DRAFT SUBSEQUENT

Prepared For:

City of GLendale
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SCH No. 2008121042

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November 2013

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NOTICE OF AVAILABILITY OF DRAFT SUBSEQUENT ENVIRONMENTAL IMPACT REPORT

Tropico Apartments Project

NOTICE IS HEREBY GIVEN that the City of Glendale in its role as Lead Agency has completed a Draft Subsequent Environmental Impact Report (EIR) for the project described below and invites comments on the adequacy and completeness of the environmental analyses described in the Draft Subsequent EIR.

PROJECT LOCATION/DESCRIPTION: The proposed Tropico Apartments Project ("Project") is located at 435 West Los Feliz Boulevard and is zoned Industrial/Commercial-Residential Mixed-Use (IMU-R). The 91,826 square-foot site is bounded on the south by Los Feliz Boulevard, on the east by Gardena Avenue, on the north by Fernando Court, and on the west by railroad tracks. The project site is currently vacant.

The Project proposes development of a five-story residential building and a six-story parking structure with a total of 225 multi-family residential units (approximately 49 studios, 103 one-bedroom, and 73 two-bedroom units) and 330 parking spaces. The residential building would be located on the easterly portion of the site; the parking structure would be located on the westerly portion of the site abutting railroad tracks. The parking structure would have five levels of residential units along its entire southern edge screening the structure from Los Feliz Boulevard. In addition, a ground floor leasing office and four levels of units would be located on the northeast corner of the parking structure on Fernando Court. A 20' wide utility easement landscaped as a pedestrian paseo would separate the two structures. The maximum height of the structures would be approximately 65 feet above adjacent grade. Vehicle access to the parking structure on the site would be provided via one driveway along Fernando Court near the western Project boundary.

ENVIRONMENTAL REVIEW FINDINGS: The Draft Subsequent EIR has been prepared pursuant to the requirements of the State Guidelines for the implementation of the California Environmental Quality Act (CEQA). Potential impacts were either less than significant or mitigated to less than significant for aesthetics, cultural resources, hazards and hazardous materials, land use and planning, public services, population and housing, and utilities and service systems. Overall, the project was determined to result in significant and unavoidable environmental impacts related to short-term construction equipment noise and vibration; long-term vehicle exterior noise levels along Los Feliz Road, long term traffic and circulation impacts to the intersection of Los Feliz Road/San Fernando Road, long-term recreation impacts, and contribute to cumulative solid waste, recreation, fire, and police impacts.

DOCUMENT AVAILABILITY: The Draft Subsequent EIR will be available for public review for a period of 30 days on and after November 12, 2013 on the Planning Division's website at www.ci.glendale.ca.us/government/planning and at the Central Library. Copies of the Draft Subsequent EIR will also be available for public review at the Planning Division of the City of Glendale, 633 E. Broadway, Room 103, Glendale, CA 91206-4386.

HOW TO COMMENT: Please provide written comments to Jeff Hamilton, Senior Planner, at the City of Glendale Planning Division, 633 E. Broadway, Room 103, Glendale, CA 91206-4386, fax: (818) 240-0392 or email: JHamilton@ci.glendale.ca.us, prior to the close of the **30-day public review period at 5:00 p.m. on December 12, 2013**.

Published: Glendale News Press – November 9, 2013

Draft Subsequent

Environmental Impact Report

Tropico Apartments Project

City of Glendale

(SCH No. 2008121042)

Prepared for:

City of Glendale
633 E. Broadway, Room 103
Glendale, California 91206

Prepared by:

Meridian Consultants LLC
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Westlake Village, California 91361

November 2013

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A disc containing both the Draft EIR and Appendices is attached on the inside cover.

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1.0 INTRODUCTION

This section provides information on the background of the Project, as described in **Section 3.0, Project Description**, and assessed in this Draft environmental impact report (EIR), the environmental review process being conducted by the City of Glendale for this Project and the organization and content of this Draft Subsequent EIR.

ENVIRONMENTAL REVIEW PROCESS

Background

In 2010, the Glendale Redevelopment Agency, which is now the Successor Agency after the elimination of Redevelopment Agencies within the state, and the City of Glendale approved the Mitaa Plaza Project and certified the Final EIR (SCH No. 2008121042). The approved Mitaa Plaza Project included the development of a 163,090 square-foot mixed use development consisting of a grocery store, day spa, restaurants, retail, and medical/general office uses with a five-story parking structure. Entitlements included design review, a sign program, a 125-space parking exception, Conditional Use Permits for various on-site uses such as massage services and for the sale of alcoholic beverages, a standards variance for parking structure height and building corner treatment, and two sign variances. Significant and unavoidable impacts associated with these approved uses and entitlements were examined in the Final EIR and included traffic noise impacts along Fernando Court and along Los Feliz Boulevard east and west of Gardena Avenue; noise impacts during construction activities; cumulative construction and operational noise impacts; recreation impacts; traffic impacts due to the generation of 8,338 average daily trips (ADTs), 368 AM peak hour trips, and 825 PM peak hours trips resulting in impact to the intersections of San Fernando Road/Chevy Chase Drive, San Fernando Road/West Los Feliz Road, San Fernando Road/Brand Boulevard, and Glendale Avenue/Chevy Chase Drive; the loss of on-street parking spaces; and reduction of landfill capacity in Los Angeles County.

Since the time of approval of the Mitaa Plaza Project, the applicant has changed the project and has submitted a new application to the City of Glendale to develop a 225-dwelling-unit apartment project on the site with a six-story parking structure that includes 330 spaces (referred to as the “Project”). Because of the size and type of the proposed Project, there would be a reduction and/or increase in some of the previously identified impacts for the approved Mitaa Plaza Project. For example, the Project would reduce traffic generation from 8,338 ADTs to 1,350 ADTs, from 368 AM peak-hour trips to 67 AM peak-hour trips, and from 825 PM peak-hour trips to 88 PM peak-hour trips. Water usage would be reduced from 66.5 acre-feet to 39.2 acre-feet and wastewater generation from 47,515 gallons per day to 24,224 gallons per day under the proposed Project. However, because the proposed Project is a residential project and would result in a permanent population, the Project would result in an increase in

recreation and school impacts, as well as solid waste. The difference between the previously approved Project and proposed Project is examined in **Section 6.0, Alternatives**, within this EIR.

Purpose of a Subsequent EIR

The California Environmental Quality Act (CEQA) requires preparation of an EIR when there is substantial evidence that a project may have a significant impact on the environment. The purpose of an EIR is to provide decision makers, public agencies, and the public with an objective and informational document that fully discloses the potential environmental impacts of a proposed project. The EIR process is specifically designed to facilitate the objective evaluation of potentially significant direct, indirect, and cumulative impacts of a proposed project, as well as to identify potentially feasible mitigation measures and alternatives that reduce or avoid a project's significant impacts. In addition, CEQA specifically requires that an EIR identify those adverse impacts determined to be significant after mitigation.

The purpose of a Subsequent or Supplement to the Final EIR is defined in the CEQA Guidelines as:[1]

1) Substantial changes are proposed in the project which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified significant impacts.

2) Substantial changes in circumstances under which the project is undertaken will occur which will require major revisions of the previous EIR due to the involvement of new significant environmental effects or a substantial increase in the severity of previously identified effects.

3) New information of substantial importance which was not known and could not have been known with the exercise of reasonable diligence at the time the previous EIR was certified as complete, shows any of the following:

   (a) The project will have one or more significant effects not discussed in the previous EIR.

   (b) Significant effects previously examined will be substantially more severe than shown in the previous EIR.

   (c) Mitigation measures or alternatives previously found not to be feasible would in fact be feasible, and would substantially reduce one or more significant effects of the project, but the project proponents decline to adopt the mitigation measure or alternative.

1 14 California Code of Regulations § 15162.

(d) Mitigation measures or alternatives which are considerably different from those analyzed in the previous EIR would substantially reduce one or more significant effects on the environment, but the project proponents decline to adopt the mitigation measure or alternative.

This Subsequent EIR has been prepared to evaluate environmental impacts resulting from the proposed Project and changes that have occurred since adoption of the Mitaa Plaza Project Final Environmental Impact Report (the "Final EIR"), SCH No. 2008121042, dated December 2010.

Based on the Project revisions, the City determined this Draft Subsequent EIR will assess the following environmental topics:

- Aesthetics
- Air Quality & Greenhouse Gas Emissions
- Hazards & Hazardous Materials
- Land Use & Planning
- Noise
- Public Services
- Recreation
- Population & Housing
- Traffic & Transportation
- Utilities & Service Systems

This Subsequent Draft EIR was released by the City for a public review period in accordance with Section 15087 of the CEQA Guidelines. A Notice of Availability (NOA) of this Draft EIR for review was provided with copies of the Draft EIR to regional and local public agencies. In addition, the NOA and Draft EIR were made available on the City of Glendale website at:

www.ci.glendale.ca.us/planning/environmentalreview.asp.

Following the completion of this review period, the City of Glendale will review all comments received on the Draft Subsequent EIR and prepare written responses in accordance with Section 15088 of the CEQA Guidelines. These comments and responses will be incorporated into the proposed Final Subsequent EIR, which will be reviewed and considered by the City Council for certification in accordance with Section 15090 of the CEQA Guidelines prior to considering the proposed Project for approval.

Interested individuals, organizations, and public agencies can provide written comments on this Draft Subsequent EIR to:

City of Glendale
Community Development Department – Planning Division
633 E. Broadway, Room 103
Glendale, California 91206
Attention: Jeff Hamilton, Case Planner

Comments may also be sent by facsimile to (818) 548-2115 or by e-mail to jhamilton@ci.glendale.ca.us and include "Tropico Apartments Draft Subsequent EIR" in the subject line.

Agency responses should include the name of a contact person within the commenting agency.

INCORPORATION BY REFERENCE

This document incorporates by reference the analysis presented in the City's certified Mitaa Plaza Project Final EIR, along with the original Findings of Fact, Statement of Overriding Considerations, and Mitigation Monitoring and Reporting Program (MMRP) that were adopted by the Successor Agency (previously the Glendale Redevelopment Agency) and City of Glendale for the original project. These documents are available at the City's Planning Counter at the address above.

ORGANIZATION OF THE EIR

A description of the organization of this EIR and the content of each section is provided below. The Draft EIR is organized as follows:

Section 1.0, Introduction, provides information on the background of the Project, the environmental review process, and organization of the Draft EIR.

Section 2.0, Summary, presents a concise summary of the environmental information, analysis and conclusions in this EIR.

Section 3.0, Project Description, presents a description of the Project which addresses the location of the Project site, the objectives of the Project, the characteristics of the proposed residential apartment building and parking structure, and the approvals being requested from the City, including a conditional use permit to develop residential land uses within the Industrial/Commercial-Residential Mixed Use zone.

Section 4.0, Environmental Impact Analysis, contains information and analysis of the potential for the Project to result in significant environmental effects for each of the topics evaluated in this EIR.

Section 5.0, Alternatives, discusses alternatives to the proposed Project that have been developed and analyzed to provide additional information on ways to avoid or lessen the impacts of the proposed Project. The alternatives include the "No Project Alternative" as required by the CEQA Guidelines along with other alternatives including the approved Mitaa Plaza project.

Section 6.0, Effects Not Found to Be Significant, presents information used by the City to determine why certain environmental effects of the Project were found not to be significant and are not evaluated in detail in this EIR.

Section 7.0, Consideration and Discussion of Significant Impacts, contains a discussion of other topics required by the CEQA Guidelines to be included in an EIR, including the potential for the Project to induce additional growth; discussion of any significant environmental effects which can be mitigated, but not to a less than significant level, and cannot be avoided for this reason; and a discussion of any potential significant irreversible environmental changes that could result from the Project.

Section 8.0, Organizations and Persons Consulted, lists persons involved in the preparation of this Draft EIR or who contributed information incorporated into this Draft EIR.

Section 9.0, References, lists the principal documents, reports, maps, and other information sources referenced in this EIR.

Appendices to this EIR include technical information and other materials prepared for this EIR and the City's environmental review of this Project.

2.0 SUMMARY

This section provides information on the background of the Project, as described in **Section 3.0, Project Description**, assessed in this Draft EIR, and a summary of the information in this Draft EIR identifying the potential environmental impacts of the Project, the measures identified to mitigate these impacts, and the alternatives evaluated to provide additional information on ways to avoid or lessen these impacts.

BACKGROUND

In 2010, the Glendale Redevelopment Agency, which is now the Successor Agency after the elimination of Redevelopment Agencies within the state, approved the Mitaa Plaza Project EIR (SCH No. 2008121042) for the development of a 163,090-square-foot commercial building and supporting parking facility of nine floors consisting of seven stories above ground with two subterranean levels for a total of 597 parking spaces.

Since the time of approval of the Mitaa Plaza Project, the Project has been modified and a new application submitted to the City of Glendale to develop a 225-apartment unit project on the site with a six-story parking structure that includes 330 spaces (referred to as the "Project").

According to the CEQA Guidelines, a Subsequent Environmental Impact Report (Subsequent EIR) is required when "substantial changes are proposed in the project which will require major revisions of the environmental impact report" (Section 15162), and "[d]ue to the involvement of new significant environmental effects" (Section 15162(a)(1)). Accordingly, this Subsequent EIR has been prepared to evaluate environmental impacts resulting from the proposed Tropico Apartments Project (the "Project") and changes that have occurred since adoption of the Mitaa Plaza Project Final Environmental Impact Report (the "Final EIR"), SCH No. 2008121042 dated December 2010.

OVERVIEW OF PROPOSED PROJECT

The Project proposes development of three separate five-story residential locations, which would provide 225 apartment units, and a six -story parking structure for 330 parking spaces and 14,698 square feet of amenities within the City of Glendale.

As illustrated in **Figure 2.0-1, Regional Location and Project Vicinity**, the rectangular-shaped 2.25-acre Project site is located in the southern portion of the City of Glendale. The Project site is located approximately 70 feet east of the boundary between the Cities of Glendale and Los Angeles. Interstate (I) 5 (Golden State Freeway), State Route (SR) 134 (Ventura Freeway) and SR-2 (Glendale Freeway) provide regional access to the Project site. **Figure 2.0-1**, shows that the rectangular-shaped Project site is bound by Fernando Court to the north, Union Pacific Railroad (UPRR)/Southern California Railroad

Authority (SCRRA) right-of-way to the west, West Los Feliz Road to the south, and Gardena Avenue to the east.

Figure 2.0-2, Project Site and Surrounding Uses, shows an aerial photograph of the Project site. The Project was previously occupied by light industrial and warehouse uses which are shown on the recent aerial. The site is currently vacant and is used for surface parking. Land uses around the Project site include industrial uses and a homeless center to the north, commercial uses, a veterinary clinic, ambulance company and multi-family residential to the east, commercial retail, and light-industrial uses to the south, and the UPRR right-of-way to the west.

The current Glendale General Plan land use designation for the Project site is Mixed Use and the zoning designation is Industrial/Commercial-Residential Mixed Use (IMU-R). The General Plan land use designation permits a mix of commercial and residential uses as well as exclusively commercial, industrial, or residential land uses.

PROJECT OBJECTIVES

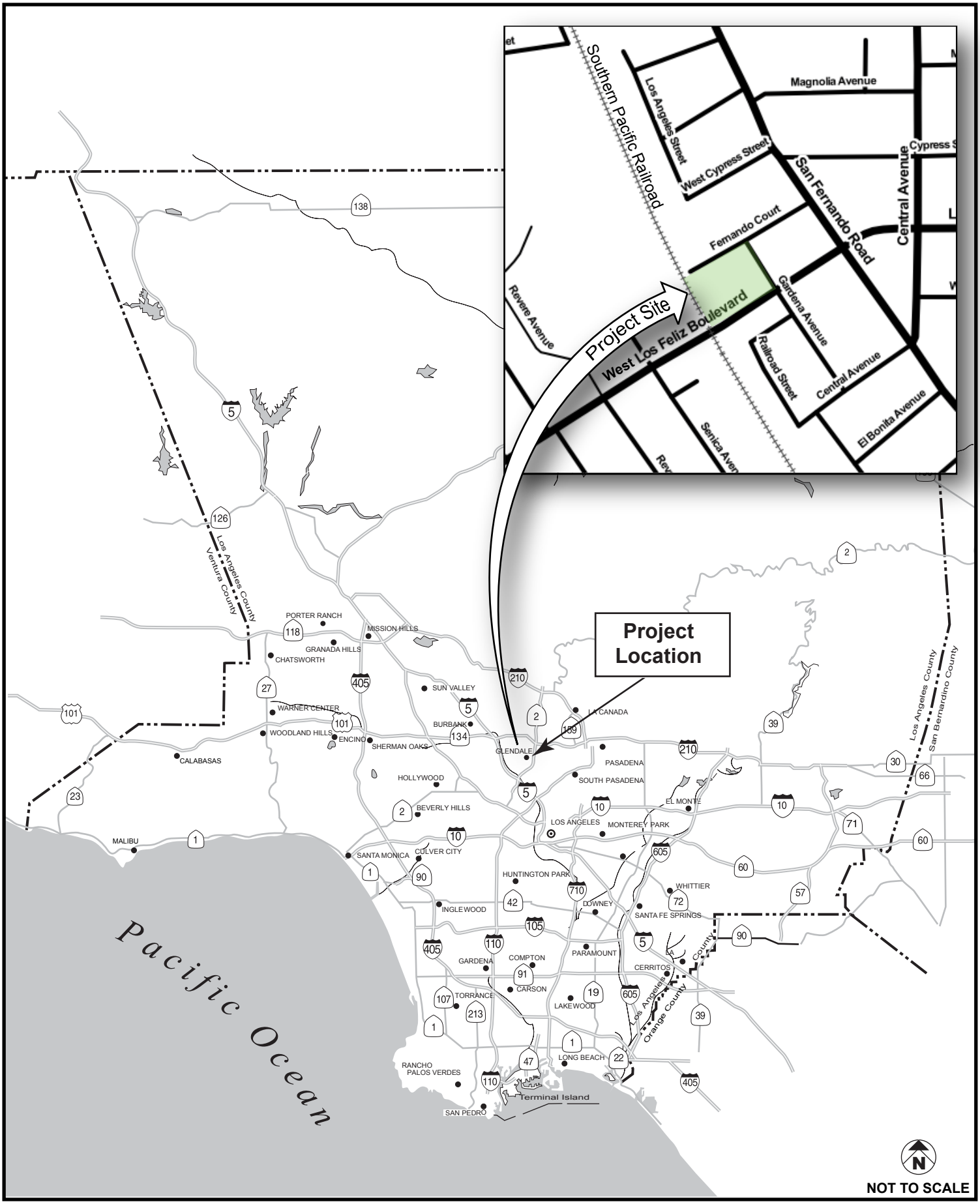
The CEQA Guidelines require an EIR to include a statement of the objectives of the Project that address the underlying purpose. The Applicant is proposing to develop 225 apartment units and an associated parking structure on the Project site. The objectives of the Project are to:

- Redevelop an underutilized property with residential uses for the community of Glendale
- Utilize architectural design, lighting, and landscape design to enhance the architectural character of the proposed building and create a gateway building to the City of Glendale
- Implementation of the Redevelopment Plan Objectives – but without redevelopment agency assistance

SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

A summary of the potential environmental impacts of the Project and the measures identified to mitigate these impacts is provided in **Table 2.0-1, Summary of Project Impacts** below for each topic addressed in this Draft EIR. **Table 2.0-1** has been arranged in four columns: the identified impact under each EIR issue area; the level of significance prior to implementation of mitigation; mitigation measures that would avoid or reduce the level of impacts, and the level of significance after implementation of mitigation measures, if applicable. Compliance with existing City programs, practices, and procedures are assumed for purposes of determining the level of significance prior to mitigation.

A summary of the alternatives to the Project to promote informed decision-making are provided after **Table 2.0-1**.



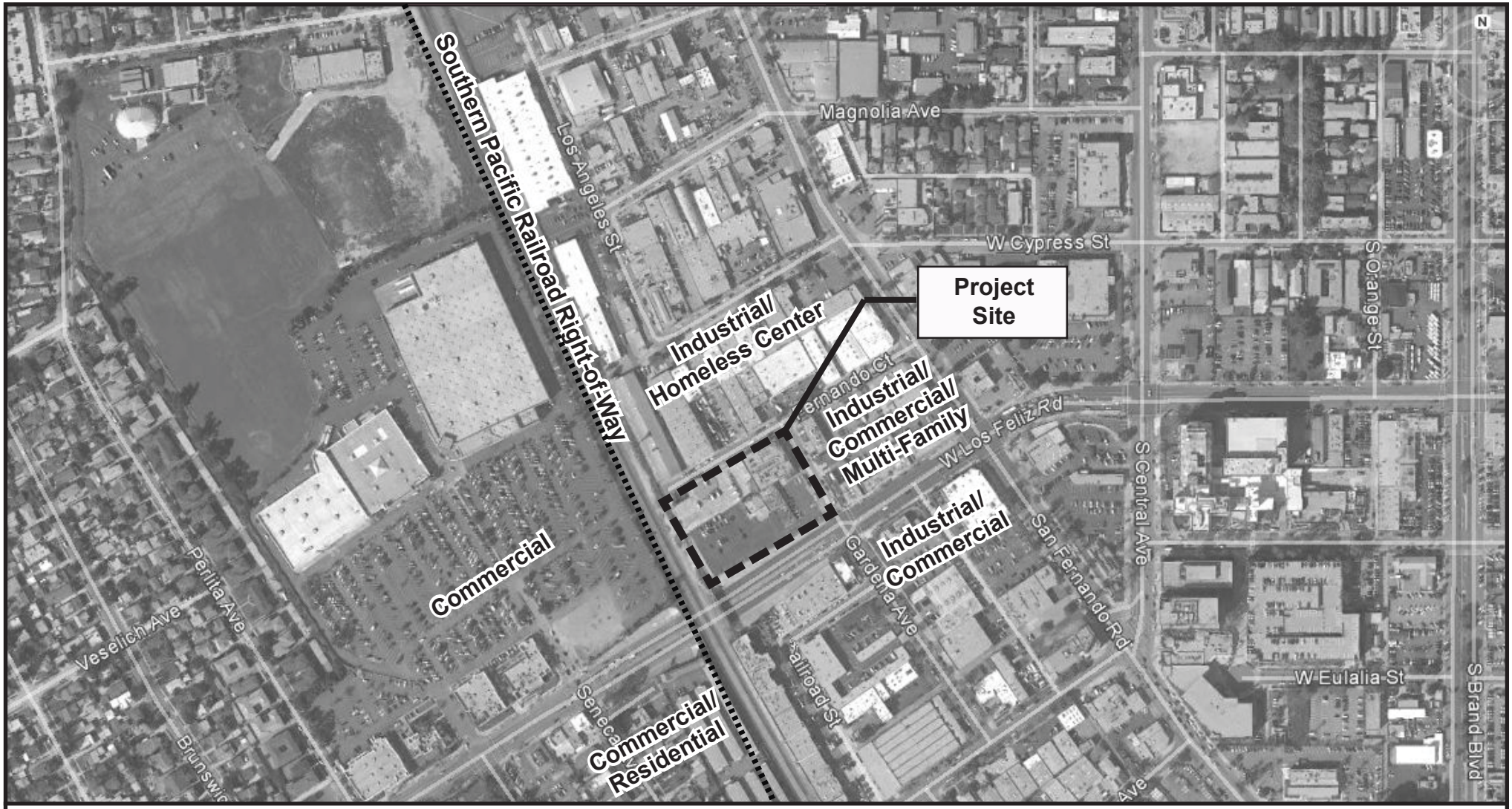
SOURCE: Meridian Consultants, LLC - March 2013

FIGURE **2.0-1**

Meridian Consultants

Regional Location and Project Vicinity

006-002-13



Legend:

- Project Site
- City of Los Angeles/City of Glendale Boundary

NOT TO SCALE

SOURCE: Google Earth - 2013

FIGURE **2.0-2**

Meridian Consultants

Project Site and Surrounding Uses

006-002-13

Table 2.0-1
Summary of Project Impacts

Project Impacts	Impact Without Mitigation	Mitigation Measures	Impact With Mitigation
Aesthetics			
Existing views across the site would be modified with Project development. The mass of the proposed structures would potentially impact views across the Project site towards the Santa Monica Mountains to the west and the San Gabriel Mountains to the north. However, the existing views across the site towards the San Gabriel Mountains and San Gabriel Mountains are currently degraded.	Less than significant.	No mitigation measures are required.	Less than significant.
While the proposed buildings will be taller than the existing buildings located around the site, the architectural design will result in the massing of the buildings being visually compatible and actually improving site conditions. Furthermore, improvement of the current slab concrete embankment area adjacent to the Project site with landscaping and hardscaping features would improve the view in this regard.	Less than significant.	No mitigation measures are required.	Less than significant.
All outdoor lighting would be directed onto the driveway, walkways, and public areas and away from adjacent properties and public rights-of-way to avoid any light or glare impacts from lighting fixtures included in the Project. Therefore, the new on-site lighting would not result in substantial increases in light or glare that would affect any light-sensitive uses on or near the site, such as the homeless shelter north of Fernando Court.	Less than significant.	No mitigation measures are required.	Less than significant.

Air Quality and Greenhouse Gas Emissions			
The Project would account for approximately 8.4 percent of the anticipated increase of residents within the City between 2012 and 2020. This total is within the growth projections for the City of Glendale as adopted by SCAG. Because the SCAQMD has incorporated these same projections into the AQMP, the Project would be consistent with the projections in the 2012 AQMP.	Less than significant.	No mitigation measures are required.	Less than significant.
Construction of the Project would result in maximum unmitigated daily emissions of approximately 24.50 pounds/day of ROG, 34.24 pounds/day of NOX, 33.15 pounds/day of CO, 0.05 pounds/day of SOX, 7.96 pounds/day of PM10, and 4.98 pounds/day of PM2.5, which do not exceed SCAQMD thresholds for criteria pollutant.	Although unmitigated emissions for PM10 and PM2.5 are below SCAQMD thresholds, standard mitigation in compliance with SCAQMD rules and regulations would be implemented. With the application of **Mitigation Measure 4.2-1**, which requires adherence to SCAQMD Rule 403 and other Rule 402 dust control techniques, PM10 and PM2.5 emissions would be further reduced.	**4.2-1** Prior to grading, the grading plan, building plans, and specifications will stipulate that, in compliance with SCAQMD Rule 403, excessive fugitive dust emissions shall be controlled by regular watering or other dust prevention measures. In addition, SCAQMD Rule 402 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off-site. Implementation of the following measures would reduce short-term fugitive dust impacts on nearby sensitive receptors: • All active grading portions of the construction site shall be watered at least three times daily as required to prevent excessive amounts of dust. • On-site vehicle speed shall be limited to 15 miles per hour. • Any temporary on-site construction routes shall be paved where feasible, watered as needed (to maintain a moisture content of 12 percent), or chemically stabilized. • Visible dust beyond the property line	Less than significant.

Project Impacts	Impact Without Mitigation	Mitigation Measures	Impact With Mitigation
		which emanates from the Project shall be prevented to the maximum extent feasible. • All material transported off-site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust prior to departing the job site. • Track-out devices shall be used at all construction site access points. • All delivery truck tires shall be watered down and/or scraped down prior to departing the job site as required. • Replace ground cover on disturbed areas quickly. • Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 mph. • Prohibit truck idling in excess of 5 minutes, on-and off-site. • Sweep streets at the end of the day if visible soil is carried onto adjacent public paved roads. • Reroute construction haul trucks away from congested streets or sensitive receptor areas.	
Operational emissions would be generated by both stationary and mobile sources as a result of normal day-to-day activity on the Project site after occupancy. Stationary emissions would be generated by the consumption of natural gas for space and water heating devices. Mobile emissions would be generated by the motor vehicles traveling to and from the Project site. The emissions associated with	Less than significant.	No mitigation measures are required.	Less than significant.

Project Impacts	Impact Without Mitigation	Mitigation Measures	Impact With Mitigation
the Project would not exceed the SCAQMD's recommended operational emission thresholds.			
The Project would result in direct annual emissions of Greenhouse Gases (GHG) during operation. Operational emissions would be generated by both area and mobile sources because of normal day-to-day activities. The Project would not result in a significant impact with respect to GHG emissions.	Less than significant.	No mitigation measures are required.	Less than significant.
Hazards and Hazardous Materials			
Grading and excavation of the Project site for future residential and parking garage uses could expose construction workers and the public to potentially unknown hazardous substances present in the soil. Such contamination could cause various short-term or long-term adverse health effects in persons exposed to the hazardous substances.	Significant.	**4.3-1** The three subsurface anomalies identified on the southeastern portion of the Project site shall be further assessed, even though only two were considered to be potential USTs. If USTs or other buried features identified, they shall be removed in accordance with state and federal regulations. The Glendale Fire Department must be notified of any UST found and/or other materials, and consulted during removal of such materials. If contamination is determined to be on site during trenching, the City of Glendale, in accordance with appropriate agency requirements, must require remediation of the soil contamination. Remediation shall be the responsibility of the site developer(s) to complete such activities prior to construction of the Project. Remediation shall be accomplished in a manner that reduces risk to below applicable standards and must be completed prior to issuance of any occupancy permits. Soil remediation methods that could be employed include, but are not limited to, one or more of the	Less than significant.

Project Impacts	Impact Without Mitigation	Mitigation Measures	Impact With Mitigation
		following: excavation and off-site disposal, or on-site treatment, such as above ground bioremediation, soil washing, soil stabilization, soil vapor extraction, or high-temperature soil thermal desorption. Closure reports or other reports acceptable to the Glendale Fire Department that document the successful completion of required remediation activities, if any, for contaminated soils, must be submitted and approved by the Glendale Fire Department. No construction must occur in the affected area until reports have been accepted by the City of Glendale. **4.3-3** Prior to grading, a soil and groundwater management plan shall be prepared and implemented to address the handling of soil or groundwater that may contain residual concentrations of petroleum hydrocarbons or other contaminants. The management plan will include procedures to conduct profile sampling of contaminated soils or groundwater encountered during grading. The excavated soil or groundwater shall be disposed of at an appropriate permitted disposal facility or treated to acceptable levels. The Project applicant shall coordinate and submit the soil and ground water management plan to the City of Glendale Fire Department prior to construction activities. Example soil remediation methods that may be employed include, but are not limited to, one or more of the following: excavation and off-site disposal or on-site treatment, such as above ground	

Project Impacts	Impact Without Mitigation	Mitigation Measures	Impact With Mitigation
		bioremediation, soil washing, soil stabilization, soil vapor extraction, or high-temperature soil thermal desorption. Example groundwater remediation methods that may be employed include, but are not limited to, pumping water to surface, treating, and returning to aquifer; treating groundwater in place by injecting oxidizing agents; and placing a membrane in the aquifer and using natural flows to trap contaminants.	
Land Use and Planning			
The Project would not introduce new infrastructure (except where required by utility service providers to accommodate anticipated demand by the proposed uses) and the proposed uses would be consistent with the allowable uses in the IMU-R zone, The surrounding sidewalks would be improved and enhanced to encourage pedestrian activity along West Los Feliz Road, which extends into the City of Los Angeles. In addition, the embankment area along West Los Feliz adjacent to the Project site would be improved. The Project would increase connectivity between the existing uses in Atwater Village and provide an architectural element to one of the entrances to the City of Glendale.	Less than significant.	No mitigation measures.	Less than significant.
The Project would be consistent with applicable goals within the Land Use, Housing Element, Circulation, Safety, Open Space and Conservation, Recreation, Air Quality, and Noise Elements of the General Plan. The Project would also be consistent with the goals of the Redevelopment Plan.	Less than significant.	No mitigation measures are required.	Less than significant.

Project Impacts	Impact Without Mitigation	Mitigation Measures	Impact With Mitigation
Noise			
The Project would not increase roadway noise levels by 3 dBA or greater, land uses located along study area roadway ways, would not be affected by traffic noise	Less than significant.	No mitigation measures are required.	Less than significant.
Due to the high level of traffic noise along West Los Feliz Road on the southern side of the site and operations on the UPRR, normal daytime parking structure Leq noise would not likely be audible due to the masking of noise by these sources. However, single noise events could be an annoyance to on-site residents and may exceed the 65 dBA Municipal Code threshold at receptor locations.	Significant.	**4.5-1** Sound attenuation measures shall be incorporated into the design to minimize noise leakage from the aboveground parking structure. These measures may include a half-wall on the grade-level parking deck and/or full walls on the sides of the structure that are facing on-site residential uses and/or noise control louvers on selected structure facades that potentially influence receptor areas. Acoustical analysis shall be performed to demonstrate that the aboveground parking structure does not result in noise levels that exceed City standards at on-site residences. These components shall be incorporated into the plans to be submitted by the applicant to the City of Glendale for review and approval prior to the issuance of building permits.	Less than significant.
Other noise sources that may be associated with the parking structure areas include the use of sweepers in the early morning or late evening hours.	Significant.	**4.5-2** On-site sweeper operations shall be restricted to between the hours of 7:00 AM to 10:00 PM.	Less than significant.
Existing exterior noise levels on the Project site due to vehicle traffic and operation along UPRR along the West Los Feliz Road frontage and near the intersection of West Los Feliz Road and Gardena Avenue range from 65 to 69 dBA CNEL. Noise levels would be above the City Municipal Code exterior	Significant.	**4.5-3** Noise sensitive residential land uses proposed in areas exceeding the exterior 65 dBA CNEL (such as those dwelling units facing West Los Feliz Road) shall be designed so that interior noise levels attributable to exterior sources do not exceed 55 dBA	Significant and unavoidable (exterior), less than significant (interior).

Project Impacts	Impact Without Mitigation	Mitigation Measures	Impact With Mitigation
noise threshold of 65 dBA for residential uses, and because the Project proposes exterior living areas along West Los Feliz Road, such as small balcony patios which are considered to be exterior useable areas, impacts would be significant. In addition, interior noise levels in the apartment building along these roadways could be above the interior threshold of 55 dBA during the daytime and 45 dBA during the nighttime resulting in significant interior noise levels as well.		during the daytime and 45 dBA during the nighttime when doors and windows are closed. An acoustical analysis of the noise insulation effectiveness of proposed construction shall be required and documented during permit review, showing that the building materials and construction specifications are adequate to meet the interior noise standard. Examples of building materials and construction specifications which may be used to meet the interior noise standard include but are not limited to the following: Windows and sliding glass doors along West Los Feliz Road in Zone 1 along Gardena Avenue in Zone 1, and along the UPRR in Zone 1 shall be doubled paned, mounted in low air filtration rate frames, and have a minimum sound transmission coefficient rating of 30 or greater; Air conditioning units may be provided to allow for windows to remain closed; and Roof or attic vents facing Los Feliz Road and the UPRR shall be baffled.	
Large bulldozers are capable of producing approximately 87 VdB at 25 feet, the approximate distance to the nearest structure and homeless shelter. Individuals staying overnight at the homeless shelter check in the late afternoon and leave early in the morning. High noise-producing (and vibration-producing) activities during construction would be scheduled to occur between the hours of 8:00 AM and 5:00 PM to minimize disruption on sensitive uses. The high vibration-producing activities would occur	Significant.	**4.5-4** All demolition, earthmoving, and ground-impacting operations shall be conducted so as not to occur in the same period. Select demolition method to minimize vibration, where possible (e.g., sawing masonry into sections rather than demolishing it by pavement breakers). **4.5-6** Operate earthmoving equipment on the construction site as far away from vibration sensitive sites as possible.	Significant and unavoidable (short-term).

