Family Homes	300 du	230 gallons/du/day	69,000
4	Single Family Homes	204 du	230 gallons/du/day	46,290
5	Single Family Homes	62 du	230 gallons/du/day	14,260
6	Single Family Homes	64 du	230 gallons/du/day	14,720
7	Single Family Homes	2 du	230 gallons/du/day	460
8	Active Adult (Residential)	600 du	230 gallons/du/day	138,000
9	Active Adult (Residential)	600 du	230 gallons/du/day	138,000
10	Single Family Homes	23 du	230 gallons/du/day	5,290
11	Single Family Homes	207 du	230 gallons/du/day	47,610
	Single Family Homes	31 du	230 gallons/du/day	7,130
12	Single Family Homes	245 du	230 gallons/du/day	56,350
13	Single Family Homes	59 du	230 gallons/du/day	13,570
	Single Family Homes	59 du	230 gallons/du/day	13,570
14	Single Family Homes	176 du	230 gallons/du/day	40,480
15	Single Family Homes	56 du	230 gallons/du/day	12,880
16	Single Family Homes	1,594 du	230 gallons/du/day	366,620
	Park	1,221,858 sf	Unknown <sup>b</sup>	0
	School <sup>cd</sup>	500 students	12 gallons/student/day	6,000
17	Single Family Homes	84 du	230 gallons/du/day	19,320
18	Single Family Homes	77 du	230 gallons/du/day	17,710
19	Single Family Homes	21 du	230 gallons/du/day	4,830
20	Single Family Homes	77 du	230 gallons/du/day	17,710
21	Single Family Homes	36 du	230 gallons/du/day	8,280
22	Single Family Homes	19 du	230 gallons/du/day	4,370
23	Single Family Homes	49 du	230 gallons/du/day	11,270
24	Single Family Homes	36 du	230 gallons/du/day	8,280
25	Single Family Homes	650 du	230 gallons/du/day	149,500
26	Single Family Homes	104 du	230 gallons/du/day	23,920
27	Single Family Homes	32 du	230 gallons/du/day	7,360
28	Single Family Homes	41 du	230 gallons/du/day	9,430
29	Single Family Homes	112 du	230 gallons/du/day	25,760
30	Single Family Homes	85 du	230 gallons/du/day	19,550
31	Single Family Homes	33 du	230 gallons/du/day	7,590
32	Single Family Homes	40 du	230 gallons/du/day	9,200
33	Single Family Homes	58 du	230 gallons/du/day	13,340
34	Single Family Homes	41 du	230 gallons/du/day	9,430
35	Single Family Homes	43 du	230 gallons/du/day	9,890
36	Single Family Homes	156 du	230 gallons/du/day	35,880
37	Single Family Homes	86 du	230 gallons/du/day	19,780
38	Single Family Homes	58 du	230 gallons/du/day	13,340
39	Single Family Homes	58 du	230 gallons/du/day	13,340
40	Single Family Homes	60 du	230 gallons/du/day	13,800
41	Single Family Homes	254 du	230 gallons/du/day	58,420
42	Single Family Homes	22 du	230 gallons/du/day	5,060
43	Single Family Homes	106 du	230 gallons/du/day	24,380

**Table IV.O-2 (Continued)**  
**Cumulative Wastewater Generation**

<b>No.</b>	<b>Land Use</b>	<b>Size</b>	<b>Generation Rate <sup>a</sup></b>	<b>Total Wastewater Generation (gpd)</b>
44	Single Family Homes	73 du	230 gallons/du/day	16,790
45	Single Family Homes	108 du	230 gallons/du/day	24,840
46	Single Family Homes	73 du	230 gallons/du/day	16,790
47	Single Family Homes	20 du	230 gallons/du/day	4,600
48	Single Family Homes	42 du	230 gallons/du/day	9,660
49	Single Family Homes	152 du	230 gallons/du/day	34,960
50	Single Family Homes	65 du	230 gallons/du/day	14,950
51	Single Family Homes	78 du	230 gallons/du/day	17,940
52	Single Family Homes	39 du	230 gallons/du/day	8,970
53	Single Family Homes	88 du	230 gallons/du/day	20,240
54	Single Family Homes	38 du	230 gallons/du/day	8,740
55	Middle School <sup>d</sup>	700 students	8 gallons/student/day	5,600
56	Single Family Homes	215 du	230 gallons/du/day	49,450
57	Single Family Homes	54 du	230 gallons/du/day	12,420
58	Single Family Homes	307 du	230 gallons/du/day	70,610
59	Single Family Homes	95 du	230 gallons/du/day	21,850
60	Single Family Homes	20 du	230 gallons/du/day	4,600
61	Single Family Homes	169 du	230 gallons/du/day	38,870
62	Single Family Homes	34 du	230 gallons/du/day	7,820
63	Single Family Homes	101 du	230 gallons/du/day	23,230
64	Single Family Homes	29 du	230 gallons/du/day	6,670
65	Single Family Homes	116 du	230 gallons/du/day	26,680
66	Single Family Homes	87 du	230 gallons/du/day	20,010
67	Single Family Homes	242 du	230 gallons/du/day	55,660
68	Single Family Homes	61 du	230 gallons/du/day	14,030
69	Single Family Homes	94 du	230 gallons/du/day	21,620
70	Single Family Homes	240 du	230 gallons/du/day	55,200
71	Single Family Homes	61 du	230 gallons/du/day	14,030
72	Single Family Homes	19 du	230 gallons/du/day	4,370
73	Single Family Homes	77 du	230 gallons/du/day	17,710
74	Single Family Homes	74 du	230 gallons/du/day	17,020
75	Single Family Homes	61 du	230 gallons/du/day	14,030
76	Single Family Homes	450 du	230 gallons/du/day	103,500
77	Single Family Homes	650 du	230 gallons/du/day	149,500
78	Commercial	394,575 sf	100 gallons/1,000 sf/day	39,458
79	Single Family Homes	9 du	230 gallons/du/day	2,070
80	Retail	14,112 sf	100 gallons/1,000 sf/day	1,411
81	Senior Housing	75 du	75 gallons/du/day	5,625
82	Retail	267,494 sf	100 gallons/1,000 sf/day	26,749
<b>Subtotal Related Projects</b>				<b>2,325,181</b>
<b>Subtotal Proposed Project</b>				<b>47,321</b>
<b>Cumulative Total</b>				<b>2,372,502</b>

**Table IV.O-2 (Continued)  
Cumulative Wastewater Generation**

No.	Land Use	Size	Generation Rate <sup>a</sup>	Total Wastewater Generation (gpd)
<p><i>Notes:</i>  <i>du=dwelling unit; sf=square feet</i>  <sup>a</sup> <i>LACSD website <a href="http://www.lacsd.org/civica/filebank/blobdload.asp?BlobID=3531">http://www.lacsd.org/civica/filebank/blobdload.asp?BlobID=3531</a> and verbal correspondence with Ruth Frazen, Engineering Technician, Facilities and Planning Department, LACSD on July 12, 2007</i>  <sup>b</sup> <i>No generation rates available, however any wastewater generation is expected to be minimal.</i>  <sup>c</sup> <i>California Department of Education, School Facility Recommendations for Class Size Reduction, website: <a href="http://www.cde.ca.gov/ls/cs/k3/recommend.asp">http://www.cde.ca.gov/ls/cs/k3/recommend.asp</a>, August 18, 2005. Calculated based on an average of 1 student/30 sf of school uses. Current California Code of Regulations, Title 5, Section 14030(g)(1)(A) states that classrooms be "960 sq. ft. or an equivalent space that provides not less than 30 sq. ft. per student." The current Title 5 regulations are based on an average of 30 students per classroom. In addition, revisions to the Title 5 Regulations are being pursued that would establish 960 sf as the standard for all grade 1-6 classrooms. As a conservative estimate, this 1 student/30 sf factor was utilized for calculating day care center and school sf for all levels</i>  <sup>d</sup> <i>Middle school uses are expected to generate wastewater at a rate of 8 gallons per student per day. As related project 16 does not specify the type of school to be constructed, a high school use was assumed (as the most conservative) with a wastewater generation rate of 12 gallons per student per day.</i></p>				

responsibility of the respective project applicants, and as such, impacts with respect to local trunk sewer capacity would be less than significant.

As with the proposed projects, the City of Lancaster and the Los Angeles County Sanitation Districts undertake expansion or modification of wastewater service infrastructure to serve future growth within the service area as required in the normal process of providing service. Cumulative impacts related to wastewater service would be addressed through this process. As such, the proposed project would not contribute to cumulatively considerable effects on wastewater service infrastructure.

**MITIGATION MEASURES**

No mitigation measures are required

**LEVEL OF SIGNIFICANCE AFTER MITIGATION**

The proposed project’s impact on sewer services would be less than significant.

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**IV. ENVIRONMENTAL IMPACT ANALYSIS**  
**O. UTILITIES**  
**2. WATER**

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**ENVIRONMENTAL SETTING**

**Water Supplies**

Water is supplied to the project site by the Los Angeles County Water Works District 40 of the County of Los Angeles Department of Public Works (DPW). Water supplies are derived from the following sources: groundwater, aquifer storage and recharge (ASR), water reclamation, and wholesale (imported) water from the State Water Project (SWP) which is then purchased by Antelope Valley East Kern Water Agency (AVEK).<sup>5</sup> Water availability from these sources varies depending upon the weather and demand. In Lancaster, ground water levels fluctuate on a year to year basis while the amount of rainfall and runoff determines the amount of water available from the SWP.<sup>6</sup> Beginning in 2007, the Lancaster Water Reclamation Plant will be expanded to provide an additional 4,000 acre-feet of reclaimed water for use during high-demand periods at reuse locations.<sup>7</sup>

The water obtained by the AVEK is sold to local retail water agencies that include:

- Antelope Park Mutual Water Companies #1 and #2
- Averydale Mutual Water Company
- California Water Service
- El Dorado Mutual Water Company
- Evergreen Mutual Water Corporation
- Green Grove Mutual Water Company
- Lancaster Water Company
- Los Angeles County Waterworks District 40
- Palmdale Water District
- Palm Ranch Irrigation District
- Quartz Hill Water District
- Shadow Acres Municipal Water District
- Sunnyside Farms Municipal Water District

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<sup>5</sup> *Ibid.*

<sup>6</sup> *Ibid.*

<sup>7</sup> *Los Angeles County Sanitation Districts, Projects, Lancaster Water Reclamation Plant Expansion, website: <http://www.lacsd.org>, accessed April 11, 2007.*

- Westside Park Water Company
- White Fence Farms Mutual Water Company #1 and #3

On August 31, 2007, a historic court ruling was made concerning the Delta smelt. The Delta smelt is a small fish endemic to the Sacramento River Delta. The court ordered limits on the pumping of water from the Sacramento River Delta, which supplies much of the water to the California Aqueduct. The pumping will be shut down or limited during winter and spring as this is the breeding season for the Delta smelt. Actual water supply curtailment will depend on fish, weather and flow conditions in the Delta.<sup>8</sup>

AVEK is supplied a large part of its water from the California Aqueduct under the SWP and therefore limitations on water pumping in the Delta has the potential to affect water supplies in the project area. Public outreach and education about water conservation measures are an important step to ensuring that water supplies are adequate given the pump shutdown and the drought conditions currently affecting the region.<sup>9</sup>

The majority of the City of Lancaster, including the project site, is served by the Los Angeles County Waterworks District 40. District 40 has recently allocated 1,000 acre feet of water to the City of Lancaster to allocate for projects considered important. A draft policy regarding distribution of this water is currently being prepared. As the project site is currently undeveloped, no water consumption currently exists on the project site.

### **Water Supply Infrastructure**

The majority of the City of Lancaster is located in the Antelope Valley in Region 4, part of District 40 of the County of Los Angeles Waterworks Districts. Region 4 and Region 34, representing Palmdale, are integrated and operated as one water distribution system.<sup>10</sup> The infrastructure needed to supply residents and businesses includes: water storage facilities, transmission and distribution pipelines, water treatment plants, and other related facilities to deliver water to the City's residents.<sup>11</sup>

Water storage is essential for the conservation of water to supply daily peaks, meet high demand conditions, and provide for firefighting emergencies. The County water system has four 8 million gallon water storage facilities near Mojave and one 3 million gallon reservoir at Vincent Hill Summit.<sup>12</sup> District 40 has been a signatory to the California Urban Water Conservation Council (CUWCC) Memorandum of

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<sup>8</sup> *Metropolitan Water District of Southern California, News Release, August 31, 2007.*

<sup>9</sup> *Metropolitan Water District of Southern California website:*  
<http://www.mwdh2o.com/mwdh2o/pages/news/press%5Freleases/2007%2D05/banks%5Fshutdown.htm>

<sup>10</sup> *Los Angeles County Department of Public Works, Los Angeles County Water Works Districts, 2005 Integrated Urban Water Management Plan for the Antelope Valley, website: <http://ladpw.org/WWD/Web/>, accessed April 4, 2007.*

<sup>11</sup> *Ibid.*

<sup>12</sup> *Ibid.*

Understanding since 1996, and as such has pledged to comply with the 14 Demand Management Measures<sup>13</sup> (DMM) required under the CUWCC, including:

- DMM1, Water Survey Programs for single-family residential and multi-family residential sources;
- DMM2, Residential plumbing retrofit;
- DMM3, System water audits, leak detection, and repair;
- DMM4, Metering with commodity rates for all new connections and retrofit of existing connections;
- DMM5, Large landscape conservation programs and incentives;
- DMM6, High-efficiency washing machine rebate programs;
- DMM7, Public information programs;
- DMM8, School education programs;
- DMM9, Conservation programs for commercial, industrial, and institutional accounts;
- DMM10, Wholesale agency programs;
- DMM11, Conservation Pricing;
- DMM12, Water conservation coordinator;
- DMM13, Water waste prohibition; and
- DMM14, Residual-ultra-low flush toilet replacement programs.

Much of the City's water supplies flow from north to south and enter the Antelope Valley from the East Branch of the California Aqueduct and through these four treatment facilities: the Quartz Hill Water Treatment Plant, the Eastside Water Treatment Plant, the Rosamond Water Treatment Plant, and the Acton Water Treatment Plant, which are operated by the Antelope Valley-East Kern Water Agency.<sup>14</sup> Water entering these four facilities undergoes treatment and disinfection before being distributed throughout the water service area. The Quartz Hill Water Treatment Plant was expanded in 1989 and is capable of producing 65 million gallons per day of filtered water and is currently being upgraded to produce 90 million gallons of treated water per day upon completion.<sup>15</sup> The Eastside Water Treatment Plant was expanded in 1988 and is capable of producing 10 million gallons per day of filtered water. The Rosamond Water Treatment Plant is capable of producing 14 million gallons per day of filtered water. The Acton Water Treatment Plant is capable of producing 4 million gallons per day of filtered water. The project site is adjacent to a network of water mains located beneath all major streets that deliver water to the project area.

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<sup>13</sup> *Ibid.*

<sup>14</sup> *Antelope Valley-East Kern Water Agency, AVEK Facilities, website: <http://www.avek.org/index.html>, accessed April 4, 2007.*

<sup>15</sup> *Phone correspondence with Michael Flood, Engineer, Antelope Valley-East Kern Water Agency, April 11, 2007.*

## **Regulatory Framework**

To meet the growing population and demand for water in the City of Lancaster, the General Plan mandates several water conservation and reuse measures and incentives for existing and new developments. Some of these water conservation and reuse measures include the use of reclaimed water for irrigation, selection of drought-tolerant and water using plants, and the incorporation of water conservation techniques into irrigation system design.

CEQA Guidelines Section 15083.5 requires a Lead Agency to identify water systems to provide water supplies for projects over specified thresholds. The 2003 Senate Bill (SB) 221 requires that for any residential subdivision project the Lead Agency include a requirement that a sufficient water supply shall be available to serve the residential development. In regards to SB 221, the proposed project would not be subject to this bill because it does not include a residential subdivision.

SB 610 requires a water supply assessment to evaluate whether total projected water supplies will meet the projected water demand for certain development projects that are subject to CEQA review. Existing law identifies those projects as (a) a residential development of more than 500 dwelling units; (b) a shopping center or business employing more than 1,000 persons or having more than 500,000 square feet of floor space; (c) a commercial office building employing more than 1,000 persons or having more than 250,000 square feet; (d) a hotel or motel with more than 500 rooms; (e) an industrial or manufacturing establishment housing more than 1,000 persons or having more than 650,000 square feet or 40 acres; (f) a mixed use project containing any of the foregoing; or (g) any other project that would have a water demand at least equal to a 500 dwelling unit project. The proposed project does not meet the listed criteria of SB 610 and, therefore, a water supply assessment is not required.

## **ENVIRONMENTAL IMPACTS**

### **Thresholds of Significance**

In accordance with guidance provided in Appendix G of the State CEQA Guidelines, the proposed projects would have a potentially significant water impact if it would result in one or more of the following:

- a) A project would require or result in the construction of new water facilities or expansion of existing facilities, the construction of which could cause a significant environmental effect.
- b) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.

Water consumption was estimated from wastewater generation factors. In order to present a conservative analysis, water consumption is assumed to be 120 percent of the wastewater generated for a given land use.

## Project Impacts

### Water Supplies

The proposed project is anticipated to consume approximately 56,785 gallons per day (gpd) of water (see Table IV.O-3). According to the 2005 Integrated Urban Water Management Plan for the Antelope Valley, all water purveyors, including District 40 which serves the City of Lancaster, will have enough water supplies to meet the increasing demands projected through the year 2020 under an average water year assessment and through 2030 under single dry-year and multi dry-year water assessments. While the Urban Water Management Plan would have considered the site for residential uses (under the current zoning and general plan designation), the water demand for the proposed project would be similar as for a residential project on the site. As shown in Section VI Alternatives, the existing zoning alternative consisting of 197 single-family residences would create demand for 54,372 gallons per day, whereas the proposed project would create demand for 56,785 gallons per day. However, while as discussed above, the pumping curtailments in the Sacramento Delta area have the potential to affect water supplies in all of Southern California including the project site, water would be supplied to the project site as part of the City of Lancaster's water allotment from District 40. Therefore, as water supply can be verified for the proposed project, impacts with respect to water supply would be less than significant.