Project Impacts	Impact Without Mitigation	Mitigation Measures	Impact With Mitigation
after individuals staying overnight at the shelter are awake and have left the facility. Nonetheless, potential impacts due to vibration would be considered significant.			
The City of General Plan does not address vibration impacts. Based on the Federal Transit Administration, the threshold of residential annoyance is 80 VdB for infrequent events (less than 30 events) such as the level freight trains typically produce at 50 feet. Residents will be annoyed by much more frequent events generating a lower level of 72 VdB (over 70 events), such as from rapid transit trains. Commuter rail trains (such as Metrolink and Amtrak) typically generate about 75 VdB velocity level, with a maximum of about 85 VdB for higher speed (>60 mph) commuter trains. Based on very limited data monitored by Veneklasen, the vertical velocity vibration levels expected at the proposed Project site were estimated. The velocity level at the nearest residence on the Project site (61 feet from the rail line centerline) is expected to range between 70 and 75 VdB. These levels are within the level expected to cause annoyance from relatively frequent events. Consequently, vibration experienced at this future residence within the Project site could be significant.	Significant.	**4.5-7** Vibration sensitive residential land uses proposed in areas exceeding the 75 VdB (such as the dwelling unit near the UPRR frontage) shall be designed so that vibration levels attributable levels to the UPRR do not exceed acceptable level. A vibration analysis of the effectiveness of proposed construction techniques shall be required and documented during permit review, showing that the building materials and construction specifications are adequate to meet the vibration standard. Examples of building materials and construction specifications which may be used to meet the vibration standard include but are not limited the following: providing for an open or closed trench along the western property boundary between the UPRR and the closest on-site residential use; increasing the buffer distance between the nearest on-site residential use and the UPRR; providing for an alternative use in this building area instead of a residential use; and/or providing for vibration isolation of the building consisting of supporting the building foundation on elastomer pads similar to bridge bearing pads.	Less than significant.

Project Impacts	Impact Without Mitigation	Mitigation Measures	Impact With Mitigation
Equipment used during the construction phases would generate both steady state and episodic noise that would be heard both on and off the Project site. Noise levels generated during construction would primarily affect the warehouse and industrial uses adjacent to the Project site. Potential construction-related noise impacts are considered significant due to exceeding the noise threshold of 65 dBA for transient lodging and 70 dBA for industrial area, as allowed by the Municipal Code.	Significant.	**4.5-8** All construction activity within the City shall be conducted in accordance with Section 8.36.080, Construction on buildings, structures and projects, of the City of Glendale Municipal Code. **4.5-9** The following construction best management practices (BMPs) shall be implemented to reduce construction noise levels: • Ensure that construction equipment is properly muffled according to industry standards and be in good working condition. • Place noise-generating construction equipment and locate construction staging areas away from sensitive uses, where feasible. • Schedule high noise-producing activities between the hours of 8:00 AM and 5:00 PM to minimize disruption on sensitive uses. • Implement noise attenuation measures to the extent feasible, which may include, but are not limited to, temporary noise barriers or noise blankets around stationary construction noise sources. • Use electric air compressors and similar power tools rather than diesel equipment, where feasible. • Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more	Significant and unavoidable (short-term).

Project Impacts	Impact Without Mitigation	Mitigation Measures	Impact With Mitigation
		than 30 minutes. • Construction hours, allowable workdays, and the phone number of the job superintendent shall be clearly posted at all construction entrances to allow for surrounding owners to contact the job superintendent. If the City or the job superintendent receives a complaint, the superintendent shall investigate, take appropriate corrective action, and report the action taken to the reporting party. **4.5-10** Construction staging areas along with the operation of earthmoving equipment within the Project area shall be located as far away from vibration-and noise-sensitive sites as possible.	
Public Services			
Fire Protection & Emergency Services			
The new residential units would create additional demand on the Glendale Fire Department, specifically to Station 22 which would have first response duties. The Project would increase the City's population. The increase in residents within the City would not substantially impact the current fire services and would not result in the need for any new or the physical alteration to any existing governmental facility.	Less than significant.	No mitigation measures are required.	Less than significant.
The additional residents associated with the Project would result in an increase in emergency medical responses. The Project is located within the response district for RA 21, which currently averages 336 calls per month. The City has no formal service ratios or	Less than significant.	No mitigation measures are required.	Less than significant.

Project Impacts	Impact Without Mitigation	Mitigation Measures	Impact With Mitigation
performance objectives for Rescue Ambulance service, but has considered a performance workload of 350 responses per month for a paramedic rescue ambulance. The Project would generate additional emergency medical services (EMS) calls every month, but not be above the current performance workload of 350 responses per month for a rescue ambulance; and would not result in the need for any new or the physical alteration to any existing governmental facility.			
The City of Glendale's minimum fire flow requirement for water mains in the streets surrounding the Project site is 6,000 gpm at 20 pounds per square inch (psi) of residual pressure. Water service to the Project site is presently provided by existing water lines on and adjacent to the site. City of Glendale policy requires upgrades to water lines serving new development as needed to meet minimum fire flow requirements for new development.	Significant.	**4.6.1-1** Replace the existing water main in West Los Feliz Road with minimum 12-inch-diameter water main until connection to San Fernando Road. Provide a new water main in Gardena Avenue between West Los Feliz Road and Fernando Court, minimum 12 inches. Make water main improvements in Fernando Court, as dictated by Glendale Water and Power Water Engineering for possible removal of 4-inch water main. If existing 12-inch water main in Fernando Court is not in good condition, it shall be replaced or cleaned-and-lined to the satisfaction of GWP. **4.6.1-2** The Project applicant shall provide city standard fire hydrants on Fernando Court, Gardena Avenue, and West Los Feliz Road at approximately 300 feet on center or as approved by the Glendale Fire Department and Glendale Water and Power. Fire hydrant shall have three outlets (three, 2.5 x 4 x 4) with 6-inch minimum lateral supply.	Less than significant.

Project Impacts	Impact Without Mitigation	Mitigation Measures	Impact With Mitigation
The Project and related projects would result in the addition of approximately 10,719 residents to the City of Glendale. Implementation of the related project and associated increase in population would increase the demand for fire protection services and could require the need for the construction of new or physically altered facilities to accommodate the increased demand associated with the related projects. This would result in a significant cumulative impact. As discussed previously, the Project would not result in significant impacts to the Glendale Fire Department on a Project-specific level. The Project, however, would contribute to the significant impact and would be considered to be cumulatively considerable. For this reason, impacts are considered to be significant.	Significant.	No mitigation measures are available.	Significant an unavoidable (cumulative).
Police Protection			
The new residential units would create additional demand on Glendale Police Department, specifically in Reporting District No. 274 in the southern portion of the City. Based upon a target officer to population ratio, Project residents would result in a need for 0.5 sworn officers per 1,000 residents. The increase in residents within the City would not substantially impact the current officer to population ratio and would not result in the need for any new or the physical alteration to any existing governmental facility.	Less than significant.	No mitigation measures are required.	Less than significant.
The increase in City residents by the Project would generate additional calls for service. Based on the existing estimated number of calls for police services per 1,000 residents, the Project would generate approximately 29 calls per year for police services. The increase in 29 additional calls per year, or	Less than significant.	No mitigation measures are required.	Less than significant.

Project Impacts	Impact Without Mitigation	Mitigation Measures	Impact With Mitigation
approximately 2 calls per month, would not seriously impact police department operations. The Project would not result in the need for any new or the physical alteration to any existing governmental facility.			
The Project and related projects would result in the addition of approximately 10,719 residents to the City of Glendale. Implementation of the related projects and associated increase in population would increase the demand for police protection services and could require the need for the construction of new or physically altered facilities to accommodate the increased demand associated with the related projects. This would result in a significant cumulative impact. As discussed previously, the Project would not result in significant impacts to the Glendale Police Department on a project-specific level. The Project, however, would contribute to the significant impact and would be considered to be cumulatively considerable. For this reason, impacts are considered to be significant.	Significant.	No mitigation measures are available.	Significant and unavoidable (cumulative).
Schools			
The Project would add 68 students to Cerritos Elementary for a projected enrollment of 458 students which would be below the operating capacity of 620 students; would add 24 students to Roosevelt Middle School for a projected enrollment of 832 students which would be below the operating capacity of 1,206; and would add 51 students to Glendale High School for a projected enrollment of 2,800 students which is below the operating capacity of 3,802 students. All schools serving the Project site are currently operating under capacity and would not require the provision of new or physically alter	Less than significant.	No mitigation measures are required.	Less than significant.

Project Impacts	Impact Without Mitigation	Mitigation Measures	Impact With Mitigation
existing school facilities. As authorized by SB 50, the Project applicant shall pay school impact fees to the GUSD prior to the issuance of building permits.			
Recreation			
Existing park facilities are currently heavily used due to the deficit in parkland in the City. The increase in use of neighborhood and community parks in the City that would result from the increase in residents associated with the Project.	Significant.	**4.7-1** In accordance with the requirements of the City of Glendale Municipal Code Section 4.10 (Ordinance No. 5575 and Resolution No. 07-164 as amended on Resolution 10-199), the project applicant shall pay the Development Impact Fee to the City. The current fee schedule is $7,000 per residential unit, which is scheduled to increase to $10,500 per unit in November 2014.	Significant and unavoidable.
Given the existing deficiency of parkland in the City, the combined effects of the Project and related projects on existing facilities is considered cumulatively significant because the use of existing parks would increase, thus contributing to an acceleration in the physical deterioration of these facilities. Even with the provision of Project amenities, the Project's contribution to this significant impact would be cumulatively considerable.	Significant.	Under CEQA, the development impact fee payments constitute mitigation of project-related impacts on parks and recreation land and facilities within Glendale. However, the fee payment is not considered to fully mitigate this impact, because the fee amount to be paid would not equal the full fair-share per-unit fee for residential projects, which was determined to be $14,251 per multifamily unit in the City's Public Facilities Fee Study. Consequently, impacts would be significant and unavoidable.	Significant and unavoidable (cumulative).
Population and Housing			
The Project would develop a residential apartment building which would house 49 studios, 103 one-bedroom apartments, and 73 two-bedroom apartments for a total of 225 residential units. The	Less than significant.	No mitigation measures are required.	Less than significant.

Project Impacts	Impact Without Mitigation	Mitigation Measures	Impact With Mitigation
Project would generate approximately 525 residents. The Project would account for approximately 8.4 percent of the anticipated increase of residents within the City between 2012 and 2020. Therefore, the Project would not result in substantial population growth in the area.			
Traffic			
The Project is projected to generate approximately 1,350 daily vehicle trips, 67 of which occur during the morning peak hour and 88 of which will occur during the evening peak hour. To determine the potential impact of the Project on each study area intersection, Project traffic volumes were added to existing traffic conditions. Under these conditions, Project traffic was determined to significantly impact one intersection - San Fernando Road and Los Feliz Road.	Significant.	No feasible mitigation measures are available.	Significant and unavoidable.
There is no Congestion Management Plan (CMP) intersection monitoring locations in the Project vicinity. The CMP guidelines require that intersection-monitoring locations must be examined if the Project will add 50 or more trips during either the AM or PM weekday peak periods. The Project would not add 50 or more trips during the AM or PM peak hours at any CMP monitoring intersections, which is the threshold for preparing a traffic impact assessment, as stated in the CMP manual. Therefore, the Project would have a less than significant impact to intersection monitoring locations that are part of the CMP highway system.	Less than significant.	No mitigation measures are required.	Less than significant.
The City of Glendale parking requirements for residential land uses are set forth in Section 30.32.090 of the Glendale Municipal Code. The parking requirements for residential uses that contain zero to one-bedroom units are 1 space per unit. Two-	Less than significant.	No mitigation measures are required.	Less than significant.

Project Impacts	Impact Without Mitigation	Mitigation Measures	Impact With Mitigation
to three bedroom units require 2 parking spaces per unit. The proposed studio and one-bedroom apartments are required to provide only 1 parking space per residential unit. Under the GMC, the Project would be required to provide 507 parking spaces. The applicant is requesting a variance to the standard City of Glendale parking code to be allowed to park automobiles following Glendale's "Downtown Specific Plan" (DSP). Under the DSP, the Project would be required to provide for 321 parking spaces and is providing 330 parking spaces.			
Based on the projected increased demand for transit services generated by the Project, it is anticipated that the existing transit service in the Project area would adequately accommodate the Project-generated transit trips.	Less than significant.	No mitigation measures are required.	Less than significant.
Utilities and Service Systems			
Water Service			
The City has adequate supply to meet citywide demand under normal and drought conditions. Even with the addition of 39.2 acre-feet per year of demand generated by the Project, there is sufficient supply to meet City demand under normal and drought conditions.	Less than significant.	No mitigation measures are required.	Less than significant.
Sewer			
Sewage from the Project site goes to the Hyperion Treatment Plant, which Glendale has access to through the Amalgamated Agreement. With the Hyperion Treatment Plant currently operating 88 million gallons-per-day below capacity, adequate capacity exists to treat Project-generated average effluent of 24,224 gallons-per-day.	Less than significant.	No mitigation measures are required.	Less than significant.

Project Impacts	Impact Without Mitigation	Mitigation Measures	Impact With Mitigation
As part of the City's Tyburn Wastewater Capital Improvement Project, sewer lines in the vicinity of the Project would be upgraded. The Project's sewage increase to the lines in the Tyburn Flume would be mitigated through payment of the sewer capacity increase fee, which would provide the Project's proportionate share of the funds for the City to upgrade the system.	Significant.	**4.10.2-1** The project applicant shall pay a sewer capacity increase fee for the Project's sewage increase to the lines in the Tyburn Flume area to alleviate sewer impacts. These collected fees shall be deposited by the City of Glendale into a specially created account to be used to fund capacity improvements to the Tyburn Flume drainage basin.	Less than significant.
Solid Waste			
Solid waste generated on the Project site would be deposited at the Scholl Canyon Landfill, which is owned by the City of Glendale, or one of the landfills located within the County of Los Angeles. The annual disposal rate at the Scholl Canyon facility is 200,000 tons per year. Combined with the increase of approximately 164.3 tons per year in solid waste generated by the Project, the annual disposal amount would increase to approximately 200,164 tons per year. With a total remaining capacity of 3.6 million tons, the Scholl Canyon facility would meet the needs of the City and the Project for approximately 16 years. Because the Project would be required to implement a waste-diversion program aimed at reducing the amount of solid waste disposed in the landfill, the amount of solid waste generated would likely be less than the amount estimated.	Less than significant.	No mitigation measures are required.	Less than significant.
There is presently insufficient permitted solid waste disposal capacity within the existing system serving Los Angeles County. The Project, in combination with other development, could contribute to insufficient permitted disposal capacity by contributing additional solid waste to regional landfills. Development under the Project would also contribute construction debris	Significant.	No mitigation measures are available.	Significant and unavoidable (cumulative).

Project Impacts	Impact Without Mitigation	Mitigation Measures	Impact With Mitigation
to regional landfills, increasing the cumulative effect. Therefore, the Project's contribution to the cumulative impact would be considered cumulatively considerable, and would be a significant and unavoidable impact			

SUMMARY OF ALTERNATIVES

This Draft EIR considers a range of Alternatives to the Project were in accordance with CEQA Guidelines §15126.6. This section of the Guidelines requires that an EIR describe and evaluate a range of reasonable alternatives to a project to promote informed decision-making.

The Alternatives to the Project evaluated in this Draft EIR include:

1. No Project/No Development
2. Development of Mitaa Plaza Project
3. Reduced Density (25 Percent Reduction)
4. Reduced Density (50 Percent Reduction)

A brief description of each of these Alternatives is provided below with a summary of the evaluation of each.

Alternative 1 – No Project/No Development

Under the No Project/No Development Alternative, the Project site would not be developed with additional uses, and would remain in its current state. The building foundations and associated surface parking would remain.

Alternative 2 – Development of the Mitaa Plaza Project

The Glendale Redevelopment Agency, which is now the Successor Agency, and City of Glendale approved the Mitaa Plaza Project in December 2010. The approved Mitaa Plaza Project included the development of a 163,090 square-foot mixed use development consisting of a grocery store, day spa, restaurants, retail, and medical/general office uses with a five-story parking structure. Entitlements included design review, a sign program, a 125-space parking exception, Conditional Use Permits for various on-site uses such as massage services and for the sale of alcoholic beverages, a standards variance for parking structure height and building corner treatment, and two sign variances. This is what is currently approved to be built on the Project site.

Alternative 3 – 25 Percent Reduced Density

The 25 Percent Reduced Density Alternative considers development of the entire 2.25-acre site with a reduced residential density. This alternative would include a development of 169 dwelling units on-site and approximately 248 parking spaces. This alternative would allow for the Project building to be reduced to four levels and parking garage to four levels (assuming a straight 25 percent reduction). The layout for the land uses under this alternative would not change.

Alternative 4 – 50 Percent Reduced Density

The 50 Percent Reduced Density Alternative considers development of the entire 2.25-acre site with a reduced residential density. This alternative would include a development of 113 dwelling units on site and approximately 165 parking spaces. This alternative would allow for the Project building to be reduced to three floors and parking garage to three levels (assuming a straight 50 percent reduction). The layout for the land uses under this alternative would not change.

Environmentally Superior Alternative

State *CEQA Guidelines* Section 15126.6(e) (2) requires an EIR to identify an environmentally superior alternative among those evaluated in an EIR. Of the alternatives considered in this section, the No Project/No Development Alternative is environmentally superior to the other alternatives, because this alternative would avoid the significant and unavoidable impacts identified for the Project.

According to State *CEQA Guidelines* if the No Project/No Development Alternative is identified as the environmentally superior alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives. Of the other alternatives considered, Alternative 4 – 50 Percent Reduced Density would be considered environmentally superior, as it would result in the greatest incremental reduction of the overall level of impact when compared to the Project due to the reduction in intensity on the Project site. However, the only significant and unavoidable impact this alternative would eliminate would be traffic impacts to the intersection of San Fernando Road and West Los Feliz Road. Overall, the significant and unavoidable short-term noise impact during construction; long-term on-site noise impact due to vehicle and railroad operations; long-term impact due to the loss of on-street parking spaces; long-term and cumulative impact to recreation facilities, and cumulative impacts to fire, police, and solid waste would not be eliminated by this alternative. In addition, the development density and resulting revenue due to the size of the alternative may not be sufficient to offset the cost of the land and may not be economically feasible for the applicant for this reason.

AREAS OF CONTROVERSY AND ISSUES TO BE RESOLVED

During the public review period on the previous EIR, comments were received related to the potential environmental effects of the Project were raised related to construction activities adjacent to the Union Pacific Railroad/Southern California Railroad Authority right-of-way, the easement access to the existing storm drain crossing the site, traffic in the Project vicinity, and loss of street parking around the site.

3.0 PROJECT DESCRIPTION

The purpose of the Project Description in an environmental impact report (EIR) is to describe the project in a manner that is meaningful to the public, reviewing agencies, and decision makers. As described in Section 15124 of the *California Environmental Quality Act (CEQA) Guidelines*, a complete Project Description must contain the following information: (1) a precise location and boundaries of the project, shown on a detailed map, along with a regional map of location of the project; (2) a statement of the objectives sought by the project, which should include the underlying purpose of the project; (3) a general description of the project's technical, economic, and environmental characteristics; and (4) a statement briefly describing the intended uses of the EIR. This includes a list of the agencies that are expected to use the EIR in their decision making, a list of permits and other approvals required to implement the project, and a list of related environmental review and consultation requirements imposed by federal, state or local laws, regulations, or policies. The *CEQA Guidelines* state that an adequate Project Description need not be exhaustive, but should provide the level of detail necessary for the evaluation and review of the potential significant environmental effects of the project.

The description of the Tropico Apartments Project (the "Project") presented in this section serves as the basis for the environmental analysis contained in this EIR. This section identifies the location, objectives, and characteristics of the Project, and the intended uses of this EIR, as required by Section 15124 of the *CEQA Guidelines*.

PROJECT LOCATION AND SITE CHARACTERISTICS

As illustrated in **Figure 3.0-1, Regional Location and Project Vicinity**, the rectangular-shaped 2.25-acre Project site is located in the southern portion of the City of Glendale. The Project site is located approximately 70 feet east of the boundary between the cities of Glendale and Los Angeles. Interstate (I) 5 (Golden State Freeway), State Route (SR) 134 (Ventura Freeway), and SR-2 (Glendale Freeway) provide regional access to the Project site. **Figure 3.0-1** shows that the rectangular-shaped Project site is bound by Fernando Court to the north, Union Pacific Railroad (UPRR)/Los Angeles County Metropolitan Transportation Authority (MTA) right-of-way to the west, West Los Feliz Road to the south, and Gardena Avenue to the east. In addition, a 20-foot Los Angeles County storm drain easement runs through the project site in a north–south direction.

Figure 3.0-2, Project Site and Surrounding Uses, shows an aerial photograph of the Project site. As shown, the site is vacant and is used for surface parking.

The Project was previously occupied by light industrial and warehouse uses. Land uses around the Project site include industrial uses and a homeless center to the north, commercial uses, a veterinary clinic, an ambulance company, and a multifamily residential area to the east; commercial retail, and light-industrial uses to the south, and the UPRR right-of-way to the west.

The current Glendale General Plan land use designation for the Project site is Mixed Use and the zoning designation is Industrial/Commercial-Residential Mixed Use (IMU-R). Development of a residential project would be subject to a Conditional Use Permit (CUP). The zoning designation permits a mix of commercial and residential uses as well as exclusively commercial, industrial, or residential land uses.

PROJECT OBJECTIVES

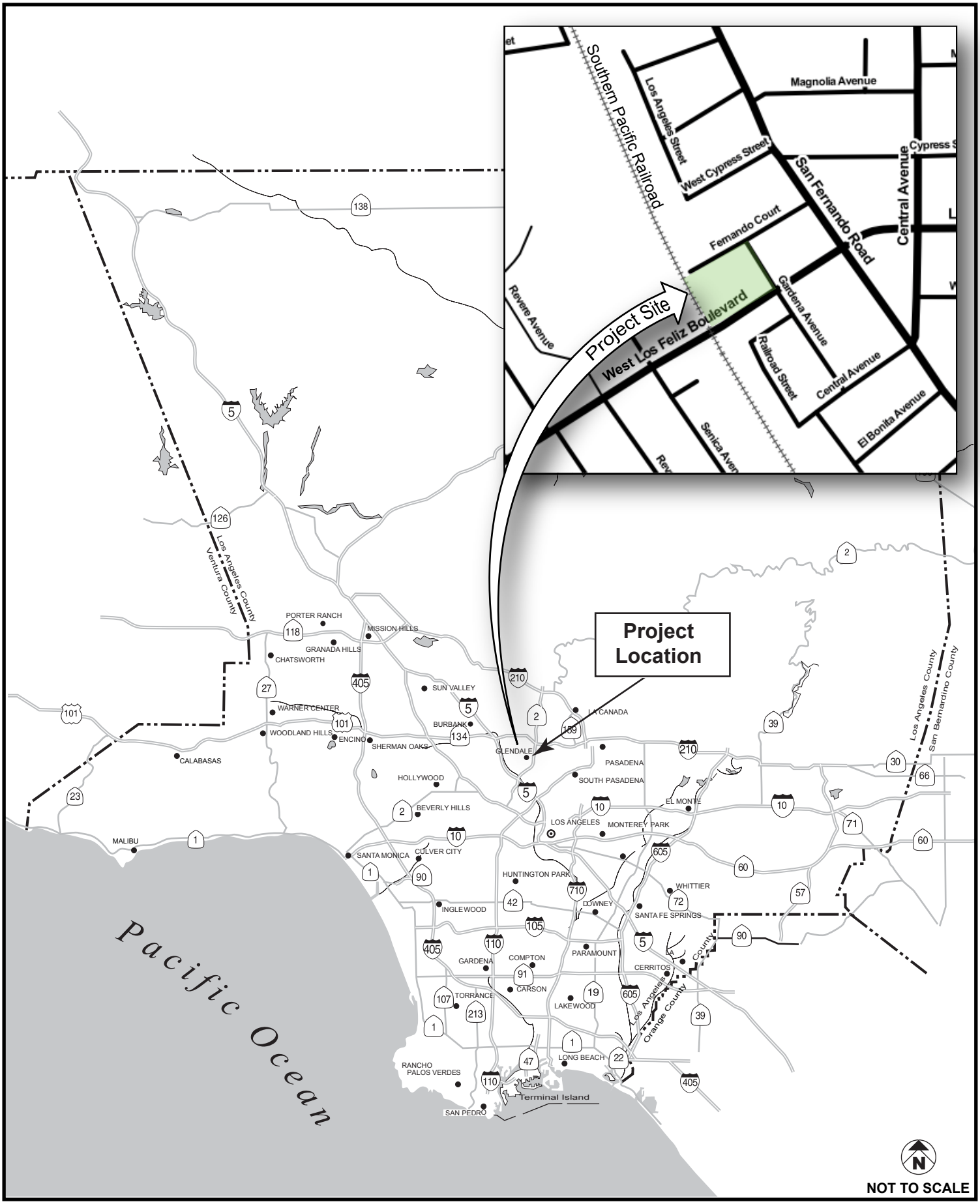
The *CEQA Guidelines* require an EIR to include a statement of the objectives of the Project that address the underlying purpose. The Applicant is proposing to develop 225 apartment units and an associated parking structure on the Project site. The objectives of the Project are to:

- Redevelop an underutilized property with residential uses for the community of Glendale
- Utilize architectural design, lighting, and landscape design to enhance the architectural character of the proposed building and create a gateway building to the City of Glendale
- Implement the Redevelopment Plan Objectives, but without redevelopment agency assistance

PROJECT BACKGROUND

In 1992, the Glendale Redevelopment Agency[1] prepared and adopted the Redevelopment Plan for the San Fernando Road Corridor Redevelopment Project Area (the "Redevelopment Plan"). The Project site is located within the boundaries of the Redevelopment Plan, which includes 750 acres generally extending along the length of the San Fernando Road corridor and bounded by the I-5 Freeway and the UPRR/MTA right-of-way to the west. The primary objective of the Redevelopment Plan is to eliminate and prevent the spread of blight and deterioration in the Redevelopment Plan.

1 The Glendale Redevelopment Agency was created in 1972 for the purpose of improving, upgrading, and revitalizing areas within the City that had become blighted because of deterioration, disuse, and unproductive economic conditions. It was a legal and separate public body, with separate powers and a separate budget from the City. ABx126 and AB1484 (collectively "The Dissolution Act") eliminated redevelopment agencies in California effective February 1, 2012. The City of Glendale elected to assume the power, duties, and obligations of the former Glendale Redevelopment Agency as the Glendale Successor Agency pursuant to the Dissolution Act.



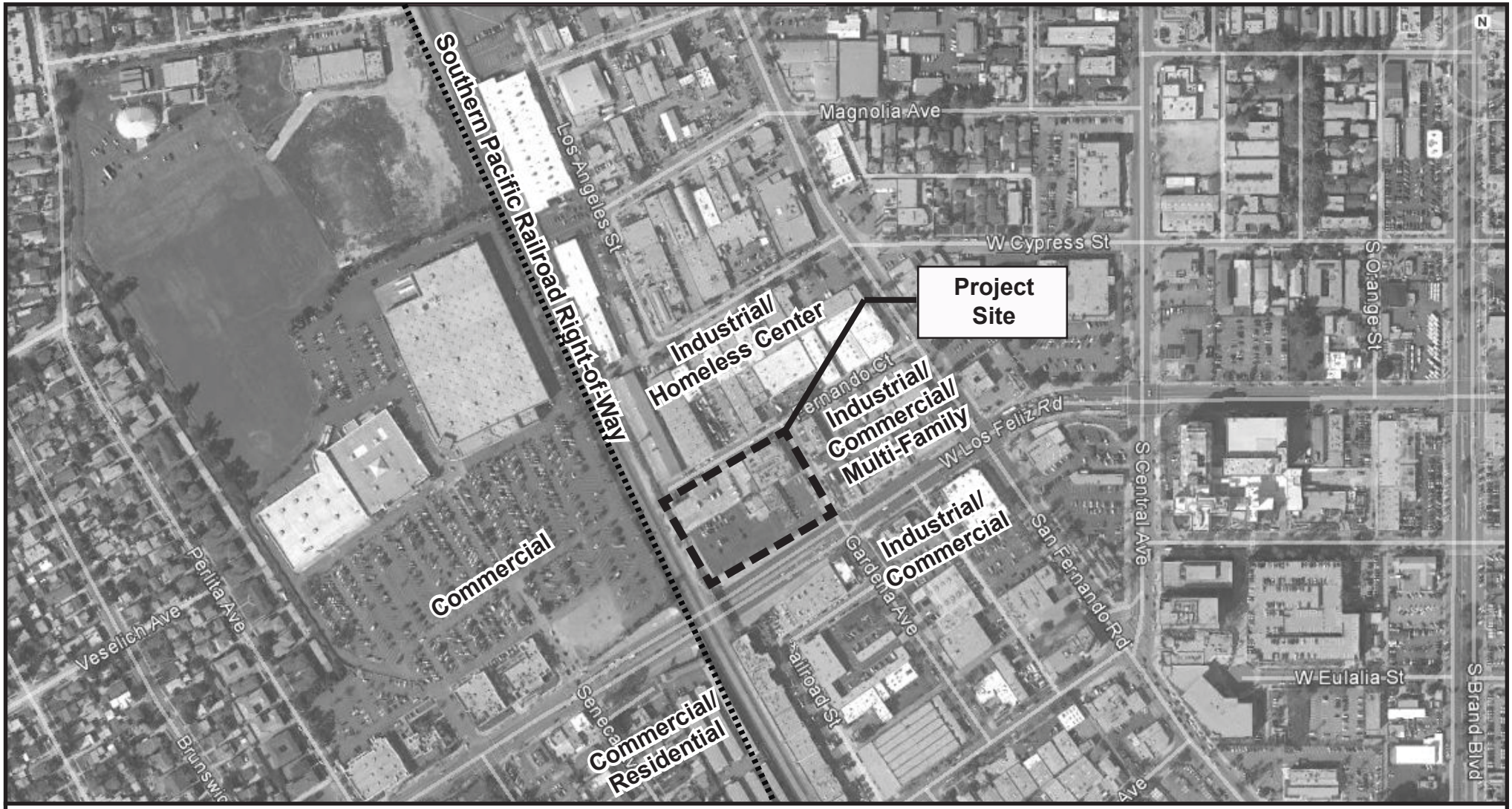
SOURCE: Meridian Consultants, LLC - March 2013

FIGURE **3.0-1**

Meridian Consultants

Regional Location and Project Vicinity

006-002-13



Legend:

- Project Site
- City of Los Angeles/City of Glendale Boundary

NOT TO SCALE

SOURCE: Google Earth - 2013

FIGURE **3.0-2**

Meridian Consultants

Project Site and Surrounding Uses

006-002-13

The Successor Agency[2] is responsible for winding down the activities of the former Glendale Redevelopment Agency.

According to the Redevelopment Plan, the former Glendale Redevelopment Agency proposed the following actions to meet this objective:

- Participation in the redevelopment process by owners and occupants of properties located in the Redevelopment Plan boundaries, consistent with the Redevelopment Plan and rules adopted by the Redevelopment Agency
- Acquisition of real property
- Management of property under the ownership and control of the Redevelopment Agency
- Relocation assistance to displaced occupants of property acquired by the Redevelopment Agency in the Redevelopment Plan boundaries
- Demolition or removal of buildings and improvements
- Installation, construction, expansion, addition, extraordinary maintenance, or reconstruction of streets, utilities, and other public facilities and improvements
- Disposition of property for uses in accordance with the Redevelopment Plan
- Redevelopment of land by private enterprise or public agencies for uses in accordance with the Redevelopment Plan
- Rehabilitation of structures and improvements by present owners, their successors, and the Redevelopment Agency
- Rehabilitation, development, or construction of low and moderate income housing within the City
- Provisions for the retention of controls and the establishment of restrictions or covenants running with the land so that property will continue to be used in accordance with the Redevelopment Plan

As described previously, the Project is located within the Redevelopment Plan boundaries and is subject to the applicable provisions of the Redevelopment Plan for the San Fernando Road Corridor Redevelopment Project Area. The Redevelopment Plan also granted the former Glendale Redevelopment Agency the authority to establish further requirements, restrictions, or design standards as appropriate. In addition, the Redevelopment Plan requires compliance with applicable provisions of

2 The Successor Agency undertakes enforceable obligations and performs duties pursuant to the enforceable obligations in compliance with the Dissolution Act. The Successor Agency staff also serves as staff to the Oversight Board.

the General Plan, Zoning Ordinance, Building Code, and other City ordinances, resolutions, and laws. However, pursuant to Health and Safety Code 34173(i), all land use related plans and functions of the former redevelopment agency were transferred to the city.

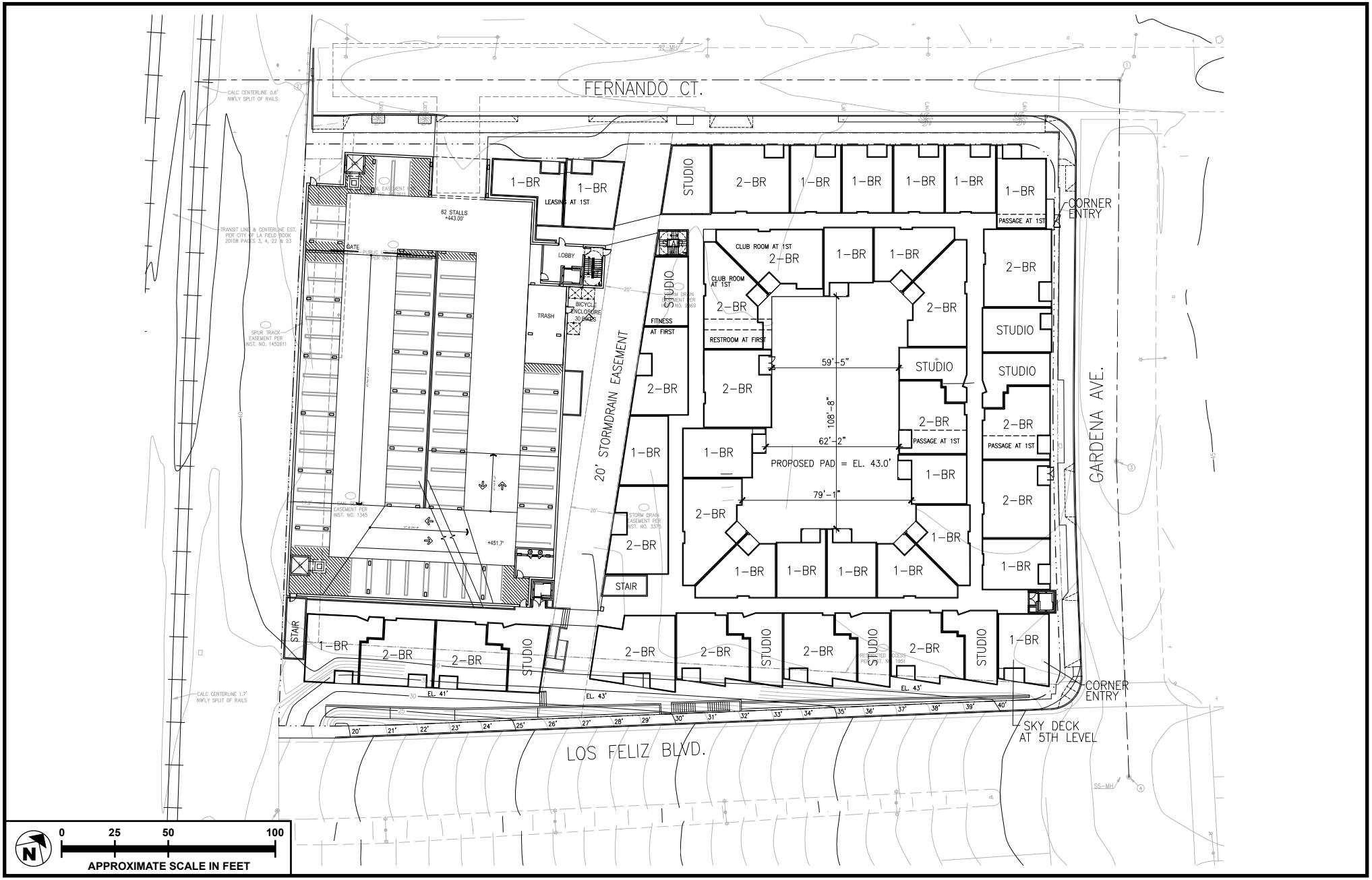
Consistent with California state law, the City's Comprehensive General Plan serves as a long-term planning guide for future development throughout the City. The Comprehensive General Plan consists of several individual elements including the Land Use Element, Circulation Element, Air Quality Element, Noise Element, Housing Element, Community Facilities Element, Safety Element, Recreation Element, Open Space and Conservation Element, and Historic Preservation Element. In general, the Elements provide an inventory of existing resources or conditions and specific goals and policies intended to direct and manage new development, and suggest implementation strategies for the attainment of Element objectives.

PROJECT CHARACTERISTICS

The *CEQA Guidelines* require an EIR to include a general description of the technical, economic, and environmental characteristics of a proposed Project. The Project proposes the development of three 5-story residential building area, which would provide 225 apartment units, and a 6-story parking structure for 330 parking spaces and 14,698 square feet of amenities.

As shown in **Figure 3.0-3, Site Plan**, the Project would include the development of the 225 units in three separate building locations on the Project site. The majority of the dwelling units (approximately 197 units) would be developed in a 5-story residential building located on the eastern portion of the site. The second 5-story residential building area (approximately 20 dwelling units) would be developed on the southwestern portion of the Project site along Los Feliz Road and adjacent to the UPRR/MTA right-of-way. Another third small 5-story residential building area (approximately eight dwelling units) would be developed on the northern portion of the project adjacent to the County storm drain easement. In addition to the residential areas, an attached six-level parking structure would be located on the western portion of the site. The maximum height of the structures would be approximately 65 feet above adjacent grade. The proposed parking structure would abut the UPRR/MTA right-of-way, located to the west of the Project site. Vehicle access to the parking structure on the site would be provided via one driveway along Fernando Court near the western Project boundary.

As indicated in **Table 3.0-1, Proposed Development**, the Project would consist of 225 apartment units. The development would include approximately 49 studios, 103 one-bedroom apartments, and 73 two-bedroom apartments. The top floor (5th story) residential level would include 46 penthouse units with second-level lofts accessed from within each unit. The breakdown would consist of 10 penthouse-



SOURCE: Architects Orange, September 2013

FIGURE **3.0-3**

Meridian Consultants

Site Plan

006-002-13

studio lofts, 20 penthouse one-bedroom lofts, and 16 penthouse two-bedroom loft units as well as a courtyard in the center of the building.

As indicated in **Table 3.0-1**, the parking structure would include 330 parking spaces, the basement level would include 35 parking spaces, and the ground level would include 48 parking spaces and a trash/recycling room. The second, third, and fourth levels would each include 59 parking spaces, and the fifth and six levels would include 58 and 12 spaces, respectively. Each of these levels would include trash/recycling rooms. The top of the parking structure would be 65 feet above adjacent grade. The structure would contain security screening around the parking structure on the western side of each level facing the railroad.

Table 3.0-1
Proposed Development

Type	Basement Floor	1st Floor	2nd Floor	3rd Floor	4th Floor	5th Floor	6th Floor	Total
Residential Uses								
Studio	--	9	10	10	10	10		**49**
One bedroom	--	20	21	21	21	20		**103**
Two bedroom	--	10	15	16	16	16		**73**
Total	--	39	46	47	47	46		**225**
Parking Structure								
Parking spaces	35	48	59	59	59	58	12	**330**
Amenities (square feet)	--	--	--	--	--		8,469	**8,469**
Bicycle	--	16	--	--	--	--	--	**16**

Development Characteristics

Residential Apartment Units

The Project would be developed with 49 studio and studio+loft units. The studio units would have four different layouts, with and without balconies, and would range in size from 600 square feet to 725 square feet.

The Project would be developed with 103 one-bedroom and one-bedroom+loft apartment units. The one-bedroom apartments would have 15 different layouts, with and without balconies, and would range in size from 627 square feet to 906 square feet.

The Project would be developed with 73 two-bedroom and two-bedroom+loft apartment units. The two-bedroom apartments would have eight different layouts, all with balconies, and would range in size from 893 square feet to 1,241 square feet.

Architectural Design

Figure 3.0-4, Perspective South Elevation – Los Feliz Road, and West Elevation – Parking Structure, and **Figure 3.0-5, Perspective East Elevation – Gardena Avenue**, provide elevations of the proposed structures. As shown in **Figure 3.0-4** and **Figure 3.0-5**, the Project has been designed as a contemporary building utilizing various different building materials in conformance with the IMU-R zone designations. These elevations illustrate the primary building materials proposed for the exterior of the building, including stucco, concrete, exterior metal, glass, and illuminated signage.

Landscaping

The landscaping plan includes drought-tolerant trees, shrubbery, flowers, and ground cover. Landscaping would be located in the courtyard and along the three roadways surrounding the Project site. The Project would provide 15,000 square feet of landscaping. An extensive amount of landscaping would be provided along the entire eastern side of the parking structure wall to provide a more attractive view for the tenants.

Traffic, Pedestrian Circulation, and Parking

Parking for the Project is proposed in a six-level parking structure, which would provide 330 parking spaces, 4 of which would be for electric plug-in vehicles, and 16 bike spaces. The basement level through the sixth floor of the parking structure would provide 330 spaces, which would be designated for residential parking.

One driveway, located along Fernando Court at the northwest corner of the site, would provide access to the Project. The Project driveway would be 24 feet in width, would accommodate left-turn movements for ingress and right-turn movements for egress from the site, and would be stop-sign controlled.

As part of the Project, an eastbound left-turn storage modification and protected left-turn arrow at the intersection of Gardena Avenue and Los Feliz Road would be provided as specified by the City of Glendale Traffic and Transportation Division. In addition, the Project will be required to install an additional southbound-to-eastbound exclusive turn lane. The Project would be required to provide a 2-foot widening, restriping, and associated dedication of right-of-way along the site's entire

PARKING STRUCTURE

SOURCE: Architects Orange, September 2013

FIGURE **3.0-4**

Meridian Consultants

Perspective South Elevation - Los Feliz Road

006-002-13

GARDENA AVENUE

SOURCE: Architects Orange, September 2013

FIGURE **3.0-5**

Meridian Consultants

Perspective East Elevation - Gardena Avenue

006-002-13

frontage of Fernando Court. This widening and restriping would allow for the provision of two 10-foot travel lanes and two 8-foot parking lanes. A loading zone would also be installed west of the County Sewer easement. Parking would be retained along the site's Fernando frontage to the greatest extent possible. Lastly, the Project would provide a hammerhead on Fernando Court using a portion of the county sewer easement to provide a turnaround area for a fire apparatus. To maintain the hammerhead free of obstructions, parking would not be allowed on an approximate 150-foot portion of the north side of Fernando Court. The Project improvements would result in approximately 8 on-street parking spaces being eliminated on Gardena Avenue and Fernando Court.

Sidewalks along the frontages of the Project site would be provided to improve pedestrian access to the site. Pedestrian access to the Project would be provided along the southern, eastern, and northern façades of the project site, while the main pedestrian access to the parking garage would be provided along the northern façade of the building. The corner of Gardena Avenue and Fernando Court and Gardena Avenue and West Los Feliz Road within the Project site would provide a 25-foot radius curb return and Americans With Disabilities Act (ADA)-compliant handicap ramps.

Alternative transportation modes are also available in the Project vicinity. The MTA and the City of Glendale presently operate bus routes near the Project site. The MTA system includes Routes 180, 181, and 780 along West Los Feliz Road, and Routes 94, 201, 603, and 794 along San Fernando Road. The Glendale Beeline Bus system includes Route 12 along San Fernando Road. All routes serving the Project make a stop at the Glendale Transportation Center (GTC), which provides access to the greater Los Angeles Metropolitan region via bus and commuter trains. The GTC also provides statewide access via Amtrak long-distance trains. The GTC is 0.4 miles south from the Project site and is accessible via Gardena Avenue.

Another form of alternative transportation modes includes Zipcar, a car sharing service. This service provides members the opportunity to rent a car on an hourly or daily basis. The nearest Zipcar is located at 400 North Brand within the City of Glendale and near Occidental College.

UTILITIES AND INFRASTRUCTURE

Water and Sewer Service

Utility service providers would include Glendale Water and Power for water service and the Glendale Public Works Department for sewer service. Lateral lines extending from the proposed buildings would connect to existing water and sewer lines. The Glendale Public Works Department, California Department of Transportation (Caltrans), and Los Angeles County Flood Control District share the storm drain system throughout the City. The drainage system servicing the Project site consists of City and

County facilities. Existing storm drain facilities at the Project site include three catch basins located at the southwest, southeast, and north perimeters of the Project site.

Electrical and Natural Gas

Glendale Water and Power and Southern California Gas Company provide electricity and natural gas service, respectively, near the Project site. Electricity and natural gas transmission infrastructure presently exists on and near the Project site. Project development would necessitate the construction of on-site distribution systems. These systems would be designed to accommodate the uses proposed within the Project and would not extend beyond the requirements or boundary of the Project. The on-site service lines would be sized to meet Project demand.

PROJECT CONSTRUCTION PHASING AND SCHEDULE

Project construction is anticipated to last approximately 23 months and is anticipated to begin in or after April 2014. The Project would be constructed in three phases.

Phase I would involve the demolition and removal of existing surface parking lots. Demolition would involve the use of standard construction equipment such as bulldozers, loaders, backhoes, cranes, and haul trucks. Approximately 1,000 cubic yards of demolition material would be generated and would require an average of 14 truck trips per day. This material would be hauled by trucks that would travel west on West Los Feliz Road to I-5 to dispose of material at the Scholl Canyon Landfill in Glendale.

Phase II would consist of excavation of existing fill materials and replacement with properly compacted fill materials. Grading on the Project site is anticipated to result in approximately 100 cubic yards of earth material that would be removed from the site. This phase would involve approximately seven truckloads for export and import of soil. Material would be hauled via the same route and to the same location as demolition debris. Grading activities would involve the use of standard earth-moving equipment, such as a drop hammer, dozers, loaders, excavators, graders, backhoes, pile drivers, dump trucks, and other related heavy-duty equipment, which would be stored on site during construction to minimize disruption of the surrounding land uses.

Phase III would consist of construction of the residential structure and parking structure. Above-grade construction activities would involve the use of standard construction equipment, such as hoists, cranes, mixer trucks, concrete pumps, laser screens, and other related equipment. This phase would also involve finishing the proposed structures, testing, and operation. Finishing, testing, and operation activities would involve the use of hoist cranes and other related equipment. These phases are anticipated to generate an average of seven material delivery trucks per day.

Construction worker parking would occur off site during the initial phases of grading and on the Project site during all the other construction phases. Construction workers would also park on site and would utilize the parking structure when its use is feasible. All construction equipment would be staged on the Project site. Temporary street and sidewalk closures within and along the perimeter of the Project site may be required during building construction. Sidewalk and parking areas behind the fenced site may be used as staging areas.

Due to the proximity of the parking structure construction to the active rail right-of-way, supervision may be required during construction to ensure safety of train operations. It may be necessary for the developer or construction contractor to enter into a Southern California Regional Rail Authority (SCRRA) Temporary Right-of-Entry agreement for the construction of the Project.

INTENDED USES OF THE EIR

The *CEQA Guidelines* require an EIR to include a statement briefly describing the intended uses of the EIR, including a list of agencies expected to use the EIR in their decision making and the list of the permits and other approvals required to implement the Project.

Discretionary Actions

A series of approvals from the City of Glendale Planning Division and other agencies would be necessary to implement the Project. Discretionary approvals may include, but are not limited to, the actions/permits described as follows.

Conditional Use Permit

Pursuant to Glendale Municipal Code, Section 30.42, approval of a separate CUP is required by the City Council for the provision to develop residential land uses within the zoning designation IMU-R.

Design Review

The City of Glendale Community Development Division has a multistage design review process for proposed projects. The Stage I/II Design will be considered for approval after completion of the environmental analysis. The design of the Project would be subject to the *City of Glendale Comprehensive Design Guidelines*.

Parking Concession/Modification of Development Standards

The Project would provide an above-grade parking structure as opposed to subterranean parking as required by Glendale Municipal Code, Section 30.32.040(B)(4). The applicant requests a waiver of the requirement for subterranean parking and the use of the above-ground parking structure. The applicant

also request a variance to the standard City of Glendale parking code to be allowed to park automobiles following Glendale's "Downtown Specific Plan" (DSP).

Other Public Agency Approvals

Certain aspects of the Project may require a permit or approval issued by a public agency other than the City of Glendale Planning Division. The following is a list of the other permits or approvals that may be required by federal, state, or regional agencies responsible for granting any such permits or approvals:

- A Los Angeles County Department of Public Works review of the existing storm drain easement located within/beneath the Project site. The Applicant shall obtain written approval from the Los Angeles County Department of Public Works to construct this Project with the existing storm drain system, which runs through a storm drain easement within the property.
- A SCRRA/Metrolink review and approval of design of parking garage to ensure conformance with applicable standards.

4.0 ENVIRONMENTAL IMPACT ANALYSIS

The purpose of this section is to inform decision makers and the public of the type and magnitude of the change to the existing environment that would result from the Project, plus proposed and approved cumulative development in the City of Glendale. This section provides a detailed discussion of the environmental setting for each topic addressed in this EIR, analysis of the potential impacts of the Project, potential cumulative impacts, and other measures identified to mitigate these impacts.

CUMULATIVE IMPACT ANALYSIS

The technical analysis contained in **Section 4.0, Environmental Impact Analysis,** examines both Project-specific impacts and the potential environmental effects associated with cumulative development. The California Environmental Quality Act (CEQA) requires that EIRs discuss cumulative impacts, in addition to Project-specific impacts. In accordance with CEQA, the discussion of cumulative impacts must reflect the severity of the impacts and the likelihood of their occurrence; however, the discussion need not be as detailed as the discussion of environmental impacts attributable to the Project alone. According to Section 15355 of the CEQA Guidelines:

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

Section 15130(a)(l) of the CEQA Guidelines further states, "a cumulative impact consists of an impact which is created as a result of the combination of the project evaluated in the EIR together with other projects causing related impacts."

Section 15130(a) of the CEQA Guidelines also requires that EIRs discuss the cumulative impacts of a project when the project's incremental effect is "cumulatively considerable."1 Where a Lead Agency is examining a project with an incremental effect that is not cumulatively considerable, it need not

1 Under Section 15065(a)(3) of the State CEQA Guidelines, "cumulatively considerable" means that "the incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects."

consider the effect significant but must briefly describe the basis for its conclusion. If the combined cumulative impact associated with the Project's incremental effect and the effects of other projects is not significant, Section 15130(a)(2) of the CEQA Guidelines requires a brief discussion in the EIR of why the cumulative impact is not significant and why it is not discussed in further detail. Section 15130(a)(3) of the CEQA Guidelines requires supporting analysis in the EIR if a determination is made that a project's contribution to a significant cumulative impact is rendered less than cumulatively considerable and, therefore, is not significant. CEQA recognizes that the analysis of cumulative impacts need not be as detailed as the analysis of project-related impacts, but instead should "be guided by the standards of practicality and reasonableness" (CEQA Guidelines Section 15130(b)). The discussion of cumulative impacts in this Draft Subsequent EIR focuses on whether the impacts of the Project are cumulatively considerable.

The fact that a cumulative impact is significant does not necessarily mean that the project contribution to the cumulative impact is significant as well. Instead, under CEQA, a project-related contribution to a significant cumulative impact is only significant if the contribution is "cumulatively considerable." To support each significance conclusion, the draft Subsequent EIR provides a cumulative impact analysis; and where project-specific impacts have been identified that, together with the effects of other related projects, could result in cumulatively significant impacts, these potential impacts are documented.

Section 15130(b) of the CEQA Guidelines defines consideration of the following two elements as necessary to provide an adequate discussion of cumulative impacts: “(a) a list of past, present, and reasonably anticipated future projects producing related or cumulative impacts, including those projects outside the control of the Agency, or (b) a summary of projections contained in an adopted general plan or related planning document which is designed to evaluate regional or area-wide conditions.” In this draft Subsequent EIR, a combination of these two methods is used depending upon the specific environmental issue area being analyzed.

Related projects within the City are presented in **Table 4.0-1, List of Related Projects,** and includes those projects that are (1) completed but not fully occupied; (2) currently under construction or beginning construction; (3) proposed with applications on file at the City of Glendale or the City of Los Angeles; or (4) reasonably foreseeable. Combined, these projects would result in the Citywide development of 561 live/work units, 3,334 multi-family residential units, 410,000 square feet of commercial uses, 50,400 square feet of industrial uses, 32,241 square feet of restaurant uses, 12,802 square feet of office uses, 266 hotel rooms, 9,500 square feet of church uses, and 14,600 square feet of cinema/studio uses.

Specific past, present, and reasonably anticipated future projects listed above, as well as applicable Glendale land use planning documents, are considered when evaluating cumulative impacts in **Sections 4.1** through **4.10** of this EIR, as appropriate for each environmental topic addressed in this EIR.

Table 4.0-1
List of Related Projects

Project Name	Location	Land Use	Size	Unit	Status
ICIS Project	546 W. Colorado St. and	Multi-Family	200	du	Complete
	552 W. Elk Ave.	Commercial	8,300	sf	
Nordstrom at Americana	889 Americana Way	Commercial	105,000	sf	Complete
Nexus at Central	610 N. Central Avenue	Multi-Family	235	du	Under Construction
Citi Live/Work Community	210 W. Lexington and 418 N. Central Ave	Live/Work	540	du	Proposed
		Commercial	4,200	sf	
Legendary Tower	300 N. Central Ave.	Multi-Family	72	du	Under Construction
		Live/Work	8	du	
		Commercial	1,240	sf	
	301 N. Central Ave.	Multi-Family	84	du	Approved
		Commercial	4,397	sf	
Brand + Wilson	124 W. Wilson	Multi-Family	235	du	Under Construction
		Commercial	9,800	sf	
The Lex on Orange	320-324 N. Central Ave.; 208 W. Lexington Dr.; and 317-345 N. Orange St.	Multi-Family	307	du	Under Construction
		Live/Work	3	du	
North Central Avenue Apartments	607 – 633 N. Central Ave; and 540 N. Central Ave.	Multi-Family	507	du	Proposed
	463 Salem St.	Multi-Family	10	du	Proposed
	4201 Pennsylvania Ave.	Multi-Family	30	du	Approved
	518 Glenwood	Multi-Family	6	du	Approved
Orange + Wilson	200 W. Wilson.	Multi-Family	166	du	Under Construction
		Live/Work	5	du	
		Restaurant	2,649	sf	

Project Name	Location	Land Use	Size	Unit	Status
Central + Wilson	130 N. Central Ave.	Multi-Family	153	du	Approved
		Commercial (Option A)	4,900	sf	
		Live/Work (Option B)	5	du	
	125 N. Central	Multi-Family	167	du	Proposed
		Commercial Pharmacy (CVS)	15,100	sf	
Hampton Inn & Suites	315 S. Brand Blvd.	Hotel	94	rooms	Approved
Veterans Village of Glendale	327 Salem St.	Multi-Family	44	du	Approved
	370 Salem St.	Multi-Family	17	du	Approved
	347 Milford St.	Multi-Family	12	du	Approved
	604-610 W. Broadway	Office	12,802	sf	Approved
		Commercial	1,620	sf	
Louise Gardens	111 N. Louise St.	Multi-Family	63	du	Approved
	118 S. Kenwood St.	Multi-Family	35	du	Under Construction
Laemmle Cinema Lofts	111 E. Wilson Ave. and 215 N. Maryland Ave.	Multi-Family	42	du	Approved
		Movie Theater	9,690	sf	
Glendale Triangle Project	3900 San Fernando Rd.	Multi-Family Market Rate	265	du	Under Construction
		Multi-Family Affordable	22	du	
		Commercial	37,000	sf	
The Link	3901-3915 San Fernando Rd.	Multi-Family	142	du	Proposed
		Commercial	11,600	sf	
		Studio	5,000	sf	
Hyatt Place Glendale	225 Wilson Ave.	Hotel	172	rooms	Approved
		Restaurant	1,950	sf	
Broadway Lofts	200 E. Broadway	Multi-Family	248	du	Complete

Project Name	Location	Land Use	Size	Unit	Status
		Restaurant	12,585	sf	
		Restaurant	14,057	sf	
	525 W. Elk Ave.	Multi-Family	71	du	Proposed
	463 Salem St.	Multi-Family	10	du	Proposed
	3013 Montrose Ave.	Church	9,500	sf	Approved
Gwynn Chevrolet	1400 S. Brand Blvd.	Addition to Car Dealership	2,423	sf	Proposed
Star Ford Dealership	1101 S. Brand Blvd.	Car Dealership	47,977	sf	Approved
	124 W. Colorado St.	Multi-Family	50	du	Approved
	900 W. Glenoaks Blvd.	Commercial Shopping Center	8,947	sf	Proposed
	527 Hazel	Multi-Family	4	du	Proposed
	507-525 W. Colorado	Multi-Family	90	DU	Proposed
		Medical Office	18,000	sf	
		Commercial	1,000	sf	
	344 W. Milford	Multi-Family	4	du	Proposed
Public Storage	5500 San Fernando Road	Mini Storage Facility	180,000	sf	Proposed
	430 Pioneer	Multi-Family	5	du	Approved
	700 E. Garfield	Multi-Family	5	du	Proposed
	2625 Hermosa Ave.	Multi-Family	3	du	Approved
	2631 Hermosa Ave.	Multi-Family	3	du	Approved
Habitat for Humanity	806 Chestnut	Multi-Family	3	du	Proposed
	342-344 Myrtle St.	Multi-Family	11	du	Proposed

Source: City of Glendale, October 16, 2013.
du = dwelling units; sq ft = square feet; rm = rooms

4.1 AESTHETICS

This section addresses the existing visual characteristics of the Project site and the surrounding area and evaluates the significance of the changes in visual character that would result from development of the proposed Project as viewed from the surrounding streets and other public viewpoints. Also evaluated is the impact of light and glare. Information on existing visual resources is incorporated from the City of Glendale Open Space and Conservation Element and field observations.

ENVIRONMENTAL SETTING

Existing Conditions

A description of the existing visual characteristics of the Project site and the area surrounding the Project site is presented below.

Scenic Vistas

The City of Glendale is bordered on the north by the San Gabriel Mountains, on the northwest by the Verdugo Mountains, and on the east by the San Rafael Hills. To the southwest, just beyond the City boundary is the easternmost edge of the Santa Monica Mountains in Griffith Park in Los Angeles. The Repetto Hills are located at the southeast edge of the City.[1] The Verdugo Mountains and the San Rafael Hills are identified in the Open Space and Conservation Element as the most significant physical landmarks in the community as these topographic features flank the central portion of the City.[2] The Open Space and Conservation Element further identifies visual and scenic resources as aesthetic functions which contain natural beauty such as lush or colorful vegetation, prominent topographical stature, unique physical features, and an interesting visual effect.[3] The Verdugo Mountains, San Gabriel Mountains, Santa Monica Mountains, and San Rafael Hills are visible from the portion of southern Glendale where the Project site is located.

The Verdugo Mountains, located approximately 3 miles north of the Project site, are approximately 2,100 feet above the Project site and 2,600 feet above mean sea level. The Verdugo Mountains are visible from major north-south streets in the Project area. Due to existing development, views of the Verdugo Mountains are limited from the Project site.

Views of the San Rafael Hills, located approximately 2.5 miles east of the Project site, are generally visible from major east-west streets in the area. The San Rafael Hills are approximately 500 feet above

1 City of Glendale, Open Space and Conservation Element, 3-2.
2 City of Glendale. 2-1.
3 City of Glendale. 4-37.

the Project site and 975 feet above mean sea level. Partial views of the San Rafael Hills are visible to the east down West Los Feliz Road and Fernando Court.

Views of the Santa Monica Mountains, located approximately 1 mile west of the Project site, are generally visible from major east-west streets in the area. The Santa Monica Mountains are approximately 1,000 feet above the Project site and 1,500 feet above mean sea level. Partial views of the Santa Monica Mountains from the Project site are visible to the west down West Los Feliz Road.

Scenic Routes

There are no designated scenic highways in the City of Glendale. The Open Space and Conservation Element of the General Plan identifies several "urban hikeways" in an effort to provide an opportunity for citizens and visitors to discover Glendale's unique urban form. Three self-guided routes cross through downtown Glendale highlighting the Financial/Fremont Park District, the Brand Shopping District, and the Civic Center District. The Project site is not located along these routes.

Light and Glare

The site and surrounding area currently have average ambient nighttime light levels for an urbanized area. Commercial and industrial uses adjacent to the Project site use typical levels of interior and exterior lighting for security, parking, signage, architectural highlighting, and landscaping. Likewise, the streets and rail lines in the area also utilize nighttime lighting for visibility and safety purposes. Artificial light sources found on the site and in the surrounding area include security lights associated with parking lots, illuminated signs, streetlights, stop lights along the major and secondary surface streets, automobile headlights, and associated locomotive lights.

Glare generation within the Project vicinity is limited. Surrounding development consists predominately of buildings that generally lack large expanses of glass or other reflective materials.

Shade and Shadow

Buildings surrounding the Project site conform to similar shade and shadow patterns. The commercial and industrial structures located to the north, east, and south of the Project site range from one to two stories in height. The site presently contains the foundations of former buildings and the associated surface parking which do not create shade or shadow patterns within the site. No shadow-sensitive uses, such as residences, school playgrounds, and parks, are located adjacent to the Project site.

Off-Site Views

Land uses surrounding the Project site are industrial and commercial in nature. Industrial uses are located adjacent to the Project site north of Fernando Court and east of Gardena Avenue, with commercial and industrial uses located south of West Los Feliz Road. The Union Pacific Railroad right-of-way is located adjacent to the site to the west. Buildings within this area immediately surrounding the Project site are primarily one and two story. **Figure 4.1-1, Photo Location Key**, provides the location and viewshed of each photograph. **Figures 4.1-2** through **4.1-4, Existing Off-Site Views**, provide photographs of the surrounding area taken from vantage points along the edges of the Project site.

Photo 1, Figure 4.1-2, provides a view east of Gardena Avenue and West Los Feliz Road from the southeastern corner of the Project site. As illustrated, the short-range view consists of an existing parking lot. The mid-range view is dominated by one-and two-story commercial structures, street trees, an animal hospital, a fast food restaurant with associated signage, an eight story hospital, trees, electrical poles, and street lighting. Limited long distance views of the San Rafael Hills can be seen by looking east along West Los Feliz Road.

Photo 2, Figure 4.1-2, provides a view south of West Los Feliz Road from the southern edge of the Project site. As shown, the short-range views are characterized by security fencing, street lights, and West Los Feliz Road with the associated embankment. Mid-range views include street lights, trees, and one-and two-story commercial and industrial structures with associated surface parking. Long distance views are largely disrupted by existing development.

Photo 3, Figure 4.1-3, provides a view west of the Union Pacific Railroad right-of-way from the western edge of the Project site. This view is dominated by railroad tracks, security fencing, and an electrical pole. Mid-range views consist of trees which largely shield views of large big-box retailers and associated lighted surface parking lots. Long-distance views of the Santa Monica Mountains can be seen above the tree line.

Photo 4, Figure 4.1-3, provides a view north along Gardena Avenue from the eastern edge of the Project site. As shown, one-and two-story commercial and industrial buildings characterizes short-range views from this vantage point. Electrical poles, electrical lines, and street lighting are also visible. Mid-and long-range views are obstructed by existing development, except for a small portion of the Verdugo Mountains.

Photo 5, Figure 4.1-4, provides a view northeast of Gardena Avenue and Fernando Court from the center of the Project site.

As shown, one-story commercial buildings, some with associated surface parking lots, characterizes short-range views from this vantage point. Electrical poles, electrical lines, and street trees are also visible. Mid-range views include additional commercial and industrial structures, street trees, electrical poles, and electrical lines. Limited long distance views of the San Rafael Hills and the Verdugo Mountains can be seen by looking to the northwest from the Project site.

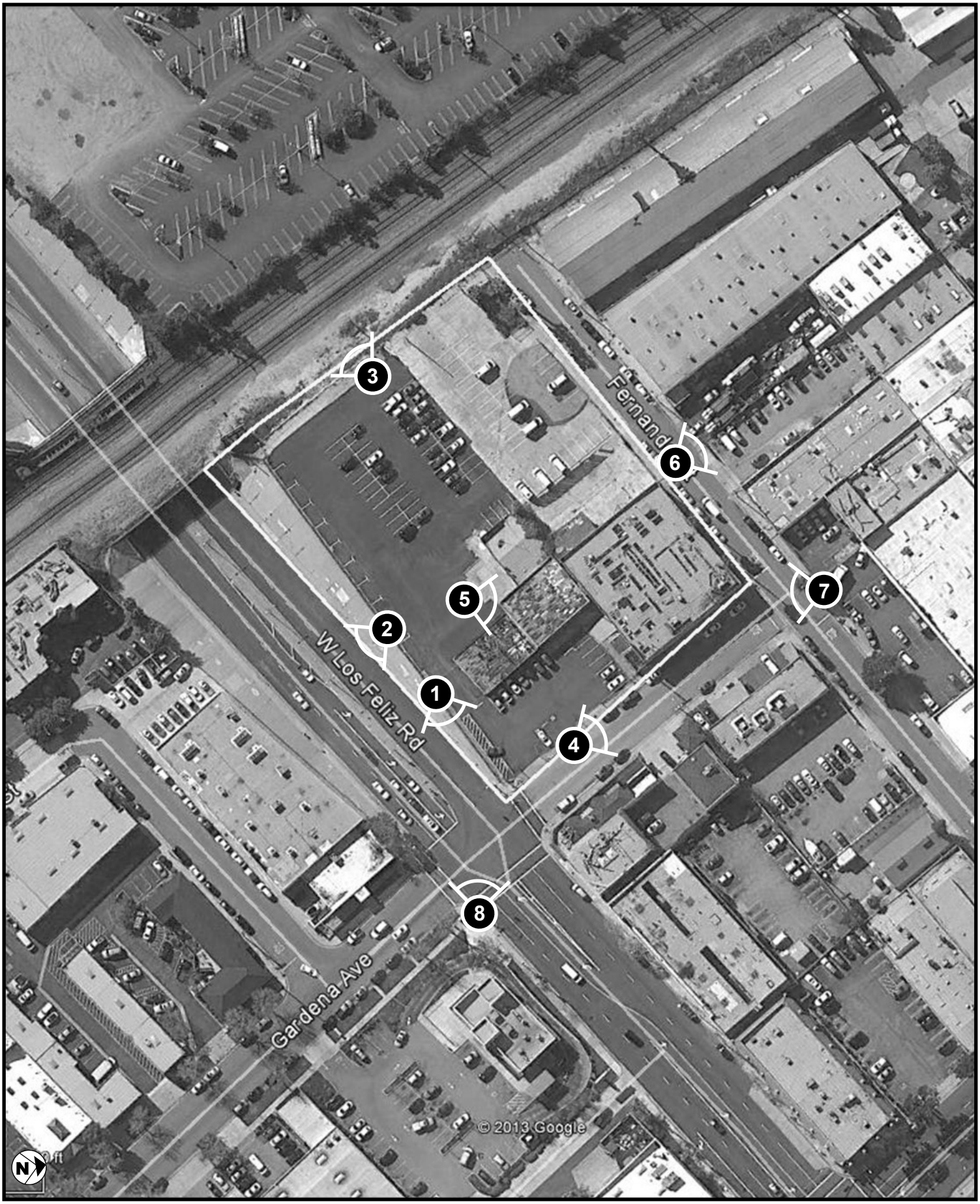
Photo 6, Figure 4.1-4, provides a view north of Fernando Court from the northern edge of the Project site. As shown, one-story commercial and industrial buildings characterize short-range views from this vantage point. Associated surface parking, security fencing and electrical lines are also visible. Mid-range views consist mostly of tall palm trees. Long-range views are obstructed by existing development.

On-Site Views

Current views of the Project site consist of the foundations of previous industrial buildings and associated parking lots. **Figure 4.1-5**, **Existing On-Site Views**, provide photographs of the Project site from off-site vantage points.

Photo 7, Figure 4.1-5, provides a view southwest across the Project site from the intersection of Fernando Court and Gardena Avenue. As illustrated, the Project site is characterized by concrete foundations of former structures, street trees, surface parking spaces and electrical poles and lines. Mid-range views consist of commercial and industrial uses to the north of the Project site down Fernando Court and to the south of the site along West Los Feliz Road, along with street trees and utilities. Long-range views include limited views of the Santa Monica Mountains. Views of the Santa Monica Mountains are largely obstructed by existing development, street trees, and utility infrastructure.

Photo 8, Figure 4.1-5, provides a view northwest across the Project site from the intersection of West Los Feliz Road and Gardena Avenue. Associated surface parking, existing foundations of former industrial structures, security fencing, street lights, traffic signals, and palm trees are visible on the Project site. Long-range views of the Santa Monica Mountains are available from this location.