**Table IV.O-3  
Proposed Project Water Consumption**

Land Use	Size	Generation Rate <sup>a</sup>	Total Water Consumption (gpd)
Retail	330,255 sf	120 gallons/1,000 sf/day	39,631
Restaurant	14,295 sf	1,200 gallons/1,000 sf/day	17,154
<b>Proposed Project Total</b>	<b>344,550 sf</b>		<b>56,785</b>
<i>Notes:</i>			
<i>sf. =square feet</i>			
<i><sup>a</sup> LACSD website <a href="http://www.lacsd.org/civica/filebank/blobdload.asp?BlobID=3531">http://www.lacsd.org/civica/filebank/blobdload.asp?BlobID=3531</a> and verbal correspondence with Ruth Frazen, Engineering Technician, Facilities and Planning Department, LACSD on July 12, 2007.</i>			

### Water Supply Infrastructure

The water demands of the project site would be served by the existing water system and would comply with state and local water conservation measures. Los Angeles County Waterworks undertakes expansion or modification of water service infrastructure to serve future growth in the City as these expansions or modifications are required in the normal process of providing water service. Furthermore, the Antelope Valley-East Kern Water Agency is upgrading the Quartz Hill Water Treatment Plant from production capacities of 65 million gpd to 90 million gpd to accommodate the increase in demand in the City of Lancaster. The Antelope Valley-East Kern Agency will undergo the CEQA process for the above-mentioned upgrades outside the context of the proposed project. As such, impacts to water supply infrastructure would be less than significant.

## CUMULATIVE IMPACTS

### Water Supplies

With respect to water supplies, the proposed project combined with the identified 82 related projects listed in Section III, Environmental Setting, would be expected to increase regional demand for water supplies. The cumulative projects, including the proposed project, are anticipated to consume approximately 3,209,776 gpd of water (see Table IV.O-4).

**Table IV.O-4  
Cumulative Water Consumption**

No.	Land Use	Size	Consumption Rate <sup>a</sup>	Total Water Consumption (gpd)
1	Single Family Homes	111 du	276 gallons/du/day	30,636
2	Single Family Homes	183 du	276 gallons/du/day	50,508
3	Single Family Homes	300 du	276 gallons/du/day	82,800
4	Single Family Homes	204 du	276 gallons/du/day	56,304
5	Single Family Homes	62 du	276 gallons/du/day	17,112
6	Single Family Homes	64 du	276 gallons/du/day	17,664
7	Single Family Homes	2 du	276 gallons/du/day	552
8	Active Adult (Residential)	600 du	276 gallons/du/day	165,600
9	Active Adult (Residential)	600 du	276 gallons/du/day	165,600
10	Single Family Homes	23 du	276 gallons/du/day	6,348
11	Single Family Homes	207 du	276 gallons/du/day	57,132
	Single Family Homes	31 du	276 gallons/du/day	8,556
12	Single Family Homes	245 du	276 gallons/du/day	67,620
13	Single Family Homes	59 du	276 gallons/du/day	16,284
	Single Family Homes	59 du	276 gallons/du/day	16,284
14	Single Family Homes	176 du	276 gallons/du/day	48,576
15	Single Family Homes	56 du	276 gallons/du/day	15,456
16	Single Family Homes	1,594 du	276 gallons/du/day	439,944
	Park	1,221,858 sf	Unknown <sup>b</sup>	0
	School <sup>c</sup>	500 students	9.6 gallons/student/day	7,200
17	Single Family Homes	84 du	276 gallons/du/day	23,184
18	Single Family Homes	77 du	276 gallons/du/day	21,252
19	Single Family Homes	21 du	276 gallons/du/day	5,796
20	Single Family Homes	77 du	276 gallons/du/day	21,252
21	Single Family Homes	36 du	276 gallons/du/day	9,936
22	Single Family Homes	19 du	276 gallons/du/day	5,244
23	Single Family Homes	49 du	276 gallons/du/day	13,524
24	Single Family Homes	36 du	276 gallons/du/day	9,936
25	Single Family Homes	650 du	276 gallons/du/day	179,400
26	Single Family Homes	104 du	276 gallons/du/day	28,704
27	Single Family Homes	32 du	276 gallons/du/day	8,832
28	Single Family Homes	41 du	276 gallons/du/day	11,316
29	Single Family Homes	112 du	276 gallons/du/day	30,912
30	Single Family Homes	85 du	276 gallons/du/day	23,460
31	Single Family Homes	33 du	276 gallons/du/day	9,108
32	Single Family Homes	40 du	276 gallons/du/day	11,040

**Table IV.O-4 (Continued)**  
**Cumulative Water Consumption**

<b>No.</b>	<b>Land Use</b>	<b>Size</b>	<b>Consumption Rate <sup>a</sup></b>	<b>Total Water Consumption (gpd)</b>
33	Single Family Homes	58 du	276 gallons/du/day	16,008
34	Single Family Homes	41 du	276 gallons/du/day	11,316
35	Single Family Homes	43 du	276 gallons/du/day	11,868
36	Single Family Homes	156 du	276 gallons/du/day	43,056
37	Single Family Homes	86 du	276 gallons/du/day	23,736
38	Single Family Homes	58 du	276 gallons/du/day	16,008
39	Single Family Homes	58 du	276 gallons/du/day	16,008
40	Single Family Homes	60 du	276 gallons/du/day	16,560
41	Single Family Homes	254 du	276 gallons/du/day	70,104
42	Single Family Homes	22 du	276 gallons/du/day	6,072
43	Single Family Homes	106 du	276 gallons/du/day	29,256
44	Single Family Homes	73 du	276 gallons/du/day	20,148
45	Single Family Homes	108 du	276 gallons/du/day	29,808
46	Single Family Homes	73 du	276 gallons/du/day	20,148
47	Single Family Homes	20 du	276 gallons/du/day	5,520
48	Single Family Homes	42 du	276 gallons/du/day	11,592
49	Single Family Homes	152 du	276 gallons/du/day	41,952
50	Single Family Homes	65 du	276 gallons/du/day	17,940
51	Single Family Homes	78 du	276 gallons/du/day	21,528
52	Single Family Homes	39 du	276 gallons/du/day	10,764
53	Single Family Homes	88 du	276 gallons/du/day	24,288
54	Single Family Homes	38 du	276 gallons/du/day	10,488
55	Middle School	700 students	9.6 gallons/student/day	6,720
56	Single Family Homes	215 du	276 gallons/du/day	59,340
57	Single Family Homes	54 du	276 gallons/du/day	14,904
58	Single Family Homes	307 du	276 gallons/du/day	84,732
59	Single Family Homes	95 du	276 gallons/du/day	26,220
60	Single Family Homes	20 du	276 gallons/du/day	5,520
61	Single Family Homes	169 du	276 gallons/du/day	46,644
62	Single Family Homes	34 du	276 gallons/du/day	9,384
63	Single Family Homes	101 du	276 gallons/du/day	27,876
64	Single Family Homes	29 du	276 gallons/du/day	8,004
65	Single Family Homes	116 du	276 gallons/du/day	32,016
66	Single Family Homes	87 du	276 gallons/du/day	24,012
67	Single Family Homes	242 du	276 gallons/du/day	66,792
68	Single Family Homes	61 du	276 gallons/du/day	16,836
69	Single Family Homes	94 du	276 gallons/du/day	25,944
70	Single Family Homes	240 du	276 gallons/du/day	66,240
71	Single Family Homes	61 du	276 gallons/du/day	16,836
72	Single Family Homes	19 du	276 gallons/du/day	5,244
73	Single Family Homes	77 du	276 gallons/du/day	21,252
74	Single Family Homes	74 du	276 gallons/du/day	20,424
75	Single Family Homes	61 du	276 gallons/du/day	16,836
76	Single Family Homes	450 du	276 gallons/du/day	124,200
77	Single Family Homes	650 du	276 gallons/du/day	179,400
78	Commercial	394,575 sf	120 gallons/1,000 sf/day	47,349
79	Single Family Homes	9 du	276 gallons/du/day	2,484

**Table IV.O-4 (Continued)  
Cumulative Water Consumption**

No.	Land Use	Size	Consumption Rate <sup>a</sup>	Total Water Consumption (gpd)
80	Retail	14,112 sf	120 gallons/1,000 sf/day	1,693
81	Senior Housing	75 du	90 gallons/du/day	6,750
82	Retail	267,494 sf	120 gallons/1,000 sf/day	32,099
<b>Subtotal Related Projects</b>				<b>3,152,991</b>
<b>Subtotal Proposed Project</b>				<b>56,785</b>
<b>Cumulative Total</b>				<b>3,209,776</b>

*Notes:**du=dwelling unit; sf=square feet**<sup>a</sup> LACSD website <http://www.lacsd.org/civica/filebank/blobdload.asp?BlobID=3531> and verbal correspondence with Ruth Frazen, Engineering Technician, Facilities and Planning Department, LACSD on July 12, 2007**<sup>b</sup> No generation rates available, however any wastewater generation is expected to be minimal.**<sup>c</sup> California Department of Education, School Facility Recommendations for Class Size Reduction, website: <http://www.cde.ca.gov/ls/cs/k3/recommend.asp>, August 18, 2005. Calculated based on an average of 1 student/30 sf of school uses. Current California Code of Regulations, Title 5, Section 14030(g)(1)(A) states that classrooms be "960 sq. ft. or an equivalent space that provides not less than 30 sq. ft. per student." The current Title 5 regulations are based on an average of 30 students per classroom. In addition, revisions to the Title 5 Regulations are being pursued that would establish 960 sf as the standard for all grade 1-6 classrooms. As a conservative estimate, this 1 student/30 sf factor was utilized for calculating day care center and school sf for all levels*

The 2005 Integrated Urban Water Management Plan for the Antelope Valley anticipates that its projected water supplies available during average, single dry-year, and multi dry-year periods would meet the projected water demand associated with the proposed project and the related projects in the Antelope Valley. Furthermore, for the projects that meet the requirements established pursuant to SB 610 and SB 221 (e.g., projects of more than 500 dwelling units or commercial space with more than 500,000 square feet of floor area) a water supply assessment demonstrating sufficient water availability is required on a project-by-project basis so as to further ensure adequacy of supplies. Similar to the proposed project, each related project would be required to comply with City and State water conservation programs. However, as discussed above, the pumping curtailments in the Sacramento Delta area have the potential to affect water supplies in all of Southern California including the project site and the related projects. However, as water supply can be verified for the proposed project under the City's allotment from District 40, the proposed project's incremental contribution to a cumulative water supply impact would be less than significant.

### **Water Supply Infrastructure**

The Los Angeles County Waterworks Districts undertake expansion or modification of water service infrastructure and distribution systems to serve future growth in the City as required in the normal process of providing water. Furthermore, the Antelope Valley-East Kern Water Agency is upgrading the Quartz Hill Water Treatment Plant from production capacities of 65 million gpd to 90 million gallons per day to

accommodate the increase in demand in the City of Lancaster. As such, the proposed project would not contribute to a cumulatively considerable effect on water supply infrastructure.

## **MITIGATION MEASURES**

The proposed project would have a less significant impact with respect to water supply. However, the following mitigation measures are required to further reduce the project's impacts on water supplies:

- O.2-1 The project developer shall ensure that the landscape irrigation system be designed, installed and tested to provide uniform irrigation coverage. Sprinkler head patterns shall be adjusted to minimize over spray onto walkways and streets.
- O.2-2 The project developer shall install either a "smart sprinkler" system to provide irrigation for the landscaped areas or, at a minimum, set automatic irrigation timers to water landscaping during early morning or late evening hours to reduce water losses from evaporation. Irrigation run times for all zones shall be adjusted seasonally, reducing water times and frequency in the cooler months (fall, winter, spring). Sprinkler timer run times shall be adjusted to avoid water runoff, especially when irrigating sloped property.
- O.2-3 The project developer shall select and use drought-tolerant, low-water-consuming plant varieties to reduce irrigation water consumption.
- O.2-4 The project developer shall install low-flush water toilets in new construction. Low-flow faucet aerators should be installed on all sink faucets.
- O.2-5 The City of Lancaster shall allocate water to the proposed project from the 1,000-acre feet of water allotted to the City from County Waterworks.

## **LEVEL OF SIGNIFICANCE AFTER MITIGATION**

The proposed project would result in a less than significant impact with respect to water supply and infrastructure.

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## IV. ENVIRONMENTAL IMPACT ANALYSIS

### O. UTILITIES

#### 3. SOLID WASTE

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##### ENVIRONMENTAL SETTING

##### Solid Waste Collection and Disposal

Within the City of Lancaster, solid waste management, including collection and disposal services and landfill operation, is administered by one private company under a franchise agreement. Currently, Waste Management, Inc. collects all residential, commercial, and industrial solid waste.<sup>16</sup> All collected solid waste is deposited at the Lancaster Landfill and Recycling Center (Landfill) located at 600 East Avenue F<sup>17</sup>, at the Antelope Valley Recycling and Disposal Facility located at 1200 West City Ranch Road in Palmdale, and at the Antelope Valley Environmental Collection Center (AVECC) also located at 1200 West City Ranch Road in the City of Palmdale. The AVECC is designed to be a disposal site for Household Hazardous Wastes (HHW), such as paint, tires, and electronics.<sup>18</sup> As the project site is undeveloped, no solid waste is currently generated on the site.

##### Landfills

The Lancaster Landfill and Recycling Center accepts municipal solid waste for landfill operations and recycles appliances, tires, clean dirt, clean asphalt/concrete and wood waste and green waste. Currently the landfill has approximately 19,088,739 cubic yards of remaining capacity. It is permitted to accept 1,700 tons of solid waste per day<sup>19</sup> and has an average daily intake of approximately 1,500 tons/day.<sup>20</sup> Waste Management, Inc. is in the process of obtaining new permits to allow for an increase in the amount of solid waste accepted per day from its current level to 3,000 tons per day to meet increasing demand.<sup>21</sup>

The Antelope Valley Recycling and Disposal Facility accepts municipal solid waste for landfill operations and recycles appliances, tires, clean dirt, clean asphalt/concrete and wood waste and green

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<sup>16</sup> *City of Lancaster, General Plan, Master Environmental Assessment Final EIR, 1997.*

<sup>17</sup> *Waste Management, Keeping Antelope Valley Clean, Landfills, website: <http://www.wm.com>, accessed April 5, 2007.*

<sup>18</sup> *Ibid.*

<sup>19</sup> *State of California Solid Waste Information System, Facility Database, Lancaster Landfill and Recycling Center, website: <http://www.ciwmb.ca.gov/SWIS/>, accessed April 10, 2007.*

<sup>20</sup> *Phone correspondence with Jim Merritt, Landfill Manager, Lancaster Landfill and Recycling Center, April 10, 2007.*

<sup>21</sup> *Los Angeles County Integrated Waste Management Plan, 2004 Annual Report, February 2006.*

waste. Currently the landfill has approximately 8,434,000 cubic yards of remaining capacity<sup>22</sup> spread over two sites and is permitted to accept up to 1,400 tons of solid waste per day.<sup>23</sup> To meet the increasing demands for disposal capacity, the Antelope Valley Recycling and Disposal Facility is in the process of expanding their site by adding an 11-acre strip of unused land between the two sites to its disposal capacity; it would result in an additional 9.2 million tons of capacity.<sup>24</sup>

The AVECC is a joint venture between the Cities of Lancaster and Palmdale, the California Integrated Waste Management Board, the County of Los Angeles, the Office of Los Angeles County Supervisor Michael Antonovich, and Waste Management, Inc.<sup>25</sup> At the AVECC, residents can dispose of Household Hazardous Waste (e.g., paint, oil and batteries), as well as old electronics (e.g., TVs, monitors, computers, and printers). It is open on the first and third Saturday of every month.

### **Regulatory Framework**

The California Integrated Waste Management Act of 1989, Assembly Bill 939 (AB 939), was enacted to reduce, recycle, and reuse solid waste generated in the State to the maximum amount feasible. Specifically, AB 939 required city and county jurisdictions to identify an implementation schedule to divert 50 percent of the total waste stream from landfill disposal by the year 2000 and 70 percent by the year 2020. The act also requires each city and county to promote source reduction, recycling, and safe disposal and transformation.

AB 939 further requires each city to conduct a Solid Waste Generation Study and to prepare a Source Reduction and Recycling Element (SRRE) to describe how it would reach the goals. The SRRE contains programs and policies for fulfillment of the goals of the Act, including the above noted diversion goals and must be updated annually to account for changing market and infrastructure conditions. As projects and programs are implemented, the characteristics of the waste stream, the capacities of the current solid waste disposal facilities and the operational status of those facilities, are updated and upgraded as appropriate. California cities and counties are required to submit annual reports to the California Integrated Waste Management Board to update the Board on the City's progress toward AB 939 goals (i.e., source reduction, recycling, composting, and environmentally safe land disposal).<sup>26</sup>

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<sup>22</sup> *Los Angeles County Integrated Waste Management Plan, 2004 Annual Report, February 2006.*

<sup>23</sup> *State of California Solid Waste Information System, Facility Database, Antelope Valley Recycling and Disposal Facility, website: <http://www.ciwmb.ca.gov/SWIS/>, accessed April 12, 2007.*

<sup>24</sup> *Los Angeles County Integrated Waste Management Plan, 2004 Annual Report, February 2006.*

<sup>25</sup> *County of Los Angeles Department of Public Works, Antelope Valley Environmental Collection Center, website: <http://ladpw.org/epd/avecc/>, accessed April 9, 2007.*

<sup>26</sup> *California Public Resources Code, §40050 et seq.*

## ENVIRONMENTAL IMPACTS

### Thresholds of Significance

In accordance with guidance provided in Appendix G of the State CEQA Guidelines, the proposed projects would have a potentially significant solid waste impact if it would:

- a) Be served by a landfill with insufficient permitted capacity to accommodate the project's solid waste disposal needs.
- b) Comply with federal, State, and local statutes and regulations related to solid waste.