SOURCE: Google Earth – 2013; Meridian Consultants – January 2013

FIGURE **4.1-1**

Meridian Consultants

Photo Location Key

006-002-13

Photo 1: View East – Immediately south of Gardena Avenue and Los Feliz Road Intersection

Photo 2: View South – Immediately south of Gardena Avenue and Los Feliz Road Intersection

SOURCE: Google Earth – 2013; Meridian Consultants – January 2013

FIGURE **4.1-2**

Meridian Consultants

Existing Off-Site Views

006-002-13

Photo 3: View West – Union Pacific Railroad right-of-way

Photo 4: View north along Gardena Avenue

SOURCE: Google Earth – 2013; Meridian Consultants – January 2013

FIGURE **4.1-3**

Meridian Consultants

Existing Off-Site Views

006-002-13

Photo 5: View Northeast towards Gardena Avenue and Fernando Court intersection

Photo 6: View North Fernando Court

SOURCE: Google Earth – 2013; Meridian Consultants – January 2013

FIGURE **4.1-4**

Meridian Consultants

Existing Off-Site Views

006-002-13

Photo 7: View Southwest – Gardena Avenue and Fernando Court intersection

Photo 8: View Northwest – Gardena Avenue and Los Feliz Road intersection

SOURCE: Google Earth – 2013; Meridian Consultants – January 2013

FIGURE **4.1-5**

Meridian Consultants

Existing On-Site Views

006-002-13

Regulatory Setting

The City's Urban Design Guidelines address the aesthetic character of development in the City of Glendale and San Fernando Road Corridor Project Areas. These Urban Design Guidelines address the characteristics of open space and street spaces, ground floor uses and building design in relation to pedestrian movement, and building height and bulk along with other design characteristics. The City Planning Department and the Urban Design Studio, reviews projects for consistency with these guidelines through the City's Design Review process.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In order to assist in determining whether a project would have a significant effect on the environment, the City determines a project may be deemed to have a significant impact on aesthetic resources, if it would:

- Have a substantial adverse effect on a scenic vista.
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway (issue is addressed in **Section 6.0, Effects Found Not to Be Significant**).
- Substantially degrade the existing visual character or quality of the site and its surroundings.
- Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.

Methodology

Each applicable threshold of significance is listed below followed by analysis of the significance of potential impacts and the identification of mitigation measures that would lessen or avoid potential impacts. Finally, the significance of potential impacts after implementation of all identified mitigation measures is presented.

Project Impacts

Threshold: **Have a substantial adverse effect on a scenic vista.**

The Project site is located in a highly developed urban area. As indicated in the Glendale Open Space and Conservation Element, the primary scenic vistas throughout Glendale are of the Verdugo Mountains and the San Rafael Hills. Existing scenic vistas from the Project site are limited to the long-range views of

the San Rafael Hills to the east and the Santa Monica Mountains to the west. Due to the highly developed nature of the area, long-distance views of these mountains are mostly limited to the views along major streets as existing buildings block or obstruct the views from other locations on and around the site. The development of the Project would not obstruct existing views of these scenic resources along adjacent roadways.

Existing views across the site would be modified with Project development. The mass of the proposed structures would potentially impact views across the Project site towards the Santa Monica Mountains to the west and the San Gabriel Mountains to the north. In addition, the maximum height of the structures associated with the Project would be approximately 65 feet above adjacent grade, which is below the maximum height of 75 feet permitted by the Glendale Municipal Code. However, the Santa Monica Mountains are not considered a valued visual resource according to the Open Space and Conservation Element of the Glendale General Plan, as those mountains do not contain lush or colorful vegetation, distinctive relief features, or an interesting visual effect compared with more prominent mountain ranges in the area (i.e., Verdugo Mountains, San Rafael Hills). Additionally, as discussed above, existing views across the site towards the San Gabriel Mountains are currently degraded. Finally, the height of the proposed structures would not significantly degrade views across the Project site as views would already be degraded at or slightly below the maximum height. As a result, development of the Project, as proposed, would not worsen the availability of on-site views towards the Santa Monica and San Gabriel Mountains and impacts would be less than significant.

Level of Significance Before Mitigation: Less than significant

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than significant.

Threshold: **Substantially degrade the existing visual character or quality of the site and its surroundings.**

As discussed in **Section 3.0, Project Description**, development of the Project would replace foundations of former vacant buildings and associated surface parking with three separate five-story building locations, attached to a six-story above-grade parking structure. The Project site is located in the southern portion of the City of Glendale within the San Fernando Road Redevelopment Project Area. A main objective of the redevelopment plan is to intensify development on underutilized land.[4]

4 Glendale Redevelopment Agency, San Fernando Road Corridor Redevelopment Project Final EIR, 3.6-7, 1992.

Industrial uses and commercial businesses, which range in height from one to two stories, characterize the area. Industrial and commercial uses located north and east of the site range from one to two stories in height. Commercial and residential uses located east of the site along West Los Feliz Road and south of the site along Gardena Avenue range in height from one to two stories. The replacement of the existing foundations and surface parking lots with the proposed new buildings, structures, landscaped, and other open spaces and landscaping will change the visual character of the Project site. In general, the Project elements to be introduced will improve the aesthetic character of the site given the architectural design of the Project; the use of design elements, such as landscaped view corridors, and walkways; and the comprehensive landscape plan to be implemented. While the proposed buildings will be taller than the existing buildings located around the site, the architectural design will result in the massing of the buildings being visually compatible and actually improving site conditions. Furthermore, improvement of the current slab concrete embankment area adjacent to the Project site with landscaping and hardscaping features would improve the view in this regard.

Figure 4.1-6, **Perspective South Elevation – Los Feliz Road, and West Elevation – Parking Structure**, illustrates the conceptual architectural design of the Project in relation to Los Feliz Road and entry into the City of Glendale. This elevation illustrates the general massing of the proposed structures and level of detail along Los Feliz Road. The Project has been designed as a contemporary building utilizing various different building materials in conformance with the Industrial/Commercial-Residential Mixed Use zone designations. These elevations illustrate the primary building materials proposed for the exterior of the building, including stucco, concrete, exterior metal, glass and illuminated signage. The design of the main building and parking structure would emphasize the building as a "gateway" into Glendale from the City of Los Angeles. The Project would include landscaping at the street level that would consist of street trees, ground cover, and shrubs to enhance the pedestrian environment. **Figure 4.1-7, Perspective East Elevation - Gardena Avenue,** illustrates architecture of the Project site along the eastern portions of the Project site.

All supporting infrastructure, such as telecommunications equipment and utility lines, would be placed underground or screened from public view. Finally, signage associated with the Project would meet the standards and programs contained in the Municipal Code, and no adverse impact is expected to result.

In general, the Project elements would improve the aesthetic character of the site, given the architectural design of the Project; the use of design elements, such as the comprehensive landscape plan to be implemented. The landscaping plan includes drought-tolerant trees, shrubbery, flowers and ground cover. Landscaping would be located in the courtyard and along the three roadways surrounding the Project site .Given the existing urban aesthetic context and objectives of the Redevelopment Plan for the San Fernando Road Corridor, development of the Project would not substantially degrade the

existing visual character or quality of the Project site and its surroundings, and no significant impact to the visual character of the site and the surrounding area would result. Development of the Project, as proposed, would improve the visual character of the site and the surrounding areas of the San Fernando Road Corridor Redevelopment Project Area, and the change in visual character of the site would not degrade the existing visual character or quality of the site and its surroundings.

The proposed use would be required to comply with the San Fernando Road Redevelopment project and must undergo a two-stage design review process through the City of Glendale Planning Division to verify compliance with City Design Review and Urban Design Guidelines. As such, Project development would not substantially degrade the existing visual character or quality of the Project site and their surroundings and no significant impact to the visual character of the site and the surrounding area would result.

The nearest sensitive use to the Project site is the Ascencia Homeless Shelter, located north of Fernando Court. The building does not contain any windows and would not be impacted by the shadow that would project from the Project site. As such, this sensitive use would not be affected by the Project.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than significant.

PARKING STRUCTURE

SOURCE: Architects Orange, September 2013

FIGURE **4.1-6**

Meridian Consultants

Perspective South Elevation - Los Feliz Road

006-002-13

GARDENA AVENUE

SOURCE: Architects Orange, September 2013

FIGURE **4.1-7**

Meridian Consultants

Perspective East Elevation - Gardena Avenue

006-002-13

Threshold: **Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.**

Substantial light or glare can result from the installation of high-intensity lighting fixtures or the use of highly reflective glass or other building materials.

Lighting would be established on the site during construction. Lighting used during construction would consist primarily of security lights, although lighting may be used for construction activities occurring during morning or evening hours, particularly in the winter. This lighting would be temporary in nature and would not result in any substantial long-term light or glare impacts.

The proposed structure would consist of light and cool colored exterior wall materials balanced with low-reflective glass materials. Primary building materials proposed for the exterior of the building, including stucco, concrete, exterior metal, and glass. Highly polished materials or highly reflective metal material and glass that could reflect light and create glare are not proposed. No substantial glare impacts from building materials would result from the proposed Project.

Development of the proposed Project would establish new permanent sources of lighting that would increase the current low-intensity level of light on the site. The lighting proposed would be limited to the amount required to safely light the driveway, the sidewalks along West Los Feliz Road, Fernando Court and Gardena Avenue, and public space areas within the Project site. All outdoor lighting would be directed onto the driveway, walkways, and public areas and away from adjacent properties and public rights-of-way to avoid any light or glare impacts from lighting fixtures included in the Project. Therefore, the new on-site lighting would not result in substantial increases in light or glare that would affect any light-sensitive uses on or near the site, such as the homeless shelter north of Fernando Court.

Direct and indirect lighting would be used for signage to be placed on building façades. Signage lighting would be focused onto sign surfaces and would generally be of low to medium brightness. All proposed signage and associated lighting would be subject to signage regulations and programs included in the Glendale Municipal Code. Therefore, lighting associated with signs would not result in substantial light or glare impacts.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than significant.

Cumulative Impacts

Threshold: **Have a substantial adverse effect on a scenic vista.**

As described in **Section 4.0, Environmental Impact Analysis**, the only related project located in the immediate vicinity of the Project is the proposed mixed-use project at 3900 San Fernando Road, one block east of the Project site. This Project consists of 37,000 square feet of commercial space and 325 multi-family dwelling units. Due to its location, the 3900 San Fernando Road project would also change the visual character of the area surrounding the Project site.

As discussed above, views of the San Gabriel Mountains to the north, San Rafael Hills to the east and Santa Monica Mountains to the west in the Project area are currently partially degraded by surrounding development. Therefore, a potential cumulative impact would not result from the development of the Project in combination with other related projects including the 3900 San Fernando Road project. Therefore, the cumulative impact of the Project would be less than significant.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than significant.

Threshold: **Substantially degrade the existing visual character or quality of the site and its surroundings.**

The 3900 San Fernando Road project would involve the redevelopment of a site that presently contains commercial buildings and associated surface parking. The 3900 San Fernando Road project, like the proposed Project, would be subject to the City of Glendale Urban Design Guidelines and Agency Design Review process. The combined development on the proposed Project and 3900 San Fernando Road sites would improve the local visual character, which is currently characterized by mostly one-to two-story buildings that contain few windows or other architectural design features and minimal landscaping. No significant cumulative impact on the existing local visual character, therefore, would result from the development of these two projects.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than significant.

Threshold: **Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area.**

The proposed Project and the 3900 San Fernando Road project would add lighting typical of commercial and residential developments in the area. This includes directed lighting for architectural accents, signage, and security focused onto surfaces to be lit, such as building details, landscape elements, signs, and pedestrian areas. The related project is sufficient distance from the proposed Project that cumulative light and glare impact would not result. In addition, lighting plans for both projects would be reviewed by the Glendale Successor Agency (formally the Glendale Redevelopment Agency) during the Design Review process and cumulative light or glare impacts would be less than significant. As discussed above, the structures on the proposed Project would consist of light-and cool-colored exterior wall materials and balanced with low-reflective glass materials. Proposed building materials associated with the 3900 San Fernando Road project would not be permitted to be highly reflective. No cumulative glare impacts from reflective building materials would result.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than significant.

4.2 AIR QUALITY AND GREENHOUSE GASES

This section describes and evaluates the potential air quality and greenhouse gas (GHG) impacts from the Project. The Project Site is located within the South Coast Air Basin, which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). In assessing air quality and GHG impacts, the following sources were considered: emissions from equipment that will be used during construction related activities, operational related emissions generated from electricity and water use, and emissions from motor vehicles generated by trips to and from the Project site. This section incorporates information from the air quality emissions calculations contained in **Appendix 4.2**.

ENVIRONMENTAL SETTING

Existing Conditions

Air Quality

Air pollutant emissions within the region are primarily generated by stationary and mobile sources. Stationary sources can be divided into two major subcategories: point and area sources. Point sources occur at a specific location and are often identified by an exhaust vent or stack at a facility. Area sources are widely distributed and can include such sources as residential and commercial water heaters, painting operations, lawn mowers, agricultural fields, parking lots, and some consumer products.

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 may be legally operated on roadways and highways. Off-road sources include aircraft, ships, trains, and self-propelled construction equipment.

Air pollutants can also be generated by the natural environment, such as when high winds suspend fine dust particles. The main source of pollutants near the Project site area includes mobile emissions generated from on-road vehicles. Traffic-congested roadways and intersections have the potential to generate localized high levels of carbon monoxide (CO). Localized areas where ambient concentrations exceed state and/or federal standards are termed CO “hotspots”.

The US Environmental Protection Agency (US EPA) is the federal agency responsible for setting the National Ambient Air Quality Standards (NAAQS). Air quality of a region is considered to be in attainment of the NAAQS if the measured ambient air pollutant levels are not exceeded more than once per year, except for ozone, particulate matter (PM10), and fine particulate matter (PM2.5) and those based on annual averages or arithmetic mean. The NAAQS for ozone, PM10, and PM2.5 are based on statistical calculations over one-to three-year periods, depending on the pollutant. The California Air

Resources Board (CARB) is the state agency responsible for setting the California Ambient Air Quality Standards (CAAQS). Air quality of a region is considered to be in attainment of the CAAQS if the measured ambient air pollutant levels for ozone, carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), PM10, PM2.5, and lead are not exceeded, and all other standards are not equaled or exceeded at any time in any consecutive three-year period.

A brief description of the criteria pollutants is provided below.

- Ozone (O_3). O_3 is a gas that is formed when VOCs and NOX, both byproducts of internal combustion engine exhaust and other sources 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.

- Volatile Organic Compounds (VOCs). VOCs are compounds comprised primarily of atoms of hydrogen and carbon. Internal combustion associated with motor vehicle usage is the major source of hydrocarbons. Adverse effects on human health are not caused directly by VOCs, but rather by reactions of VOCs to form secondary air pollutants, including ozone. VOCs are also referred to as reactive organic compounds (ROCs) or reactive organic gases (ROGs). VOCs themselves are not "criteria" pollutants; however, they contribute to formation of O_3.

- Nitrogen Dioxide (NO_2). A reddish-brown, highly reactive gas that is formed in the ambient air through the oxidation of nitric oxide (NO). NO_2 is also a byproduct of fuel combustion. The principle form of NO_2 produced by combustion is NO, but NO reacts quickly to form NO_2, creating the mixture of NO and NO_2 referred to as oxides of nitrogen (NO_X). NO_2 acts as an acute irritant and, in equal concentrations, is more injurious than NO. At atmospheric concentrations, however, NO_X is only potentially irritating. NO_2 absorbs blue light, the result of which is a brownish-red cast to the atmosphere and reduced visibility.

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

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

- Respirable Particulate Matter (PM10). PM10 consists of extremely small, suspended particles or droplets 10 microns or smaller in diameter. Some sources of PM10, like pollen and windstorms, are naturally occurring. However, in populated areas, most PM10 is caused by road dust, diesel soot, combustion products, abrasion of tires and brakes, and construction activities.

- Fine Particulate Matter (PM2.5). PM2.5 refers to particulate matter that is 2.5 micrometers or smaller in size. The sources of PM2.5 include fuel combustion from automobiles, power plants, wood burning, industrial processes, and diesel-powered vehicles such as buses and trucks. These fine particles are also formed in the atmosphere when gases such as sulfur dioxide, NOx, and VOCs are transformed in the air by chemical reactions.

- Lead (Pb). Pb occurs in the atmosphere as particulate matter. The combustion of leaded gasoline is the primary source of airborne lead in the basin. The use of leaded gasoline is no longer permitted for on-road motor vehicles, so most such combustion emissions are associated with off-road vehicles such as racecars that use leaded gasoline. Other sources of Pb include the manufacturing and recycling of batteries, paint, ink, ceramics, ammunition, and secondary lead smelters.

For evaluation purposes, the SCAQMD has divided its territory into 36 Source Receptor Areas (SRA) with operating monitoring stations in most of the SRAs. These SRAs are designated to provide a general representation of the local meteorological, terrain, and air quality conditions within the particular geographical area.

The city of Glendale, within Los Angeles County, California, is within the South Coast Air Basin (SCAB). The SCAB is a 6,600-square mile area bounded by the Pacific Ocean to the west and the San Gabriel, San Bernardino, and San Jacinto Mountains to the north and east. The SCAB includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the San Gorgonio Pass area in Riverside County.

The Project site is within SRA 7 within the South Coast Air Basin. SCAQMD operates an air monitoring station in SRA 7 in the east San Fernando Valley. **Table 4.2-1, Air Quality Monitoring Summary,** summarizes published monitoring data from 2009 through 2011, the most recent 3-year period available. The data shows that during the past few years, SRA 7 has exceeded the ozone, PM10, and PM2.5 standards.

The US EPA and the CARB designate air basins where ambient air quality standards are exceeded as “nonattainment” areas. If standards are met, the area is designated as an “attainment” area. If there is inadequate or inconclusive data to make a definitive attainment designation, they are considered “unclassified”. Federal nonattainment areas are further designated as marginal, moderate, serious, severe, or extreme as a function of deviation from standards.

Table 4.2-1
Air Quality Monitoring Summary

Air Pollutant	Averaging Time (Units)	2009	2010	2011
Ozone	Max 1 Hour (ppm)	0.145	0.111	0.120
	Days > CAAQS threshold (0.09 ppm)	16	3	8
	Max 8 Hour (ppm)	0.096	0.084	0.084
	Days > CAAQS threshold (0.07 ppm)	28	11	10
	Days > NAAQS threshold (0.075 ppm)	14	4	6
Carbon monoxide	Max 1 Hour (ppm)	3	3	ND[1]
	Days > CAAQS threshold (20 ppm)	0	0	0
	Days > NAAQS threshold (35 ppm)	0	0	0
	Max 8 Hour (ppm)	2.9	2.4	2.4
	Days > CAAQS threshold (9.0 ppm)	0	0	0
	Days > NAAQS threshold (9 ppm)	0	0	0
Nitrogen dioxide	Mean (ppm)	0.027	0.024	0.022
	Max 1 Hour (ppm)	0.09	0.082	0.068
	Days > CAAQS threshold (0.18 ppm)	0	0	0
Sulfur dioxide	Max 24 Hour (ppm)	0.003	0.004	0.009
	Days > CAAQS threshold (0.04 ppm)	0	0	0
	Days > NAAQS threshold (0.14 ppm)	0	0	0
Suspended particulate matter (PM10)	Mean (μg/m^3)	39.2	29.6	28.4
	24 Hour (μg/m^3)	80	51	61
	Days > CAAQS threshold (50 μg/m^3)	11	1	2
	Days > NAAQS threshold (150 μg/m^3)	0	0	0
Fine particulate matter (PM2.5)	Mean (μg/m^3)	14.4	12.5	13.2
	24 Hour (μg/m^3)	67.5	43.7	47.8
	Days > NAAQS threshold (35 μg/m^3)	4	4	5

Source: South Coast Air Quality Management District, Historical Data by Year, http://www.aqmd.gov/smog/historicaldata.htm, 2013.
1 - One hour CO is not reported.
Abbreviations:
> = exceed; ppm = parts per million; μg/m3 = micrograms per cubic meter; ND = no data ; max = maximum; Mean = Annual Arithmetic Mean
CAAQS = California Ambient Air Quality Standard; NAAQS = National Ambient Air Quality Standard

The current attainment designations for the South Coast Air Basin are shown in **Table 4.2-2, South Coast Air Basin Attainment Status**. The South Coast Air Basin is currently designated as being in nonattainment for the federal ozone, carbon monoxide, nitrogen dioxide, lead, PM10, and PM2.5 and unclassified for the federal sulfur dioxide, nonattainment for the State ozone, nitrogen dioxide, lead, PM10 and PM2.5 standards. Areas where air pollution levels persistently exceed the state or national ambient air quality standards may be designated "nonattainment".

Table 4.2-2
South Coast Air Basin Attainment Status

Pollutant	State Status	National Status
Ozone	Extreme Nonattainment	Extreme Nonattainment
Carbon Monoxide	Attainment	Serious Nonattainment
Nitrogen Dioxide	Nonattainment	Nonattainment
Sulfur Dioxide	Attainment	Unclassified
Lead	Nonattainment	Nonattainment
PM10	Nonattainment	Serious Nonattainment
PM2.5	Nonattainment	Nonattainment

Source: CARB, Area Designations Maps/State and National, http://www.arb.ca.gov/desig/adm/adm.htm, accessed February 22, 2013. US EPA, The Green Book Nonattainment Areas for Criteria Pollutants, http://www.epa.gov/air/oaqps/greenbk/index.html, accessed November 3, 2013.

Individuals who are sensitive to air pollution include children, the elderly, and persons with preexisting respiratory or cardiovascular illness. For purposes of CEQA, the SCAQMD considers a sensitive receptor to be a location where a sensitive individual could remain for 24 hours, such as residences, hospitals, or convalescent facilities. Commercial and industrial facilities are not included in the definition because employees do not typically remain on site for 24 hours. However, when assessing the impact of pollutants with 1-hour or 8-hour standards (such as nitrogen dioxide and carbon monoxide), commercial and/or industrial facilities would be considered sensitive receptors for those purposes.

Land uses around the Project site include commercial and retail uses to the north, south and west, the PATH ACHIEVE Glendale transitional housing facility across the street from the Project site, a residential community to the southwest, and the Glendale Memorial Hospital to the east of the Project site.

Global Climate Change

Climate change is a change in the average weather of the earth that may be measured by changes in wind patterns, storms, precipitation, and temperature. These changes are assessed using historical records of temperature changes that have occurred in the past, such as during previous ice ages. Many of the concerns regarding climate change use this data to extrapolate a level of statistical significance specifically focusing on temperature records from the last 150 years (the Industrial Age) that differ from previous climate changes in rate and magnitude.

The United Nations Intergovernmental Panel on Climate Change (IPCC) considered six alternative future greenhouse gases (GHG) scenarios that would stabilize global temperatures and climate change impacts. The IPCC predicted that global mean temperature change from 1990 to 2100 for the six scenarios considered could range from 1.1 degrees Celsius (°C) to 6.4°C. Global average temperatures and sea levels are expected to rise under all scenarios.[1]

In California, climate change may result in consequences such as the following:

- A reduction in the quality and supply of water to the State from the Sierra snowpack
- Increased risk of large wildfires
- Reductions in the quality and quantity of certain agricultural products
- Exacerbation of air quality problems
- A rise in sea levels resulting in the displacement of coastal businesses and residences
- Damage to marine ecosystems and the natural environment
- An increase in infections, disease, asthma, and other health-related problems
- A decrease in the health and productivity of California's forests

Gases that trap heat in the atmosphere are GHGs. The effect is analogous to the way a greenhouse retains heat. Common GHGs include water vapor, CO_2, methane, nitrous oxides, chlorofluorocarbons, hydrofluorocarbons, perfluorocarbons, sulfur hexafluoride, ozone, and aerosols. Without the natural greenhouse effect, the average temperature at Earth's surface would be below the freezing point of

1 Intergovernmental Panel on Climate Change, Summary for Policymakers, Climate Change 2007: The Physical Science Basis, Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Avery, M. Tignor and H.L. Miller [eds.]). (Cambridge University Press: Cambridge, United Kingdom and New York, NY, USA) 2007.

water.[2] However, it is believed that emissions from human activities, such as electricity production and vehicle use, have elevated the concentration of these gases in the atmosphere beyond the level of naturally occurring concentrations.

The global warming potential (GWP) is the potential of a gas or aerosol to trap heat in the atmosphere. The GWP compares the amount of heat trapped by a certain mass of the gas in question to the amount of heat trapped by a similar mass of carbon dioxide. A GWP is calculated over a specific time interval, commonly 20, 100, or 500 years. GWP is expressed as a factor of carbon dioxide (whose GWP is standardized to 1). For example, the 100 year GWP of methane is 21, which means that if the same mass of methane and carbon dioxide were introduced into the atmosphere, that methane will trap 21 times more heat than the carbon dioxide over the next 100 years.[3] The GHGs of most concern are identified in **Table 4.2-3, Greenhouse Gases** below. Of these two primary sources of GHG, CO_2 would be generated by sources associated with the Project, while methane would not be generated in any substantial amount.

Table 4.2-3
Greenhouse Gases

Greenhouse Gas	Description and Physical Properties	Sources
Carbon dioxide (CO_2)	Carbon dioxide is an odorless, colorless, natural GHG. GWP = 1.	Carbon dioxide is emitted from natural and anthropogenic sources. Natural sources include decomposition of dead organic matter; respiration of bacteria, plants, animals, and fungus; evaporation from oceans; and volcanic outgassing. Anthropogenic sources are from burning coal, oil, natural gas, and wood. The concentration in 2005 was 379 ppm, which is an increase of about 1.4 ppm per year since 1960.
Methane (CH_4)	Methane is a flammable gas and is the main component of natural gas. GWP = 21.	A natural source of methane is from the anaerobic decay of organic matter. Methane is extracted from geological deposits (natural gas fields). Other sources are from landfills, fermentation of manure, and cattle.
Nitrous oxide (N_2O)	Nitrous oxide is also known as laughing gas and is a colorless GHG. GWP = 310.	Microbial processes in soil and water, fuel combustion, and industrial processes.

Source: Intergovernmental Panel on Climate Change, Summary for Policymakers, Climate Change 2007: The Physical Science Basis, Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Avery, M. Tignor and H.L. Miller [eds.]). (Cambridge University Press: Cambridge, United Kingdom and New York, NY, USA) 2007.
Notes: ppm = parts per million; ppt = parts per trillion (measure of concentration in the atmosphere); GWP = global warming potential

2 California Environmental Protection Agency, Climate Action Team, Climate Action Team Report to Governor Schwarzenegger and the California Legislature, www.climatechange.ca.gov/climate_action_team /reports/index.html, (March 2006), accessed November 3, 2013.

3 Working Group, Fourth Assessment Report of the Intergovernmental Panel on Climate Change, 2007.

Individual GHG compounds have varying GWP and atmospheric lifetimes. The calculation of the carbon dioxide equivalent is a consistent methodology for comparing GHG emissions, since it normalizes various GHG emissions to a consistent metric. Methane's warming potential of 21 indicates that methane has a 21 times greater warming affect than carbon dioxide on a molecule per molecule basis. A carbon dioxide equivalent is the mass emissions of an individual GHG multiplied by its GWP.

(1) Emissions Inventory and Trends

California is the second largest contributor of GHGs in the US and the 16th largest in the world.[4] In 2009, California produced 452.97 $MMTCO_2E$,[5] including imported electricity and excluding combustion of international fuels and carbon sinks or storage. The 2004 California GHG inventory was approximately seven percent of US emissions. The major source of GHGs in California is transportation, contributing to 41 percent of the State's total GHG emissions.[6] Electricity generation (both in and out of state) is the second largest source, contributing to 22 percent of the State's GHG emissions.[7] The statewide inventory of GHGs by sector is shown in **Table 4.2-4, California GHG Inventory 2001-2009**.

Table 4.2-4
California GHG Inventory 2001-2009

	Emissions $MMTCO_2E$								
Transportation	174.79	181.28	179.39	183.18	186.06	186.64	187.07	177.97	172.93
Electric Power	122.90	109.71	113.69	116.26	109.01	105.72	115.08	121.22	103.58
Commercial/Residential	40.98	42.96	41.33	42.67	41.04	41.66	41.92	41.53	42.94
Industrial	93.34	94.29	91.58	93.49	92.75	92.31	89.78	87.09	81.36
Recycling and Waste	6.65	6.61	6.71	6.68	7.00	7.09	7.06	7.26	7.32
Agriculture	29.10	32.26	30.67	32.34	32.61	33.75	32.91	33.68	32.13
Forestry	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19	0.19
Agriculture & Forestry	29.29	32.45	30.86	32.53	32.80	3375.19	33.10	33.87	32.32
Forestry Net	-4.30	-4.16	-4.16	-4.16	-4.03	-3.87	-3.94	-3.84	-3.80
Total Net Emissions	474.95	475.02	471.98	484.00	487.52	478.02	484.89	480.88	452.97

Source: CARB 2012
Notes: Excludes military sector. $MMTCO_2E$ = million metric tons carbon dioxide equivalents.

4 California Energy Commission, Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004, Staff Final Report, CEC-600-2006-013-SF, (December 2006).

5 CARB, California Greenhouse Gas Inventory for 2000-2009-by Category as Defined in the Scoping Plan. http://www.arb.ca.gov/cc/inventory/data/tables/ghg_inventory_scopingplan_00-08_2010-05-12.pdf, (October 26, 2011), accessed November 3, 2013

6 California Energy Commission, Inventory of California Greenhouse Gas Emissions and Sinks: 1990 to 2004, Staff Final Report, CEC-600-2006-013-SF, (2006).

7 California Energy Commission. 2006.

Regulatory Setting

Air quality within the basin 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, policymaking, education and a variety of programs. The agencies primarily responsible for improving the air quality within the basin are discussed below along with their individual responsibilities.

Air Quality

Federal

At the federal level, the United States Environmental Protection Agency (US EPA) is responsible for the implementation of portions of the Clean Air Act (CAA) dealing with certain mobile sources of air emissions and other requirements. Charged with handling global, international, national, and interstate air pollution issues and policies, the US EPA sets national vehicle and stationary source emission standards, oversees approval of all State Implementation Plans[8], provides research and guidance for air pollution programs, and sets National Ambient Air Quality Standards (NAAQS). The NAAQS for six common air pollutants (ozone, particulate matter PM10 and PM2.5, nitrogen dioxide, carbon monoxide (CO), lead, and sulfur dioxide) shown in **Table 4.2-5, Criteria Air Pollutants**, were identified from provisions of the Clean Air Act of 1970.

The NAAQS were set to protect public health, including that of sensitive individuals, and for this reason; the standards continue to change as more medical research is available regarding the health effects of the criteria pollutants. The primary NAAQS define the air quality considered necessary, with an adequate margin of safety, to protect the public health.[9] Other portions of the CAA, such as the portions dealing with stationary source requirements, are implemented by state and local agencies.

8 A State Implementation Plan is a document prepared by each state describing existing air quality conditions and measures that will be followed to attain and maintain National Ambient Air Quality Standards.

9 U.S. Environmental Protection Agency. A Comprehensive Analysis of Biodiesel Impacts on Exhaust Emissions.EPA420-P-02-001. October 2002; U.S. Environmental Protection Agency. Office of Air and Radiation. Nitrogen Oxides: Impact on Public Health and the Environment. 1997. www.epa.gov/ttn/oarpg/t1/reports/noxrept.pdf. Accessed January 20, 2010. U.S. Environmental Protection Agency. Ozone and your Health. 1999. EPA-452/F-99-003. www.epa.gov/air/ozonepollution/pdfs/health.pdf Accessed January 20, 2010; U.S. Environmental Protection Agency. September 2003. Particle Pollution and your Health. EPA-452/F-03-001. http://epa.gov/pm/pdfs/pm-color.pdf. Accessed November 3, 2013; U.S. Environmental Protection Agency. Health and Environmental Impacts of CO. http://www.epa.gov/airquality/carbonmonoxide/ health.html. Accessed November 3, 2013; U.S. Environmental Protection Agency. Fact Sheet, Proposed Revisions to the National Ambient Air Quality Standards for Nitrogen Dioxide. July 22, 2009. accessed November 3, 2013 www.epa.gov/air/nitrogenoxides/pdfs/20090722fs.pdf.

Table 4.2-5
Criteria Air Pollutants

Air Pollutant	Averaging Time	CA Standard	National Standard	Most Relevant Effects from Pollutant Exposure	Properties	Sources
Ozone	1 Hour 8 Hour	0.09 ppm 0.070 ppm	— 0.075 ppm	(a) Decrease of pulmonary function and localized lung edema in humans and animals; (b) Risk to public health implied by alterations in pulmonary morphology and host defense in animals; (c) Increased mortality risk; (d) Risk to public health implied by altered connective tissue metabolism and altered pulmonary morphology in animals after long-term exposures and pulmonary function decrements in chronically exposed humans; (e) Vegetation damage; (f) Property damage.	Ozone is a photochemical pollutant as it is not emitted directly into the atmosphere, but is formed by a complex series of chemical reactions between volatile organic compounds (VOC), NOx, and sunlight. Ozone is a regional pollutant that is generated over a large area and is transported and spread by the wind.	Ozone is a secondary pollutant; thus, it is not emitted directly into the lower level of the atmosphere. The primary sources of ozone precursors (VOC and NOx) are mobile sources (on-road and off-road vehicle exhaust).
Carbon Monoxide (CO)	1 Hour 8 Hour	20 ppm 9.0 ppm	35 ppm 9 ppm	(a) Aggravation of angina pectoris (chest pain) and other aspects of coronary heart disease; (b) Decreased exercise tolerance in persons with peripheral vascular disease and lung disease; (c) Impairment of central nervous system functions; (d) Possible increased risk to fetuses.	CO is a colorless, odorless, toxic gas. CO is somewhat soluble in water; therefore, rainfall and fog can suppress CO conditions. CO enters the body through the lungs, dissolves in the blood, replaces oxygen as an attachment to hemoglobin, and reduces available oxygen in the blood.	CO is produced by incomplete combustion of carbon-containing fuels (e.g., gasoline, diesel fuel, and biomass). Sources include motor vehicle exhaust, industrial processes (metals processing and chemical manufacturing), residential wood burning, and natural sources.