### Project Impacts

#### *Construction Impacts*

Construction of the proposed project would generate solid waste (in the form of construction debris) that would need to be disposed of at area landfills. Construction debris includes concrete, asphalt, wood, drywall, metals, and other miscellaneous and composite materials. Much of this material would be recycled and salvaged to the maximum extent feasible. Materials not recycled would be disposed of at local landfills. Because there would be no demolition involved, combined with the recycling of most of the solid waste generated by the construction phase, short-term construction impacts to landfills and solid waste service would be less than significant.

#### *Operational Impacts*

Operation of the proposed project would result in ongoing generation of solid waste. Over the long term, the proposed project would be expected to generate 1,723 pounds or 0.86 tons of solid waste per day (see Table IV.O-5, Proposed Project Solid Waste Generation). As discussed above, the AB 939 requirement to reduce the solid waste stream in landfills by 50 percent would be implemented at a City-wide level. For purposes of this analysis, however, it is assumed that all 1,723 pounds (0.86 tons) would be disposed of in local landfills.

The Lancaster Landfill and Recycling Center currently is permitted to accept 1,700 tons per day of solid waste and accepts approximately 1,500 tons per day. The landfill is permitted to accept up to an additional 200 tons per day of solid waste intake over its current approximate intake. The project site would generate approximately 1,723 pounds per day, or 0.86 tons per day. This represents approximately 0.05 percent of the solid waste the Lancaster Landfill and Recycling Center is currently permitted to take on a daily basis, and 0.43 percent of the remaining daily permitted throughput. Therefore, adequate capacity exists to accommodate the solid waste generated by the proposed project and impacts associated with solid waste service would be less than significant.

**Table IV.O-5  
Proposed Project Solid Waste Generation**

Land Use	Size	Generation Rate <sup>a</sup>	Total Solid Waste Generation (lbs/day)
Retail	330,255 sf	5 lbs/1,000 sf/day	1,651
Restaurant	14,295 sf	5 lbs/1,000 sf/day	72
<b>Proposed Project Total</b>	<b>344,550 sf</b>		<b>1,723</b>
<i>Notes:</i>			
<i>du=dwelling unit; sf.=square feet; lbs=pounds</i>			
<i><sup>a</sup> Source: City of Los Angeles, Draft L.A. CEQA Thresholds Guide, Page K.3-2, May 14, 1998, and City of Los Angeles Bureau of Sanitation, Solid Waste Generation, 1981. Waste generation includes all materials discarded, whether or not they are later recycled or disposed of in a landfill.</i>			

## CUMULATIVE IMPACTS

The proposed project, in conjunction with the 82 identified related projects in Section III, Environmental Setting, would increase the solid waste generation. The related projects in combination with the proposed project are anticipated to generate approximately 147,590 pounds of solid waste per day or 73.79 tons (see Table IV.O-6).

**Table IV.O-6  
Cumulative Solid Waste Generation**

No.	Land Use	Size	Generation Rate <sup>a</sup>	Total Solid Waste Generation (lbs) per day
1	Single Family Homes	111 du	12.23 lbs/du/day	1,358
2	Single Family Homes	183 du	12.23 lbs/du/day	2,238
3	Single Family Homes	300 du	12.23 lbs/du/day	3,669
4	Single Family Homes	204 du	12.23 lbs/du/day	2,495
5	Single Family Homes	62 du	12.23 lbs/du/day	758
6	Single Family Homes	64 du	12.23 lbs/du/day	783
7	Single Family Homes	2 du	12.23 lbs/du/day	25
8	Active Adult (Senior Community)	600 du	12.23 lbs/du/day	7,338
9	Active Adult (Senior Community)	600 du	12.23 lbs/du/day	7,338
10	Single Family Homes	23 du	12.23 lbs/du/day	281
11	Single Family Homes	207 du	12.23 lbs/du/day	2,532
	Single Family Homes	31 du	12.23 lbs/du/day	379
12	Single Family Homes	245 du	12.23 lbs/du/day	2,996
13	Single Family Homes	59 du	12.23 lbs/du/day	722
	Single Family Homes	59 du	12.23 lbs/du/day	722
14	Single Family Homes	176 du	12.23 lbs/du/day	2,153
15	Single Family Homes	56 du	12.23 lbs/du/day	685

**Table IV.O-6 (Continued)**  
**Cumulative Solidwaste Generation**

No.	Land Use	Size	Generation Rate <sup>a</sup>	Total Solid Waste Generation (lbs) per day
16	Single Family Homes	1,594 du	12.23 lbs/du/day	19,495
	Park	1,221,858 sf	5 lbs/1,000 sf/day	6,109
	School <sup>b</sup>	15,000 sf	7 lbs/1,000 sf/day	105
17	Single Family Homes	84 du	12.23 lbs/du/day	1,027
18	Single Family Homes	77 du	12.23 lbs/du/day	942
19	Single Family Homes	21 du	12.23 lbs/du/day	257
20	Single Family Homes	77 du	12.23 lbs/du/day	942
21	Single Family Homes	36 du	12.23 lbs/du/day	440
22	Single Family Homes	19 du	12.23 lbs/du/day	232
23	Single Family Homes	49 du	12.23 lbs/du/day	599
24	Single Family Homes	36 du	12.23 lbs/du/day	440
25	Single Family Homes	650 du	12.23 lbs/du/day	7,950
26	Single Family Homes	104 du	12.23 lbs/du/day	1,272
27	Single Family Homes	32 du	12.23 lbs/du/day	391
28	Single Family Homes	41 du	12.23 lbs/du/day	501
29	Single Family Homes	112 du	12.23 lbs/du/day	1,370
30	Single Family Homes	85 du	12.23 lbs/du/day	1,040
31	Single Family Homes	33 du	12.23 lbs/du/day	404
32	Single Family Homes	40 du	12.23 lbs/du/day	489
33	Single Family Homes	58 du	12.23 lbs/du/day	709
34	Single Family Homes	41 du	12.23 lbs/du/day	501
35	Single Family Homes	43 du	12.23 lbs/du/day	526
36	Single Family Homes	156 du	12.23 lbs/du/day	1,908
37	Single Family Homes	86 du	12.23 lbs/du/day	1,052
38	Single Family Homes	58 du	12.23 lbs/du/day	709
39	Single Family Homes	58 du	12.23 lbs/du/day	709
40	Single Family Homes	60 du	12.23 lbs/du/day	734
41	Single Family Homes	254 du	12.23 lbs/du/day	3,106
42	Single Family Homes	22 du	12.23 lbs/du/day	269
43	Single Family Homes	106 du	12.23 lbs/du/day	1,296
44	Single Family Homes	73 du	12.23 lbs/du/day	893
45	Single Family Homes	108 du	12.23 lbs/du/day	1,321
46	Single Family Homes	73 du	12.23 lbs/du/day	893
47	Single Family Homes	20 du	12.23 lbs/du/day	245
48	Single Family Homes	42 du	12.23 lbs/du/day	514
49	Single Family Homes	152 du	12.23 lbs/du/day	1,859
50	Single Family Homes	65 du	12.23 lbs/du/day	795
51	Single Family Homes	78 du	12.23 lbs/du/day	954
52	Single Family Homes	39 du	12.23 lbs/du/day	477
53	Single Family Homes	88 du	12.23 lbs/du/day	1,076
54	Single Family Homes	38 du	12.23 lbs/du/day	465
55	Middle School	21,000 sf	7 lbs/1,000 sf/day	147
56	Single Family Homes	215 du	12.23 lbs/du/day	2,630
57	Single Family Homes	54 du	12.23 lbs/du/day	660
58	Single Family Homes	307 du	12.23 lbs/du/day	3,755
59	Single Family Homes	95 du	12.23 lbs/du/day	1,162

**Table IV.O-6 (Continued)**  
**Cumulative Solidwaste Generation**

No.	Land Use	Size	Generation Rate <sup>a</sup>	Total Solid Waste Generation (lbs) per day
60	Single Family Homes	20 du	12.23 lbs/du/day	245
61	Single Family Homes	169 du	12.23 lbs/du/day	2,067
62	Single Family Homes	34 du	12.23 lbs/du/day	416
63	Single Family Homes	101 du	12.23 lbs/du/day	1,235
64	Single Family Homes	29 du	12.23 lbs/du/day	355
65	Single Family Homes	116 du	12.23 lbs/du/day	1,419
66	Single Family Homes	87 du	12.23 lbs/du/day	1,064
67	Single Family Homes	242 du	12.23 lbs/du/day	2,960
68	Single Family Homes	61 du	12.23 lbs/du/day	746
69	Single Family Homes	94 du	12.23 lbs/du/day	1,150
70	Single Family Homes	240 du	12.23 lbs/du/day	2,935
71	Single Family Homes	61 du	12.23 lbs/du/day	746
72	Single Family Homes	19 du	12.23 lbs/du/day	232
73	Single Family Homes	77 du	12.23 lbs/du/day	942
74	Single Family Homes	74 du	12.23 lbs/du/day	905
75	Single Family Homes	61 du	12.23 lbs/du/day	746
76	Single Family Homes	450 du	12.23 lbs/du/day	5,504
77	Single Family Homes	650 du	12.23 lbs/du/day	7,950
78	Commercial	394,575 sf	5 lbs/1,000 sf/day	1,972
79	Single Family Homes	9 du	12.23 lbs/du/day	110
80	Retail	14,112 sf	5 lbs/1,000 sf/day	71
81	Senior Housing	75 du	12.23 lbs/du/day	917
82	Retail	267,494 sf	5 lbs/1,000 sf/day	1,338
<b>Subtotal Related Projects</b>				<b>145,867</b>
<b>Subtotal Proposed Project</b>				<b>1,723</b>
<b>Cumulative Total</b>				<b>147,590</b>
<i>Notes:</i>				
<i>du=dwelling unit; sf=square feet; lbs=pounds</i>				
<i><sup>a</sup> Source: City of Los Angeles, Draft L.A. CEQA Thresholds Guide, Page K.3-2, May 14, 1998, and City of Los Angeles Bureau of Sanitation, Solid Waste Generation, 1981. Waste generation includes all materials discarded, whether or not they are later recycled or disposed of in a landfill</i>				
<i><sup>b</sup> For school uses one student is assumed to be equal to 30 feet.</i>				

Similar to the proposed project, the related projects would participate in regional source reduction and recycling programs further reducing the amount of solid waste to be disposed of at the Lancaster Landfill and Recycling Center and the Antelope Valley Recycling and Disposal Facility as described above. As the City of Lancaster has a franchise agreement with Waste Management, Inc., all recycling services would be handled by Waste Management, Inc. as well. Residents of the City of Lancaster are able to dispose of their Household Hazardous Waste at the Antelope Valley Environmental Collection Center. The Lancaster Landfill and Recycling Center has a remaining capacity of 200 tons per day. As such, it would have adequate existing capacity to handle the 73.79 tons per day as a result of the proposed project

in combination with the related projects. Therefore, the proposed project and the related projects would not contribute to a cumulatively considerable effect on solid waste resources.

### **MITIGATION MEASURES**

No mitigation measures are required.

### **LEVEL OF SIGNIFICANCE AFTER MITIGATION**

Impacts to solid waste generation would be less than significant.

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## IV. ENVIRONMENTAL IMPACT ANALYSIS

### O. UTILITIES

#### 4. NATURAL GAS

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##### ENVIRONMENTAL SETTING

Energy consumption, including electricity, by new buildings in California, is regulated by the State Building Energy Efficiency Standards, embodied in Title 24 of the California Code of Regulations (CCR). The efficiency standards apply to new construction of both residential and non-residential buildings, and regulate energy consumed for heating, cooling, ventilation, water heating, and lighting. The building efficiency standards are enforced through the local building permit process. Local government agencies may adopt and enforce energy standards for new buildings, provided that these standards meet or exceed those provided in Title 24 guidelines.

Southern California Gas Company (SoCal Gas), a subsidiary of Sempra Energy and the nation's largest natural gas supplier, distributes natural gas to 19.5 million residential, commercial, and industrial customers throughout the southern half of California. SoCal Gas owns and operates 95,000 miles of gas distribution mains and service lines, as well as nearly 3,000 miles of transmission and storage pipeline. The utility also owns gas transmission compressor stations and underground storage facilities.

SoCal Gas serves the project area through existing subterranean gas mains in the adjoining dedicated streets. The project site is located in SoCal Gas's North Region. Natural gas service is provided in accordance with SoCal Gas's policies and extension rules on file with the California Public Utilities Commission (PUC) at the time contractual agreements are made.

The State produces about 15 percent of the natural gas it uses. The remaining 85 percent is obtained from sources outside of the State, 62 percent from the Southwest and Rocky Mountain area, and 23 percent from Canada. In the last 10 years, three new interstate gas pipelines were built to serve California, expanding the over one million miles of existing pipelines. However, the availability of natural gas is based upon present conditions of gas supply and regulatory policies. As a public utility, SoCal Gas is under the jurisdiction of the PUC, but can be affected by the actions of federal regulatory agencies. Should these agencies take any action affecting natural gas supply or the conditions under which service is available, natural gas service would be provided in accordance with those revised conditions.<sup>27</sup>

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<sup>27</sup> Southern California Gas Company website: <http://www.socalgas.com/about/profile/facts/>, accessed on August 12, 2007.

## ENVIRONMENTAL IMPACTS

### Thresholds of Significance

Implementation of the proposed project would create a significant impact on natural gas resources if:

- (a) Demand for natural gas cannot be served by existing natural gas infrastructure and/or supply.
- (b) If the proposed project would limit or interfere with the City's ability to achieve and or meet its citywide objectives.

### Project Impacts

The proposed project would consist of a retail/commercial development totaling approximately 330,255 square feet and two restaurants totaling approximately 14,295 square feet, for a total project square footage of approximately 344,550 square feet. A total of approximately 1,728 parking spaces are anticipated to be provided and access to the site would occur from Avenue L and 60<sup>th</sup> Street West. As the project site is currently undeveloped, no natural gas consumption currently exists on the project site.

As indicated in Table IV.O-7 below, Proposed Project Natural Gas Consumption, the proposed project is estimated to consume a total of 33,307 cubic feet (cf) per day. The Southern California Gas Company anticipates having adequate supply and facilities to serve the proposed project.<sup>28</sup> However, as the Southern California Gas Company is regulated by the Public Utilities Commission (PUC), any changes made by the PUC may affect the ability of the Gas Company to serve the site. As an adequate supply is anticipated, the increase in natural gas consumption as a result of the proposed project would be less than significant.

**Table IV.O-7  
Proposed Project Natural Gas Consumption**

Land Use	Size	Generation Rate <sup>a</sup>	Total Natural Gas Consumption (cf/day)
Retail	330,255 sf	2.9 cf/sf/mo	31,925
Restaurant	14,295 sf	2.9 cf/sf/mo	1,382
<b>Proposed Project Total</b>	<b>344,550 sf</b>		<b>33,307</b>
<i>Notes:</i>			
<i>sf.=square feet; cf=cubic feet; mo=month (assumed to be 30 days)</i>			
<i><sup>a</sup> Source: SCAQMD, CEQA Air Quality Handbook, Table A9-12-A, 1993.</i>			

<sup>28</sup> Written correspondence with Henry Briggs, Planning Associate, The Southern California Gas Company, July 19, 2007.

The project developer would be responsible for paying any connection costs. Natural gas connection to the proposed project would not entail expansion of distribution infrastructure nor capacity enhancing alterations to existing facilities.

Title 24 of the California Code of Regulations establishes energy conservation standards for new construction, including residential and non-residential buildings. The proposed project would comply with Title 24 energy conservation standards for insulation, glazing, lighting, shading, and water and space heating systems in all new construction. With modern energy efficient construction materials and compliance with Title 24 standards, the proposed project would be consistent with the State's energy conservation standards and, therefore, would not conflict with adopted energy conservation plans.

The proposed project would result in an increase in natural gas consumption. However, SoCal Gas would be able to provide the increase in its portion of the volume of natural gas anticipated from development of the proposed project. Therefore, there would be a less than significant impact on natural gas supply systems.

## CUMULATIVE IMPACTS

The related projects evaluated in this cumulative impacts analysis comprise the planned or projected development identified in the related projects list. The geographic context for cumulative energy resources analysis pertaining to natural gas entails a two mile radius around the project site. These projects in combination with the proposed project would greatly intensify the land usage and natural gas consumption in the immediate project area.

Implementation of the proposed project in conjunction with the 82 related projects would increase the demand for natural gas. As shown in Table IV.O-8, Cumulative Natural Gas Consumption, the estimated natural gas consumption by the related projects in combination with the proposed project would be approximately 1,577,611 cubic feet per day. In addition, like the proposed project, all of the related projects would be required to comply with Title 24 of the CCR, which establishes energy conservation standards for new construction. As a result, cumulative natural gas impacts are not expected to be significant.