Air Pollutant	Averaging Time	CA Standard	National Standard	Most Relevant Effects from Pollutant Exposure	Properties	Sources
Nitrogen Dioxidec (NO2)	1 Hour	0.18 ppm	0.100 ppm	(a) Potential to aggravate chronic respiratory disease and respiratory symptoms in sensitive groups; (b) Risk to public health implied by pulmonary and extra-pulmonary biochemical and cellular changes and pulmonary structural changes; (c) Contribution to atmospheric discoloration.	During combustion of fossil fuels, oxygen reacts with nitrogen to produce nitrogen oxides-NOx (NO, NO2, NO3, N2O, N2O3, N2O4, and N2O5). NOx is a precursor to ozone, PM10, and PM2.5 formation. NOx can react with compounds to form nitric acid and related particles.	NOx is produced in motor vehicle internal combustion engines and fossil fuel-fired electric utility and industrial boilers. NO2 concentrations near major roads can be 30 to 100 percent higher than those at monitoring stations.
	Annual	0.030 ppm	0.053 ppm			
Sulfur Dioxide (SO2)	1 Hour	0.25 ppm	—	Bronchoconstriction accompanied by symptoms which may include wheezing, shortness of breath and chest tightness, during exercise or physical activity in persons with asthma. Some population-based studies indicate that the mortality and morbidity effects associated with fine particles show a similar association with ambient sulfur dioxide levels. It is not clear whether the two pollutants act synergistically or one pollutant alone is the predominant factor.	Sulfur dioxide is a colorless, pungent gas. At levels greater than 0.5 ppm, the gas has a strong odor, similar to rotten eggs. Sulfur oxides (SOx) include sulfur dioxide and sulfur trioxide. Sulfuric acid is formed from sulfur dioxide, which can lead to acid deposition and can harm natural resources and materials. Although sulfur dioxide concentrations have been reduced to levels well below State and national standards, further reductions are desirable because sulfur dioxide is a precursor to sulfate and PM10.	Human caused sources include fossil-fuel combustion, mineral ore processing, and chemical manufacturing. Volcanic emissions are a natural source of sulfur dioxide. The gas can also be produced in the air by dimethylsulfide and hydrogen sulfide. Sulfur dioxide is removed from the air by dissolution in water, chemical reactions, and transfer to soils and ice caps. The sulfur dioxide levels in the State are well below the maximum standards.
	3 Hour1	—	0.5 ppm			
	24 Hour	0.04 ppm	0.14 ppm			
	Annual	—	0.030 ppm			

Air Pollutant	Averaging Time	CA Standard	National Standard	Most Relevant Effects from Pollutant Exposure	Properties	Sources
Particulate Matter (PM10)	24 hour	50 µg/m3	150 µg/m3	(a) Exacerbation of symptoms in sensitive patients with respiratory or cardiovascular disease; (b) Declines in pulmonary function growth in children; (c) Increased risk of premature death from heart or lung diseases in the elderly. Daily fluctuations in PM2.5 levels have been related to hospital admissions for acute respiratory conditions, school absences, and increased medication use in children and adults with asthma.	Suspended particulate matter is a mixture of small particles that consist of dry solid fragments, droplets of water, or solid cores with liquid coatings. The particles vary in shape, size, and composition. PM10 refers to particulate matter that is 10 microns or less in diameter, (1 micron is one-millionth of a meter). PM2.5 refers to particulate matter that is 2.5 microns or less in diameter.	Stationary sources include fuel combustion for electrical utilities, residential space heating, and industrial processes; construction and demolition; metals, minerals, and petrochemicals; wood products processing; mills and elevators used in agriculture; erosion from tilled lands; waste disposal, and recycling. Mobile or transportation-related sources are from vehicle exhaust and road dust.
	Mean	20 µg/m3	—			
Particulate Matter (PM2.5)	24 Hour	—	35 µg/m3			
	Annual	12 µg/m3	15.0 µg/m3			
Sulfates	24 Hour	25 µg/m3	—	(a) Decrease in ventilatory function; (b) Aggravation of asthmatic symptoms; (c) Aggravation of cardio-pulmonary disease; (d) Vegetation damage; (e) Degradation of visibility; (f) Property damage.	The sulfate ion is a polyatomic anion with the empirical formula SO42−. Sulfates occur in combination with metal and/or hydrogen ions. Many sulfates are soluble in water.	Sulfates are particulates formed through the photochemical oxidation of sulfur dioxide. In California, the main source of sulfur compounds is combustion of gasoline and diesel fuel.
Lead b	30-day	1.5 µg/m3	—	Lead accumulates in bones, soft tissue, and blood and can affect the kidneys, liver, and nervous system. It can cause impairment of blood formation and nerve conduction. The more serious effects of lead poisoning include behavior disorders, mental retardation, neurological impairment, learning deficiencies, and low IQs. Lead may also	Lead is a solid heavy metal that can exist in air pollution as an aerosol particle component. An aerosol is a collection of solid, liquid, or mixed-phase particles suspended in the air. Lead was first regulated as an air pollutant in 1976. Leaded gasoline was first marketed in 1923 and was used in motor vehicles until around 1970.	Lead ore crushing, lead-ore smelting, and battery manufacturing are currently the largest sources of lead in the atmosphere in the United States. Other sources include dust from soils contaminated with lead-based paint, solid waste disposal, and crustal physical weathering. Lead can be removed from the
	Quarter	—	1.5 µg/m3			

Air Pollutant	Averaging Time	CA Standard	National Standard	Most Relevant Effects from Pollutant Exposure	Properties	Sources
	Rolling 3-month average	—	0.15 µg/m3	contribute to high blood pressure and heart disease.	Lead concentrations have not exceeded State or national air quality standards at any monitoring station since 1982.	atmosphere through deposition to soils, ice caps, oceans, and inhalation.
Vinyl Chloride b	24 Hour	0.01 ppm	—	Short-term exposure to high levels of vinyl chloride in the air causes central nervous system effects, such as dizziness, drowsiness, and headaches. Epidemiological studies of occupationally exposed workers have linked vinyl chloride exposure to development of a rare cancer, liver angiosarcoma, and have suggested a relationship between exposure and lung and brain cancers.	Vinyl chloride, or chloroethene, is a chlorinated hydrocarbon and a colorless gas with a mild, sweet odor. In 1990, ARB identified vinyl chloride as a toxic air contaminant and estimated a cancer unit risk factor.	Most vinyl chloride is used to make polyvinyl chloride plastic and vinyl products, including pipes, wire and cable coatings, and packaging materials. It can be formed when plastics containing these substances are left to decompose in solid waste landfills. Vinyl chloride has been detected near landfills, sewage plants, and hazardous waste sites.
Hydrogen Sulfide	1 Hour	0.03 ppm	—	High levels of hydrogen sulfide can cause immediate respiratory arrest. It can irritate the eyes and respiratory tract and cause headache, nausea, vomiting, and cough. Long exposure can cause pulmonary edema.	Hydrogen sulfide (H2S) is a flammable, colorless, poisonous gas that smells like rotten eggs.	Manure, storage tanks, ponds, anaerobic lagoons, and land application sites are the primary sources of hydrogen sulfide. Anthropogenic sources include the combustion of sulfur containing fuels (oil and coal).

Air Pollutant	Averaging Time	CA Standard	National Standard	Most Relevant Effects from Pollutant Exposure	Properties	Sources
Volatile Organic Compounds (VOC)		There are no State or national ambient air quality standards for VOCs because they are not classified as criteria pollutants.		Although health-based standards have not been established for VOCs, health effects can occur from exposures to high concentrations because of interference with oxygen uptake. In general, concentrations of VOCs are suspected to cause eye, nose, and throat irritation; headaches; loss of coordination; nausea; and damage to the liver, the kidneys, and the central nervous system. Many VOCs have been classified as toxic air contaminants.	Reactive organic gases (ROGs), or VOCs, are defined as any compound of carbon—excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate—that participates in atmospheric photochemical reactions. Although there are slight differences in the definition of ROGs and VOCs, the two terms are often used interchangeably.	Indoor sources of VOCs include paints, solvents, aerosol sprays, cleansers, tobacco smoke, etc. Outdoor sources of VOCs are from combustion and fuel evaporation. A reduction in VOC emissions reduces certain chemical reactions that contribute to the formulation of ozone. VOCs are transformed into organic aerosols in the atmosphere, which contribute to higher PM10 and lower visibility.

Source of effects: South Coast Air Quality Management District, Final 2007 Air Quality Management Plan, www.aqmd.gov/aqmp/07aqmp/index.html, (2007) Accessed November 3, 2013 (SCAQMD 2007b); California Environmental Protection Agency, Office of Environmental Health Hazard Assessment, Health Effects of Diesel Exhaust, (2002) Accessed November 3, 2013. http://oehha.ca.gov/public_info/facts/dieselfacts.html (OEHAA 2002) California Air Resources Board, Vinyl Chloride, www.arb.ca.gov/research/aaqs/caaqs/vc/vc.htm. (Page updated 2009) Accessed FEBRUAYR 25, 2013 (CARB 2009b); US EPA, Technology Transfer Network, Air Toxics Website, Health Effects Notebook for Hazardous Air Pollutants. www.epa.gov/ttn/atw/hlthef/hapindex.html, (Last updated April 5, 2010) Accessed November 3, 2013 (US EPA 2007); US EPA, Technology Transfer Network, Air Toxics Website, Benzene, www.epa.gov/ttn/atw/hlthef/benzene.html, (Revised in 2000) Accessed November 3, 2013 (US EPA 2000).

Source of standards: CARB, California Greenhouse Gas Inventory for 2000-2009-by Category as Defined in the Scoping Plan, http://www.arb.ca.gov/cc/inventory/data/tables/ghg_inventory_scopingplan_00-08_2010-05-12.pdf, (October 26, 2011) Accessed November 3, 2013 (CARB 2010).

Source of properties and sources: US EPA. Office of Air and Radiation, Nitrogen Oxides: Impact on Public Health and the Environment, www.epa.gov/ttn/oarpg/t1/reports/noxrept.pdf, (2007) Accessed January 20, 2010 (US EPA 1997); US EPA, Ozone and your Health, EPA-452/F-99-003. www.epa.gov/air/ozonepollution/pdfs/health.pdf, (1999) Accessed January 20, 2010 (US EPA 1999); US EPA, A Comprehensive Analysis of Biodiesel Impacts on Exhaust Emissions, EPA420-P-02-001, October 2002, (US EPA 2002); US EPA, Particle Pollution and your Health, EPA-452/F-03-001, http://epa.gov/pm/pdfs/pm-color.pdf, (September 2003), Accessed November 3, 2013, (US EPA 2003a); US EPA, Health and Environmental Impacts of CO, http://www.epa.gov/airquality/carbonmonoxide/health.html, Accessed November 3, 2013, (US EPA 2008); US EPA, Fact Sheet, Proposed Revisions to the National Ambient Air Quality Standards for Nitrogen Dioxide, (July 22, 2009), www.epa.gov/air/nitrogenoxides/pdfs/20090722fs.pdf, Accessed November 3, 2013 (US EPA 2009d).

Abbreviations:

ppm = parts per million (concentration); µg/m3 = micrograms per cubic meter; Annual = Annual Arithmetic Mean; 30-day = 30-day average; Quarter = Calendar quarter.

a - *National standard refers to the primary national ambient air quality standard, or the levels of air quality necessary, with an adequate margin of safety to protect the public health. All standards listed are primary standards except for 3 Hour SO2, which is a secondary standard. A secondary standard is the level of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.*

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

c - *EPA established a new 1-hour nitrogen dioxide standard of 100 ppb or 188 ug/m3, which became effective April 12, 2010. In addition to establishing an averaging time and level, EPA also is setting a new "form" for the standard. The form is the air quality statistic used to determine if an area meets the standard. The form for the 1-hour nitrogen dioxide standard is the 3-year average of the 98th percentile of the annual distribution of daily maximum 1-hour average concentrations. This suite of standards will protect public health by limiting exposures to short-term peak concentrations of nitrogen dioxide – which primarily occur near major roads – and by limiting community-wide nitrogen dioxide concentrations to levels below those that have been linked to respiratory-related emergency department visits and hospital admissions in the United States.*

The 1990 amendments to the CAA identify specific emission reduction goals for areas not meeting the NAAQS. These amendments require both a demonstration of reasonable further progress toward attainment and incorporation of additional sanctions for failure to attain or to meet interim milestones. The sections of the CAA which are most applicable to the Project include Title I, Nonattainment Provisions, and Title II, Mobile Source Provisions.

The NAAQS were also amended in July 1997 to include an 8-hour standard for ozone and to adopt a NAAQS for PM2.5. The NAAQS were amended in September 2006 to include an established methodology for calculating PM2.5, as well as revoking the annual PM10 threshold. The CAA includes the following deadlines for meeting the NAAQS within the South Coast Air Basin: (1) PM2.5 by the year 2014 and (2) 8-hour ozone by the year 2023. Although the deadline for federal one hour ozone standard has passed, the South Coast Air Basin has yet to attain those standards, but is continuing to implement the 2007 AQMP to attain these standards as soon as possible.

State

The California Clean Air Act, signed into law in 1988, requires all areas of the state to achieve and maintain the California Ambient Air Quality Standards (CAAQS) by the earliest practicable date. The California Air Resources Board (CARB), 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 CARB conducts research, sets state ambient air quality standards, compiles emission inventories, develops suggested control measures, and provides oversight of local programs. The CARB establishes emissions standards for motor vehicles sold in California, consumer products, and various types of commercial equipment. It also sets fuel specifications to further reduce vehicular emissions. **Table 4.2-5** includes the CAAQS currently in effect for each of the criteria pollutants as well as other pollutants recognized by the State. As shown in **Table 4.2-5** above, the CAAQS include more stringent standards than the NAAQS.

Local

The SCAQMD shares responsibility with CARB for ensuring that all state and federal ambient air quality standards are achieved and maintained over an area of approximately 10,743 square miles. This area includes all of Orange County and Los Angeles County except for the Antelope Valley, the non-desert portion of western San Bernardino County, and the western and Coachella Valley portions of Riverside County.

The Project lies within the jurisdiction of the SCAQMD and compliance with SCAQMD rules and guidelines is required. SCAQMD is responsible for controlling emissions primarily from stationary

sources. SCAQMD maintains air quality monitoring stations throughout the South Coast Air Basin. SCAQMD, in coordination with the Southern California Association of Governments, is also responsible for developing, updating, and implementing the Air Quality Management Plan (AQMP) for the South Coast Air Basin. An AQMP is a plan prepared and implemented by an air pollution district for a county or region designated as "nonattainment" of the national and/or California ambient air quality standards. The term "nonattainment area" is used to refer to an air basin in which one or more ambient air quality standards are exceeded.

The purpose of the 2003 AQMP is to lead the South Coast Air Basin and portions of the Salton Sea Air Basin under SCAQMD jurisdiction into compliance with the 1-hour ozone and PM10 national standards.[10] The goal of the 2007 AQMP is to lead the South Coast Air Basin into compliance with the national 8-hour ozone and PM2.5 standards.

The 2003 AQMP also replaced the 1997 attainment demonstration for the federal CO standard and provided a basis for a maintenance plan for CO for the future, and updated the maintenance plan for the federal nitrogen dioxide standard that the South Coast Air Basin has met since 1992.[11] A subsequent AQMP for the basin was adopted by the SCAQMD on June 1, 2007.[12] The 2007 AQMP outlined a detailed strategy for meeting the national health-based standards for PM2.5 by 2015 and 8-hour ozone by 2024 while accounting for and accommodating future expected growth. The 2007 AQMP incorporated significant new emissions inventories, ambient measurements, scientific data, control strategies, and air quality modeling. Most of the reductions were to be from mobile sources, which are currently responsible for about 75 percent of all smog and particulate forming emissions.

The SCAQMD approved the 2012 AQMP on December 7, 2012. The 2012 AQMP incorporates the latest scientific and technological information and planning assumptions, including the 2012 Regional Transportation Plan/Sustainable Communities Strategy and updated emission inventory methodologies for various source categories. The 2012 AQMP outlines a comprehensive control strategy that meets the requirement for expeditious progress towards attainment with the 24-hour PM2.5 federal ambient air quality standard with all feasible control measures and demonstrates attainment of the standard by 2014. The 2012 AQMP is also an update to the 8-hour ozone control plan with new emission reduction commitments from a set of new control measures, which implement the 2007 AQMP's Section 182 (e)(5) commitments.

10 South Coast Air Quality Management District (SCAQMD), Air Quality Management Plan, www.aqmd.gov/aqmp/AQMD03AQMP.htm, (2003), accessed November 3, 2013.

11 SCAQMD. 2013. Page 1-1.

12 SCAQMD, Final 2007 Air Quality Management Plan, www.aqmd.gov/aqmp/07aqmp/index.html, (2007), accessed November 3, 2013.

The SCAQMD is responsible for limiting the amount of emissions that can be generated throughout the basin by various stationary, area and mobile sources. Specific rules and regulations have been adopted by the SCAQMD Governing Board, which limit the emissions that can be generated by various uses/activities and that identify specific pollution reduction measures, which must be implemented in association with various uses and activities. These rules not only regulate the emissions of the federal and state criteria pollutants but also toxic air contaminants (TACs) and acutely hazardous materials. The rules are also subject to ongoing refinement by SCAQMD.

Among the SCAQMD rules applicable to the Project are Rule 403 (Fugitive Dust), Rule 1113 (Architectural Coatings), and Rule 1403 (Asbestos Emissions from Demolition/Renovation Activities). Rule 403 requires the use of stringent best available control measures to minimize PM10 emissions during grading and construction activities. Rule 1113 will require reductions in the VOC content of coatings, with a substantial reduction in the VOC content limit for flat coatings in July 2008. Compliance with SCAQMD Rule 1403 requires that the owner or operator of any demolition or renovation activity to have an asbestos survey performed prior to demolition and provide notification to the SCAQMD prior to commencing demolition activities. Additional details regarding these rules and other potentially applicable rules are presented below.

Rule 403 (Fugitive Dust). This rule requires fugitive dust sources to implement Best Available Control Measures for all sources and all forms of visible particulate matter are prohibited from crossing any property line. SCAQMD Rule 403 is intended to reduce PM10 emissions from any transportation, handling, construction, or storage activity that has the potential to generate fugitive dust (see also Rule 1186).

Rule 1113 (Architectural Coatings). This rule requires manufacturers, distributors, and end users of architectural and industrial maintenance coatings to reduce VOC emissions from the use of these coatings, primarily by placing limits on the VOC content of various coating categories.

Rule 1121 (Control of Nitrogen Oxides from Residential Type, Natural Gas-Fired Water Heaters). This rule prescribes NOX emission limits for natural gas-fired water heaters with heat input rates less than 75,000 Btu per hour. It applies to manufacturers, distributors, retailers, and installers of natural gas-fired water heaters. In lieu of meeting these NOX limits, this rule allows emission mitigation fees to be collected from water heater manufacturers to fund stationary and mobile source emission reduction projects targeted at offsetting NOX emissions from water heaters that do not meet Rule 1121 emission standards.

Rule 1146.2 (Emissions of Oxides of Nitrogen from Large Water Heaters and Small Boilers and Process Heaters). This rule requires manufacturers, distributors, retailers, refurbishers, installers and operators of new and existing units to reduce NOX emissions from natural gas-fired water heaters, boilers, and process heaters as defined in this rule.

Rule 1186 (PM10 Emissions from Paved and Unpaved Roads, and Livestock Operations). This rule applies to owners and operators of paved and unpaved roads and livestock operations. The rule is intended to reduce PM10 emissions by requiring the cleanup of material deposited onto paved roads, use of certified street sweeping equipment, and treatment of high-use unpaved roads (see also Rule 403).

Stationary emissions sources subject to these rules are regulated through SCAQMD's permitting process. Through this permitting process, SCAQMD also monitors the amount of stationary emissions being generated and uses this information in developing AQMPs. The Project would be subject to SCAQMD rules and regulations to reduce specific emissions and to mitigate potential air quality impacts.

Greenhouse Gases

Federal

On April 17, 2009, the US EPA released a proposed finding that determined climate change poses a risk to public health. The US EPA held a 60-day public comment period, which ended June 23, 2009, and received over 380,000 public comments. On December 7, 2009, the US EPA Administrator signed two distinct findings regarding GHGs under Section 202(a) of the CAA:

- Endangerment Finding: The Administrator finds that the current and projected concentrations of the six key well-mixed greenhouse gases—carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF_6)—in the atmosphere threaten the public health and welfare of current and future generations.

- Cause or Contribute Finding: The Administrator finds that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the GHG pollution, which threatens public health and welfare.

These findings do not themselves impose any requirements on industry or other entities. However, this action is a prerequisite to finalizing the proposed US EPA GHG standards for light-duty vehicles. These standards were jointly proposed by US EPA and the Department of Transportation's National Highway Safety Administration (NHTSA) on September 15, 2009. The two findings were published in the Federal Register Docket ID No. EPA-HQ-OAR-2009-0171. The final rule was effective January 14, 2010.

The US EPA has issued the Final Mandatory Reporting of Greenhouse Gases Rule that requires reporting of GHG emissions from large sources and suppliers in the United States. Under the rule (effective December 29, 2009), suppliers of fossil fuels or industrial GHGs, manufacturers of vehicles and engines, and facilities that emit 25,000 metric tons or more per year of GHG emissions are required to submit annual reports to US EPA. The gases covered by the proposed rule are CO_2, CH_4, N_2O, HFC, PFC, SF_6, and other fluorinated gases including nitrogen trifluoride (NF_3) and hydrofluorinated ethers (HFE).

On September 15, 2009, US EPA and the NHTSA proposed a new national program to reduce greenhouse gas emissions and improve fuel economy for all new cars and trucks sold in the United States. The US EPA proposed the first-ever national GHG emissions standards under the CAA, and NHTSA proposed Corporate Average Fuel Economy (CAFE) standards under the Energy Policy and Conservation Act. This proposed national program would allow automobile manufacturers to build a single light-duty national fleet that satisfies all requirements under both federal programs and the standards of California and other states.

State

Significant legislative and regulatory activities that affect climate change and greenhouse gas emissions in California that relate to the Project are discussed below.

AB 1493. California Assembly Bill 1493 (Pavley), enacted on July 22, 2002, required the CARB to develop and adopt regulations that reduce GHGs emitted by passenger vehicles and light duty trucks. Regulations adopted by the CARB apply to 2009 and later model year vehicles. The CARB estimates that the regulation would reduce climate change emissions from the light-duty passenger vehicle fleet by an estimated 18 percent in 2020 and by 27 percent in 2030.[13] On June 30, 2009, the US EPA granted a waiver of CAA preemption to California for the State's GHG emission standards for motor vehicles beginning with the 2009 model year. The waiver was published in the Federal Register on July 8, 2009.

Executive Order S-3-05. Former California Governor Arnold Schwarzenegger announced on June 1, 2005, through Executive Order S-3-05,[14] the following reduction targets for GHG emissions:

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

13 CARB, Fact Sheet, Climate Change Emission Control Regulations, (December 10, 2004).

14 State of California, Executive Order S-3-05, http://www.dot.ca.gov/hq/energy/ExecOrderS-3-05.htm, (June 1, 2005) accessed November 3, 2013

The 2050 reduction goal represents what scientists believe is necessary to reach levels that will stabilize the climate. The 2020 goal was established to be an aggressive, but achievable, mid-term target. To meet these targets, the Governor directed the Secretary of the California EPA to lead a Climate Action Team made up of representatives from the Business, Transportation, and Housing Agency; the Department of Food and Agriculture; the Resources Agency; the CARB; the Energy Commission; and the Public Utilities Commission. The Climate Action Team's Report to the Governor in 2006 contains recommendations and strategies to help ensure that the targets in Executive Order S-3-05 are met.[15]

Executive Order S-01-07. The former Governor signed Executive Order S-01-07 on January 18, 2007. The order mandated that a statewide goal be established to reduce the carbon intensity of California's transportation fuels by at least 10 percent by 2020. It also established a Low Carbon Fuel Standard for transportation fuels for California.

SB 1368. In 2006, the State Legislature adopted Senate Bill 1368, which was subsequently signed into law by the Governor. SB 1368 directs the California Public Utilities Commission to adopt a performance standard for GHG emissions for the future power purchases of California utilities. In an effort to limit carbon emissions associated with electrical energy consumed in California, this bill prohibits purchase arrangements for energy or periods of longer than 5 years from resources that exceed the emissions of a relatively clean, combined cycle natural gas power plant. A coal-fired plant cannot meet this standard because such plants emit roughly twice as much carbon as natural gas, combined cycle plants. Accordingly, the new law will effectively prevent California's utilities from investing in, otherwise financially supporting, or purchasing power from new coal plants located in or out of the State. Thus, SB 1368 will lead to lower GHG emissions associated with California's energy demand, by effectively prohibiting California utilities from purchasing power from out-of-state producers that cannot satisfy the required performance standard for GHG emissions.

SB 97. SB 97 was passed in August 2007, and added Section 21083.05 to the Public Resources Code. Section 21083.05. It states:

> "(a) On or before July 1, 2009, the Office of Planning and Research (OPR) shall prepare, develop, and transmit to the Resources Agency guidelines for the mitigation of GHG emissions or the effects of GHG emissions as required by this division, including, but not limited to, effects associated with transportation or energy consumption. (b) On or before January 1, 2010, the Resources Agency shall certify and adopt guidelines prepared and developed by the OPR pursuant to subdivision (a)".

15 State of California, Environmental Protection Agency, Climate Action Team, Climate Action Team Report to Governor Schwarzenegger and the California Legislature, www.climatechange.ca.gov/climate_action_team /reports/index.html, (March 2006), accessed November 3, 2013

CEQA Amendments. As required by SB 97, the Governor's Office of Planning and Research prepared and transmitted recommended Amendments to the State *CEQA Guidelines* for GHG emissions to the California Natural Resources Agency on April 13, 2009. The Office of Administrative Law reviewed the Adopted Amendments and the Natural Resources Agency's rulemaking file. The Adopted Amendments were filed with the Secretary of State, and became effective March 18, 2010.

The CEQA Amendments provide guidance to public agencies regarding the analysis and mitigation of the effects of GHG emissions in CEQA documents. The CEQA Amendments fit within the existing CEQA framework by amending existing State *CEQA Guidelines* to reference climate change.

A new section, State *CEQA Guidelines* Section 15064.4, was added to assist agencies in determining the significance of GHG emissions. The new section allows agencies the discretion to determine whether a quantitative or qualitative analysis is best for a particular project. This section does not provide guidance to public agencies on how to determine whether the project's estimated GHG emissions are significant or cumulatively considerable.

Also amended were State *CEQA Guidelines* Sections 15126.4 and 15130, which address mitigation measures and cumulative impacts, respectively. GHG mitigation measures are referenced in general terms, but no specific measures are identified or required. The revision to the cumulative impact guideline directs public agencies to analyze GHG emissions in an EIR when the incremental contribution of emissions from a project being reviewed may be cumulatively considerable. However, the determination of when emissions are cumulatively considerable is left to the discretion of the public agency reviewing a proposed project.

The Amendments also added Section 15183.5, which permits programmatic GHG analysis and allows for project-specific analysis to tier off this program level analysis, and the preparation of GHG reduction plans for a city or county. Compliance with a GHG reduction plan can then be used to support a determination that an individual project's contribution to GHG impacts is not cumulatively considerable.

In addition, the Amendments revised Appendix F of the State *CEQA Guidelines*, which focuses on Energy Conservation, and Appendix G, which includes the sample Environmental Checklist Form.

AB 32. In 2006, the California State Legislature enacted AB 32, the California Global Warming Solutions Act of 2006. AB 32 focuses on reducing GHG emissions in California. GHGs, as defined under AB 32, include CO_2, methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. AB 32 requires that GHGs emitted in California be reduced to 1990 levels by the year 2020. CARB is the state agency charged with monitoring and regulating sources of emissions of GHGs that cause global warming in order to reduce emissions of GHGs.

The CARB Governing Board approved the 1990 GHG emissions level of 427 million metric tons of carbon dioxide equivalents ($MMTCO_2E$) on December 6, 2007. Therefore, in 2020, emissions in California are required to be at or below 427 $MMTCO_2E$.

Under the current "business as usual" scenario, statewide emissions are increasing at a rate of approximately 1 percent per year as noted below.

- 1990: 427 $MMTCO_2E$
- 2004: 480 $MMTCO_2E$
- 2008: 495 $MMTCO_2E$
- 2020: 596 $MMTCO_2$

Under AB 32, the CARB published its Final Expanded List of Early Action Measures to Reduce Greenhouse Gas Emissions in California.[16] The CARB has 44 early action measures that apply to the transportation, commercial, forestry, agriculture, cement, oil and gas, fire suppression, fuels, education, energy efficiency, electricity, and waste sectors. Of those early action measures, nine are considered discrete early action measures[17], as they were adopted by CARB and enforceable by January 1, 2010. The CARB estimates that the 44 early action measures will result in reductions of at least 42 $MMTCO_2E$ by 2020, representing approximately 25 percent of the 2020 target.

CEQA is only mentioned once in the Early Action Measures report. The California Air Pollution Control Officer's Association suggested that CARB work with local air districts on approaches to review GHG impacts under the CEQA process, including significance thresholds for GHGs for projects and to develop a process for capturing reductions that result from CEQA mitigations. CARB's response to this recommendation in the report is as follows:

> "the Governor's Office of Planning and Research is charged with providing statewide guidance on CEQA implementation. With respect to quantifying any reductions that result from project-level mitigation of GHG emissions, we would like to see air districts take a lead role in tracking such reductions in their regions."[18]

16 CARB, Expanded List of Early Action Measures to Reduce Greenhouse Gas Emissions in California Recommended for Board Consideration, www.arb.ca.gov/cc/ejac/ghg_eamcommitteelist.pdf, (October 2007), accessed November 3, 2013

17 Discrete early actions are regulations to reduce greenhouse gas emissions adopted by the CARB Governing Board and enforceable by January 1, 2010.

18 CARB. October 2007.

The CARB approved the Climate Change Proposed Scoping Plan (Scoping Plan) in December 2008. The Scoping Plan:

> "proposes a comprehensive set of actions designed to reduce overall GHG emissions in California, improve our environment, reduce our dependence on oil, diversify our energy sources, save energy, create new jobs, and enhance public health."[19]

As noted in the Scoping Plan, the projected total business-as-usual emissions for year 2020 (estimated as 506.8 $MMTCO_2E$) must be reduced by approximately 16 percent to achieve the CARB's approved 2020 emission target of 427 $MMTCO_2E$. The Scoping Plan identifies recommended measures for multiple GHG emission sectors and the associated emission reductions needed to achieve the year 2020 emissions target—each sector has a different emission reduction target. Most of the measures target the transportation and electricity sectors. As stated in the Scoping Plan, the key elements of the strategy for achieving the 2020 GHG target include:

- Expanding and strengthening existing energy efficiency programs as well as building and appliance standards
- Achieving a statewide renewable energy mix of 33 percent
- Developing a California cap-and-trade program that links with other Western Climate Initiative partner programs to create a regional market system
- Establishing targets for transportation-related GHG emissions for regions throughout California and pursuing policies and incentives to achieve those targets
- Adopting and implementing measures pursuant to existing State laws and policies, including California's clean car standards, goods movement measures, and the Low Carbon Fuel Standard
- Creating targeted fees, including a public goods charge on water use, fees on high global warming potential gases, and a fee to fund the administrative costs of the State's long-term commitment to AB 32 implementation

In addition, the Scoping Plan differentiates between "capped" and "uncapped" strategies. "Capped" strategies are subject to the proposed cap-and-trade program.[20] The Scoping Plan states that the inclusion of these emissions within the cap-and trade program will help ensure that the year 2020

19 CARB, Climate Change Scoping Plan, a framework for change as approved December 2008. http://www.arb.ca.gov/cc/scopingplan/document/adopted_scoping_plan.pdf. (December 2008), accessed November 3, 2013

20 The cap-and-trade program is a central element of AB 32 and covers major sources of GHG emissions in the State such as refineries, power plants, industrial facilities, and transportation fuels. The regulation includes an enforceable GHG cap that will decline over time. CARB will distribute allowances, which are tradable permits, equal to the emission allowed under the cap.

emission targets are met despite some degree of uncertainty in the emission reduction estimates for any individual measure. "Uncapped" strategies include additional reductions that will not be subject to the cap-and-trade emissions requirements. They are provided as a margin of safety to help achieve required GHG emission reductions.

SB 375. SB 375 was signed into law by the Governor on September 30, 2008. According to SB 375, the transportation sector is the largest contributor of GHG emissions, which contributes to 40 percent of the total GHG emissions in California. Automobiles and light trucks alone contribute almost 30 percent. SB 375 indicates that GHGs from automobiles and light trucks can be reduced by new vehicle technology but significant reductions from changed land use patterns and improved transportation are necessary. SB 375 states, "Without improved land use and transportation policy, California will not be able to achieve the goals of AB 32". SB 375 does the following: (1) it requires metropolitan planning organizations to include sustainable community strategies in their regional transportation plans for reducing GHG emissions, (2) it aligns planning for transportation and housing, and (3) it creates specified incentives for the implementation of the strategies.

Non Legislative

CAPCOA. On January 8, 2008, the California Air Pollution Control Officers Association (CAPCOA) released a paper to provide a common platform of information and tools for public agencies. The disclaimer states that it is not a guidance document, but rather a resource to enable local decision makers to make the best decisions they can in the face of incomplete information during a period of change. The paper indicates that it is an interim resource and does not endorse any particular approach. It discusses three groups of potential thresholds, including a no significance threshold, a threshold of zero emissions, and a non-zero threshold.[21] The non-zero quantitative thresholds as identified in the paper range from 900 to 50,000 metric tons of CO_2 per year. The CAPCOA paper also identified non-zero qualitative thresholds.[22]

Attorney General. The Office of the California Attorney General maintains a list of CEQA Mitigations for Global Warming Impacts on its website. The Attorney General's Office has listed some examples of types of mitigations that local agencies may consider to offset or reduce global warming impacts from a project. The Attorney General's Office states that the lists are examples and not intended to be exhaustive, but instead are provided as measures and policies that could be undertaken. Moreover, the

21 California Air Pollution Control Officers Association, CEQA & Climate Change, Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act, www.capcoa.org/, (January 2008), accessed November 3, 2013.

22 A non-zero threshold could minimize the resources spent reviewing environmental analyses that do not result in real GHG reductions or to prevent the environmental review system from being overwhelmed.

measures cited may not be appropriate for every project, so the Attorney General suggests that the lead agency should use its own informed judgment in deciding which measures it would analyze, and which measures it would require, for a given project. The mitigation measures are divided into two groups: generally applicable measures and general plan measures. The Attorney General presents "generally applicable" measures in the following areas:

- Energy efficiency
- Renewable energy
- Water conservation and efficiency
- Solid waste measures
- Land use measures
- Transportation and motor vehicles
- Carbon offsets

South Coast Air Quality Management District

In April 2008, the South Coast Air Quality Management District (SCAQMD) convened a "GHG CEQA Significance Threshold Working Group" in order to provide guidance to local lead agencies on determining the significance of GHG emissions identified in CEQA documents.[23] The goal of the working group is to develop and reach consensus on an acceptable CEQA significance threshold for GHG emissions that would be utilized on an interim basis until CARB (or some other State agency) develops Statewide guidance on assessing the significance of GHG emissions under CEQA.

Initially, SCAQMD staff presented the working group with a significance threshold that could be applied to various types of projects – residential; non-residential; industrial; etc. In December 2008, staff presented the SCAQMD Governing Board with a significance threshold for stationary source projects where it is the lead agency. This threshold uses a tiered approach to determine a project's significance, with 10,000 metric tons of carbon dioxide equivalent (MTCO2e) as a screening numerical threshold.

At the present time, the SCAQMD has not adopted thresholds for projects such as the one analyzed in this Draft EIR. The SCAQMD has considered a tiered approach to determine the significance of

23 For more information see: http://www.aqmd.gov/ceqa/handbook/GHG/GHG.html.

residential and commercial projects. The draft approach that was published in October 2008 is as follows:[24]

- Tier 1: Is the project exempt from further analysis under existing statutory or categorical exemptions? If yes, there is a presumption of less than significant impacts with respect to climate change.

- Tier 2: Are the project's GHG emissions within the GHG budgets in an approved regional plan? (The plan must be consistent with State *CEQA Guidelines* Sections 15064(h)(3), 15125(d), or 15152(s).) If yes, there is a presumption of less than significant impacts with respect to climate change.

- Tier 3: Is the project's incremental increase in GHG emissions below or mitigated to less than the significance screening level (10,000 MTCO2e per year for industrial projects and 3,000 MTCO2e for commercial/residential projects) and is the project X percent beyond the Title 24 standard and achieve Y percent reduction in water use (the X and Y values were not determined at the time the draft approach was published)? If yes, there is a presumption of less than significant impacts with respect to climate change.

- Tier 4: Does the project meet one of the following performance standards (the performance standards were not well defined at the time the draft approach was published)? If yes, there is a presumption of less than significant impacts with respect to climate change.

  Option #1: Uniform Percent Emission Reduction Target Objective (e.g., 30 percent) from BAU by incorporating project design features and/or implementing emission reduction measures.

  Option #2: Early Implementation of Applicable AB32 Scoping Plan Measures.

  Option #3: Achieve sector-based standard (e.g., pounds per person, pounds per square foot etc.).

- Tier 5: Does the project obtain offsets alone or in combination with the above to achieve the target significance screening level (offsets provided for 30-year project life, unless project life limited by permit, lease, or other legally binding conditions)? If yes, there is a presumption of less than significant impacts with respect to climate change. Otherwise, the project's impact is significant.

24 South Coast Air Quality Management District, "Greenhouse Gases (GHG) CEQA Significance Thresholds Working Group Meeting #15," http://www.aqmd.gov/ceqa/handbook/GHG/2010/sept28mtg/sept29.html. 2010.

In November 2009, the following revisions were proposed for Tiers 3 and 4:[25]

- Tier 3: Is the project's incremental increase in GHG emissions below or mitigated to less than the significance screening level (10,000 MTCO2e per year for industrial projects; 3,500 MTCO2e for residential projects; 1,400 MTCO2e for commercial projects; 3,000 MTCO2e for mixed-use or all land use projects)? If yes, there is a presumption of less than significant impacts with respect to climate change.

- Tier 4: Does the project meet one of the following performance standards? If yes, there is a presumption of less than significant impacts with respect to climate change.

  Option #1: Achieve a 28 percent reduction from a base case scenario, including land use sector reductions from AB 32 (total emissions not to exceed 25,000 MTCO2e).

  Option #2: Achieve a project-level efficiency target of 4.6 MTCO2e per service population (total emissions not to exceed 25,000 MTCO2e) or plan-level efficiency target of 6.6 MTCO2e.

The SCAQMD has not announced when they expect to present a finalized version of these thresholds to the Governing Board. The SCAQMD also has adopted Rules 2700, 2701, and 2702 that address GHG reductions. These rules apply to boilers and process heaters, forestry, and manure management projects.

ENVIRONMENTAL IMPACTS

Methodology

Air Quality

Short-term emissions of criteria air pollutants (e.g., CO, SO_x, PM10 and PM2.5) generated by project construction and ozone precursors (e.g., ROG and NO_x) were assessed in accordance with SCAQMD-recommended methods. Where quantification was required, these emissions were modeled using the CARB-approved California Emissions Estimator Model 2013.2.2 (CalEEMod) computer program as recommended by the SCAQMD. CalEEMod is designed to model construction emissions for land use development projects and allows for the input of project specific information. Project-generated emissions were modeled based on general information provided in the proposed project description and SCAQMD-recommended and default CalEEMod model settings to estimate reasonable worst-case conditions. Emission modeling assumes construction to begin in late spring of 2014.

25 South Coast Air Quality Management District, "Greenhouse Gases (GHG) CEQA Significance Thresholds Working Group Meeting #14," http://www.aqmd.gov/ceqa/handbook/GHG/2009/nov19mtg/nov19.html. 2009.

Project-generated, regional area-and mobile-source emissions of criteria air pollutants and ozone precursors were also modeled using the CalEEMod computer program. CalEEMod allows land use selections that include project location specifics and trip generation rates. CalEEMod accounts for area-source emissions from the use of natural gas, landscape maintenance equipment, and consumer products and from mobile-source emissions associated with vehicle trip generation. Project-generated emissions were modeled based on proposed land uses and general information provided in the project description.

Other air quality impacts (i.e., CO, TACs, and odors) were assessed in accordance with methodologies recommended by SCAQMD.

Greenhouse Gases

GHG emissions were modeled using the CalEEMod computer program and emission factors from CCAR, as recommended by SCAQMD, which estimates construction and operations emissions of carbon dioxide, among other air pollutants. Project-generated emissions were modeled based on general information provided in the Project description.

Thresholds of Significance

Air Quality

In order to assist in determining whether a project would have a significant effect on the environment, the City finds a project may be deemed to have a significant air quality impact if it would:

- Conflict with or obstruct the implementation of the applicable air quality plan?
- violate any air quality standard or contribute substantially to an existing or projected air quality violation?
- result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors)?
- expose sensitive receptors to substantial pollutant concentrations?
- create objectionable odors affecting a substantial number of people?

Under CEQA, the SCAQMD is an expert commenting agency on air quality within its jurisdiction or impacting its jurisdiction. Under the Federal CAA, the SCAQMD has adopted federal attainment plans for O_3 and PM10. The SCAQMD reviews projects to ensure that they would not: (1) cause or contribute to any new violation of any air quality standard; (2) increase the frequency or severity of any existing

violation of any air quality standard; or (3) delay timely attainment of any air quality standard or any required interim emission reductions or other milestones of any federal attainment plan.

Construction and Operational Thresholds

The CEQA Air Quality Handbook provides significance thresholds for both construction and operation of projects within the SCAQMD jurisdictional boundaries. If the SCAQMD thresholds are exceeded, a potentially significant impact could result. However, ultimately the lead agency determines the thresholds of significance for impacts. If a project proposes development in excess of the established thresholds, as outlined in **Table 4.2-6, South Coast Air Quality Management District Emissions Thresholds**, a significant air quality impact may occur and additional analysis is warranted to fully assess the significance of impacts.

Table 4.2-6
South Coast Air Quality Management District Emissions Thresholds (pounds/day)

Pollutant	Construction	Operational
Nitrogen Dioxide (NOx)	100	55
Reactive Organic Gases (ROG)	75	55
Carbon Monoxide (CO)	550	550
Sulfur Dioxide (SOx)	150	150
Respirable Particulate Matter (PM10)	150	150
Fine Particulate Matter (PM2.5)	55	55

Source: SCAQMD, CEQA Air Quality Handbook, November 1993

Local Carbon Monoxide Thresholds

The significance of localized project impacts depends on whether ambient CO levels in the vicinity of the proposed project are above or below state and federal CO standards. If the project causes an exceedance of either the state one-hour or eight-hour CO concentrations, the project would be considered to have a significant local impact. If ambient levels already exceed a state or federal standard, then project emissions are considered significant if they increase one-hour CO concentrations by 1.0 ppm or more, or eight hour CO concentrations by 0.45 ppm or more pursuant to SCAQMD Rule 1303(b).

Localized Significance Thresholds

The SCAQMD recommends the evaluation of localized air quality impacts to sensitive receptors in the immediate vicinity of the Project site as a result of construction activities. This evaluation requires that anticipated ambient air concentrations, determined using a computer-based air quality dispersion model, be compared to localized significance thresholds for PM10, PM2.5, NO2, and CO. The significance threshold for PM10 represents compliance with Rule 403 (Fugitive Dust), while the thresholds for NO2 and CO represent the allowable increase in concentrations above background levels in the vicinity of the Project that would not cause or contribute to an exceedance of the relevant ambient air quality standards. The significance threshold for PM2.5 is intended to constrain emissions so as to aid in progress toward attainment of the ambient air quality standards.

For project sites of 5 acres or less, the SCAQMD Localized Significance Threshold Methodology (LST Methodology) includes screening tables that can be used to determine the maximum allowable daily emissions that would satisfy the localized significance criteria (i.e., not cause an exceedance of the applicable concentration limits) without project-specific dispersion modeling. The allowable emission rates depend on (a) the SRA in which the project is located, (b) the size of the project site, and (c) the distance between the project site and the nearest sensitive receptor (e.g., residences, schools, hospitals).

The Project site is approximately 2.3 acres. The nearest sensitive receptors are at the PATH ACHIEVE Glendale transitional housing facility across the street from the Project site. The distance used to determine the mass-rate emissions from the screening tables is 25 meters (82 feet), as specified in the LST Methodology. The allowable mass-rate emissions were linearly interpolated for a 2.3-acre site using the specified thresholds for 2-and 5-acre sites. The applicable thresholds are shown in **Table 4.2-7, Localized Significance Thresholds for a 2.3-Acre Site Located in SRA 7 (East San Gabriel Valley**). It should be noted that LST methodology and associated mass rates are not designed to evaluate localized impacts from mobile sources traveling over the roadways.

Table 4.2-7
Localized Significance Thresholds for a 2.3-Acre Site Located in SRA 7
(East San Gabriel Valley)

Pollutant	LST Threshold (pounds per day)
Construction	
Nitrogen Dioxide (NOx)	115.93
Carbon Monoxide (CO)	807.60
Respirable Particulate Matter (PM10)	7.23
Fine Particulate Matter (PM2.5)	4.13
Operational	
Nitrogen Dioxide (NOx)	115.93
Carbon Monoxide (CO)	807.60
Respirable Particulate Matter (PM10)	2.07
Fine Particulate Matter (PM2.5)	1.03

Cumulative Emissions Thresholds

The SCAQMD's *CEQA Air Quality Handbook* identifies several methods to determine the cumulative significance of land use projects (i.e., whether the contribution of a project is cumulatively considerable). However, the SCAQMD no longer recommends the use of these methodologies. Instead, the SCAQMD recommends that any construction-related emissions and operational emissions from individual development projects that exceed the project-specific mass daily emissions thresholds identified above also be considered cumulatively considerable.[26] The SCAQMD neither recommends quantified analyses of the emissions generated by a set of cumulative development projects nor provides thresholds of significance to be used to assess the impacts associated with these emissions.

Greenhouse Gases

For the purpose of this analysis, the following qualitative thresholds of significance, as suggested by the State *CEQA Guidelines* (Appendix G), have been used to determine whether implementation of the proposed Project would result in significant GHG or climate change impacts.

26 White Paper on Regulatory Options for Addressing Cumulative Impacts from Air Pollution Emissions, SCAQMD Board Meeting, September 5, 2003, Agenda No. 29, Appendix D, p. D-3.

A GHG or climate change impact is considered significant if the proposed Project would:

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

As indicated previously, the SCAQMD convened a "GHG CEQA Significance Threshold Working Group" in order to provide guidance to local lead agencies on determining the significance of GHG emissions identified in CEQA documents. The goal of the working group was to develop and reach consensus on an acceptable CEQA significance threshold for GHG emissions that would be utilized on an interim basis until the California Air Resources Board (CARB), or some other state agency, develops statewide guidance on assessing the significance of GHG emissions under CEQA. In December 2008, staff presented the SCAQMD Governing Board with a significance threshold of 10,000 metric tons of carbon dioxide equivalents (MTCO2e) for stationary source projects where SCAQMD is the lead agency. To date, the SCAQMD has not formally adopted any threshold or methodology for residential and commercial land use projects. The Working Group has released draft documents that recommend all new land use projects not exceed a screening threshold of 3,000 MTCO2e per year. Although a significance threshold has not been formally adopted, the Working Group draft recommendations represent the best available information with which to evaluate project significance with respect to GHG emissions and climate change for projects located in the South Coast region. This threshold is used in this EIR for the purposes of determining significance.

Project Impacts

Air Quality

Threshold: **Conflict with or obstruct the implementation of the applicable air quality plan.**

Impact Analysis:

The 2012 AQMP was prepared to accommodate growth, to reduce the high levels of pollutants within the areas under the jurisdiction of SCAQMD, to return clean air to the region, and to minimize the impact on the economy. Projects that are considered consistent with the AQMP would not interfere with attainment because this growth is included in the projections utilized in the formulation of the AQMP. Therefore, projects, uses, and activities that are consistent with the applicable assumptions used in the development of the AQMP would not jeopardize attainment of the air quality levels identified in the AQMP, even if they exceed the SCAQMD's recommended daily emissions thresholds.

Demographic growth forecasts for various socioeconomic categories (e.g., population, housing, employment), developed by SCAG for their 2012 RTP were used to estimate future emissions within the 2012 AQMP (refer to the 2012 AQMP, Chapter 3). Projects that are consistent with the growth projections are considered consistent with the AQMP. The Project would result in population growth for the region. According to the California Department of Finance estimates, the current population (2012) within the City of Glendale is 192,654 residents.[27] Based on SCAG data, the population projections used to estimate emissions in the 2012 AQMP for year 2020 anticipated a population within the City of Glendale of 198,900. The Project would generate approximately 525 residents. The Project would account for approximately 8.4 percent of the anticipated increase of residents within the City between 2012 and 2020.[28] This total is within the growth projections for the City of Glendale as adopted by SCAG. Because the SCAQMD has incorporated these same projections into the AQMP, the Project would be consistent with the projections in the 2012 AQMP.

Level of Significance Before Mitigation: Less than Significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than Significant.

Threshold: **Violate any air quality standard or contribute substantially to an existing or projected air quality violation.**

Construction

Project construction is anticipated to last approximately 23 months. The Project would be constructed in 3 phases. Phase I would involve the demolition and removal of existing surface parking lots. Demolition would occur over 20 days and would involve the use of standard construction equipment such as bulldozers, loaders, backhoes, cranes, and haul trucks. Approximately 1,000 cubic yards of demolition material would be generated.

Phase II would consist of excavation of existing fill materials and replacement with properly compacted fill materials over a 50-day period. Grading on the Project site is anticipated to result in approximately 100 cubic yards of earth material that would be removed from the site. Grading activities would involve the use of standard earth moving equipment, such as drop hammer, dozers, loaders, excavators, graders, backhoes, pile drivers, dump trucks, and other related heavy-duty equipment, which would be stored on site during construction to minimize disruption of the surrounding land uses.

27 California Department of Finance, E-5: City/County Population and Housing Estimates January 1, 2012.

28 525 Project residents/6,246 (the increase in residents in Glendale between 2012 and 2020) = 0.084.

Phase III would consist of construction of the residential structure and parking structure, which would occur over a 19-month period. Above-grade construction activities would involve the use of standard construction equipment, such as hoists, cranes, mixer trucks, concrete pumps, laser screeds and other related equipment. This phase would also involve finishing of the proposed structures, testing and operation. Finishing, testing and operation activities would involve the use of hoist cranes and other related equipment.

Construction emissions were calculated according to the SCAQMD's CEQA Air Quality Handbook, and construction emission factors contained in the CalEEMod model. The emission calculations assume the use of standard construction practices, such as compliance with SCAQMD Rule 403 (Fugitive Dust), to minimize the generation of fugitive dust. Compliance with Rule 403 is mandatory for all construction projects. In the CalEEMOD model, the emission calculations take into account compliance with Rule 403 by incorporating the following measures:

- Watering of exposed surfaces and unpaved roads three times daily, which is estimated to reduce fugitive dust emissions from this source (both PM10 and PM2.5) by 61 percent, per guidance from the SCAQMD.

The estimated maximum daily emissions during Project construction are listed in **Table 4.2-8, Construction Emissions**. These estimates are based on the expected location, size, and development of the Project. The analysis assumes that all of the construction equipment and activities would occur continuously over the day and that activities would overlap. In reality, this would not occur, as most equipment would operate only a fraction of each workday and many of the activities would not overlap on a daily basis. Therefore, **Table 4.2-8** represents a worst-case scenario for construction activities.

Table 4.2-8
Construction Emissions (pounds/day)

Source	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)
Year 2014						
Maximum lb/day	5.50	34.24	33.15	0.05	7.96	4.98
SCAQMD Threshold	75	100	550	150	150	55
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**
Year 2015						
Maximum lb/day	24.50	29.28	31.27	0.05	3.77	2.26
SCAQMD Threshold	75	100	550	150	150	55
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**
Year 2016						

Source	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)
Maximum lb/day	24.44	2.55	3.96	0.00	0.56	0.29
Threshold Exceeded	75	100	550	150	150	55
	No	**No**	**No**	**No**	**No**	**No**

*Note: Refer to Modeling in **Appendix 4.2***

Based on the modeling, construction of the Project would result in maximum unmitigated daily emissions of approximately 24.50 pounds/day of ROG, 34.24 pounds/day of NO_X, 33.15 pounds/day of CO, 0.05 pounds/day of SO_X, 7.96 pounds/day of PM10, and 4.98 pounds/day of PM2.5, which do not exceed SCAQMD thresholds for criteria pollutants. Although unmitigated emissions for PM10 and PM2.5 are below SCAQMD thresholds, standard measures in compliance with SCAQMD rules and regulations would be implemented. With the application of **Mitigation Measure 4.2-1**, which requires adherence to SCAQMD Rule 403 and other Rule 402 dust control techniques, PM10 and PM2.5 emissions would be further reduced.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures:

4.2-1 Prior to grading, the grading plan, building plans, and specifications will stipulate that, in compliance with SCAQMD Rule 403, excessive fugitive dust emissions shall be controlled by regular watering or other dust prevention measures. In addition, SCAQMD Rule 402 requires implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off-site. Implementation of the following measures would reduce short-term fugitive dust impacts on nearby sensitive receptors:

- All active grading portions of the construction site shall be watered at least three times daily as required to prevent excessive amounts of dust.
- On-site vehicle speed shall be limited to 15 miles per hour.
- Any temporary on-site construction routes shall be paved where feasible, watered as needed (to maintain a moisture content of 12 percent), or chemically stabilized.
- Visible dust beyond the property line which emanates from the Project shall be prevented to the maximum extent feasible.
- All material transported off-site shall be either sufficiently watered or securely covered to prevent excessive amounts of dust prior to departing the job site.
- Track-out devices shall be used at all construction site access points.

- All delivery truck tires shall be watered down and/or scraped down prior to departing the job site as required.
- Replace ground cover on disturbed areas quickly.
- Suspend all excavating and grading operations when wind speeds (as instantaneous gusts) exceed 25 mph.
- Prohibit truck idling in excess of 5 minutes, on- and off-site.
- Sweep streets at the end of the day if visible soil is carried onto adjacent public paved roads.
- Reroute construction haul trucks away from congested streets or sensitive receptor areas.

Level of Significance After Mitigation: Less than Significant.

Operational

Operational emissions would be generated by both stationary and mobile sources as a result of normal day-to-day activity on the Project site after occupancy. Stationary emissions would be generated by the consumption of natural gas for space and water heating devices. Mobile emissions would be generated by the motor vehicles traveling to and from the Project site.

The analysis of daily operational emissions has been prepared using the data and methodologies identified in the SCAQMD's CEQA Air Quality Handbook, and current motor vehicle emission factors in the CalEEMOD. Trip rates for these land uses were obtained from the traffic report for the Project. The estimated emissions are based upon development of all the proposed land uses on the Project site, and are presented in **Table 4.2-9, Estimated Operational Emissions,** and are compared to the SCAQMD established operational significance thresholds. As shown, the emissions associated with the Project would not exceed the SCAQMD's recommended operational emission thresholds. As a result, the operational impacts associated with the Project are considered less than significant.

Table 4.2-9
Estimated Operational Emissions (pounds/day)

Source	ROG (lb/day)	NOx (lb/day)	CO (lb/day)	SOx (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)
Maximum lb/day	10.04	16.58	80.64	0.15	10.14	2.96
SCAQMD Threshold	55	55	550	150	150	55
Threshold Exceeded?	**No**	**No**	**No**	**No**	**No**	**No**

*Note: Refer to Modeling in **Appendix 4.2***

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than significant.

Threshold: Expose sensitive receptors to substantial pollutant concentrations.

Localized Significance Threshold

The SCAQMD recommends the evaluation of localized NOX, CO, PM 10, and PM2.5 impacts as a result of on-site construction and operational activities to sensitive receptors in the immediate vicinity of the Project site. This analysis determines the ambient air quality impacts due to construction and operational activities on the day with the highest estimated daily mass emission rates as presented in **Table 4.2-7**. The Project-specific localized significance thresholds for SRA 7 (East San Fernando Valley) are shown in **Table 4.2-10, LST Worst-Case Emissions (pounds/day)**, and are compared with the maximum daily on-site construction and operational emissions.

Table 4.2-10
LST Worst-Case Emissions (pounds/day)

Source	NOx (lb/day)	CO (lb/day)	PM10 (lb/day)	PM2.5 (lb/day)
Construction				
Total Mitigated Maximum Emissions	24.50	33.15	4.26	2.96
LST Threshold	115.93	807.60	7.23	4.13
Threshold Exceeded?	**No**	**No**	**No**	**No**
Operational				
Area/Energy Emissions	0.78	19.14	0.18	0.18
LST Threshold	115.93	807.60	2.07	1.03
Threshold Exceeded?	**No**	**No**	**No**	**No**

As shown in **Table 4.2-10,** construction emissions would not exceed LSTs for SRA 7 for PM10 and PM2.5 with implementation of **Mitigation Measure 4.2-1**. In general, modeling through using CalEEMod is inherently conservative in its forecasting, and thus the proposed Project may in actuality result in lower dust emissions. Additionally, LSTs for PM10 and PM2.5 would be the greatest during the demolition and grading phases which are anticipated to take place over approximately the first 7 months of construction. All other construction emissions as well as operational emissions would not exceed the LSTs for SRA 7. This impact is considered to be less than significant.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: Implementation of **Mitigation Measure 4.2-1**.

Level of Significance After Mitigation: Less than significant.

Localized Carbon Monoxide Hotspots

Carbon monoxide is produced in greatest quantities from vehicle combustion, and is usually concentrated at or near ground level because it does not readily disperse into the atmosphere. As a result, potential air quality impacts to sensitive receptors are assessed through an analysis of localized CO concentrations. Areas of vehicle congestion have the potential to create "pockets" of CO called "hotspots". These pockets have the potential to exceed the state ambient air quality 1-hour standard of 20 ppm or the 8-hour standard of 9.0 ppm. Note that the federal levels are based on 1-and 8-hour standards of 35 and 9 ppm, respectively. Thus, an exceedance condition would occur based on the state standards prior to exceedance of the federal standard. As such, exceedance of the state ambient air quality 1-hour standard of 20 ppm or the 8-hour standard of 9.0 ppm would constitute a significant air quality impact from the creation of substantial concentrations of CO.

The SCAQMD suggests that localized CO impacts be evaluated at intersections due to increases in project-related off-site mobile sources. The SCAQMD recommends performing a localized CO impacts analysis for intersections that change from level of service (LOS) C to D as a result of the Project and for all intersections rated D or worse where the Project increases the volume-to-capacity ratio by 2 percent or more. One Project intersection falls under the SCAQMD's criteria requiring a more detailed localized CO impact analysis. This intersection is at San Fernando Road and West Los Feliz Road. The results of these CO concentration calculations are presented in **Table 4.2-11, Future Carbon Monoxide Concentrations – With Project**, for representative receptors located 0 and 25 feet from the intersection.

Table 4.2-11
Future Carbon Monoxide Concentrations – With Project

(LOS D, E, and F only)	1-Hour[1]	8-Hour[2]	1-Hour[1]	8-Hour[2]
San Fernando Road at West Los Feliz Road	6.1	5.0	5.3	4.4

Notes:
1 - *State standard is 20.0 parts per million. Federal standard is 35.0 parts per million.*
2 - *State standard is 9.0 parts per million. Federal standard is 9.0 parts per million.*

As shown, future CO concentrations at this intersection under worst-case would not exceed the state 1-hour and 8-hour standards with the development of the Project. No significant CO hotspot impacts

would occur to sensitive receptors in the vicinity of these intersections. As a result, no significant project-related impacts would occur relative to future carbon monoxide concentrations.

Level of Significance Before Mitigation: Less than Significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than Significant.

Toxic Air Contaminants

Projects that use hazardous materials or emit toxic air contaminants (TACs) have the potential to expose sensitive receptors to adverse health impacts. The residential land uses associated with the proposed Project are not anticipated to use hazardous or acutely hazardous materials in appreciable quantities. Hazardous substances currently are regulated under the California Accidental Release Prevention (CalARP) Program. The CalARP Program satisfies the requirements of the Federal Risk Management Plan Program, and contains additional state requirements. The CalARP Program applies to regulated substances in excess of specific quantity thresholds. The majority of the substances have thresholds in the range of 100 to 10,000 pounds. The residential land uses associated with the Project may contain small, if any, amounts of these hazardous substances in household and commercial cleaners and other products. However, typical use of these products would not result in quantities at any one location that exceed the thresholds. Moreover, significant amounts of hazardous substances would typically be expected at industrial, manufacturing, and complex water or wastewater treatment land uses. Accordingly, the Project would not result in a significant impact with respect to hazardous materials.

The proposed residential land uses may potentially emit trace amounts of TACs but would not exceed the thresholds contained in SCAQMD Rule 1401 (New Source Review of Toxic Air Contaminants) and would not result in an incremental increase in cancer risk of 10 in 1 million or more or a Hazard Index of 1.0 or more. Diesel-fueled waste-hauling trucks would drive to and from the Project site resulting in emissions of diesel particulate matter. However, the number of trucks would be equal to that occurring in other similarly developed residential neighborhoods throughout the region. Residential land uses are not substantial sources of TACs as well. Therefore, the site is not expected to generate emissions of TACs that would exceed the SCAQMD's cancer risk threshold of 10 in 1 million or the non-cancer Hazard Index threshold of 1.0.

CARB has determined that adverse health effects are generally elevated near heavily traveled roadways. The CARB guidance document, *Air Quality and Land Use Handbook*, recommends that lead agencies,

where possible, avoid siting new sensitive land uses within 500 feet of a freeway,[29] urban roads with 100,000 vehicles per day, or rural roads with 50,000 vehicles per day. This recommendation is not mandated by state law, but only serves as a general guidance to lead agencies when considering land use projects. The *Air Quality and Land Use Handbook* states that it is up to lead agencies to balance other considerations, including housing and transportation needs, economic development priorities, and other quality of life issues. The Project would not locate sensitive land uses within 500 feet of freeways of heavily traveled roads. An analysis of the traffic report for the Project indicated average daily trips much less than the 100,000 limit for urban roads. For these reasons, no significant impacts are anticipated with respect to TACs.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than significant.

Threshold: Create objectionable odors affecting a substantial number of people. Impact Analysis:

According to the SCAQMD, "while almost any source may emit objectionable odors, some land uses will be more likely to produce odors…because of their operation." Land uses that are more likely to produce odors include agriculture, chemical plants, composting operations, dairies, fiberglass molding, landfills, refineries, rendering plants, rail yards, and wastewater treatment plants. The proposed Project would not include any of these land uses. Consequently, no significant impacts from odors are anticipated from the proposed Project.

Any unforeseen odors generated by the Project will be controlled in accordance with SCAQMD Rule 402 (Nuisance). Rule 402 prohibits the discharge of air contaminants that cause "injury, detriment, nuisance, or annoyance to any considerable number of persons or to the public, or which endanger the comfort, health or safety of any such persons or the public, or which cause, or have a natural tendency to cause, injury or damage to business or property". Failure to comply with Rule 402 could subject the offending facility to possible fines and/or operational limitations in an approved odor control or odor abatement plan.

29 California Air Resources Board, *Air Quality and Land Use Handbook*, 2005, p. 8-9. The 2002 study of impacts along the San Diego (I-405) Freeway and the Long Beach (I-710) Freeway cited by CARB in its *Air Quality and Land Use Handbook* found a substantial reduction in pollutant concentrations, relative exposure, and health risk beyond 300 feet.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance after Mitigation: Less than significant.

Greenhouse Gases

Threshold: **Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment.**

The SCAQMD has published draft GHG guidelines for assessing the significance of GHG emissions. As described above, the draft guidelines recommend that all land use or mixed-use projects meet a screening threshold of 3,000 metric tons of carbon dioxide equivalents (MTCO2e). If a project exceeds the screening threshold, it should demonstrate a reduction in GHG emissions equivalent to AB 32 or meet a per service population GHG intensity of 4.8 MTCO2e. The significance of the Project's GHG emissions will be evaluated based on the SCAQMD draft GHG guidelines.

The Project would result in short-term emissions of GHGs during construction. Site-specific or project-specific data were used in the CalEEMod model where available. Although GHGs are generated during construction and are accordingly considered one-time emissions, it is important to include construction-related GHG emissions when assessing all of the long-term GHG emissions associated with a project. Therefore, current practice is to annualize construction-related GHG emissions over a project's lifetime in order to include these emissions as part of a project's annualized lifetime total emissions, so that GHG reduction measures will address construction GHG emissions as part of the operational GHG reduction strategies. A project lifetime has generally been defined as 30 years. In accordance with this methodology, the estimated Project's construction GHG emissions have been annualized over a 30-year period and are included in the annualized operational GHG emissions.

The Project would become operational in 2016 and would result in direct annual emissions of GHGs during operation. Operational emissions would be generated by both area and mobile sources because of normal day-to-day activities. Area source emissions would be generated by the consumption of natural gas for space and water heating devices (including residential use water heater and boilers). Area source emissions are based on emission factors contained in the CalEEMod model. Mobile emissions would be generated by the motor vehicles traveling to and from the Project site. Trip generation rates provided in the traffic report for the Project were used to estimate the mobile source emissions.

The Project would also result in indirect GHG emissions due to the electricity demand, water consumption, and waste generation. The emission factor for CO2 due to electrical demand from Glendale Water and Power (GWP), the electrical utility serving the proposed Project, was selected in the CalEEMod model. Electricity consumption was based on default data found in CalEEMod for the respective land use types. In addition to electrical demand, the Project would also result in indirect GHG emissions due to water consumption, wastewater treatment, and solid waste generation. The estimate of project water demand, wastewater generation, and solid waste generation is described in **Section 4.10, Utilities and Service Systems**, of the Draft EIR.

The Project incorporates design features that would reduce GHG emissions. The following is a list of project design features that would reduce GHG emissions:

- Residential Density: High-density residential developments would reduce the number of project generated vehicles trips.
- Public Transit: Residential land uses within 0.25 mile of a public transit stop (Metrolink) would reduce the number of project-generated vehicles trips and vehicle miles traveled.
- Energy Efficiency: The Project would be designed to meet the requirements of Glendale Ordinances 5714 and 5736 which adopt the California Green Building Standards (CALGreen).
- The Project would be designed to reduce water consumption compared to conventionally designed projects of similar size and scope. Such features would include low flow faucets, toilets, shower, and water efficient irrigation systems
- The Project would be designed to reduce solid waste generation by including a recycling and composting program per City of Glendale requirements.

The annual net GHG emissions associated with the operation of the proposed Project are provided below in **Table 4.2-12, Estimated Operational Greenhouse Gas Emissions**. The sum of the direct and indirect emissions associated with the Project is compared with the SCAQMD's screening threshold for mixed-use and all land use projects, which is 3,000 MTCO2e per year. As shown in **Table 4.2-12**, the Project would not result in a significant impact with respect to GHG emissions.

Table 4.2-12
Estimated Operational Greenhouse Gas Emissions

GHG Emissions Source	Emissions (Metric Tons CO_2e/year)
Construction	30.1
Operational (Mobile) Sources	1,669.0
Area Sources	3.9
Energy	504.8
Waste	37.4
Water	79.9
Annual Total	**2,325.1**

*Source: Emissions calculations are provided in **Appendix 4.2***
Totals in table may not appear to add exactly due to rounding in the computer model calculations.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than significant.

Cumulative Impacts

Air Quality

Threshold: **Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is nonattainment under an applicable federal or state ambient air quality standard (including releasing emissions, which exceed quantitative thresholds for ozone precursors).**

In large part, the SCAQMD 2012 AQMP was prepared to accommodate growth, to meet state and federal air quality standards, and to minimize the fiscal impact that pollution control measures have on the local economy. According to the SCAQMD *CEQA Air Quality Handbook*, projects that are within the mass emission thresholds identified above should be considered less than significant on a cumulative basis unless there is other pertinent information to the contrary.[30] As shown in **Table 4.2-8** and **Table 4.2-9**, construction emissions would not exceed the SCAQMD project-level thresholds of significance, and the operational emissions would not exceed the SCAQMD project-level thresholds of significance. Therefore, the Project would not be cumulatively considerable and result in a less than significant impact on a cumulative basis.

30 South Coast Air Quality Management District, CEQA Air Quality Handbook, 9–12.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance after Mitigation: Less than significant.

Greenhouse Gases

Threshold: **Conflict with any applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases.**

The goal of AB 32 is to reduce statewide GHG emissions to 1990 levels by 2020. In December 2008, CARB adopted the *Climate Change Scoping Plan*, which details strategies to meet that goal. The Scoping Plan instructs local governments to establish sustainable community strategies to reduce GHG emissions associated with transportation, energy, and water, as required under SB 375. Planning efforts that lead to reduced vehicle trips while preserving personal mobility should be undertaken in addition to programs and designs that enhance and complement land use and transit strategies. The *Climate Change Scoping Plan* also recommends energy-efficiency measures in buildings such as maximizing the use of energy efficient appliances and solar water heating as well as complying with green building standards that result in decreased energy consumption compared to Title 24 building codes. In addition, the *Climate Change Scoping Plan* encourages the use of solar photovoltaic panels and other renewable sources of energy to provide clean energy and reduce fossil-fuel based energy.

In addition to the measures listed in the *Climate Change Scoping Plan*, other state offices have provided recommended measures that would assist lead agencies in determining consistency with the state's GHG reduction goals. The California Attorney General's Office (AGO) has stated that lead agencies can play an important role in "moving the State away from 'business as usual' and toward a low-carbon future."[31] The AGO has released a guidance document that provides information to lead agencies that may be helpful in carrying out their duties under CEQA with respect to GHGs and climate change impacts. Provided in the document are measures that can be included as project design features, required changes to the project, or mitigation measures at the project level and at the general-plan level. The measures are not intended to be exhaustive and may not be appropriate for every project or general plan. The AGO affirms that "the decision of whether to approve a project—as proposed or with required changes or mitigation—is for the local agency, exercising its informed judgment in compliance with the law and balancing a variety of public objectives".

31 California Office of the Attorney General, The California Environmental Quality Act: Addressing Global Warming Impacts at the Local Agency Level, 2008.

The Project's is consistent with the goal of AB 32. As shown above, the Project would incorporate measures that reduce GHG emissions compared to a conventional project of similar size and scope. The Project is also located in an urban area that would reduce vehicle trips and vehicles miles traveled due to the urban infill characteristics and proximity to public transit stops. These measures and features are consistent with existing recommendations to reduce GHG emissions. The Project would emit net emissions less than 3,000 MTCO2e of GHG per year, which in of itself is considered a less than significant impact. Therefore, the Project would result in a less than significant cumulative impact for GHG emissions.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance after Mitigation: Less than significant.

4.3 HAZARDS

This section addresses hazards associated with the Project that may potentially affect public health and safety or degrade the environment and incorporates information from the following study of the Project site, which is provided in **Appendix 4.3** of this environmental impact report (EIR):

- Qore Property Sciences, Inc. (Qore) Phase I and Phase II Environmental Site Assessment (ESA) and Additional Services

ENVIRONMENTAL SETTING

Definitions

Hazardous Material

Certain facilities generate substances considered hazardous. Characteristics of hazardous materials include toxicity, ignitability, corrosivity, or reactivity. A hazardous material is defined as:

> a substance or combination of substances which, because of its quantity, concentration, or physical, chemical or infectious characteristics, may either: (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating irreversible illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of or otherwise managed. (Title 22, California Code of Regulations [CCR], Section 66084)

Hazardous Waste

A "hazardous waste" is defined as "any hazardous material that is abandoned, discarded or recycled." (California Health and Safety Code, Section 25124) In addition, hazardous wastes occasionally may be generated by actions that change the composition of previously nonhazardous materials. The same criteria that render a material hazardous make a waste hazardous: toxicity, ignitability, corrosivity, or reactivity.