**Table IV.O-8  
Cumulative Natural Gas Consumption**

No.	Land Use	Size	Consumption Rate <sup>a</sup>	Total Natural Gas Consumption (cf/day)
1	Single Family Homes	111 du	4,011.5 cf/du/mo	14,843
2	Single Family Homes	183 du	4,011.5 cf/du/mo	24,470
3	Single Family Homes	300 du	4,011.5 cf/du/mo	40,115
4	Single Family Homes	204 du	4,011.5 cf/du/mo	27,278
5	Single Family Homes	62 du	4,011.5 cf/du/mo	8,290
6	Single Family Homes	64 du	4,011.5 cf/du/mo	8,558
7	Single Family Homes	2 du	4,011.5 cf/du/mo	267
8	Active Adult	600 du	4,011.5 cf/du/mo	80,230

**Table IV.O-8 (Continued)**  
**Cumulative Natural Gas Consumption**

No.	Land Use	Size	Consumption Rate <sup>a</sup>	Total Natural Gas Consumption (cf/day)
	(Senior Community)			
9	Active Adult (Senior Community)	600 du	4,011.5 cf/du/mo	80,230
10	Single Family Homes	23 du	4,011.5 cf/du/mo	3,076
11	Single Family Homes	207 du	4,011.5 cf/du/mo	27,679
	Single Family Homes	31 du	4,011.5 cf/du/mo	4,154
12	Single Family Homes	245 du	4,011.5 cf/du/mo	32,761
13	Single Family Homes	59 du	4,011.5 cf/du/mo	7,889
	Single Family Homes	59 du	4,011.5 cf/du/mo	7,889
14	Single Family Homes	176 du	4,011.5 cf/du/mo	23,534
15	Single Family Homes	56 du	4,011.5 cf/du/mo	7,488
16	Single Family Homes	1,594 du	4,011.5 cf/du/mo	213,144
	Park	1,221,858 sf	0	0
	School <sup>b</sup>	15,000 sf	2.0 cf/sf/mo	1,000
17	Single Family Homes	84 du	4,011.5 cf/du/mo	11,232
18	Single Family Homes	77 du	4,011.5 cf/du/mo	10,296
19	Single Family Homes	21 du	4,011.5 cf/du/mo	2,808
20	Single Family Homes	77 du	4,011.5 cf/du/mo	10,296
21	Single Family Homes	36 du	4,011.5 cf/du/mo	4,814
22	Single Family Homes	19 du	4,011.5 cf/du/mo	2,541
23	Single Family Homes	49 du	4,011.5 cf/du/mo	6,552
24	Single Family Homes	36 du	4,011.5 cf/du/mo	4,814
25	Single Family Homes	650 du	4,011.5 cf/du/mo	86,916
26	Single Family Homes	104 du	4,011.5 cf/du/mo	1,872
27	Single Family Homes	32 du	4,011.5 cf/du/mo	4,279
28	Single Family Homes	41 du	4,011.5 cf/du/mo	5,482
29	Single Family Homes	112 du	4,011.5 cf/du/mo	14,976
30	Single Family Homes	85 du	4,011.5 cf/du/mo	11,366
31	Single Family Homes	33 du	4,011.5 cf/du/mo	4,413
32	Single Family Homes	40 du	4,011.5 cf/du/mo	5,349
33	Single Family Homes	58 du	4,011.5 cf/du/mo	7,755
34	Single Family Homes	41 du	4,011.5 cf/du/mo	5,782
35	Single Family Homes	43 du	4,011.5 cf/du/mo	5,750
36	Single Family Homes	156 du	4,011.5 cf/du/mo	20,860
37	Single Family Homes	86 du	4,011.5 cf/du/mo	11,500
38	Single Family Homes	58 du	4,011.5 cf/du/mo	7,756
39	Single Family Homes	58 du	4,011.5 cf/du/mo	7,756
40	Single Family Homes	60 du	4,011.5 cf/du/mo	8,023
41	Single Family Homes	254 du	4,011.5 cf/du/mo	33,964
42	Single Family Homes	22 du	4,011.5 cf/du/mo	2,942
43	Single Family Homes	106 du	4,011.5 cf/du/mo	14,174
44	Single Family Homes	73 du	4,011.5 cf/du/mo	9,761
45	Single Family Homes	108 du	4,011.5 cf/du/mo	14,441
46	Single Family Homes	73 du	4,011.5 cf/du/mo	9,761
47	Single Family Homes	20 du	4,011.5 cf/du/mo	2,674
48	Single Family Homes	42 du	4,011.5 cf/du/mo	5,616
49	Single Family Homes	152 du	4,011.5 cf/du/mo	20,325

**Table IV.O-8 (Continued)**  
**Cumulative Natural Gas Consumption**

No.	Land Use	Size	Consumption Rate <sup>a</sup>	Total Natural Gas Consumption (cf/day)
50	Single Family Homes	65 du	4,011.5 cf/du/mo	8,692
51	Single Family Homes	78 du	4,011.5 cf/du/mo	10,430
52	Single Family Homes	39 du	4,011.5 cf/du/mo	5,215
53	Single Family Homes	88 du	4,011.5 cf/du/mo	11,767
54	Single Family Homes	38 du	4,011.5 cf/du/mo	5,081
55	Middle School	21,000 sf	2.0 cf/sf/mo	1,400
56	Single Family Homes	215 du	4,011.5 cf/du/mo	28,749
57	Single Family Homes	54 du	4,011.5 cf/du/mo	7,221
58	Single Family Homes	307 du	4,011.5 cf/du/mo	41,051
59	Single Family Homes	95 du	4,011.5 cf/du/mo	12,703
60	Single Family Homes	20 du	4,011.5 cf/du/mo	2,674
61	Single Family Homes	169 du	4,011.5 cf/du/mo	22,598
62	Single Family Homes	34 du	4,011.5 cf/du/mo	4,546
63	Single Family Homes	101 du	4,011.5 cf/du/mo	13,505
64	Single Family Homes	29 du	4,011.5 cf/du/mo	3,878
65	Single Family Homes	116 du	4,011.5 cf/du/mo	15,511
66	Single Family Homes	87 du	4,011.5 cf/du/mo	11,633
67	Single Family Homes	242 du	4,011.5 cf/du/mo	32,359
68	Single Family Homes	61 du	4,011.5 cf/du/mo	8,157
69	Single Family Homes	94 du	4,011.5 cf/du/mo	12,569
70	Single Family Homes	240 du	4,011.5 cf/du/mo	32,092
71	Single Family Homes	61 du	4,011.5 cf/du/mo	8,157
72	Single Family Homes	19 du	4,011.5 cf/du/mo	2,541
73	Single Family Homes	77 du	4,011.5 cf/du/mo	10,296
74	Single Family Homes	74 du	4,011.5 cf/du/mo	9,895
75	Single Family Homes	61 du	4,011.5 cf/du/mo	8,157
76	Single Family Homes	450 du	4,011.5 cf/du/mo	60,173
77	Single Family Homes	650 du	4,011.5 cf/du/mo	86,916
78	Commercial	394,575 sf	2.9 cf/sf/mo	38,142
79	Single Family Homes	9 du	4,011.5 cf/du/mo	1,204
80	Retail	14,112 sf	2.9 cf/sf/mo	1,364
81	Senior Housing	75 du	4,011.5 cf/du/mo	10,029
82	Retail	267,494 sf	2.9 cf/sf/mo	25,858
<b>Subtotal Related Projects</b>				<b>1,544,304</b>
<b>Subtotal Proposed Project</b>				<b>33,307</b>
<b>Cumulative Total</b>				<b>1,577,611</b>
<i>Notes:</i>				
<i>Notes: u=dwelling unit; sf.=square feet; cf=cubic feet; mo=month (assumed to be 30 days)</i>				
<i><sup>a</sup> Source: SCAQMD, CEQA Air Quality Handbook, Table A9-12-A, 1993.</i>				
<i><sup>b</sup> Calculated assuming 30 square feet per student.</i>				

The combined total natural gas consumption of the related and proposed project, coupled with other potential growth within the service area of the Gas Company, would increase demand for natural gas. Future development projects within the service area of the Gas Company would be subject to the locally

mandated energy conservation programs. As with the proposed project, the Gas Company undertakes expansion or modification of natural gas service infrastructure to serve future growth in the within its service area as required in the normal process of providing service. Cumulative impacts related to natural gas service would be addressed through this process. As such, the proposed project would not contribute to cumulatively considerable effects on natural gas supplies and infrastructure.

### **MITIGATION MEASURES**

No mitigation measures are required.

### **LEVEL OF SIGNIFICANCE AFTER MITIGATION**

The proposed project would have a less than significant impact on natural gas services.

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## IV. ENVIRONMENTAL IMPACT ANALYSIS

### O. UTILITIES

#### 5. ELECTRICITY

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##### ENVIRONMENTAL SETTING

Southern California Edison (SCE) provides electricity service to the City of Lancaster. Service is provided by a network of overhead and underground transmission lines. SCE obtains electricity from various generating sources that utilize natural gas, fossil fuels, hydroelectric sources; nuclear energy, and renewable resources, like solar and wind.<sup>29</sup> SCE obtains power for the City of Lancaster from the following sources: the San Onofre Nuclear Generating Station (SONGS) and the Big Creek Hydroelectric Generating System. Currently, SONGS operates two of its three nuclear reactors and provides nearly 20 percent of the power provided to SCE customers or approximately 2,254 megawatts of power. The facilities that make up the Big Creek Hydroelectric Generating System are currently going through a re-licensing process.

Energy consumption by new buildings in California is regulated by the State Building Energy Efficiency Standards, embodied in Title 24 of the California Code of Regulations. The efficiency standards apply to new construction of both residential and non-residential buildings and regulate insulation, glazing, lighting, shading, and water and space heating systems. Building efficiency standards are enforced through the local building permit process. Local government agencies may adopt and enforce energy standards for new buildings, provided that standards meet or exceed those in Title 24 Guidelines.

##### ENVIRONMENTAL IMPACTS

###### Thresholds of Significance

Implementation of the proposed project would create a significant impact on electricity resources if:

- (a) Demand for electricity cannot be served by existing electricity infrastructure and/or supply.
- (b) If the proposed project would limit or interfere with the City's ability to achieve and or meet its citywide objectives.

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<sup>29</sup> Southern California Edison, *Power Generation*, website: <http://www.sce.com>, accessed April 9, 2007.

## Project Impacts

The proposed project consists of a retail/commercial development totaling approximately 330,255 square feet and two restaurants totaling 14,295 square feet, for a total project square footage of 344,550 square feet. A total of approximately 1,728 parking spaces are anticipated to be provided and access to the site would occur from Avenue L and 60<sup>th</sup> Street West. As the project site is currently undeveloped, no electricity is currently consumed on the site. As indicated in Table IV.O-9 below, Proposed Project Electricity Consumption, the proposed project is estimated to consume a total of 14,118 kilowatt hours (kWh) per day.

**Table IV.O-9  
Proposed Project Electricity Consumption**

Land Use	Size	Consumption Rate <sup>a</sup>	Total Electricity Consumption (kWh)
Retail	330,255 sf	13.55 kWh/sf /yr	12,260
Restaurant	14,295 sf	47.45 kWh/sf /yr	1,858
<b>Proposed Project Total</b>	<b>344,550</b>		<b>14,118</b>
<i>Notes:</i>			
<i>du=dwelling unit; sf=square feet; kWh=kilowatt hours; yr=year</i>			
<i><sup>a</sup> Source: SCAQMD, CEQA Air Quality Handbook, Table A9-11-A, 1993.</i>			

Southern California Edison undertakes expansion and/or modification of electricity distribution infrastructure and systems to serve future growth in the City of Lancaster as required in the normal process of providing electrical service. According to Southern California Edison, the current infrastructure and plans for expansion are adequate to accommodate the needs of the City of Lancaster through 2010.<sup>30</sup> Impacts related to electrical power distribution would be addressed through this process. As such, impacts associated with electricity distribution infrastructure would be less than significant.

## CUMULATIVE IMPACTS

The related projects evaluated in this cumulative impacts analysis comprise the planned or projected development identified in the related projects list. The geographic context for cumulative energy resources analysis pertaining to electricity entails all projects within a two mile radius around the project site. These projects in combination with the proposed project would greatly intensify the land use and electricity consumption in the immediate project area.

Implementation of the proposed project in conjunction with the 82 related projects would increase the demand for electricity. As shown in Table IV.O-10, Cumulative Electricity Consumption, the estimated

<sup>30</sup> Letter correspondence with Katie Conklin, Customer Service Planner, Southern California Edison, July 13, 2007.

electricity consumption by the related projects in combination with the proposed project would be approximately 243,579 kilowatt hours per day. SCE expects that electricity demand will continue to increase annually and execution of plans for new distribution resources will maintain their ability to serve customers throughout the decade of the 2000's.<sup>31</sup> Therefore; these 82 related projects have been factored into the projected load growth electricity demands. In addition, like the proposed project, all of the related projects would be required to comply with Title 24 of the CCR, which establishes energy conservation standards for new construction. As a result, cumulative electricity impacts are not expected to be significant.

If new electricity supply facilities, distribution infrastructure, or capacity-enhancing alterations would be needed with implementation of the related projects, as anticipated by SCE, it is expected that SCE would connect such new electricity loads with minimum interruption to existing customers.

Coupled with other potential growth within the service area of SCE, additional cumulative increases in demand for electricity could occur. Future development projects within the service area of SCE would be subject to the locally mandated energy conservation programs. SCE has also indicated that the cumulative electricity demand by regional growth can be adequately accommodated. As with the proposed project, SCE undertakes expansion or modification of electrical service infrastructure and distribution systems to serve future growth in the service area as required in the normal process of providing electrical service. Cumulative impacts related to electric power service would be addressed through this process. As such, the proposed project would not contribute to a cumulatively considerable effect on electricity generation or infrastructure and impacts would be less than significant.

## **MITIGATION MEASURES**

No mitigation measures are required.

## **LEVEL OF SIGNIFICANCE AFTER MITIGATION**

The proposed project would have a less than significant impact with respect to electricity services.

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<sup>31</sup> *Ibid.*

**Table IV.O-10  
Cumulative Electricity Generation**

<b>No.</b>	<b>Land Use</b>	<b>Size</b>	<b>Generation Rate <sup>a</sup></b>	<b>Total Electricity Consumption (kWh) per day</b>
1	Single Family Homes	111 du	5,626.50 kWh/du/yr	1,711
2	Single Family Homes	183 du	5,626.50 kWh/du/yr	2,821
3	Single Family Homes	300 du	5,626.50 kWh/du/yr	4,625
4	Single Family Homes	204 du	5,626.50 kWh/du/yr	3,145
5	Single Family Homes	62 du	5,626.50 kWh/du/yr	956
6	Single Family Homes	64 du	5,626.50 kWh/du/yr	987
7	Single Family Homes	2 du	5,626.50 kWh/du/yr	31
8	Active Adult (Senior Community)	600 du	5,626.50 kWh/du/yr	9,249
9	Active Adult (Senior Community)	600 du	5,626.50 kWh/du/yr	9,249
10	Single Family Homes	23 du	5,626.50 kWh/du/yr	355
11	Single Family Homes	207 du	5,626.50 kWh/du/yr	3,191
	Single Family Homes	31 du	5,626.50 kWh/du/yr	478
12	Single Family Homes	245 du	5,626.50 kWh/du/yr	378
13	Single Family Homes	59 du	5,626.50 kWh/du/yr	910
	Single Family Homes	59 du	5,626.50 kWh/du/yr	910
14	Single Family Homes	176 du	5,626.50 kWh/du/yr	2,713
15	Single Family Homes	56 du	5,626.50 kWh/du/yr	863
16	Single Family Homes	1,594 du	5,626.50 kWh/du/yr	24,572
	Park	1,221,858 sf	10.50 kWh/sf/yr	35,149
	School <sup>b</sup>	15,000 sf	10.50 kWh/sf./yr	432
17	Single Family Homes	84 du	5,626.50 kWh/du/yr	1,295
18	Single Family Homes	77 du	5,626.50 kWh/du/yr	1,187
19	Single Family Homes	21 du	5,626.50 kWh/du/yr	324
20	Single Family Homes	77 du	5,626.50 kWh/du/yr	1,187
21	Single Family Homes	36 du	5,626.50 kWh/du/yr	555
22	Single Family Homes	19 du	5,626.50 kWh/du/yr	293
23	Single Family Homes	49 du	5,626.50 kWh/du/yr	755
24	Single Family Homes	36 du	5,626.50 kWh/du/yr	555
25	Single Family Homes	650 du	5,626.50 kWh/du/yr	10,020
26	Single Family Homes	104 du	5,626.50 kWh/du/yr	1,603
27	Single Family Homes	32 du	5,626.50 kWh/du/yr	493
28	Single Family Homes	41 du	5,626.50 kWh/du/yr	632
29	Single Family Homes	112 du	5,626.50 kWh/du/yr	1,727
30	Single Family Homes	85 du	5,626.50 kWh/du/yr	1,310
31	Single Family Homes	33 du	5,626.50 kWh/du/yr	509
32	Single Family Homes	40 du	5,626.50 kWh/du/yr	617
33	Single Family Homes	58 du	5,626.50 kWh/du/yr	894
34	Single Family Homes	41 du	5,626.50 kWh/du/yr	632
35	Single Family Homes	43 du	5,626.50 kWh/du/yr	663
36	Single Family Homes	156 du	5,626.50 kWh/du/yr	2,405
37	Single Family Homes	86 du	5,626.50 kWh/du/yr	1,326