Recognized Environmental Conditions

The term "recognized environmental conditions" means the presence or likely presence of any hazardous substances or petroleum products on a property under conditions that indicate an existing release, a past release, or a material threat of a release of any hazardous substances or petroleum products into the structures on the property or into the ground, groundwater, or surface water of the property.

Historical Recognized Environmental Condition

The term historical recognized environmental condition is defined as "environmental condition which in the past would have been considered a recognized environmental condition, but which may or may not be considered a recognized environmental condition currently." ASTM further defines a historical recognized environmental condition by stating "If a past release of any hazardous substances or petroleum products has occurred in connection with the property and has been remediated, with such remediation accepted by the responsible regulatory agency… this condition shall be considered a historical recognized environmental condition…"

Existing Conditions

The Project site is located on the west corner of the intersection of West Los Feliz Road and Gardena Avenue in Glendale, California. The Project site is approximately 2.25 acres and was previously occupied by light industrial and warehouse uses. The previous uses included four vacant office/warehouse buildings with concrete and asphalt parking lots. These on-site buildings were constructed in the 1950s and 1960s, and were recently removed in 2011. All that remains of these buildings are the concrete building foundations. The Project site is currently being used as a parking lot.

Land uses around the Project site include industrial uses and a homeless center to the north, commercial uses, a veterinary clinic, ambulance company and multi-family residential to the east, commercial retail, and light-industrial uses to the south, and the Union Pacific Rail Road (UPRR) right-of-way to the west, as shown in **Figure 3.0-2, Project Site and Surrounding Uses**.

Phase I ESA Findings

Historical Information Review

Several sources were used to document prior conditions on the Project site including prior reports (Phase I ESAs, subsurface assessments and geotechnical investigations), regulatory files and standard historical sources. Phase I ESA reports reviewed included a 2004 EP Associates (EP) Phase I ESA and a 2005 EP Addendum Phase I ESA. Other sources of information reviewed included regulatory files obtained from the Glendale Fire Department, City of Glendale Building Department, and various state agencies and historical aerial photographs, Sanborn Fire Insurance Maps, historical city directories, and topographic maps.

Subsurface assessments of the Project site included a 1997 geophysical survey (using ground penetrating radar [GPR] and/or electromagnetic devices to identify subsurface structures such as Underground Storage Tanks [USTs] or pipe chases) which was included in the 2004 EP Phase I ESA, a 2004 TRAK Environmental Group (TRAK) geophysical survey and subsurface soil assessment, a 2004

Geosystems, Inc., geotechnical assessment, and a 2005 EP geophysical survey and subsurface soil assessment.

Project Site

Northwestern Portion

National Ice Company was located on the northwest portion of the Project site from the mid-1920s to late 1930s. A building permit from 1924 indicated the installation of a gas pump at the National Ice Company facility, although the use and location was not provided. The 1925 Sanborn map indicated an "oil house" was located on the northeast corner of the ice plant building. The oil house (which appeared to be relatively small) was likely a storage room for lubricants used by machinery in the plant. The oil house may have contained drums, aboveground storage tanks (ASTs), or potentially an underground storage tank (UST) and the previously mentioned gas pump. The geophysical survey of the northwestern parking lot in 1997 did not identify the presence of anomalies consistent with a UST in this area. The former location of the ice plant structure was a paved parking area with an office trailer for Pyramid Marble at the time of the Phase I site reconnaissance survey. The lack of an identified UST in the area of the former oil house indicates that petroleum storage would have been above ground. Soil sampling was not conducted in this area since (1) the redevelopment of the site which likely disturbed and redistributed soil in this area, (2) the time elapsed since oil storage (over 80 years), and (3) that groundwater is located at depths of at least 48 to 52 feet below ground surface (bgs). The oil storage was not considered to present a recognized environmental condition to the Project site.

Quality Col-Pak an apple processing plant was located on the Project site from the early 1940s to late 1970s. This facility initially occupied the building vacated by National Ice Company, and through expansions occupied the entire northern portion of the Project site by 1970. A 9-foot by 3-foot by 3-foot clarifier was documented in building department records in 1959 at the Quality Col-Pak facility. The records indicated the clarifier was used for apple processing waste and floor and equipment wash water before being discharged into a sanitary sewer. The clarifier used for food processing waste is not considered a suspect recognized environmental condition to the Project site.

A permit dated 1950 indicated that a 1,000-gallon gasoline UST was installed for Quality Col-Pak, and a 1962 permit indicated this UST had been removed. A third permit indicated a 1,000-gallon "flammable liquid" UST (likely gasoline or diesel) was installed in 1975. Removal of this second 1,000-gallon UST was not documented, indicating the UST may be present at the Project site. The USTs were likely located along the northern boundary of the Project site, north of the former Building 1. No USTs were identified in this area on the Sanborn Map, and the geophysical survey of the northwestern parking lot in 1997 did not identify the presence of anomalies consistent with a UST.

Eight soil borings were drilled to depths of 10 feet below ground surface (bgs) by TRAK along the northwestern property boundary in 2004 near the area where a UST would have been expected to be located. The borings were drilled close enough to one another that if a 1,000-gallon UST was present where the borings were drilled, it likely would have been encountered. No subsurface features were encountered. However, if the tank was located to the northwest or to the southwest of the line, oriented in a direction of southwest to northeast, the tank could have been parallel to the borings and not detected. Given that a specific tank location and orientation was not provided, that the borings were depicted in a line, and that the Project site configuration has changed since the tank was reportedly present, it is possible that a UST may remain in the vicinity of that location.

Samples were collected in four of the eight borings from 2 to 4 feet bgs and in the remaining four borings from 6 to 10 feet bgs. The sample analysis did not detect the presence of Total Petroleum Hydrocarbon (TPH) in the soil samples; the soil samples were not analyzed for Volatile Organic Compounds (VOCs). One small area on the northern portion of the Project site was not assessed by the geophysical survey or soil borings and was not covered by buildings during the installation of the UST in 1975. This area appeared to be the main entrance and exit for the Quality Col-Pak facility and is unlikely to be the location of the UST that was identified during the review of the permits.

Based on (1) the results of the 1997 GPR survey, (2) the results of the 2004 TRAK subsurface assessment, and (3) depth to groundwater, the permitted USTs associated with Quality Col-Pak are not considered to present a recognized environmental condition to the Project site. However, there is potential for localized soil impact in the northwestern portion of the Project site from former on-site activities in this area.

Byron's Auto was a Project site tenant from approximately 1997 to 2005 (former Buildings 1 and 2). In 2004, EP observed staining in the automobile service bay by a parts washer, air compressor, and used oil drums. EP also referred to the parts washer as a "parts-cleaning above ground solvent tank." Parts washers used by automobile service companies typically consist of a self-contained cleaning system comprised of a drum (typically 30 to 55 gallons in size) which is used to store a petroleum-based solvent such as mineral spirits with a removable sink and hand sprayer. Solvent from the drum is recycled until replaced by the waste disposal company, in this instance, Safety-Kleen.

At the time of the site assessment, substantial staining in the area of the former Byron's Auto was not observed. The subsurface assessment conducted by TRAK in 2004 included two hand-auger borings near the parts washer, air compressor, and used oil drums. The soil samples collected were analyzed for TPH-diesel, TPH-oil, and VOCs. The boring on the north side of this area indicated low levels of TPH-oil (362 parts per million [ppm] compared to the Primary Remediation Goal [PRG] of 1,000 ppm and the

Environmental Screening Limit [ESL] of 500 ppm at 1 foot bgs; the boring on the west side of this area indicated low levels of TPH-oil (61 ppm compared to the PRG of 1,000 ppm and the ESL of 500 ppm), ethylbenzene (2 parts per billion [ppb] compared to the PRG of 400,000 ppb and the ESL of 3,300 ppb), and xylenes (14 ppb compared to the PSG of 480,000 ppb and the ESL of 2,300 ppb) at 1 foot bgs. Other TPH constituents or VOCs were not detected in the two hand-auger borings, including a 4-foot bgs sample collected on the north side of the area. Overall, the concentrations were below regulatory screening levels and considered to be a de minimis condition.

Based on (1) the conditions reported by the EP Phase I ESA, (2) on-site observations, (3) dates of operations (1997 through 2005), (4) the results of the 2004 TRAK subsurface assessment, and (5) depth to groundwater, Byron's Auto is not considered to present a recognized environmental condition to the Project site. However, there is potential for localized soil impact in the former Byron's Auto service bays. Building 1 and 2 were demolished in 2008.

Northeast Portion

Glendale Rotary Offset Printing occupied Building 4 from late 1997 to 2005. In 2004, EP observed storage of new and spent solvents and inks in various sizes of containers and empty 55-gallon drums stored in the fenced area south of Building 4. Drum storage was also indicated by EP to be located in a storage area at the northern corner of the building. An "indirect waste receptor drain/container" was identified on the floor in the film development room of Building 4 by EP. At the time of the site assessment, ink staining was observed on the concrete floor in the area of the former printing presses inside Building 4. Stains were not observed inside Building 4 or in the exterior storage areas.

Glendale Rotary Offset Printing was listed on the HAZNET regulatory database from 1997 to 1999 for generation and disposal of photochemical and photo processing waste. The HAZNET listing did not identify the use of chlorinated solvents. Additionally, this facility was not listed as a Resource Conservation and Recovery Act hazardous waste generator, which would be expected if chlorinated solvents were used at Glendale Rotary. Material Safety Data Sheets (MSDS) and the hazardous materials inventory maintained by the Glendale Fire Department for this facility included various inks, oils, and solvents; chlorinated solvents were not included in the materials listed. An inspection conducted by the Glendale Fire Department in 2000 listed several waste storage violations including storing waste inks and oils beyond 180 days, lack of secondary containment for drums stored outside, and leaking containers stored outside. Violations after 2000 were not noted.

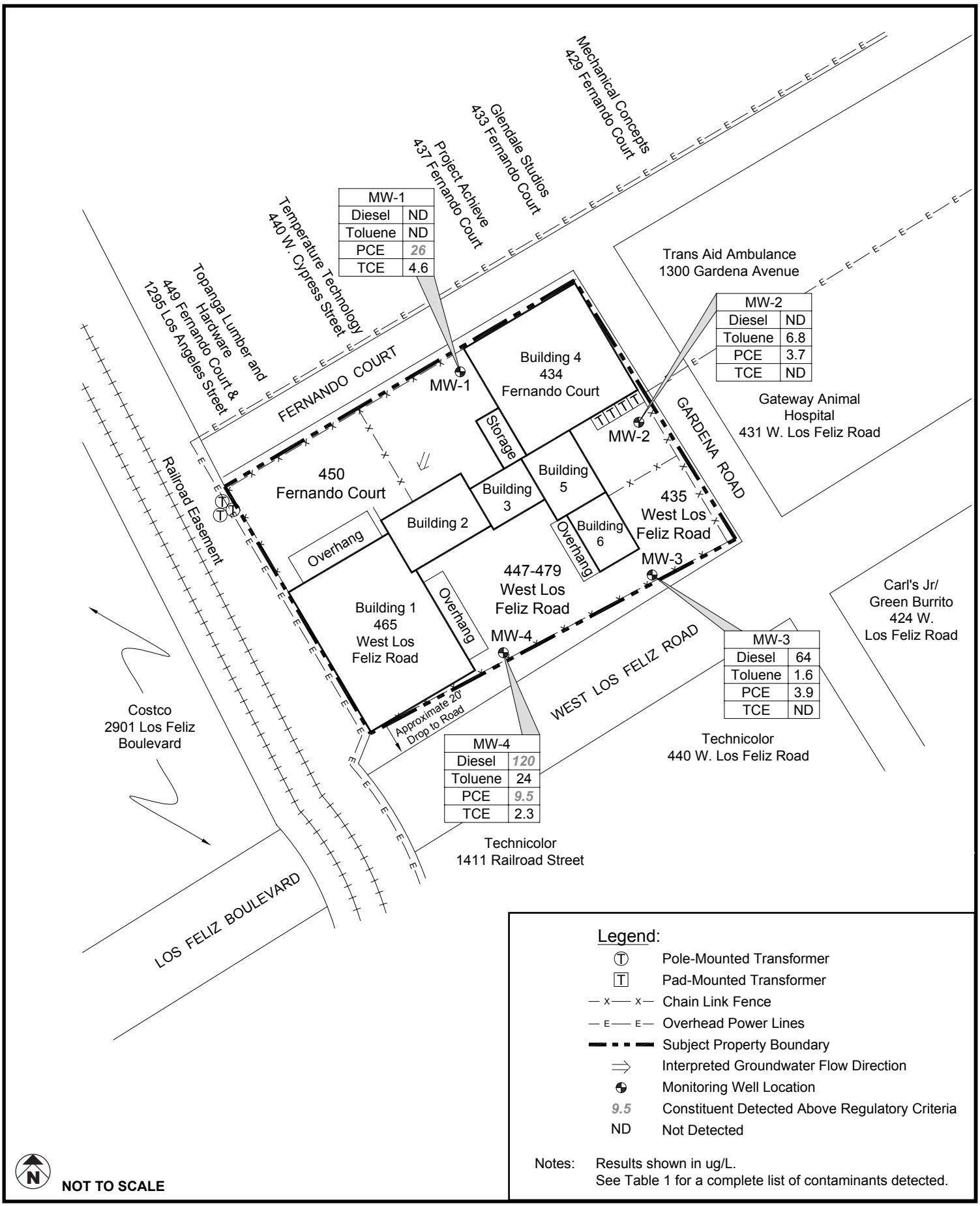
MSDS sheets provided by the former on-site printer in 2004 indicated the cleaning solvents used at the Project site were generally alcohol based, with the exception of one petroleum-based cleaner. The information provided in the 2004 EP ESA did not identify chlorinated solvent use by the on-site printer at

that time. Based on the limited length of time the printer was located on-site (late 1997 to 2005), that the most common chemicals used are petroleum based solvents, and that data indicates the use of petroleum based solvents in 1997, 1998, 1999 and 2004, it is likely that the cleaning solvents used for the remaining years were also petroleum based. Review of the information provided does not indicate that Glendale Rotary (operating from 1997 to 2005) used chlorinated solvents at the Project site.

The subsurface assessment in 2004 by TRAK included borings to depths of 3 to 11 feet bgs on the interior of Building 4 near a printing press and the drain in the film development room, on the exterior of the Building 4 near the compressors and solvent storage on the north side of Building 4, and three borings in the drum storage area on the south side of Building 4. The soil samples collected were analyzed for TPH-diesel (with the exception of one boring), TPH-oil (with the exception of one boring), and VOCs (with the exception of four borings). TPH-diesel, TPH-oil, and VOCs were not detected in the samples collected, with the exception of one boring. This boring was located near a printing press inside Building 4, and identified a TPH-oil concentration of 74 ppm, below the comparison criteria of 1,000 ppm. The detected presence of petroleum constituents at concentrations below regulatory screening levels is considered a de minimis condition.

Four groundwater monitoring wells were installed at the up-gradient and down-gradient boundaries of the Project site to assess groundwater conditions, as shown in **Figure 4.3-1, Groundwater Laboratory Results**. One of the four wells was located immediately south and topographically cross-gradient of a drum storage area used by Glendale Rotary Offset Printing. A second well was installed approximately 150 feet topographically down-gradient of the previously mentioned well and the former Glendale Rotary Offset Printing facility. Groundwater was encountered at 48 feet to 52 feet bgs. Contamination detected in these wells was likely attributable to off-site sources or the former on-site gasoline service stations and not from Glendale Rotary Offset.

Based on (1) on-site observations and regulatory review, (2) the type of chemicals likely used at Glendale Rotary Offset, (3) depth to groundwater, (4) groundwater assessment results, (5) review of EP's Phase I ESA, and (6) the results of the 2004 subsurface assessment by TRAK, the former Glendale Rotary Offset Printing is not considered to present a recognized environmental condition to the Project site. However, there is potential for localized soil impact in the former printing press and drum storage areas.



SOURCE: Property Sciences, Inc. - October 2009

FIGURE **4.3-1**

Meridian Consultants

Groundwater Laboratory Results

006-002-13

Southeast Portion

Richardson Oil Company (service station), Campbell-Land-Pierce (used cars), E J Bartel (service station), and Pratty Rubbish Service were located on the southeast portion of the Project site at various times from the mid-1920s to the mid-1950s. These four historical tenants may have used hazardous substances and petroleum products at the Project site during this time and are considered suspect recognized environmental conditions. A permit for the installation of a gas pump and tanks was issued to Richardson Oil Company in 1927. A small building labeled "gas & oil" was located on the southeast corner of the Project site in the 1950 Sanborn map which corresponds to the address and time period of E J Bartel. Additionally, a 1952 permit for Pratty Rubbish Service indicated a 10,000-gallon gasoline UST was installed at the Project site, presumably for refueling garbage trucks. Based on the size of the Project site and the numerous other tenants on-site during the same time period as Pratty Rubbish Service, it is unlikely that solid waste was stored or disposed on-site by this tenant. No records of removal of these USTs were identified during review of the referenced sources, presenting the potential for at least three USTs to remain on-site. At the time of the site assessment, Buildings 3, 5, and 6 were located on the southeastern portion of the Project site. The eastern corner of the Project site and portions of the site to the southeast of these buildings were paved storage/parking areas. No evidence of former or current UST systems was observed in this area during the Phase I site reconnaissance survey.

In 2004, TRAK conducted a geophysical survey and subsurface assessment on the southeast portion of the Project site. The geophysical survey indicated the presence of three anomalies under the southeast parking lot. One anomaly was of a size and shape consistent with the 10,000-gallon UST installed by Pratty; the second anomaly was not readily identifiable and may be a small UST, buried utility vault, or abandoned piping. The third anomaly was reportedly a small metallic object buried directly beneath the asphalt pavement and is not likely a UST.

TRAK installed 25 soil borings to depths of 4 to 10 feet bgs on the southeast portion of the Project site. Soil borings in the area of the anomaly presumed to be a large UST encountered refusal at 4 feet bgs, confirming the presence of a subsurface structure or UST. No samples were collected beneath the anomalies. If the anomalies are USTs, higher levels of contamination may be encountered in soils beneath the USTs. The borings installed by TRAK were analyzed for the full range of TPH (with the exception of two borings, which were analyzed for TPH-gas), and seven borings were analyzed for the presence of TPH-oil. Laboratory analysis identified the presence of TPH-diesel in one boring (27 ppm compared to the Soil Screening Level of 100 ppm) and TPH-oil in three borings (113 ppm, 438 ppm, and 761 ppm compared to the Soil Screening Level of 1,000 ppm). These borings were generally located in close proximity to the location where the geophysical anomalies were identified.

Tetrachloroethene (PCE) was identified in two borings during the 2004 TRAK assessment: at 35 ppb and at 11 ppb. Deeper soil samples from these borings were not analyzed for VOCs. The concentrations detected were well below the California PRG for PCE in Residential Soil of 480 ppb and the ESL of 87 ppb. A specific on-site source of PCE has not been identified. However, PCE could have been present in a cleaning solvent used by one of the former Project site tenants. As previously discussed, the Project site is also located within the boundaries of the Crystal Springs Wellfield National Priorities List (NPL) VOC plume. It is not expected that the regional chlorinated solvent plume would be the source of the PCE detection in soil on-site. The detected concentrations of PCE are considered to be a de minimis condition. Based on the depth to groundwater and the low levels of PCE detected in soil, it is unlikely that the Project site has significantly contributed to the groundwater impact.

Four groundwater monitoring wells were installed at the up-gradient and down-gradient boundaries of the Project site to assess groundwater conditions. One of the four wells was located topographically down-gradient and within 75 feet of the anomalies. A groundwater sample from this well indicated a low concentration of TPH-diesel.

Based on (1) the former presence of a gasoline service station and fuel storage facilities, (2) the presence of the two identified subsurface anomalies by GPR that could be USTs and a third subsurface anomaly by GPR of unknown origin, (3) that some soil samples were found to contain low levels of petroleum and that no soil samples were collected beneath the anomalies, and (4) that petroleum was detected in groundwater located in close proximity and topographically down-gradient of former fuel storage activities, the former use of the southeastern property is considered to be a suspect recognized environmental condition.

In addition to the gasoline service stations, a former business was identified, Turner-Yourec Press, as being located to the southeast of Building 6 from the 1940s to the early 1950s. The Sanborn Map labeled this facility as “printing” indicating the facility conducted printing activities. This facility was demolished prior to construction of Building 6 in the mid-1950s. This facility was depicted on a Sanborn map with no additional details other than the footprint of the building.

One of the four groundwater monitoring wells was located topographically cross-gradient and within 50 feet of the former printer. Constituents expected to be associated with a former printer were not detected in the groundwater sample from this well at concentrations exceeding regulatory screening levels.

Based on (1) the time span since the last date of operation, (2) the Project site being redeveloped which would have disturbed surface soils in this area, (3) depth to groundwater and (4) the results of the

groundwater assessment, the former Turner-Yourec Press is not considered a recognized environmental condition to the Project site. However, there is a potential for localized soil impact in this area from the former printer.

Southwest Portion

Tenants of concern located on the southwestern portion of the Project site included Tropico Lumber, Leslie Foods, Chef's Select, Mountain Valley Water Company and the Glenn-Webb Company. Tropico Lumber Company Planing Mill and an associated 100-gallon oil UST were located on the southwest portion of the Project site in the 1908 Sanborn map. By 1919, this portion of the Project site was vacant land. Leslie Foods was a tenant of the Project site in the 1970s; Chef's Select and Mountain Valley Water Company were tenants from the mid-1980s to early 1990s. Glenn-Webb Company was located on the Project site from the early 1950s to the late 1970s.

Former Buildings 1, 2, 3, 5, and 6 were all addressed 465 West Los Feliz Road, and the spaces occupied by Leslie Foods and Mountain Valley Water Company were not specified. Chef's Select occupied Building 1 and Glenn-Webb Company appeared to occupy all five buildings. These companies were food production companies with the exception of Mountain Valley Water Company, which distributed bottled water.

Concerns associated with these facilities included the presence of USTs, Well Investigation Program (WIP) regulatory listings, and the presence of clarifiers.

USTs/ASTs

Tropico Lumber Company Planing Mill and an associated 100-gallon oil UST was located on the southwest portion of the Project site in the 1908 Sanborn map. By 1919, this portion of the Project site was vacant land. A geophysical survey and subsurface soil assessment conducted by EP in 2005 did not identify the presence of USTs in the western portion of the parking lot between the former location of Building 1 and Building 6. Twenty-five soil borings were installed to depths of 20 to 25 feet bgs in the western portion of the lot by EP in 2005. Soil samples were selected from various intervals including 5 feet, 10 feet, 15 feet and 20 feet. Selected soil samples were analyzed for the full range of TPH and Benzene, Toluene, Ethyl benzene, Xylene (BTEX). The presence of TPH or BTEX was not identified in the laboratory results.

A building permit for Leslie Foods in the 1970s was issued for construction of a concrete pad and installation of a tank. Based on the construction of a concrete pad, it appears that the tank installed was likely an AST. An AST or evidence of a previous AST was not observed during the Phase I site reconnaissance survey. Numerous permits were provided for the Glenn-Webb Company. Permits from

1954 and 1955 indicated the presence of a 550-gallon gasoline UST; a November 1955 permit indicated the 550-gallon UST was removed. A 1959 permit indicated a 1,000-gallon gasoline UST was installed for Glenn-Webb, and a 1963 permit indicated the 1,000-gallon UST was filled in place. A 1963 permit indicated a 10,000-gallon gasoline UST was installed at the Project site; no removal records were identified for the 10,000-gallon UST.

The 2005 EP geophysical survey and subsurface assessment did not identify the presence of underground structures or soil contamination on the southwestern portion of the Project site. The USTs associated with Glenn-Webb could be on the southwestern portion of the Project site or could be associated with the anomaly on the southeast corner of the Project site identified as a potential 10,000-gallon UST during the 2004 TRAK geophysical survey and subsurface assessment.

One of the four groundwater monitoring wells was located immediately south and topographically down gradient of the area where the former on-site USTs may have been located. A groundwater sample identified the presence of TPH-diesel at a concentration of 120 ppb that exceeds regulatory screening criteria of 100 ppb.

Based on (1) the former and possibly current USTs, (2) lack of specific information indicating the location of the USTs and (3) the results of the groundwater assessment indicating petroleum impact in groundwater in close proximity in a down-gradient direction, the former use of the southwestern portion of the Project site is considered to be a recognized environmental condition.

WIP Regulatory Listings

Chef's Select and Mountain Valley Water Company were identified on WIP regulatory database as historical facilities. According to the Los Angeles Regional Water Quality Control Board (LARWQCB), the WIP database was composed of facilities that were identified as responsible parties in the San Fernando Valley NPL plume, were identified as using chlorinated solvents or heavy metals, or were identified as potentially utilizing chlorinated solvents or heavy metals. Both tenants received "no further action" letters from the LARWQCB in February 1997.

Clarifiers

A note dated 1959 in the Glenn-Webb regulatory file indicated the presence of a clarifier at the facility, and a 1985 industrial waste discharge permit for Chef's Select, which occupied former Building 1, indicated the use of an existing clarifier for floor and equipment washwater from potato baking activities. At the time of the site assessment, a three-stage clarifier was observed in Building 1. The clarifier along with the building has since been removed. Based on the historical sources reviewed, the

tenants at the subject property that utilized the clarifier were food production companies, and the wastewater disposed in the clarifier consisted of food debris and equipment washdown water.

In 2005, EP installed two direct push soil borings to depths of 10 and 15 feet bgs in the vicinity of a former clarifier in former Building 1 and two direct push soil borings to depths of 3 and 8 feet bgs in the vicinity of the concrete patch suspected to be another former clarifier. The soil samples were analyzed for the full range of TPH, BTEX, VOCs, and CAM 22 Metals. Laboratory analysis did not detect these constituents in samples from the four direct push borings.

Based on (1) on-site observations, (2) historical review, (3) regulatory review, (4) review of EP's Phase I ESA, and (5) the results of the 2005 subsurface assessment by EP, the current and former clarifiers are not considered to present a recognized environmental condition to the Project site. There is potential for localized soil impact in the vicinity of the clarifiers. This potential soil impact is not expected to be significant because the use of the clarifiers appears to have been restricted to food processing companies.

Project Vicinity

A service station was noted on the 1925 Sanborn map located adjoining the Project site to the northeast, near West Los Feliz Road in the location of what is now Gardena Avenue. The service station was not noted on the 1919 Sanborn map or the 1928 historical aerial photograph, indicating the service station was likely present from the early to mid-1920s. This service station was located topographically up-to cross gradient of the Project site. Previous soil borings on the southeast portion of the Project site did not identify significant soil contamination in that area. However, the nearest soil boring along the southeastern Project site boundary was extended to 10 feet bgs and located approximately 20 feet down gradient from the area of the northeast-adjoining former service station. Due to the shallow depth of the boring and distance of the boring from the former service station, samples from this boring may not have encountered soil contamination from the former northeast-adjoining service station, if present.

The area of this former service station was redeveloped as Gardena Avenue. USTs and/or soil contamination from the former northeast-adjoining service station were likely encountered and addressed during construction of Gardena Avenue. Based on (1) short duration of the presence of the former service station (less than 10 years), (2) length of time since the service station was present (over 80 years), (3) depth to groundwater, (4) that the highest detected concentration of TPH was in one of the monitoring wells located cross-gradient to this facility, and (5) development of Gardena Avenue, the former northeast-adjoining service station is not considered to present a recognized environmental condition to the Project site.

The Project site also had on-site service stations and/or fuel USTs during the period the northeast-adjoining service station was present. Potential releases from the on-site and northeast-adjoining fuel storage present the possibility for commingled plumes at the Project site. To assess groundwater conditions at the up-gradient and down-gradient boundaries of the Project site four monitoring wells were installed in areas that were accessible to drilling equipment. One of the four groundwater monitoring wells was located topographically down gradient of the on-site service station. A groundwater sample from this well did not indicate the presence of petroleum constituents above screening comparison criteria. Based on the results of the groundwater assessment, it does not appear that a commingled plume from this off-site facility with the on-site facilities, if present, would be migrating further down gradient and impacting off-site facilities.

Another service station was noted on the 1950 Sanborn map on the southeast-adjoining property, on the southwest corner of the intersection of West Los Feliz Road and Gardena Avenue. The 1940 historical aerial photograph indicated the service station was present at that time; in the 1956 historical aerial photograph, the location of the service station had been paved over with the re-routed West Los Feliz Road. This historical service station was identified during regulatory review as the L W Binkley service station. Based on its down gradient position, the former southeast-adjoining service station is not considered to present a recognized environmental condition to the Project site. However, the Project site also had on-site service stations and/or fuel USTs during this period. Potential releases from the on-site and southeast-adjoining fuel storage present the possibility for commingled plumes down gradient from the Project site. Based on the groundwater assessment, it does not appear that this down-gradient property has been impacted by petroleum constituents migrating from the Project site.

Government Database Review

A report of select regulatory databases published for the local area was reviewed to identify facilities potentially constituting a suspect recognized environmental condition in regard to the Project site. The databases were reviewed to identify recorded facilities located on, or in proximity to, the Project site using the ASTM E 1527-05 standard environmental record sources and recommended approximate minimum search distances.

Additional information was sought regarding listed facilities that may constitute recognized environmental conditions in connection with the Project site. In addition, local agencies were contacted regarding recorded information, incidents, or activities of environmental concern relating to the Project site and its immediate environs.

A records search of multiple federal, state, local, tribal, and proprietary environmental databases was conducted and is provided in Appendix F of the Phase I ESA in **Appendix 4.3** of this Draft EIR. Pertinent findings of the government database review are summarized below.

Project Site

As discussed above, the Project site was listed on the HAZNET regulatory database from 1997 to 1999 for generation and disposal of photochemical and photo processing waste and the WIP regulatory database due to uses associated with two former tenants (Chef's Select and Mountain Valley Water Company).

Project Vicinity

San Fernando Valley Crystal Springs Wellfield (Area 2) and Pollock Wellfield (Area 4)

According to the U.S. Environmental Protection Agency (EPA) San Fernando Valley Superfund Sites Update in 2003, Trichloroethene (TCE) and PCE were detected in numerous drinking water wells in the San Fernando Valley (the Valley) above the Maximum Concentration Limit (MCL) (five ppb) in the early 1980s. In 1986, the San Fernando Valley was added to the National Priorities List (NPL). The Valley was divided into four study areas; the Project site is located within the Crystal Springs operating unit (OU). In 1989, the EPA found elevated concentrations of VOCs in the groundwater in the Glendale area. Two groundwater plumes were discovered and named the Glendale North and Glendale South OUs within the Crystal Springs OU; the Project site is located within the Glendale South OU.

The 2002 and 2005 plume maps indicated the presence of both PCE and TCE from 5.01 ppb to 50 ppb in shallow groundwater in the Project site vicinity. However, the well-specific information provided indicated the concentrations of PCE and TCE in the nearby monitoring wells were both below the 5 ppb MCL (TCE at 0.14 to 1.3 ppb and PCE at 0.49 to 1.6 ppb). Two of the three wells were located approximately 700 feet down-gradient of the Project site, and the third well was located approximately 2,000 feet down-to cross-gradient of the Project site. Based on the shapes of the groundwater plumes on the plume maps, concentrations of PCE and TCE are likely higher at the Project site than in the down-gradient wells. Based on (1) the results of the groundwater assessment and (2) a regulatory review, the San Fernando Valley plume is considered a recognized environmental condition to the Project site.

Franciscan Promenade/Franciscan Ceramics (2901 Los Feliz Boulevard)

The 45-acre former Franciscan Ceramics facility was used to manufacture ceramic tile, dinnerware, and clay pipe from approximately 1905 to 1988. Excess unfired glazing material that contained hazardous concentrations of lead, cadmium, and zinc was deposited in low-lying areas of the facility property. Remediation work conducted in 1990 included excavation and off-site disposal of contaminated soil and

placement of a clay cap over contaminated soil that remained at the facility property. The Department of Toxic Substances Control (DTSC) established a groundwater-monitoring program for the former Franciscan Ceramics facility, which included the sampling and analysis of groundwater monitoring wells along the perimeter of the facility boundaries. The purpose of the groundwater-monitoring program was to determine whether heavy metals were migrating vertically and impacting groundwater. According to a November 2006 Groundwater Monitoring Report, Cadmium at 0.0001 ppm (compared to the MCL of 0.005 ppm), Lead at 0.00012 ppm (compared to the MCL of 0.015 ppm), and Zinc at 0.012 ppm (no current MCL) was detected at the closest groundwater monitoring well to the Project site. In addition, the November 2006 Report indicated that the area of capped contaminated soil was located over 975 feet west-northwest (cross gradient of the Project site). The November 2006 report also indicated a measured south-southwest groundwater gradient. During the Phase I site reconnaissance site, the southern portion of the former Franciscan Ceramics facility was occupied by a Costco, Toys R Us, Best Buy, and multitenant retail business and restaurant buildings. Based on (1) its cross-gradient location, (2) status as of the November 2006 Groundwater Monitoring Report, and (3) observations, the former Franciscan Ceramics facility is not considered to present a recognized environmental condition to the Project site.

Colour Grow (440 West Cypress Street)

According to file information provided by the DTSC, the unspecified solvent mixture listed on the HAZNET database was a one-time shipment in 1998. Research indicated Colour Grow was a Europe-based company that produced non-toxic, biodegradable, hydroponic crystals in which house plants could be grown as an alternative to soil. It is likely that the warehouse adjoining the Project site was a distribution center for Colour Grow. During the Phase I site reconnaissance survey the facility was observed to be occupied by Temperature Technology, a heating and air conditioning service company. Based on (1) current regulatory status, (2) past facility operations with respect to Colour Glow, and (3) present operations with respect to Temperature Technology, Colour Grow is not considered to present a recognized environmental condition to the Project site.

Mechanical Engineering Company (433 Fernando Court)

During the Phase I site reconnaissance survey, this facility was observed to be occupied by Glendale Studios, a production company. According to DTSC information, liquid with halogenated organic compounds greater than 1,000 ppm was generated from 2000 through 2003; oil/water separation sludge was a one-time shipment in 2003. Historical research indicated Mechanical Engineering Company (Mechanical) was a metalworking facility conducting precision machining and stamping activities. This facility was present from the early 1960s to the early 2000s. This indicates petroleum products and/or hazardous substances were likely utilized at the adjoining facility for over 40 years.