**Table IV.O-10 (Continued)**  
**Cumulative Electricity Generation**

No.	Land Use	Size	Generation Rate <sup>a</sup>	Total Electricity Consumption (kWh) per day
38	Single Family Homes	58 du	5,626.50 kWh/du/yr	894
39	Single Family Homes	58 du	5,626.50 kWh/du/yr	894
40	Single Family Homes	60 du	5,626.50 kWh/du/yr	925
41	Single Family Homes	254 du	5,626.50 kWh/du/yr	3,916
42	Single Family Homes	22 du	5,626.50 kWh/du/yr	339
43	Single Family Homes	106 du	5,626.50 kWh/du/yr	1,634
44	Single Family Homes	73 du	5,626.50 kWh/du/yr	1,125
45	Single Family Homes	108 du	5,626.50 kWh/du/yr	1,665
46	Single Family Homes	73 du	5,626.50 kWh/du/yr	1,125
47	Single Family Homes	20 du	5,626.50 kWh/du/yr	308
48	Single Family Homes	42 du	5,626.50 kWh/du/yr	647
49	Single Family Homes	152 du	5,626.50 kWh/du/yr	2,343
50	Single Family Homes	65 du	5,626.50 kWh/du/yr	1,002
51	Single Family Homes	78 du	5,626.50 kWh/du/yr	1,202
52	Single Family Homes	39 du	5,626.50 kWh/du/yr	601
53	Single Family Homes	88 du	5,626.50 kWh/du/yr	1,357
54	Single Family Homes	38 du	5,626.50 kWh/du/yr	586
55	Middle School <sup>b</sup>	21,000 sf	10.50 kWh/sf/yr	604
56	Single Family Homes	215 du	5,626.50 kWh/du/yr	3,314
57	Single Family Homes	54 du	5,626.50 kWh/du/yr	832
58	Single Family Homes	307 du	5,626.50 kWh/du/yr	4,732
59	Single Family Homes	95 du	5,626.50 kWh/du/yr	1,464
60	Single Family Homes	20 du	5,626.50 kWh/du/yr	308
61	Single Family Homes	169 du	5,626.50 kWh/du/yr	2,605
62	Single Family Homes	34 du	5,626.50 kWh/du/yr	524
63	Single Family Homes	101 du	5,626.50 kWh/du/yr	1,557
64	Single Family Homes	29 du	5,626.50 kWh/du/yr	447
65	Single Family Homes	116 du	5,626.50 kWh/du/yr	1,788
66	Single Family Homes	87 du	5,626.50 kWh/du/yr	1,341
67	Single Family Homes	242 du	5,626.50 kWh/du/yr	3,731
68	Single Family Homes	61 du	5,626.50 kWh/du/yr	940
69	Single Family Homes	94 du	5,626.50 kWh/du/yr	1,449
70	Single Family Homes	240 du	5,626.50 kWh/du/yr	3,700
71	Single Family Homes	61 du	5,626.50 kWh/du/yr	940
72	Single Family Homes	19 du	5,626.50 kWh/du/yr	293
73	Single Family Homes	77 du	5,626.50 kWh/du/yr	1,187
74	Single Family Homes	74 du	5,626.50 kWh/du/yr	1,141
75	Single Family Homes	61 du	5,626.50 kWh/du/yr	940
76	Single Family Homes	450 du	5,626.50 kWh/du/yr	6,937
77	Single Family Homes	650 du	5,626.50 kWh/du/yr	10,020

**Table IV.O-10 (Continued)  
Cumulative Electricity Generation**

<b>No.</b>	<b>Land Use</b>	<b>Size</b>	<b>Generation Rate <sup>a</sup></b>	<b>Total Electricity Consumption (kWh) per day</b>
78	Commercial	394,575 sf	13.55 kWh/sf/yr	14,648
79	Single Family Homes	9 du	5,626.50 kWh/du/yr	139
80	Retail	14,112 sf	13.55 kWh/sf/yr	524
81	Senior Housing	75 du	5,626.50 kWh/du/yr	1,156
82	Retail	267,494 sf	13.55 kWh/sf/yr	9,930
<b>Subtotal Related Projects</b>				<b>229,461</b>
<b>Subtotal Proposed Project</b>				<b>14,118</b>
<b>Cumulative Total</b>				<b>243,579</b>
<i>Notes:</i>				
<i>du=dwelling unit; sf=square feet; lbs=pounds</i>				
<i><sup>a</sup> Source: SCAQMD, CEQA Air Quality Handbook, Table A9-11-A, 1993.</i>				
<i><sup>b</sup> It is assumed that one student equals 30 square feet.</i>				

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## V. GENERAL IMPACT CATEGORIES

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### A. SUMMARY OF SIGNIFICANT UNAVOIDABLE IMPACTS

Section 15126.2(b) of the State CEQA Guidelines requires that an EIR describe any significant impacts which cannot be avoided. Specifically, Section 15126.2(b) states:

*“Describe any significant impacts, including those which can be mitigated but not reduced to a level of insignificance. Where there are impacts that cannot be alleviated without imposing an alternative design, their implications and the reasons why the project is being proposed, notwithstanding their effect, should be described.”*

Based on the analysis contained in Section IV of this Draft EIR, implementation of the proposed project would result in a significant and unavoidable operational air quality impact.

#### **Operational Air Quality**

The average daily emissions associated with stationary and area sources, and motor vehicles operating within the project site have the potential to generate localized emissions of CO, NO<sub>x</sub>, PM<sub>10</sub>, and PM<sub>2.5</sub>. The average daily emissions have been calculated using URBEMIS 2007, assuming that each vehicle would travel a maximum of 0.1 miles within the project site. The average daily emissions were then modeled using the ISC model to determine localized pollution concentrations generated by project operations. As discussed in Section IV.D, Air Quality, of this Draft EIR, localized emissions of CO and PM<sub>10</sub> from operational activities would exceed the thresholds set by AVAQMD thus resulting in a significant and unavoidable impact.

### B. SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGE

Section 15126.2(c) of the State CEQA Guidelines states that the “uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter unlikely.” Section 15126.2(c) further states that “irretrievable commitments of resources should be evaluated to assure that such current consumption is justified.”

The types and level of development associated with the proposed project would consume limited, slowly renewable and non-renewable resources. This consumption would occur during construction of the proposed project and would continue throughout its operational lifetime. The development of the proposed project would require a commitment of resources that would include (1) building materials, (2) fuel and operational materials/resources and (3) the transportation of goods and people to and from the project site.

Construction of the proposed project would require consumption of resources that are not replenishable or which may renew slowly as to be considered non-renewable. These resources would include certain types of lumber and other forest products, aggregate materials used in concrete and asphalt (e.g., sand, gravel and stone), metals (e.g., steel, copper and lead), petrochemical construction materials (e.g., plastics) and water. Fossil fuels, such as gasoline and oil, would also be consumed in the use of construction vehicles and equipment.

The commitment of resources required for the type and level of proposed development would limit the availability of these resources for future generations for other uses during the operation of the proposed project. However, this resource consumption would be consistent with growth and anticipated change in the City of Lancaster and Antelope Valley region.

### **C. GROWTH INDUCING IMPACTS OF THE PROPOSED PROJECT**

Section 15126.2(d) of the State CEQA Guidelines requires a discussion of the ways in which a proposed project could induce growth. This includes ways in which a project would foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Section 12126.2(d) of the State CEQA Guidelines states:

*“Discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment. Included in this are projects which would remove obstacles to population growth (a major expansion of a waste water treatment plant might, for example, allow for more construction in service areas). Increases in the population may tax existing community service facilities, requiring construction of new facilities that could cause significant environmental effects. Also discuss the characteristic of some projects which may encourage and facilitate other activities that could significantly affect the environment, either individually or cumulatively. It must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment.”*

As discussed in Section IV.L (Population and Housing), the proposed project would contribute a total of approximately 927 employees to the project area and the City of Lancaster. In addition, employment opportunities would be provided during construction and operation of the proposed project. The proposed project would account for approximately 12 percent of the employment growth projected by SCAG for the City of Lancaster between 2000 and 2010. However, as discussed in Section IV.L, there is currently a job/housing imbalance with an expected 40 percent growth in housing and expected job growth of only 14.5 percent. Therefore, the proposed project would not induce growth, but would rather provide jobs for people currently living in and moving to the project area.

As also discussed in this Draft EIR, the roadways and other infrastructure (e.g., water facilities, electricity transmission lines, natural gas lines, etc.) associated with the proposed project would not induce growth because they would only serve the proposed project.

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## VI. ALTERNATIVES TO THE PROPOSED PROJECT

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### A. INTRODUCTION

The State CEQA Guidelines require that EIRs include the identification and evaluation of a reasonable range of alternatives that are designed to reduce the significant environmental impacts of the project while still meeting the general project objectives. The CEQA Guidelines also set forth the intent and extent of alternatives analysis to be provided in an EIR. Those considerations are discussed below.

#### **Alternatives to the Proposed Project**

Section 15126.6(a) of the CEQA Guidelines states: “An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparable merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision-making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selecting a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the “rule of reason.”

#### **Purpose**

Section 15126.6(b) of the CEQA Guidelines states: “Because an EIR must identify ways to mitigate or avoid the significant effects that a project may have on the environment, the discussion of alternatives shall focus on alternatives to the project or its location which are capable of avoiding or substantially lessening any significant effects of the project, even if these alternatives would impede to some degree the attainment of project objectives, or would be more costly.”

#### **Selection of a Reasonable Range of Alternatives**

Section 15126.6(c) of the CEQA Guidelines states: “The range of potential alternatives to the proposed project shall include those that could feasibly accomplish most of the basic objectives of the project and could avoid or substantially lessen one or more of the significant effects. The EIR should briefly describe the rationale for selecting the alternatives to be discussed. The EIR should also identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process and briefly explain the reasons underlying the lead agency’s determination. Additional information explaining the choice of alternatives may be included in the administrative record. Among the factors

that may be used to eliminate alternatives from detailed consideration in an EIR are: (i) failure to meet most of the basic project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts.” Factors that may be taken into account when addressing feasibility and infeasibility are site suitability, economic viability, availability of infrastructure, and technological feasibility.

The objectives for the proposed project are:

- To create development on the currently underutilized project site to provide commercial retail facilities to serve the local community;
- To generate significant sales tax revenue to benefit the general fund;
- To provide a well-designed development that is compatible and complimentary with surrounding land uses;
- To provide development that is financially viable;
- To generate employment opportunities for the local area;
- To mitigate, to the extent feasible, the potential environmental impacts of the proposed project; and
- To provide adequate parking facilities to serve the proposed development customers, and employees.

### **Overview of Selected Alternatives**

The three alternatives analyzed for the proposed Commons at Quartz Hill project include:

Alternative 1: No Project Alternative

Alternative 2: Existing Zoning Alternative

Alternative 3: Reduced Commercial Density Alternative

These alternatives were included for analysis because of their potential to reduce the significant and unavoidable impact of the proposed project related to operational air quality.

### **Alternatives Rejected as Being Infeasible**

As described above, Section 15126.6(c) of the CEQA Guidelines requires EIRs to identify any alternatives that were considered by the lead agency but were rejected as infeasible during the scoping process, and briefly explain the reasons underlying the lead agency’s determination. One alternative use was considered and rejected as being infeasible for the proposed project: development of a park on the project site. This idea was rejected on the basis that the City does not own the project site and that it would not be economically viable and would not maximize the potential of the project site. Additionally, a 28.05 acre park was approved as part of Tentative Tract Map 53229 on October 17, 2005. This park is

to be located at approximately 65<sup>th</sup> Street West and Avenue K-8, immediately northwest of the project site, and would consist of picnic areas, open space areas, tot lots, athletic fields, and ball courts.

In addition to the park alternative, three alternative sites were considered and dismissed as being infeasible: 1) the property immediately north of the project site; 2) the property immediately west of the project site; and 3) the property at the northwest corner of 60<sup>th</sup> Street West and Avenue N. The reason each of these alternative sites was rejected is discussed below.

**Property Immediately North:** Immediately north of the project site is an approximately 20 acre site (APN 3204-008-031) which is zoned for residential uses and currently has an approved Tentative Tract Map (TTM 64922) for the development of 84 single family residences. This site was considered for the proposed project; however, it is not large enough to support the proposed development. Additionally, shifting the proposed slightly to the north would not reduce any of the potentially significant impacts identified with the proposed project. Therefore, this alternative location was rejected as being infeasible.

**Property Immediately West:** The property immediately to the west of the project site consists of approximately 483 acres and has an approved Tentative Tract Map (TTM 53229) consisting of 1,594 residential lots, a school site, and a park. Moving the proposed project to the west, but still facing Avenue L, was considered but rejected as infeasible because the impacts of the project would remain the same.

**Property at Northwest Corner of 60<sup>th</sup> St. West & N:** This site was initially considered, but rejected as infeasible for two primary reasons. First, the project site is not located within the Lancaster City limits and therefore, the City has no authority to approve or deny a project in this location. Second, while developing the project at this location may reduce some of the impacts associated with developing the project in close proximity to a high school, the impacts that it may reduce were not identified significant impacts (e.g., impacts to police services). However, the alternative location would increase impacts as a result of lack of infrastructure (e.g., streets, sanitary sewer, etc), jurisdictional drainages, and the increased potential from flooding as a result of the site's proximity to the California Aqueduct (the site is approximately 1,600 feet north of the aqueduct).

### **Assumptions and Methodology**

The anticipated means for implementation of the alternatives can influence the assessment and/or probability of impacts for those alternatives. For example, a project may have the potential to generate impacts, but considerations in project design may also afford the opportunity to avoid or reduce such impacts. The alternatives analysis is presented as a comparative analysis to the proposed project, and assumes that all applicable mitigation measures proposed for the project would apply to each alternative. Impacts associated with the alternatives are compared to project-related impacts and are classified as greater, less, or essentially similar to (or comparable to) the level of impacts associated with the proposed project.

The following alternatives analysis compares the potential environmental impacts of three alternatives with those of the proposed project for each of the environmental topics analyzed in detail in Section IV (Environmental Impact Analysis) of the EIR.

## **B. ALTERNATIVES ANALYSIS**

The following alternatives analysis compares the potential environmental impacts of three alternatives of the proposed project for each environmental topic analyzed in detail in Section IV (Environmental Impact Analysis) of this Draft EIR.

### **Alternative 1: No Project Alternative**

The No Project Alternative is the circumstance under which the project does not proceed. The CEQA Guidelines (Section 15126.6(e)) provide that the “no project” analysis shall discuss the existing conditions at the time the Notice of Preparation is published, as well as what would be reasonably expected to occur in the foreseeable future if the project is not approved based on current plans and consistent with available infrastructure and community services.

Under the No Project Alternative, the project site would continue to remain vacant and undeveloped, and assumes the continuation of existing conditions at the project site as well as the development of the related projects.

The potential environmental impacts associated with the No Project Alternative are described below and are compared to the potential environmental impacts associated with the proposed project.

#### ***Aesthetics***

The No Project Alternative would result in no impact with respect to aesthetics because the project site would continue to remain vacant and undeveloped. As there would be no development of the project site under this scenario, impacts would be less than the proposed project’s less than significant impacts. Furthermore, as the No Project Alternative would not introduce any new land uses to the project site, it would have no potential to cause urban decay to the other uses in the vicinity, nor would the No Project Alternative have the potential to result in light/glare or shade/shadow impacts. Therefore, the No Project Alternative would result in no impact with respect to aesthetics, which is less than the proposed project’s less than significant aesthetics impacts.

#### ***Agricultural Resources***

Like the proposed project, the No Project Alternative would result in no impact with respect to agricultural resources because the No Project Alternative would not convert prime farmland to a non-agricultural use. As such, both the proposed project and the No Project Alternative would have no impact with respect to agricultural resources.

### ***Air Quality***

The No Project Alternative would result in no impact with respect to air quality as no grading or construction would be required under the No Project Alternative and no new vehicle trips would be generated. Therefore, air quality impacts would be less than significant under the No Project Alternative, which would be less than the proposed project's less than significant construction impacts, and less than the significant and unavoidable operational air quality impacts with respect to PM<sub>10</sub> and PM<sub>2.5</sub>.

### ***Biological Resources***

The No Project Alternative would result in no impact with respect to biological resources because the project site would continue to remain vacant and undeveloped. As no construction activities would occur on the project site under the No Project Alternative, this scenario would not have the potential to disturb any active nests or adversely affect the Burrowing Owl.. As such, the No Project Alternative would have no impact with respect to biological resources and impacts would be less than the proposed project's less than significant impacts.

### ***Cultural Resources***

The No Project Alternative would result in no impact with respect to cultural resources, which is less than the impacts of the proposed project. This is due to the fact that no excavation or grading activities would occur under the No Project Alternative. Therefore, there would be no potential to encounter paleontological or archaeological resources at depths not previously excavated. As such, there would be no impact on paleontological or archaeological resources, and impacts would be less than those associated with the proposed project.

### ***Geology and Soils***

The No Project Alternative would result in no impact with respect to geology and soils, which is less than the impacts of the proposed project. This is due to the fact that under the No Project Alternative, no grading or excavation would take place; thus, no impacts associated with grading or excavation would occur. In addition, no people or structures would be exposed to geotechnical hazards under this alternative. Therefore, there would be no impacts with respect to geology and soils under the No Project Alternative, and impacts would be less than those associated with the proposed project.

### ***Hazards and Hazardous Materials***

Like the proposed project, the No Project Alternative would have a less than significant impact with respect to hazards and hazardous materials. However, the impacts under the No Project Alternative would be less than the proposed project as no new or different land uses or activities would occur on the site that would potentially involve the routine transport, use, or disposal of hazardous materials other than what is occurring now. As such, no impacts associated with hazards and hazardous materials would occur

under the No Project Alternative, and impacts would be less than those associated with the proposed project.

### ***Hydrology and Water Quality***

Like the proposed project, the No Project Alternative would result in a less than significant impact with respect to hydrology and water quality. Existing site conditions would remain the same as described in Section III, Environmental Setting, under the No Project Alternative. The No Project Alternative would not involve any grading or construction. No new impermeable surfaces would be constructed under this scenario. Thus, no new increases in surface water runoff rates or velocities would occur. There would be no significant impacts to water quality because there would be no construction activities. However, the No Project Alternative would result in a greater impact because with development of the proposed project, certain operational BMPs would be implemented to reduce pollutants in runoff. Development of the No Project Alternative would not implement operational BMPs, and therefore operational water quality impacts associated with this alternative would be less than significant, but greater than the proposed project's less than significant impacts.

### ***Land Use and Planning***

Like the proposed project, the No Project Alternative would result in a less than significant impact with respect to land use and planning. However, under the No Project Alternative, the project site would remain vacant and undeveloped. While the No Project Alternative would not require a zone change and general plan amendment, required by the proposed project, the No Project Alternative would not meet the City's vision for the site as contained in the current General Plan. As such, under the No Project Alternative, the project site would continue to be underutilized with respect to land use and planning and impacts would be less than significant and similar to those of the proposed project.

### ***Noise***

The No Project Alternative would result in no impact with respect to noise (both construction and operational). As no new development would occur on the project site under the No Project Alternative, no noise would be generated from construction activities. Furthermore, no new structures or other sources of noise would be developed on the project site under this alternative. Overall, under the No Project Alternative, there would be no impacts associated with noise, and impacts would be less than the proposed project's less than significant construction and operational noise impacts.

### ***Population and Housing***

The No Project Alternative would result in no impact with respect to population and housing. Under the No Project Alternative, no residents, housing or infrastructure would be introduced to the project site. No additional employees or residents would be generated with the implementation of this alternative. In comparison, the proposed project would generate 927 employees. However, the jobs created by the proposed project would help to rectify the current job/housing imbalance. Therefore, the No Project

Alternative would not result in an impact with respect to direct or indirect population growth, but would also not provide the beneficial impact of job creation when compared to the proposed project.

### ***Public Services***

#### *Fire Protection*

The No Project Alternative would result in no impact with respect to fire protection because no new commercial or other land uses would be developed which could potentially increase the demand on fire protection services. Therefore, fire protection impacts under this No Project Alternative would not be significant and impacts would be less under this scenario as compared to the proposed project's less than significant impacts.

#### *Police Protection*

The No Project Alternative would result in no impact with respect to police protection services because no new commercial or other land uses would be developed which could potentially increase the demand for police protection services. Therefore, no impacts on police protection services would occur under the No Project Alternative, and impacts would be less than those associated with the proposed project's less than significant impacts.

#### *Schools*

The No Project Alternative would result in no impact with respect to schools, as no new students would be generated under the No Project Alternative. A net increase of 20 students, including 11 elementary school students, seven middle school students, and two high school students would be generated by development of the proposed project, which would result in an increase in demand for school services. Therefore, no impact on school services would occur under the No Project Alternative, and impacts would be less than those associated with the proposed project's less than significant impacts.

#### *Libraries*

Like the proposed project, the No Project Alternative would result in no impact with respect to library services because there would be no new demand for additional library space or additional volumes of permanent collection. The proposed project would also not result in a demand for additional library space or volumes of permanent collection as employees generally visit libraries near their homes during non-work hours. Therefore, no impact on library services would occur under the No Project Alternative, and impacts would be similar to those associated with the proposed project.

#### *Parks*

Like the proposed project, the No Project Alternative would result in no impact with respect to parks and recreational facilities because there would be no new demand for additional public parkland or recreational facilities in the site vicinity. The proposed project would also not result in a demand for

additional public parkland as employees of commercial sites generally visit parks near their homes during non-working hours. Therefore, no impact on recreational and park facilities would occur under the No Project Alternative, and impacts would be less than those associated with the proposed project.

### ***Transportation and Traffic***

The No Project Alternative would have no impact with respect to transportation and traffic because no additional traffic would be generated from the project site. Development of the proposed project would generate an average of 13,658 new daily trips with 296 weekday AM peak hour trips, 1,274 weekday PM peak hour trips, and 1,740 midday Saturday peak hour trips. Under the No Project Alternative, these additional trips would not be generated, intersection impacts and street conditions would not change, and thus, no significant impacts would occur. Therefore, no impact on traffic or transportation would occur under the No Project Alternative, and impacts would be less than the proposed project's less than significant impacts.

### ***Utilities***

#### ***Water***

The No Project Alternative would result in no impact with respect to water supply and infrastructure, as no additional demand for water would be created on the project site under the No Project Alternative. Under the proposed project, there would be a net increase in water demand of 56,785 gpd. Therefore, no impact on water supply would occur, and impacts under the No Project Alternative would be less than those associated with the proposed project's less than significant impacts.

#### ***Wastewater***

The No Project Alternative would result in no impact with respect to wastewater, as no additional wastewater would be generated on the project site under the No Project Alternative. Under the proposed project, there would be a net increase of approximately 47,321 gpd of wastewater generation. Therefore, no impact on wastewater services would occur, and impacts under the No Project Alternative would be less than those associated with the proposed project's less than significant impacts.

#### ***Solid Waste***

The No Project Alternative would result in no impact with respect to solid waste because no additional solid waste would be generated on the project site under the No Project Alternative. Under the proposed project, there would be a net increase of approximately 1,723 pounds per day of solid waste generation. Therefore, no impacts with respect to solid waste would occur, and impacts under the No Project Alternative would be less than those associated with the proposed project's less than significant impacts.

### *Electricity*

The No Project Alternative would result in no impact with respect to electricity, as no additional demand for electricity would occur on the project site under the No Project Alternative. Under the proposed project, there would be a net increase in demand for electricity of approximately 14,118 kWh of electricity per day. Therefore, no impact on electricity services would occur, and impacts under the No Project Alternative would be less than those associated with the proposed project's less than significant impacts.

### *Natural Gas*

The No Project Alternative would result in no impact with respect to natural gas consumption, as no additional demand for natural gas would occur on the project site under the No Project Alternative. Under the proposed project, there would be a net increase in demand for natural gas of approximately 33,307 cf of natural gas per day. Therefore, no impact on natural gas services would occur, and impacts under the No Project Alternative would be less than those associated with the proposed project's less than significant impacts.

### ***Relationship to Project Objectives***

The No Project Alternative would avoid most of the environmental impacts associated with the proposed project, but would result in a greater impact with respect to land use and the quality of stormwater runoff when compared to the proposed project. In addition, the No Project Alternative would not satisfy any of the project objectives, nor would it help rectify the current job/housing imbalance. With respect to the project objectives, the No Project Alternative would not provide additional employment opportunities, and would not provide a development on the currently underutilized project site. Specifically, the No Project Alternative would not:

- Create development on the currently underutilized project site to provide commercial retail facilities to serve the local community;
- Generate significant sales tax revenue to benefit the general fund;
- Provide a well-designed development that is compatible and complementary with surrounding land uses;
- Provide a development that is financially viable;
- Generate employment opportunities for the local area;
- Mitigate, to the extent feasible, the potential environmental impacts of the proposed project; and
- Provide adequate parking facilities to serve the proposed development customers, and employees.

### ***Reduction of Significant Project Impacts***

The proposed project would result in a significant impact after mitigation in operational air quality. The No Project Alternative would not result in any significant environmental impacts.

### **Alternative 2: Existing Zoning Alternative (Residential)**

Under the Existing Zoning Alternative, the project site would be developed with approximately 197 single-family residences in accordance with the existing R-7,000 and R-10,000 zoning of the project site. All other aspects of the project remain unchanged. The potential environmental impacts associated with this Existing Zoning Alternative are described below and are compared to the potential environmental impacts associated with the proposed project.

#### ***Aesthetics***

Under the Existing Zoning Alternative, 197 single-family dwelling units would be developed on the project site. This alternative would create a different land use on the project site when compared to the proposed project. However, the development of single-family residences on the project site would be consistent with other residential uses in the immediate area. Therefore, impacts with respect to visual resources, massing, light and glare, and shade/shadow would all be less than significant and less than the proposed project's less than significant impacts. In addition, this alternative would not contain any commercial uses, and as a residential development would likely create demand for goods and services. Therefore, development of this alternative would not contribute to urban decay and impacts would be less than the proposed project's less than significant impact.

#### ***Agricultural Resources***

Like the proposed project, the Existing Zoning Alternative would result in no impact with respect to agricultural resources. While this scenario proposes a land use different than the proposed project, like the proposed project, the Existing Zoning Alternative would not convert prime farmland to a non-agricultural use. As such, both the proposed project and the Existing Zoning Alternative would have no impact with respect to agricultural resources.

#### ***Air Quality***

Under the Existing Zoning Alternative, a greater intensity of development is proposed, as a larger number of structures and greater site coverage would result. As such, air pollutant emissions (e.g., PM<sub>10</sub>, CO, and NO<sub>x</sub>) related to grading and construction may be greater than for the proposed project. As the proposed project would result in a less than significant construction impact, this scenario may result in a greater impact. However, this alternative would result far fewer daily traffic trips than the proposed project (see Traffic below). As such, fewer air pollutant emissions (e.g., PM<sub>10</sub>, CO, and NO<sub>x</sub>) related to trips would be generated under this alternative. Therefore, operational air quality impacts would be less than the

proposed project's significant and unavoidable operational impacts with respect to PM<sub>10</sub> and PM<sub>2.5</sub>, although impacts may still be significant and unavoidable.

### ***Biological Resources***

Like the proposed project, the Existing Zoning Alternative would result in less than significant impacts with respect to biological resources. Under the Existing Zoning Alternative, 197 single-family dwelling units would be developed on the project site. While this alternative proposes a land use different than the proposed project, like the proposed project, the Existing Zoning Alternative would involve grading and excavation of the project site. Therefore, like the proposed project, the Existing Zoning Alternative would have a similar potential as the proposed project to disturb active nests and affect the Burrowing Owl. Mitigation measures outlined in the Draft EIR for Biological Resources would apply to this scenario and impacts would be less than significant. As such, implementation of the Existing Zoning Alternative would have similar impacts to those of the proposed project.

### ***Cultural Resources***

Like the proposed project, the Existing Zoning Alternative would result in less than significant impacts with respect to cultural resources. Under the Existing Zoning Alternative, 197 single-family dwelling units would be developed on the project site. While this alternative proposes a land use different than the proposed project, like the proposed project, the Existing Zoning Alternative would not have an impact on historical resources. Additionally, this alternative would have a similar potential as the proposed project to encounter archaeological or paleontological resources or human remains during excavation and grading, and therefore, mitigation measures outlined in the Draft EIR for Cultural Resources would apply to this alternative and impacts would be less than significant. As such, implementation of the Existing Zoning Alternative would have similar impacts to those of the proposed project.

### ***Geology and Soils***

Like the proposed project, the Existing Zoning Alternative would result in less than significant impacts with respect to geology and soils. Under the Existing Zoning Alternative, 197 single-family dwelling units would be developed on the project site. While this alternative proposes a land use different than the proposed project, the analysis presented in Section IV.G. (Geology and Soils) in this Draft EIR would generally apply to the Existing Zoning Alternative. The project site is located in the seismically active region of Southern California. The seismic hazards, involving fault rupture, ground shaking, and liquefaction would be similar to those of the proposed project. The same mitigation measures that would be implemented with the proposed project would also be implemented under the Existing Zoning Alternative.

Construction activities under this alternative would be greater than for the proposed project as the number of structures built under this alternative would be greater. Minor erosion and siltation could occur during construction similar to the proposed project's less than significant impacts. Like the proposed project, all site grading and site preparation would comply with applicable provisions of the City of Lancaster

Building Code and the California Building Standards Code for development. Overall, the geology and soils impacts under the Existing Zoning Alternative would be similar to the proposed project's less than significant impacts.

### ***Hazards and Hazardous Materials***

Like the proposed project, the Existing Zoning Alternative would result in less than significant impacts with respect to hazards and hazardous materials. The residential uses under this scenario would use only small quantities of hazardous materials such as cleaning chemicals. As such, impacts with respect to hazards and hazardous materials would be less than significant and less than the proposed project's less than significant impacts.

### ***Hydrology and Water Quality***

Like the proposed project, the Existing Zoning Alternative would result in less than significant impacts with respect to hydrology and water quality. However, impacts under the Existing Zoning Alternative would be less than the proposed project. The proposed project would entirely cover the site with buildings and parking, whereas this alternative would involve more permeable surfaces than the proposed project as the homes would have yards, etc. Additionally, like the proposed project, this alternative would still implement certain operational BMPs to reduce pollutants in runoff. Therefore water quality impacts associated with this alternative would be less than significant, and less than the proposed project's less than significant impacts.

### ***Land Use and Planning***

The Existing Zoning Alternative would result in no impact with respect to land use and planning and the project developed under this scenario would be consistent with the zoning and General Plan designations for the project site. As such, there would be no land use and planning impact under this scenario which is less than the proposed project's less than significant impact.

### ***Noise***

#### ***Construction***

Under the Existing Zoning Alternative, a greater intensity of development is proposed, as a larger number of structures and greater site coverage would result, than that of the proposed project. The proposed project would result in a less than significant construction noise impact. The Existing Zoning Alternative would therefore result in a greater impact (more intense and of longer duration) than the proposed project with respect to construction noise.

#### ***Operation***

Like the proposed project, the Existing Zoning Alternative would result in less than significant impacts with respect to operational noise. However, impacts under the Existing Zoning Alternative would be

lower because the Existing Zoning Alternative consists of residential as opposed to commercial development. Additionally, this alternative would generate far fewer daily trips than the proposed project (see Traffic below), and therefore would generate less roadway noise than the proposed project. Therefore, the Existing Zoning Alternative would result in a less than significant noise impact, and impacts would be less than the proposed project's less than significant operational impacts.

### ***Population and Housing***

Like the proposed project, the Existing Zoning Alternative would result in less than significant impacts with respect to population and housing. Under the Existing Zoning Alternative, 197 single-family dwelling units would be developed on the project site, which would generate additional residents and housing units within the City of Lancaster. Based on an average of 3.061 persons per household, this alternative would generate approximately 603 residents, which would be consistent with the SCAG forecasts for population growth in the City of Lancaster. However, the impacts of the Existing Zoning Alternative would be more impactful than the proposed project as the proposed project would add jobs to rectify the existing job/housing imbalance, whereas this scenario would further exacerbate this imbalance.

### ***Public Services***

#### ***Fire Protection***

Like the proposed project, the Existing Zoning Alternative would result in less than significant impacts with respect to fire protection. Under the Existing Zoning Alternative, the project site would be developed with 197 single-family dwelling units. The development of this alternative would result in 603 permanent residents on the project site, who would require fire protection services. However, under the proposed project, there would be a daytime population of 927 employees plus customers to the proposed project, who would require fire protection services. Overall, as the total on site population under the Existing Zoning Alternative is similar to the total onsite population for the proposed project, it is assumed that impacts with respect to fire protection services would be less than significant and similar to the proposed project's less than significant impacts.

#### ***Police Protection***

Like the proposed project, the Existing Zoning Alternative would result in less than significant impacts with respect to police protection. Under the Existing Zoning Alternative, the project site would be developed with 197 single-family dwelling units. The development of this alternative would result in 603 permanent residents on the project site, who would require police protection services. However, under the proposed project, there would be a daytime population of 927 employees plus customers to the proposed project, who would require police protection services. Overall, as the total on site population under the Existing Zoning Alternative is less than the total onsite population for the proposed project, it is assumed that impacts with respect to police protection services would be less than significant and less than the proposed project's less than significant impacts.

*Schools*

Under the Existing Zoning Alternative, the project site would be developed with 197 single-family dwelling units. The proposed project would generate a net increase of 20 students, including 11 elementary school students, seven middle school students, and two high school students. In contrast, as shown in Table VI-1, the Existing Zoning Alternative would generate 168 total students, including 85 elementary school students, 27 middle school students, and 56 high school students. Therefore, when compared to the proposed project, the Existing Zoning Alternative would generate 148 more students. Like the proposed project, this development scenario would be required to pay school development impact fees that would mitigate any impacts on the school district. Therefore, school impacts under the Existing Zoning Alternative would be less than significant, but greater than the proposed project's less than significant impacts.

**Table VI-1  
Existing Zoning Student Generation**

<b>Land Use</b>	<b>Size</b>	<b>Elementary School Students</b>	<b>Middle School Students</b>	<b>High School Students</b>	<b>Total</b>
Single-Family Res.	197 du	85	27	56	<b>168</b>
<b>Existing Zoning Total</b>		<b>85</b>	<b>27</b>	<b>56</b>	<b>168</b>
<i>Note: du=dwelling unit</i> <sup>a</sup> <i>Source: Phone conversation with Nellie Thomas, Secretary of the Assistant Superintendent, Westside Union School District, Aug, 15, 2007.</i> <i>Elementary student generation rates are as follows: 0.4337 students per dwelling unit of single-family residences (detached).</i> <i>Middle school student generation rates are as follows: 0.1383 students per dwelling unit of single-family residences (detached).</i> <sup>b</sup> <i>Source: AVUHSD, School Facilities Needs Analysis, 2006</i> <i>High School student generation rates are as follows: 0.292 students per dwelling unit of single-family homes (detached).</i>					

*Libraries*

Under the Existing Zoning Alternative, the project site would be developed with 197 single-family dwelling units. The development of this alternative would result in 603 permanent residents on the project site, who would increase demand for library facilities in the project area by 1,206 volumes of permanent collection and 302 square feet of library space (based on two volumes of permanent collection and 0.5 square feet of library space per person). In contrast, under the proposed project, there would be no new demand for additional library space or additional volumes of permanent collection, as the project would only generate employees who generally visit libraries near their homes during non-work hours. However, this alternative would be required to pay developer fees, if necessary, to mitigate any potential impacts to library facilities. Therefore, this alternative would result in a less than significant impact with respect to library facilities, but impacts would be greater than those associated with the proposed project.

### *Parks*

Under the Existing Zoning Alternative, the project site would be developed with 197 single-family dwelling units. The development of this alternative would result in 603 permanent residents on the project site, who would increase demand for park facilities in the project area by 3.02 acres (based on five acres per 1,000 residents). In contrast, under the proposed project, there would be no new demand for additional public parkland or recreational facilities in the site vicinity as the project would only generate employees who generally visit parks near their homes during non-work hours. However, this alternative would be required to pay developer fees to mitigate any potential impacts to parks and recreational facilities. Therefore, this alternative would result in a less than significant impact with respect to recreational and park facilities, but impacts would be greater than those associated with the proposed project (which would result in no impact).

### *Transportation and Traffic*

Like the proposed project, the Existing Zoning Alternative would result in less than significant impacts with respect to transportation and traffic, with mitigation. Under the Existing Zoning Alternative, the project site would be developed with 197 single-family dwelling units. Development of the proposed project would generate an average of 13,658 new daily trips with 296 weekday AM peak hour trips, 1,274 weekday PM peak hour trips, and 1,740 midday Saturday peak hour trips. In contrast, as the Existing Zoning Alternative is a residential project, it would result in approximately 1,970 daily trips, which is fewer than the proposed project. The proposed project would result in significant impacts at 10 intersections/street segments that would be reduced to less than significant levels with implementation of mitigation measures. It is possible that although the Existing Zoning Alternative would generate fewer trips than the proposed project, it could still result in some of the same significant impacts as the proposed project. Therefore, the mitigation measures provided in Section IV.N. of the Draft EIR for the proposed project, would also apply to this alternative. As such, impacts on traffic or transportation under this alternative would be less than significant and less than the proposed project's less than significant impacts.

### *Utilities*

#### *Water*

Like the proposed project, the Existing Zoning Alternative would result in less than significant impacts with respect to water consumption and infrastructure. Under the Residential Alternative, the project site would be developed with 197 single-family homes. The projected demand for water is based on the amount of each land use developed on the project site. Based on the water consumption rates listed in Section IV.O.2. (Water) of this Draft EIR, the Existing Zoning Alternative would consume approximately 54,372 gallons per day of water, which is less than the proposed project's water consumption of 56,785 gallons per day.

**Table VI-2  
Existing Zoning Water Consumption**

<b>Land Use</b>	<b>Size</b>	<b>Consumption Rate</b>	<b>Total Water Consumption (gpd)</b>
Single-Family Residential	197 du	276 gallons/du/day	54,372
<b>Existing Zoning Total</b>			<b>54,372</b>
<i>Notes: du=dwelling unit</i>			

No significant impacts are anticipated on the existing water supply lines to the site. The estimated water consumption is expected to be accommodated by the existing water infrastructure serving the project area and, thus, service would be provided in accordance with the Los Angeles County Water Works rules and regulations for both the proposed project and the Existing Zoning Alternative, as long as water supply is available. Impacts with respect to water from this alternative would be less than significant and slightly less than the proposed project's significant and unavoidable impacts.

#### *Wastewater*

Like the proposed project, the Existing Zoning Alternative would result in less than significant impacts with respect to wastewater generation and infrastructure. Under the Existing Zoning Alternative, the project site would be developed with 197 single-family homes. The projected wastewater generation is based on the amount of each land use developed on the project site. Based on the wastewater generation rates listed in Section IV.O.1. (Wastewater) of this Draft EIR, the Existing Zoning Alternative would generate approximately 45,310 gallons per day of wastewater, which is less than the proposed project's wastewater generation of 47,321 gallons per day.

**Table VI-3  
Existing Zoning Wastewater Generation**

<b>Land Use</b>	<b>Size</b>	<b>Generation Rate</b>	<b>Total Wastewater Generation (gpd)</b>
Single-Family Residential	197 du	230 gallons/du/day	45,310
<b>Existing Zoning Total</b>			<b>45,310</b>
<i>Notes: du=dwelling unit</i>			

No significant impacts are anticipated on the existing sewer lines to the site, and the existing sewer lines in the project vicinity would likely have the capacity to handle the sewage generation flows from the project site. Therefore, impacts with respect to wastewater from this alternative would be less than significant, and less than the proposed project's less than significant impacts.

### *Solid Waste*

Like the proposed project, the Existing Zoning Alternative would result in less than significant impacts with respect to solid waste generation. Under the Existing Zoning Alternative, the project site would be developed with 197 single-family homes. The projected solid waste generation is based on the amount of each land use developed on the project site. Based on the solid waste generation rates listed in Section IV.O.3, Solid Waste, of this Draft EIR, the Existing Zoning Alternative would generate approximately 2,409 pounds per day of solid waste, which is greater than the proposed project's solid waste generation of 1,723 pounds per day.

**Table VI-4  
Existing Zoning Solid Waste Generation**

<b>Land Use</b>	<b>Size</b>	<b>Generation Rate</b>	<b>Total Solid Waste Generation (lbs/day)</b>
Single-Family Residential	197 du	12.23 lbs/du/day	2,409
<b>Existing Zoning Total</b>			<b>2,409</b>
<i>Notes:</i> <i>du=dwelling unit</i>			

As discussed in Section IV.O.3. (Solid Waste) of this Draft EIR, the Lancaster Landfill and Recycling Center would have the capacity to receive the additional solid waste generated by either the proposed project or the Existing Zoning Alternative. As such, the solid waste impact under the Existing Zoning Alternative would be less than significant, but greater than the proposed project's less than significant impacts.

### *Electricity*

Like the proposed project, the Existing Zoning Alternative would result in less than significant impacts with respect to electricity consumption and infrastructure. Under the Existing Zoning Alternative, the project site would be developed with 197 single-family homes. The projected demand for electricity is based on the amount of each land use developed on the project site. Based on the electricity consumption rates listed in Section IV.O.5. (Electricity) of this Draft EIR, the Existing Zoning Alternative would consume approximately 3,037 kWh per day of electricity, which is less than the proposed project's electricity consumption of 14,118 kWh per day.

**Table VI-5  
Existing Zoning Electricity Consumption**

<b>Land Use</b>	<b>Size</b>	<b>Consumption Rate</b>	<b>Total Electricity Consumption (kWh/day)</b>
Single-Family Residential	197 du	5,626.50 kWh/du/year	3,037
<b>Existing Zoning Total</b>			<b>3,037</b>
<i>Notes: du=dwelling unit</i>			

Southern California Edison undertakes expansion and/or modification of electricity distribution infrastructure and systems to serve future growth in the City of Lancaster as required in the normal process of providing electrical service. According to Southern California Edison, the current infrastructure and plans for expansion are adequate to accommodate the needs of the City of Lancaster through 2012. As such, no significant impacts are anticipated on the electrical lines to the site. Impacts with respect to electricity from this alternative would be less than significant, and less than the proposed project's less than significant impacts.

#### *Natural Gas*

Like the proposed project, the Existing Zoning Alternative would result in less than significant impacts with respect to natural gas consumption and infrastructure. Under the Existing Zoning Alternative, the project site would be developed with 197 single-family homes. The projected demand for natural gas is based on the amount of each land use developed on the project site. Based on the natural gas consumption rates listed in Section IV.O.4. (Natural Gas) of this Draft EIR, the Existing Zoning Alternative would consume approximately 26,342 cf day of natural gas, which is less than the proposed project's natural gas consumption of 33,307 cf per day.

**Table VI-6  
Existing Zoning Natural Gas Consumption**

<b>Land Use</b>	<b>Size</b>	<b>Consumption Rate</b>	<b>Total Natural Gas Consumption (cf/day)</b>
Single-Family Residential	197 du	4,011.5 cf/du/mo	26,342
<b>Existing Zoning Total</b>			<b>26,342</b>
<i>Notes: du=dwelling unit</i>			

SoCal Gas would be able to provide the increase in its portion of the volume of natural gas anticipated from development of the proposed project or this alternative. Therefore, this alternative would have a less than significant impact on natural gas supply systems, and the impact would be less than the proposed project's less than significant impacts.

### ***Relationship to Project Objectives***

The Existing Zoning Alternative would result in many of the same impacts as the proposed project. However, this alternative would result in greater impacts with respect to air quality during construction, construction noise, schools, parks, libraries, and solid waste. Additionally, the Existing Zoning Alternative would only satisfy some of the project objectives. Specifically, this alternative would:

- Provide a well-designed development that is compatible and complementary with surrounding land uses;
- Mitigate, to the extent feasible, the potential environmental impacts of the proposed project; and
- Provide adequate parking facilities to serve the proposed development customers, and employees (in this case, for residents and guests).

The Existing Zoning Alternative would partially meet the following objective, as it would only provide short-term construction jobs:

- Generate employment opportunities for the local area.

The Existing Zoning Alternative would not:

- Create development on the project site to provide commercial retail facilities to serve the local community;
- Generate significant sales tax revenues to benefit the general fund; and
- Provide a development that is financially viable.

### ***Reduction of Significant Project Impacts***

The proposed project would result in a significant impact after mitigation in operational air quality. The Existing Zoning Alternative is not likely to result in any significant environmental impacts.

### **Alternative 3: Reduced Commercial Density Alternative**

Under the Reduced Commercial Density Alternative, a proportionately smaller project would be constructed when compared to the proposed project. Specifically, this alternative would construct a 241,185 square foot development (a 30% reduction compared to the proposed project) similar to the proposed project, but without big box anchor tenants. All other aspects of the project remain unchanged. The potential environmental impacts associated with this Reduced Commercial Density Alternative are described below and are compared to the potential environmental impacts associated with the proposed project.

### ***Aesthetics***

The Reduced Commercial Density Alternative would result in a less than significant aesthetic impact. However, impacts under this alternative would be lower than the proposed project because the Reduced Commercial Density Alternative would construct a proportionately smaller project without big box anchor stores, when compared to the proposed project. As the total square footage of the project under Alternative 3 would be reduced by 30%, impacts with respect to aesthetics (including views, light and glare, and shade/shadow) would be less than significant and less than the proposed project's less than significant impacts. Furthermore, with respect to urban decay, this alternative would have a proportionately lesser impact than the proposed project and urban decay impacts would be less than significant and less than the proposed project's less than significant impacts.

### ***Agricultural Resources***

Under the Reduced Commercial Density Alternative, a proportionately smaller project would be constructed without big box anchor stores, when compared to the proposed project. Like the proposed project, the Reduced Commercial Density Alternative would not convert prime farmland to a non-agricultural use. As such, both the proposed project and the Reduced Commercial Density Alternative would have no impact with respect to agricultural resources.

### ***Air Quality***

The Reduced Commercial Density Alternative would result in lesser impacts than the proposed project because a proportionately smaller project would be constructed compared to the proposed project. The Reduced Commercial Density Alternative would also eliminate the big box anchor tenants of the proposed project. As this alternative would result in the development of a smaller project than the proposed project, fewer air pollutant emissions (e.g., PM<sub>10</sub>, CO, and NO<sub>x</sub>) related to grading, construction, or trips would be generated under this alternative. Therefore, air quality impacts would be reduced under the Reduced Commercial Density Alternative, but it is possible that this alternative could still result in the same significant and unavoidable impacts as the proposed project with respect to PM<sub>10</sub> and PM<sub>2.5</sub>.

### ***Biological Resources***

Like the proposed project, the Reduced Commercial Density Alternative would result in a less than significant impact with respect to biological resources. Under the Reduced Commercial Density Alternative, a proportionately smaller project would be built when compared with the proposed project. Like the proposed project, the Reduced Commercial Density Alternative would involve the grading and excavation of the project site. Therefore, like the proposed project, the Reduced Commercial Density Alternative would have a similar potential as the proposed project to disturb active nests and affect the Burrowing Owl, if any. As such, mitigation measures as outlined in the Draft EIR for Biological Resources would apply to this alternative and impacts would be less than significant. As such,

implementation of Alternative 3 would have less than significant impacts and impacts similar to those of the proposed project.

### ***Cultural Resources***

Like the proposed project, the Reduced Commercial Density Alternative would result in a less than significant impact with respect to cultural resources. Under the Reduced Commercial Density Alternative, a proportionately smaller project would be built when compared with the proposed project. Like the proposed project, the Reduced Commercial Density Alternative would not have an impact on historical resources. As the Reduced Commercial Density Alternative would require less grading than for the proposed project, this Alternative would have a lesser potential than the proposed project to encounter archaeological or paleontological resources or human remains during excavation and grading. However, mitigation measures as outlined in the Draft EIR for Cultural Resources would apply to this alternative and impacts would be less than significant. As such, implementation of Alternative 3 would have less than significant impacts and impacts slightly less than those of the proposed project.

### ***Geology and Soils***

Like the proposed project, the Reduced Commercial Density Alternative would result in a less than significant impact with respect to geology and soils. However, the impacts with respect to geology and soils would be lower because a proportionally smaller project would be constructed without the big box store components when compared with the proposed project, although the analysis presented in Section IV.G. (Geology and Soils) in this Draft EIR would generally apply to Alternative 3. The project site is located in the seismically active region of Southern California. The seismic hazards, fault rupture, ground shaking, liquefaction, and landslides would be similar to the proposed project. The same mitigation measures that would be implemented with the proposed project would also be implemented under Alternative 3. However, as the Reduced Commercial Density Alternative would consist of smaller structures with fewer occupants, impacts under this alternative associated with seismic hazards would be less than significant and less than the proposed project's less than significant impacts.

Construction activities would be slightly less as not as much excavation would be required for this alternative, as the structure would have a proportionately smaller footprint than the proposed project. Minor erosion and siltation could occur during construction similar to the proposed project's less than significant impacts. Like the proposed project, all site grading and site preparation would comply with applicable provisions of the City of Lancaster Building Code and the California Building Standards Code for development. Impacts of this alternative for soil erosion would be similar to the proposed project's less than significant impacts. Overall, the geology and soils impacts under Alternative 3 would be less than the proposed project's less than significant impacts.

### ***Hazards and Hazardous Materials***

Like the proposed project, the Reduced Commercial Density Alternative would result in less than significant impacts with respect to hazards and hazardous materials. Because development under

Alternative 3 would occur in the same general location and for similar uses as the proposed project and as the same mitigation measures would be implemented, the impacts associated with hazards and hazardous materials under Alternative 3 would be less than significant and similar to the proposed project's less than significant impacts.

### ***Hydrology***

Like the proposed project, the Reduced Commercial Density Alternative would result in a less than significant impact with respect to hydrology and water quality. However, the impacts with respect to hydrology and water quality would be lower because a proportionally smaller project would be constructed without the big box store components when compared with the proposed project. This alternative would therefore likely involve less grading and construction, compared to the proposed project. This alternative would also construct less impermeable surfaces as this alternative would have a smaller footprint and would construct fewer parking spaces than the proposed project. Additionally, this alternative would not create as much runoff as under proposed project conditions. However, this alternative would still implement certain operational BMPs to reduce pollutants in runoff, as would the proposed project. Therefore, water quality impacts associated with this alternative would be less than significant, and less than the proposed project's less than significant impacts.

### ***Land Use***

Like the proposed project, the Reduced Commercial Density Alternative would result in a less than significant impact with respect to land use. Under the Reduced Commercial Density Alternative, a proportionately smaller project would be constructed without big box anchor stores, when compared to the proposed project. Implementation of this alternative would involve a zone change and a general plan amendment, like the proposed project, to accommodate the proposed uses for the site. With approval of the zone change, general plan amendment and additional discretionary actions on the project site, impacts would be similar to the proposed project's less than significant impacts. Furthermore, similar to the proposed project, this alternative would not physically divide an established community. As such, land use impacts for Alternative 3 would be less than significant, and similar to the proposed project's less than significant impacts.

### ***Noise***

#### ***Construction***

Under the Reduced Commercial Density Alternative, a reduced intensity of development is proposed. As construction noise impacts would be less than significant under the proposed project, construction noise impacts would be lessened under this alternative. Therefore, construction noise and vibration impacts under this alternative would be less than significant and less than the proposed project's less than significant impacts.

### *Operation*

Like the proposed project, the Reduced Commercial Density Alternative would result in a less than significant impact with respect to operational noise. However, Alternative 3 would have fewer operational noise impacts than the proposed project due to the fact that it is a reduced density version of the proposed project. Additionally, this alternative would generate fewer daily trips than the proposed project (see Traffic below), and therefore would generate less roadway noise than the proposed project. Therefore, Alternative 3 would result in a less than significant noise impact, and impacts would be less than the proposed project's less than significant operational impacts.

### *Population and Housing*

Like the proposed project, the Reduced Commercial Density Alternative would result in a less than significant impact with respect to population and housing. However, impacts to population and housing under the Reduced Commercial Density Alternative would be lower because this alternative would involve the construction of a proportionately smaller project (30% smaller than the proposed project), and would therefore generate approximately 649 employees, which is less than the 927 employees generated by the proposed project. As such, the Reduced Commercial Density Alternative would result in a less than significant impact with respect to population and employment growth, and impacts would be less than the proposed project's less than significant impacts.

### *Public Services*

#### *Fire Protection*

Like the proposed project, the Reduced Commercial Density Alternative would result in a less than significant impact with respect to fire protection services. However, impacts to fire protection under the Reduced Commercial Density Alternative would be lower because a proportionately smaller project would be constructed when compared to the proposed project. The Reduced Commercial Density Alternative would also eliminate the big box stores that would be anchor tenants under the proposed project. On-site population would be reduced compared to the proposed project. Because of reduced on-site population, the type and frequency of fire protection services required to serve the project site would be reduced compared to the proposed project. Therefore impacts to fire protection services under the Reduced Commercial Density Alternative would be lower than the proposed project and also less than significant.

#### *Police Protection*

Like the proposed project, the Reduced Commercial Density Alternative has less than significant impacts with respect to police protection. However, the impacts to police protection services under the Reduced Commercial Density Alternative would be lower because the Reduced Commercial Density Alternative involves construction of a proportionately smaller project than the proposed project. The Reduced Commercial Density Alternative would also eliminate the big box anchor tenants of the proposed project.

On-site population would be reduced compared to the proposed project. Because of reduced on-site population, the type and frequency of police protection services required to serve the project site would be reduced compared to the proposed project. Therefore, impacts to police protection services under the Reduced Commercial Density Alternative would be lower than the proposed project and also less than significant.

#### *Schools*

Like the proposed project, the Reduced Commercial Density Alternative would result in a less than significant impact with respect to schools. Under the Reduced Commercial Density Alternative, a proportionately smaller project would be constructed compared to the proposed project. The Reduced Commercial Density Alternative would also eliminate the big box anchor tenants of the proposed project. Student generation would therefore be less than the proposed project, although school facility fees paid by the project would also be less under the Reduced Commercial Density Alternative. School fees are the State-mandated mechanism for mitigating impacts of new development on school facilities. Therefore, although student generation under the Reduced Commercial Density Alternative would be lower than under the proposed project, the net impact of the Reduced Commercial Density Alternative would be the same as the proposed project and less than significant.

#### *Libraries*

Like the proposed project, the Reduced Commercial Density Alternative would result in no impact with respect to libraries. Under the Reduced Commercial Density Alternative, there would be no new demand for additional library space or additional volumes of permanent collection as this alternative would only generate employees who generally visit libraries near their homes during non-work hours. The proposed project would also not result in a demand for additional library space or volumes of permanent collection. Therefore, no impact on library services would occur under the Reduced Commercial Density Alternative, and impacts would be similar to those associated with the proposed project.

#### *Parks*

Like the proposed project, the Reduced Commercial Density Alternative would result in no impact with respect to parks and recreational facilities. Under the Reduced Commercial Density Alternative, there would be no new demand for additional public parkland or recreational facilities in the site vicinity as this alternative would only generate employees who generally visit parks near their homes during non-work hours. The proposed project would also not result in a demand for additional public parkland. Therefore, no impact on recreational and park facilities would occur under the Reduced Commercial Density Alternative, and impacts would be similar to those associated with the proposed project.

#### ***Transportation and Traffic***

Like the proposed project, the Reduced Commercial Density Alternative has less than significant impacts with respect to traffic and transportation. However, the impacts to traffic under the Reduced Commercial

Density Alternative would be lower because a proportionately smaller project would be constructed compared to the proposed project. The Reduced Commercial Density Alternative would also eliminate the big box anchor tenants of the proposed project. Development of the proposed project would generate an average of 13,658 new daily trips with 296 weekday AM peak hour trips, 1,274 weekday PM peak hour trips, and 1,740 midday Saturday peak hour trips. As the Reduced Commercial Density Alternative is 30% smaller than the proposed project, it would also be expected to generate proportionately fewer daily peak hour trips than the proposed project (approximately 9,561 trips per day). The proposed project would result in significant impacts at 10 intersections/street segments that would be reduced to less than significant levels with implementation of mitigation measures. It is possible that although the Reduced Commercial Density Alternative would generate fewer trips than the proposed project, it could still result in all or some of the same significant impacts as the proposed project. Therefore, the mitigation measures provided in Section IV.N. of the Draft EIR for the proposed project, would also apply to the Reduced Commercial Density Alternative. As such, impacts on traffic or transportation under this alternative would be less than significant and less than the proposed project's less than significant impacts.

### *Utilities*

#### *Water*

Like the proposed project, the Reduced Commercial Density Alternative has a less than significant impact with respect to water infrastructure and water supply. However, the impacts with respect to water under the Reduced Commercial Density Alternative would be lower because a proportionately smaller project would be constructed compared to the proposed project. The Reduced Commercial Density Alternative would also eliminate the big box anchor tenants of the proposed project. Under the proposed project, there would be a net increase in water demand of 56,785 gpd. As the Reduced Commercial Density Alternative is 30% smaller than the proposed project, it would also be expected to require proportionately less water per day (approximately 39,739 gpd) than the proposed project. Therefore, both the proposed project and the Reduced Commercial Density Alternative would result in a less than significant impact with respect to water supply.

#### *Wastewater*

Like the proposed project, the Reduced Commercial Density Alternative has less than significant impacts with respect to wastewater generation and infrastructure. However, the impacts with respect to wastewater under the Reduced Commercial Density Alternative would be lower because a proportionately smaller project would be constructed compared to the proposed project. The Reduced Commercial Density Alternative would also eliminate the big box anchor tenants of the proposed project. Under the proposed project, there would be a net increase in wastewater generation of 47,321 gpd. As the Reduced Commercial Density Alternative is 30% smaller than the proposed project, it would also be expected to generate proportionately less wastewater per day (approximately 33,121 gpd) than the proposed project. Therefore, this alternative would result in a less than significant impact with respect to wastewater generation, and impacts would be less than those associated with the proposed project's less than significant impacts.

### *Solid Waste*

Like the proposed project, the Reduced Commercial Density Alternative has less than significant impacts with respect to solid waste generation. However, the impacts with respect to solid waste under the Reduced Commercial Density Alternative would be lower because a proportionately smaller project would be constructed compared to the proposed project. The Reduced Commercial Density Alternative would also eliminate the big box anchor tenants of the proposed project. Under the proposed project, there would be a net increase in solid waste generation of 1,723 pounds per day. As the Reduced Commercial Density Alternative is 30% smaller than the proposed project, it would also be expected to generate proportionately less solid waste per day (approximately 1,206 pounds per day) than the proposed project. Therefore, this alternative would result in a less than significant impact with respect to solid waste generation, and impacts would be less than those associated with the proposed project's less than significant impacts.

### *Electricity*

Like the proposed project, the Reduced Commercial Density Alternative has less than significant impacts with respect to electricity consumption and infrastructure. However, the impacts with respect to electricity under the Reduced Commercial Density Alternative would be lower because a proportionately smaller project would be constructed compared to the proposed project. The Reduced Commercial Density Alternative would also eliminate the big box anchor tenants of the proposed project. Under the proposed project, there would be a net increase in electricity consumption of 14,118 kWh per day. As the Reduced Commercial Density Alternative is 30% smaller than the proposed project, it would also be expected to require proportionately less electricity per day (approximately 9,883 kWh) than the proposed project. Therefore, this alternative would result in a less than significant impact with respect to electricity services, and impacts would be less than those associated with the proposed project's less than significant impacts.

### *Natural Gas*

Like the proposed project, the Reduced Commercial Density Alternative has less than significant impacts with respect to natural gas consumption and infrastructure. However, the impacts with respect to natural gas under the Reduced Commercial Density Alternative would be lower because a proportionately smaller project would be constructed compared to the proposed project. The Reduced Commercial Density Alternative would also eliminate the big box anchor tenants of the proposed project. Under the proposed project, there would be a net increase in natural gas consumption of 33,307 cf per day. As the Reduced Commercial Density Alternative is 30% smaller than the proposed project, it would also be expected to require proportionately less natural gas per day (approximately 22,611 cf) than the proposed project. Therefore, this alternative would result in a less than significant impact with respect to natural gas services, and impacts would be less than those associated with the proposed project's less than significant impacts.

### ***Relationship to Project Objectives***

The Reduced Commercial Density Alternative would lessen most of the environmental impacts associated with the proposed project. The Reduced Commercial Density Alternative would satisfy many of the project objectives, but not to the extent that the proposed project would satisfy them. Specifically, the Reduced Commercial Density Alternative would:

- Create development on the currently underutilized project site to provide commercial retail facilities to serve the local community;
- Generate significant sales tax revenue to benefit the general fund;
- Provide a well-designed development that is compatible and complementary with surrounding land uses;
- Provide a development that is financially viable;
- Generate employment opportunities for the local area;
- Mitigate, to the extent feasible, the potential environmental impacts of the proposed project; and
- Provide adequate parking facilities to serve the proposed development customers, and employees.

### ***Reduction of Significant Project Impacts***

The proposed project would result in a significant impact after mitigation in air quality during operation. The Reduced Commercial Density Alternative would likely reduce this significant impact to a less than significant level.

## **C. ENVIRONMENTALLY SUPERIOR ALTERNATIVE**

In addition to the discussion and comparison of impacts of a proposed project and the alternatives, Section 15126.6 of the CEQA Guidelines requires that an “environmentally superior” alternative be selected and the reasons for such a selection disclosed. In general, the environmentally superior alternative is the alternative that would be expected to generate the least amount of adverse impacts. In this case, the No Build/No Project Alternative would result in the least impacts on the existing environment. However, Section 15126.6(e)(2) of the CEQA Guidelines states if the No Project Alternative is the environmentally superior alternative, then the EIR shall also identify an environmentally superior alternative among the other alternatives. Based on the alternatives analysis provided above, Alternative 3, the Reduced Commercial Density Alternative is considered to be the environmentally superior alternative, as it results in lesser impacts than the Existing Zoning/No Project Alternative. Alternative 3 would result in lesser environmental impacts than the proposed project and would reduce, but not eliminate, the significant and unavoidable operational air quality impact. Therefore, operational air quality impacts under Alternative 3 would remain significant and unavoidable.

**Table VI-7  
Alternatives Comparison Table**

<b>Impact Area</b>	<b>Proposed Project Impact with Mitigation</b>	<b>Alternative 1: No Project Alternative</b>	<b>Alternative 2: Existing Zoning Alternative</b>	<b>Alternative 3: Reduced Community Density Alternative</b>
<b>Aesthetics</b>				
Aesthetics Views	L-T-S	LESS	LESS	LESS
Light and Glare	L-T-S	LESS	LESS	LESS
Urban Decay	L-T-S	LESS	LESS	LESS
<b>Agriculture</b>				
Convert Farmland	L-T-S	SIMILAR	SIMILAR	SIMILAR
Conflict with Zoning	L-T-S	SIMILAR	SIMILAR	SIMILAR
<b>Air Quality</b>				
Construction	L-T-S	LESS	GREATER	LESS
Operational	Significant	LESS	LESS	LESS
<b>Biological Resources</b>				
Special Status Species	L-T-S	LESS	SIMILAR	SIMILAR
Sensitive Natural Communities	L-T-S	LESS	SIMILAR	SIMILAR
Federally Protected Wetlands	L-T-S	LESS	SIMILAR	SIMILAR
Wildlife Movement or Nurseries	L-T-S	LESS	SIMILAR	SIMILAR
Local Policies or Regulations	L-T-S	LESS	SIMILAR	SIMILAR
Conservation Plans	L-T-S	LESS	SIMILAR	SIMILAR
<b>Cultural Resources</b>				
Historic Resource	L-T-S	LESS	SIMILAR	SIMILAR
Archeological Resource	L-T-S	LESS	SIMILAR	SIMILAR
Paleontological Resource	L-T-S	LESS	SIMILAR	SIMILAR
Human Remains	L-T-S	LESS	SIMILAR	SIMILAR
<b>Geology and Soils</b>				
Geological Hazards	L-T-S	LESS	SIMILAR	LESS
Soils	L-T-S	LESS	SIMILAR	LESS
<b>Hazards</b>				
Hazardous Materials	L-T-S	LESS	LESS	SIMILAR
<b>Hydrology</b>				
Water Quality	L-T-S	GREATER	LESS	LESS
<b>Land Use and Planning</b>				
Zone Change	L-T-S	GREATER	LESS	SIMILAR
General Plan Amendment	L-T-S	GREATER	LESS	SIMILAR
<b>Noise</b>				
Construction	L-T-S	LESS	GREATER	LESS
Operational	L-T-S	LESS	LESS	LESS

**Table VI-7 (Continued)  
Alternatives Comparison Table**

<b>Impact Area</b>	<b>Proposed Project Impact with Mitigation</b>	<b>Alternative 1: No Project Alternative</b>	<b>Alternative 2: Existing Zoning Alternative</b>	<b>Alternative 3: Reduced Community Density Alternative</b>
<b>Population/Housing</b>				
Population	L-T-S	LESS	LESS	LESS
Employment	L-T-S	LESS	LESS	LESS
<b>Public Services</b>				
Fire	L-T-S	LESS	SIMILAR	LESS
Police	L-T-S	LESS	SIMILAR	LESS
Schools	L-T-S	LESS	GREATER	SIMILAR
Parks and Recreation	L-T-S	LESS	GREATER	SIMILAR
Library	L-T-S	LESS	GREATER	SIMILAR
<b>Transportation/Traffic</b>				
Intersections	L-T-S	LESS	LESS	LESS
Trips	L-T-S	LESS	LESS	LESS
<b>Utilities</b>				
Wastewater	L-T-S	LESS	LESS	LESS
Water	L-T-S	LESS	LESS	LESS
Solid Waste	L-T-S	LESS	GREATER	LESS
Natural Gas	L-T-S	LESS	LESS	LESS
Electricity	L-T-S	LESS	LESS	LESS

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## VIII. ACRONYMS AND ABBREVIATIONS

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AB	Assembly Bill
ACM	Asbestos Containing Materials
ANSI	American National Standard Institute
AQMP	Air Quality Management Plan
ARB	Air Resources Board
AST	Aboveground Storage Tanks
ATCS	Adaptive Traffic Control System
ATV	Antelope Valley Transit
AVAQMD	Antelope Valley Air Quality Management District
AVEK	Antelope Valley-East Kern Water Agency
AVECC	Antelope Valley Environmental Collection Center
AVTA	Antelope Valley Transit Authority
AVUHSD	Antelope Valley Union High School District
AWP	Annual Work Plan
bgs	Below ground surface
BLS	Basic Life Support
BMPs	Best Management Practices
BWh	Dry-hot desert climate
BWhh	Dry-very hot desert climate
C	Commercial
CAA	Clean Air Act
CALTRANS	California Department of Transportation
CAR	Cooperative Agreement Recipient
CARB	California Air Resources Board
CAT	Climate Action Team
CBOC	California Burrowing Owl Consortium
CCAA	California Clean Air Act
CCR	California Code of Regulations
CDFG	California Department of Fish and Game

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CEC	California Energy Commission
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CERCLIS	Comprehensive Environmental Response, Compensation, and Liability Information System
Cf	cubic feet
CFR	Code of Federal Regulations
CGS	California Geological Survey
CH <sub>4</sub>	Methane
CHRIS	California Historical Resources Information System
CMA	Critical Movement Analysis
CMP	Congestion Management Program
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
CNPS	California Native Plant Society
CO	Carbon monoxide
CO <sub>2</sub>	Carbon dioxide
CORRACTS	Corrective Action Report
CPD	Commercial Planned Development
CUWCC	California Urban Water Conservation Council
CWA	Clean Water Act
dB	Decibel
dBA	A-weighted decibel
DPW	Department of Public Works
DMM	Demand Management Measures
EDR	Environmental Data Resources
EEO	Emergency Operations Organization
EIR	Environmental Impact Report
EPA	Environmental Protection Agency
ERNS	Emergency Response Notification System
ESA	Environmental Site Assessment
FESA	Federal Endangered Species Act

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FHWA	Federal Highway Traffic Noise Prediction Model
FIDs	Flame ionization detectors
FRA	Federal Railway Administration
GHG	Greenhouse Gas
GPA	General Plan Amendment
gpd	Gallons per Day
gpm	Gallons per Minute
GWP	Global Warning Potential
HCM	Highway Capacity Manual
HFC	Hydrofluorocarbons
HHW	Household Hazardous Waste
HI	Hazardous Index
HPOZ	Historic Preservation Overlay Zone
HRA	Health Risk Assessment
HUD	Housing and Urban Development
HVAC	Heating, Ventilation, Air Conditioning
ICU	Intersection Capacity Utilization
IS	Initial Study
ITS	Intelligent Transportation Systems
ITE	Institute of Transportation Engineers
IWMB	Integrated Waste Management Board
LACDPW	Los Angeles County Department of Public Works
LACFD	Los Angeles County Fire Department
LACSD	Los Angeles County Sheriff's Department
LACPL	Los Angeles County Public Library
LBP	Lead-based Paint
lbs	Pounds
LDPRA	Lancaster Department of Parks, Recreation and Arts
$L_{eq}$	Average sound level
LLC	Limited Liability Company
LOS	Level of Service
LRWQCB	Lahontan Regional Water Quality Control Board

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LUST	Leaking Underground Storage Tank
LUTP	Land Use/ Transportation Policy
MBTA	Migratory Bird Treaty Act
MDAB	Mojave Desert Air Basin
MEA	Master Environmental Assessment
MEP	Maximum Extent Practicable
Mgd	Million gallons per day
Mm	millimeter
MND	Mitigated Negative Declaration
MPH	Miles per Hour
Msl	Mean Sea Level
N <sub>2</sub> O	Nitrous oxide
NAHC	Native American Heritage Commission
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NFA	No Further Action
NFRAP	No Further Remedial Action Planned
NMVOCs	Nonmethane volatile organic compounds
NOAA	National Oceanic and Atmospheric Administration
NOP	Notice of Preparation
NO <sub>x</sub>	Nitrogen oxides
NO <sub>2</sub>	Nitrogen dioxide
NOI	Notice of Intent
NPPA	National Plant Protection Act
NPDES	National Pollution Discharge Elimination System
NPL	National Priorities List
NRCS	Natural Resources Conservation Service
O	Open Space
OP	Office Professional
O <sub>3</sub>	Ozone
PCBs	Polychlorinated Biphenyls
PFC	Perfluorocarbons
PIDs	Photoionization detectors

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PM <sub>2.5</sub>	Fine Particulate Matter
PM <sub>10</sub>	Respirable Particulate Matter
ppm	Parts per million
PSI	Pounds per Square Inch
PUC	Public Utilities Commission
RCPG	Regional Comprehensive Plan and Guide
RCRA	Resource Conservation and Recovery Act
RCRIS	Resource Conservation and Recovery Information Center
RHNA	Regional Housing Needs Assessment
ROG	Reactive organic gas
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SB	Senate Bill
SCAG	Southern California Association of Governments
SCAQMD	South Coast Air Quality Management District
SCE	Southern California Edison
SENL	Single Event Noise Levels
sf	Square foot
SF <sub>6</sub>	Sulfur hexafluoride
SIP	State Implementation Plan
SLIC	Spills, Leaks, Investigation, and Cleanup
SO <sub>x</sub>	Sulfur oxides
SO <sub>2</sub>	Sulfur dioxide
SONGS	San Onofre Nuclear Generating Station
SRRE	Source Reduction and Recycling Element
STIP	State Transportation Improvement Program
SUSMP	Standard Urban Stormwater Mitigation Plan
SWIS	Solid Waste Information System
SWF/LS	Solid Waste Facilities/Landfill Sites
SWP	State Water Project
SWPPP	Stormwater Pollution Prevention Plan
SWRCB	State Water Resources Control Board

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TAC	Toxic Air Contaminants
TBAs	Targeted Brownfields Assessment
TIMP	Transportation Improvement and Mitigation Plan
TSD	Treatment, Storage, Disposal
UBC	Uniform Building Code
USAR	Urban Search and Rescue
USC	United States Code
USEPA	United States Environmental Protection Agency
USFWS	U.S. Fish and Wildlife Service
USGS	United States Geological Survey
UST	Underground Storage Tank
V/C	Volume to Capacity ratio
VdB	Velocity decibels
VMP	Vehicle Miles Traveled
VOC	Volatile organic compounds
WMUD	Waste Management Unit Database
WRP	Water Reclamation Plant
WUSD	Westside Union School District