The WIP file obtained for this facility from the LARWQCB included records of an inspection in December 1994 by the LARWQCB that indicated liquid and stains in the vicinity of a parts washer and 55-gallon steel drum. MSDS sheets reviewed by the LARWQCB representative indicated previous use of 1,1,1-trichloroethane by Mechanical. Based on the results of the inspection, the LARWQCB required a soil gas survey at the Mechanical facility. Two soil gas surveys were conducted at the Mechanical facility in 1995. While the soil gas surveys showed chlorinated solvent contamination likely originated from the Mechanical facility and a facility to the east of the Mechanical facility, the LARWQCB reviewed the data and determined that the Mechanical facility had not significantly contributed to the regional VOC plume. The Mechanical facility received a "no further action" letter (NFA) letter regarding the WIP listing from the LARWQCB in October 1995.

Based on the results of the groundwater monitoring assessment, it appears that the Project site is impacted by chlorinated solvents from a local up-gradient source as well as a regional VOC plume. In consideration of (1) the results of the groundwater assessment, (2) close proximity, (3) topographic up-gradient location and (4) review of the regulatory file for Mechanical, this facility is considered to be a recognized environmental condition to the Project site.

Mechanical Concepts, Inc. (429 Fernando Court)

At the time of the Phase I site reconnaissance survey, Mechanical Concepts, Inc., (Concepts) was present at the listed address. According to DTSC information, hydrocarbon solvents, unspecified solvent mixture, waste oil and mixed oil, and/or unspecified oil-containing waste have been generated at this location from 1997 to the present. Historical research indicated the Concepts facility had been present since the mid-1980s and conducted design and fabrication of custom engineered machinery. Petroleum products and/or hazardous substances were likely utilized at the facility for approximately 20 years.

The WIP file for the Concepts facility was obtained from the LARWQCB. The file indicated limited amounts of petroleum waste (approximately 5 gallons) were stored at the facility. An inspection of the Concepts facility by LARWQCB staff in November 1994 did not identify USTs, ASTs, or clarifiers. Two floor drains were identified at the Concepts facility, but they were reportedly observed to be covered with concrete and no longer in use. The Concepts facility received a NFA letter from the LARWQCB in December 1994 regarding the WIP regulatory listing. However, Concepts' continued use of petroleum products and/or hazardous substances presents the possibility of releases at the facility since the time of the LARWQCB inspection.

Based on the results of the groundwater monitoring assessment, it appears that the Project site has been impacted by chlorinated solvents from a local up-gradient source as well as a regional VOC plume. In consideration of (1) the results of the groundwater assessment, (2) close proximity, (3) topographic

up-gradient location and (4) review of the regulatory file for Concepts, this facility is considered a recognized environmental condition to the Project site.

Nova Automotive (421 Fernando Court)

At the time of the Phase I site reconnaissance survey, Nova Automotive (Nova) was present at the listed address, which is located to the north of the Project site. The database report indicated that waste generated at this facility included contaminated soil from a cleanup on the property. WIP file status was listed as historical. According to DTSC information, the contaminated soil was a one-time shipment of over 40 tons of soil in 1993. Nova is a wholesale auto parts distributor. Nova Automotive was first listed as a tenant at the listed address in the early 1990s. Prior to occupancy by Nova, the facility address was vacant from the early 1980s. United Staff and Stone was present at the facility address from at least the mid-1950s to the early 1980s. Based on the corresponding dates of Nova's first occupancy of the facility and the shipment of the contaminated soils, it is likely that Nova cleaned up contamination from a previous occupant and not from Nova's activities at the facility. The source of the impact at the Nova facility was not included in the information reviewed.

Based on the results of the groundwater monitoring assessment, the Project site is impacted by chlorinated solvents from a local up-gradient source as well as a regional VOC plume. In consideration of (1) the results of the groundwater assessment, (2) close proximity, (3) topographic up-gradient location and (4) review of the regulatory file for Nova, the documented impact at this facility is considered a recognized environmental condition to the Project site.

Fleming Jacquet & Miller, Inc. (1300 Gardena Avenue)

At the time of the Phase I site reconnaissance, this facility address was occupied by Trans Aid Ambulance. According to file information obtained from the DTSC, Fleming Jacquet and Miller, Inc., (Fleming) generated hydrocarbon solvents, unspecified solvent mixture, and/or other organic solids from 1993 to 2000. Historical research confirmed Fleming was at this location in the early 1990s. Research indicated Fleming was related to NBC Universal (entertainment industry), but specific activities conducted by Fleming are unknown.

Based on the results of the groundwater monitoring assessment, the Project site is impacted by chlorinated solvents from a local up-gradient source as well as a regional VOC plume. In consideration of (1) the results of the groundwater assessment, (2) close proximity, (3) topographic up-gradient location and (4) review of the regulatory information for Fleming Jacquet & Miller, this facility is considered a recognized environmental condition to the Project site.

Vege Kurl (4115 San Fernando Road and 410-414 West Cypress Street)

At the time of the Phase I site reconnaissance survey, Vege Kurl was observed to be an active facility located 265 feet northeast of the Project site. Research indicated Vege Kurl produced organic health and beauty products. The database report identified the WIP file status as historical and backlog. The Spills, Leaks, Investigation, and Cleanup Listings (SLIC) listing indicated a release of VOCs with a "reopen previously closed case" status. Additional file information was not available on the DTSC SLIC database. The California Hazardous Material Incident Report System (CHMIRS) incident in 1995 was reported to consist of a spill of 250 gallons of hair conditioner from a forklift.

It was noted that if a VOC release at the Vege Kurl facility reached groundwater, it would likely be difficult to distinguish from the regional San Fernando Valley groundwater VOC plume. A regulatory file for this facility was not obtained and therefore, no additional information was obtained. Based on the information obtained from the groundwater monitoring, it is possible that this facility contributed to the groundwater impact in the area and the Project site and is therefore considered a recognized environmental condition.

Guardian X-Ray Services (Merry X-Ray Chemical Corporation) (1422 Gardena Avenue)

At the time of the Phase I site reconnaissance survey, this facility address was observed to be located 300 feet southeast and cross-gradient to the Project site. This facility was observed to be a warehouse with pallets of materials (buckets, boxes, etc.) visible on racks through open bay doors located 300 feet southeast (cross-gradient). The name of the facility was not publicly displayed. This location was developed as Guardian X-Ray Services (Guardian) from 1993 through 2000. Wastes generated by Guardian included metal sludge, other inorganic solid waste, photochemicals/photoprocessing waste, unspecified oil-containing waste, and aqueous solution with less than 10 percent total organic residues. Based on distance and topographic relationship, the facility at 1422 Gardena Avenue does not present a suspect recognized environmental condition to the Project site. However, historical research indicated Guardian occupied 1300 Gardena Avenue (adjoining northeast of the Project site) in the early to mid-1980s. It is probable that Guardian generated wastes similar to those listed in the regulatory database during that period. Four groundwater monitoring wells were installed at the up-gradient and down-gradient boundaries of the Project site to assess groundwater conditions. Based on the information obtained from the groundwater monitoring, it is possible that this facility contributed to the groundwater impact in the area and the Project site and is therefore considered a recognized environmental condition.

Site Reconnaissance of Site and Adjacent Properties

The Project site reconnaissance consisted of field observations of the Project site and adjoining land areas. Observation and documentation of current uses of the Project site was noted along with indicators of hazardous substances, petroleum products, storage tanks, odors, pools of liquid, drums, containers, PCBs, heating and cooling systems, stains, corrosion, drains and sumps, pits, ponds, lagoons, stressed vegetation, wastes, wells, and septic systems. The Project site reconnaissance was conducted on September 28, 2007 and was performed on foot within areas that were reasonably accessible.

Above and Underground Storage Tanks (AST/UST)

No current storage tanks were observed or reported to be present on the Project site. However, review of historical information indicated past usage of ASTs and/or USTs on the Project site as discussed above. Neither the Project site nor adjoining properties were identified on the state or federal databases for facilities with ASTs or USTs.

Phase II Subsurface Assessment Findings

A Phase II subsurface assessment was conducted to identify the potential presence of petroleum or hazardous substances in groundwater associated with the Project site and/or nearby, up-gradient facilities. The investigation included the installation of four soil borings, which were converted to groundwater monitoring wells. The sampling locations were positioned in up-gradient and down gradient locations near the northern and southern boundaries of the Project site. The locations of the groundwater monitoring wells are provided in **Figure 4.3-1**.

The objectives of the Phase II assessment were (1) to compare conditions in groundwater coming onto the Project site to conditions leaving the Project site in an attempt to identify contamination migrating onto the Project site; (2) detect potential on-site source areas that may have contributed to contamination, if present; and (3) to assess off-site migration of contamination from the Project site. Groundwater sampling occurred from October 24 through October 26, 2007.Groundwater samples from the October 2007 sampling event did not indicate the presence of TPH in the groundwater wells with the exception of TPH-diesel at 64 ppb in MW-3 and TPH-gasoline at 68 ppb and TPH-diesel at 120 ppb in MW-4. With the exception of the 120 ppb TPH-diesel in MW-4, these low concentrations were below the most stringent ESL of 100 ppb TPH-diesel. The presence of gasoline and diesel/or diesel in MW-3 and MW-4 (down-gradient wells) and not in MW-1 and MW-2 (up-gradient wells) indicate an on-site source for the petroleum detected in groundwater.

Groundwater samples from the October 2007 sampling event did not indicate the presence of VOCs exceeding MCLs in the groundwater wells with the exception of PCE (MCL 5 ppb) in MW-1 (26 ppb) and

MW-4 (9.6 ppb). TCE was detected in MW-1 (4.6 ppb) and MW-4 (2.3 ppb) below the ESL and MCL for TCE (5 ppb). The decreasing concentrations of PCE and TCE from MW-1 (up-gradient) to MW-4 (down-gradient) indicate an off-site, up-gradient source. However, the concentrations of PCE in MW-1 and MW-4, without similar concentrations in MW-2 and MW-3, indicate the PCE in these two wells is likely from a local off site, up-gradient source in addition to impact associated with the regional groundwater plume. PCE was detected in MW-2 (3.7 ppb) and MW-3 (3.9 ppb); these low detections below the ESL and MCL for PCE are likely attributable to the regional groundwater plume.

Toluene was detected at levels well below the MCL (150 ppb) and ESL (40 ppb) in MW-2 (6.8 ppb), MW-3 (1.6 ppb), and MW-4 (24 ppb). These detections are likely attributable to a combination of on-site and off-site sources of petroleum.

Other VOCs were detected at concentrations significantly below their respective ESLs; MCLs were not established for these chemicals. These constituents were generally chloroform and its daughter products. Chloroform has a number of uses, most notably in dyes. However, chloroform was not listed in the MSDS sheets provided for the former on-site printer, and the low detections in groundwater were not expected to be attributable to an on-site source. Based on the results of the subsurface assessment, the documented historical gasoline service stations/fuel storage on the southwestern and southeastern portions of the Project site recognized environmental conditions exist.

Based on the results of the subsurface assessment, the chlorinated solvent (PCE and TCE) detections in groundwater at the Project site indicating impact from one or more nearby up-gradient sources, as well as the regional groundwater plume, present a recognized environmental condition to the Project site.

Several of the prior on-site tenants that were not considered to be a suspect recognized environmental condition as the companies did not appear to have utilized or stored significant quantities of chemicals. This conclusion is based on several factors including the name of the company, time period of occupancy, whether the company was listed on the regulatory database, information presented in prior reports and information on the Sanborn Maps. The results of the Phase II subsurface assessment further supports the conclusion that these prior occupants of the Project site did not present a suspect recognized environmental condition.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In order to assist in determining whether a project would have a significant effect on the environment, the City determines a project may be deemed to have a significant impact from hazards or hazardous materials, if it would:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials (issue is addressed in **Section 8.0, Effects Found Not To Be Significant**).

- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment.

- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school (issue is addressed in **Section 8.0, Effects Found Not to Be Significant**).

- 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.

- For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, result in a safety hazard for people residing or working in the project area (issue is addressed in **Section 8.0, Effects Found Not To Be Significant**).

- For a project within the vicinity of a private airstrip, result in a safety hazard for people residing or working in the project area (issue is addressed in **Section 8.0, Effects Found Not to Be Significant**).

- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan (issue is addressed in **Section 8.0, Effects Found Not to Be Significant**).

- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands (issue is addressed in **Section 8.0, Effects Found Not To Be Significant**).

Methodology

An assessment of the impact of the Project from hazards and hazardous waste materials is provided below. This assessment is based on the Qore Phase I and Phase II Environmental Site Assessment and additional services technical report prepared for the Project site.

The potential for cumulative impacts associated with hazards and hazardous materials was assessed, based upon consideration of the Project and related projects in the City of Glendale. These related projects are identified in **Section 4.0, Environmental Impact Analysis.**

Project Impacts

Threshold: **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.**

A geophysical survey and subsurface assessment on the southeast portion of the Project site identified the presence of three anomalies under the southeast parking lot area. One anomaly was the size and shape consistent with a 10,000-gallon UST that was previously contained within the Project site; the second anomaly was not identifiable and but may be a small UST, buried utility vault, or abandoned piping. The third anomaly was a small metallic object buried directly beneath the asphalt pavement and is not likely to be a UST. Hazardous materials soil contamination associated with these anomalies is not known. Consequently, grading and excavation of the Project site for future residential and parking garage uses could expose construction workers and the public to potentially unknown hazardous substances present in the soil. If any unidentified sources of contamination are encountered during grading or excavation, the removal activities required could pose health and safety risks such as the exposure of contamination to workers, exposure of handling hazardous materials to personnel, and exposure of hazardous materials or vapors the public. Such contamination could cause various short-term or long-term adverse health effects in persons exposed to the hazardous substances. For this reason, potential impacts are considered to be significant.

Level of Significance Before Mitigation: Significant.

Mitigation Measures: The following mitigation measures are required to mitigate impacts related to release of hazardous materials to a less-than-significant level:

4.3-1 The three subsurface anomalies identified on the southeastern portion of the Project site shall be further assessed, even though only two were considered to be potential USTs. If USTs or other buried features are identified, they shall be removed in accordance with state and federal regulations. The Glendale Fire Department must be notified of any UST found and/or other materials, and consulted during removal of such materials.

4.3-2 If contamination is determined to be on site during trenching, the City of Glendale, in accordance with appropriate agency requirements, must require remediation of the soil contamination. Remediation shall be the responsibility of the site developer(s) to complete such activities prior to construction of the Project. Remediation shall be accomplished in a manner that reduces risk to below applicable standards and must be

completed prior to issuance of any occupancy permits. Soil remediation methods that could be employed include, but are not limited to, one or more of the following: excavation and off-site disposal, or on-site treatment, such as above ground bioremediation, soil washing, soil stabilization, soil vapor extraction, or high-temperature soil thermal desorption. Closure reports or other reports acceptable to the Glendale Fire Department that document the successful completion of required remediation activities, if any, for contaminated soils, must be submitted and approved by the Glendale Fire Department. No construction must occur in the affected area until reports have been accepted by the City of Glendale.

Level of Significance After Mitigation: Less than significant.

Threshold: **Be located on a site that is included on a list of hazardous materials sites compiled by Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment.**

The Phase I ESA and the Phase II Investigation Report prepared for the Project site addressed potentially hazardous conditions on and surrounding the Project site.

The Glendale Rotary Offset Printing, located at 434 Fernando Court, and Chef's Select and Mountain Valley Water Company, located at 465 W. Los Feliz Road, were identified on the HAZNET and WIP regulatory databases, respectively. However, as discussed above neither of these facilities are considered to be a recognized environmental condition and therefore, impacts would be less than significant.

San Fernando Valley Crystal Springs Wellfield (Area 2) & Pollock Wellfield (Area 4), which were listed on various government databases for groundwater contamination in and near the Project site, are large areas of groundwater contamination in the San Fernando Valley area of Los Angeles County. Based on the shapes of the groundwater plumes on the plume maps, concentrations of PCE and TCE are likely higher at the Project site than in the down-gradient wells. As such, the San Fernando Valley plume is considered a recognized environmental condition to the Project site.

The former Mechanical site, located at 433 Fernando Court, was occupied by Glendale Studios, a production company. According to file information obtained from the DTSC, liquid with halogenated organic compounds greater than 1,000 ppm was generated from 2000 through 2003; oil/water separation sludge was a one-time shipment in 2003. Petroleum products and/or hazardous substances were likely utilized at the adjoining facility for over 40 years.

Hydrocarbon solvents, unspecified solvent mixture, waste oil and mixed oil, and/or unspecified oil-containing waste have been generated from 1997 to the present at Concepts, located at 429 Fernando Court. Based on the results of the groundwater assessment, the Project site is impacted by chlorinated solvents from a local up-gradient source as well as a regional VOC plume.

The database report also indicated that waste generated at Nova, located at 421 Fernando Court, included contaminated soil from a cleanup on the property. WIP file status was listed as historical. According to file information obtained from the DTSC, the contaminated soil was a one-time shipment of over 40 tons of soil in 1993.

Additionally, according to file information obtained from the DTSC, Fleming Jacquet and Miller, Inc., located at 1300 Gardena Avenue, generated hydrocarbon solvents, unspecified solvent mixture, and/or other organic solids from 1993 to 2000. In consideration of (1) the results of the groundwater assessment, (2) close proximity, (3) topographic up-gradient location and (4) review of the regulatory information, these facilities are considered a recognized environmental condition to the Project site.

The database report identified Vege Kurl, located at 4115 San Fernando Road and 410-414 West Cypress Street, on the WIP file status as historical and backlog. The SLIC listing indicated a release of VOCs with a "reopen previously closed case" status. Additional file information was not available on the DTSC SLIC database. The CHMIRS incident in 1995 was reported to consist of a spill of 250 gallons of hair conditioner from a forklift.

It was noted that if a VOC release at the Vege Kurl facility reached groundwater, it would likely be difficult to distinguish from the regional San Fernando Valley groundwater VOC plume. Based on the results of the groundwater assessment, the Project site is impacted by chlorinated solvents from a local up-gradient source as well as a regional VOC plume. Based on the information obtained, it is possible that this facility contributed to the groundwater impact in the area and the Project site, and is therefore considered a recognized environmental condition.

Other than Nova and Concepts, located north of the Project site, no current adjoining land uses were observed during the area reconnaissance to be a suspect recognized environmental condition. Impacts would be potentially significant.

Level of Significance Before Mitigation: Significant.

Mitigation Measures: The following mitigation measure has been identified to reduce impacts associated with construction of the Project:

4.3-3 Prior to grading, a soil and groundwater management plan shall be prepared and implemented to address the handling of soil or groundwater that may contain residual concentrations of petroleum hydrocarbons or other contaminants. The management plan will include procedures to conduct profile sampling of contaminated soils or groundwater encountered during grading. The contaminated soil or groundwater shall be disposed of at an appropriate permitted disposal facility or treated to acceptable levels. The Project applicant shall coordinate and submit the soil and ground water management plan to the City of Glendale Fire Department prior to construction activities. Example soil remediation methods that may be employed include, but are not limited to, one or more of the following: excavation and off-site disposal or on-site treatment, such as above ground bioremediation, soil washing, soil stabilization, soil vapor extraction, or high-temperature soil thermal desorption. Example groundwater remediation methods that may be employed include, but are not limited to, pumping water to surface, treating, and returning to aquifer; treating groundwater in place by injecting oxidizing agents; and placing a membrane in the aquifer and using natural flows to trap contaminants.

Level of Significance after Mitigation: With implementation of the Mitigation Measure 4.3-3, which requires that a Risk Management Plan be prepared and implemented to handle soil that may contain low residual concentrations of petroleum hydrocarbons, impacts would be reduced to a less-than-significant level.

Cumulative Impacts

Threshold: **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.**

It is possible that a number of the related projects would involve significant renovation or demolition activities, which could subject construction workers or other persons to health and safety risks through exposure to hazardous material. The individual workers or persons potentially affected by exposure would vary from project to project. Each related project would be required to adhere to applicable federal, state, and local requirements that regulate worker and public safety. It is anticipated that all hazardous materials delivered and hazardous waste removed from the Project site and each related project site would be in accordance with Title 24 of the Code of Federal Regulations. In addition, the closest related project, located at 3900 San Fernando Road, is bound by West Los Feliz Road to the north, Central Avenue to the east, and San Fernando Road to the west and located approximately 580

feet to the east of the Project site. Therefore, demolition activities associated with related projects would not interact with demolition activities associated with the Project, thus limiting potentially cumulative hazard impacts. As a result, cumulative impacts would be less than significant.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than significant.

Threshold: **Be located on a site that is included on a list of hazardous materials sites compiled by Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment.**

Related projects may be located on or near a site included on a list of hazardous material sites compiled pursuant to Government Code Section 65962.5. Development of any of the related projects would be required to comply with applicable laws and regulations pertaining to hazardous wastes, and that risk with identified hazardous material sites would be eliminated or reduced through proper handling, disposal practice, and/or clean up procedures. Development would be denied by the City of Glendale if adequate cleanup or treatment is not feasible. In addition, the closest related project, located at 3900 San Fernando Road, is located down-gradient of the Project site and was listed on the Historical Auto Stations database. Because of its location and distance, this related project is not expected to adversely impact the Project site. Accordingly, cumulative impacts to the public or environment associated with development on or near listed contaminated sites would be less than significant.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than significant.

4.4 LAND USE AND PLANNING

This section addresses the consistency of the Project with applicable local land use policies. The Project is subject to the City's General Plan, the City's Municipal Code including the Zoning Ordinance, and the Redevelopment Plan for the San Fernando Road Corridor Redevelopment Project area.

ENVIRONMENTAL SETTING

Regional Setting

The City of Glendale is located within the six-county jurisdiction of the Southern California Association of Governments (SCAG), which also includes Ventura, Orange, San Bernardino, Riverside, and Imperial Counties. SCAG has divided its jurisdiction into 13 Subregions to facilitate regional planning efforts. The City is located in the Arroyo-Verdugo Subregion.

The Arroyo-Verdugo Subregion is bordered by the San Gabriel Mountains to the north (North Los Angeles County Subregion), the Los Angeles River and Santa Monica Mountains to the south (Los Angeles City Subregion), the San Fernando Valley to the west (Los Angeles City Subregion) and the San Gabriel Valley (San Gabriel Valley Subregion) to the east. The Arroyo-Verdugo Subregion includes the Cities of Burbank, Glendale, La Canada-Flintridge, and the unincorporated communities of La Crescenta and Montrose.

Local Setting

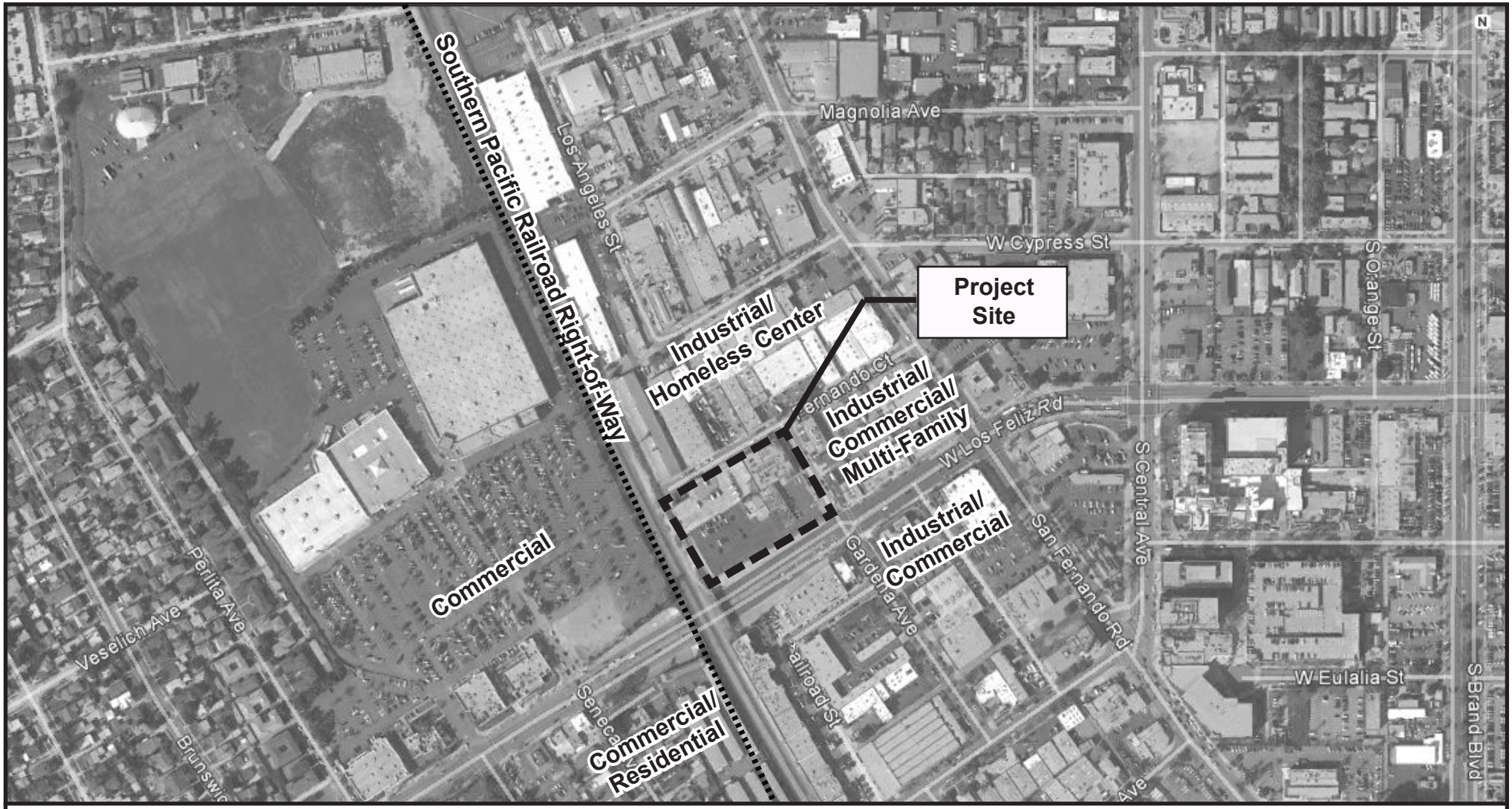
The Project site is located within the City of Glendale San Fernando Road Corridor Redevelopment Project Area within the southern portion of the City. The site is bounded by Fernando Court to the north, Gardena Avenue to the east, West Los Feliz Road to the south, and the Southern Pacific Railroad (operated by the Southern California Regional Rail Authority, "SCRRA") right-of-way to the west, as shown in **Figure 4.4-1, Project Vicinity**. The Project site presently consists of the foundations of four structures which were previously occupied by light industrial and warehouse uses. Land uses surrounding the Project site include industrial uses and a homeless center to the north, commercial uses, a veterinary clinic and multi-family residential uses to the east, commercial retail and light-industrial uses to the south, and the Southern Pacific Railroad right-of-way to the west.

The Project site is located in the southern portion of the City of Glendale, approximately 70 feet east of the boundary between the Cities of Glendale and Los Angeles. As shown in **Figure 4.4-1**, the Atwater Village neighborhood in the City of Los Angeles is located to the west of the site between the Southern Pacific Railroad right-of-way and the Los Angeles River. Land uses located in Atwater Village, in the vicinity of the Project site, include commercial, residential, and institutional uses.

Planning in Atwater Village is guided by the Northeast Los Angeles Community Plan, a component of the City of Los Angeles General Plan Land Use Element (the Community Plan).[1] The Community Plan promotes an arrangement of land uses, streets, and services to encourage and contribute to the economic, social, and physical health, safety, welfare, and convenience of the community. The Community Plan also seeks to guide development in order to create a healthful and pleasant environment. The current Community Plan is designed to meet the existing and future needs and desires of the community.

The Community Plan designates the City of Los Angeles portion of Los Feliz Boulevard, which is located adjacent to the Project site, as a street zoned for commercial uses. The Community Plan identifies the goals, objectives, and policies as a way to improve the function, design, and economic vitality of commercial areas. The commercial land use goals and objectives promote commercial areas that attract customers from outside the Community Plan area and maximize accessibility. In addition, the Community Plan calls for redevelopment of existing commercial areas, and conversion of existing structures to more appropriate uses in order to revitalize these areas. The residential land use goals, objectives, and policies of the Community Plan preserve and enhance existing residential neighborhoods to the densities that have already occurred in the neighborhoods throughout Northeast Los Angeles. In addition, the Community Plan provides for multi-family development in locations where it can best be supported by infrastructure and services and will enhance commercial revitalization efforts.

1 City of Los Angeles, *Northeast Los Angeles Community Plan*, May 2001.



Legend:

- Project Site
- City of Los Angeles/City of Glendale Boundary

N

NOT TO SCALE

SOURCE: Google Earth - 2013

FIGURE **4.4-1**

Meridian Consultants

Project Vicinity

006-002-13

Regulatory Setting

Southern California Association of Governments

The Southern California Association of Governments (SCAG) is the authorized regional agency for inter-Governmental Review of programs proposed for federal financial assistance and direct development activities. Additionally, SCAG reviews environmental impact reports for projects of regional significance for consistency with regional plans pursuant to CEQA and the CEQA Guidelines. SCAG is also responsible for the designated Regional Transportation Plan including its Sustainable Communities Strategy component pursuant to SB 375. The Sustainable Communities Strategy has been formulated to reduce greenhouse gas (GHG) emissions from passenger vehicles by 8 percent per capita by 2020 and 13 percent per capita by 2035 compared to 2005 targets set by the California Air Resources Board.

The 2012-2035 Regional Transportation Plan/Sustainable Communities Strategies (RTP/SCS) links the goal of sustaining mobility with the goals of fostering economic development, enhancing the environment, reducing energy consumption, promoting transportation-friendly development patterns, and encouraging fair and equitable access to residents affected by socio-economic, geographic and commercial limitations.

SCAG reviews the consistency of local plans, projects, and programs with regional plans to determine if projects are considered regionally significant. If a project meets the definition for "Projects of Statewide, Regional, or Areawide Significance" contained in Section 15206(b) of the State CEQA Guidelines, SCAG requests that the project be analyzed for consistency with applicable policies in the RTP/SCS. The Project does not meet the criteria for projects of Statewide, Regional, or Areawide Significance.

City of Glendale General Plan

Development in the City is subject to the City's General Plan. The State of California mandates that every city and county prepare a general plan. A general plan is a comprehensive policy document outlining the capacity of future development in a city or county. The City's General Plan is divided into 11 elements, including Land Use, Housing, Circulation, Open Space, Conservation, Noise, Safety, Air Quality, Community Facilities, Recreation, and Historical Preservation. The Land Use Element has the broadest scope of all the General Plan Elements. The Land Use Element establishes the pattern of land use in the city and sets standards and guidelines to regulate development. As illustrated in **Figure 4.4-2, Land Use Designation Map**, the Project site is currently designated as Mixed Use.

City of Glendale Zoning Ordinance

The Glendale Zoning Ordinance is the primary tool for implementing the General Plan Land Use Element. For each defined zone, the ordinance identifies the uses permitted and applicable development standards such as density, height, parking, and landscaping requirements.

As illustrated on **Figure 4.4-3, Zoning Designation Map**, the Project site is currently zoned Industrial/Commercial-Residential Mixed Use (IMU-R). The IMU-R zoning classification allows for a mix of commercial and residential or just commercial, industrial, or residential subject to a CUP (stand-alone) land uses.

Development occurring within the IMU-R zone must undergo design review and adhere to performance standards pertaining to air quality, noise, waste disposal, and other potentially hazardous conditions.

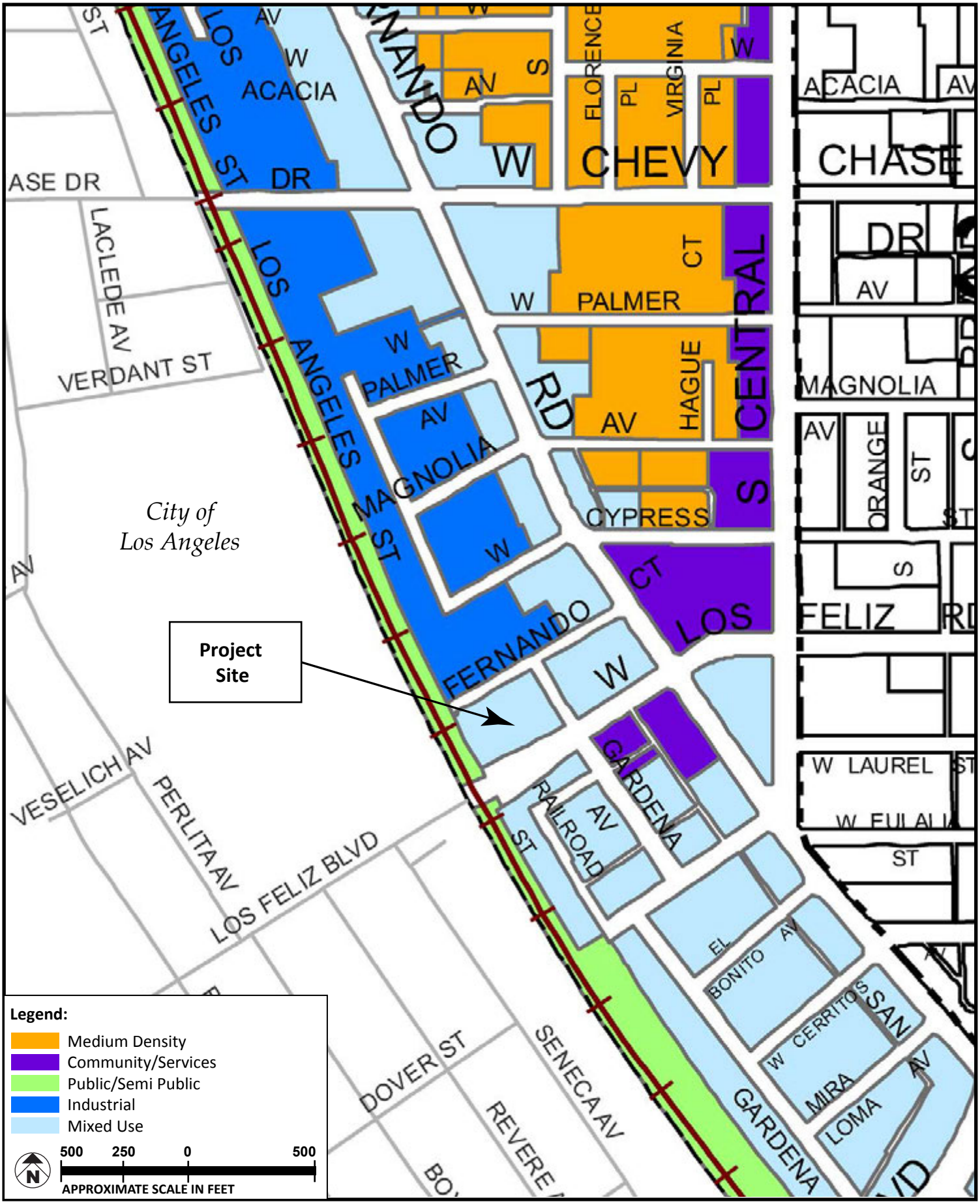
Glendale Successor Agency

In 1992, the Glendale Redevelopment Agency[2] prepared and adopted the Redevelopment Plan for the San Fernando Road Corridor Redevelopment Project Area (the "Redevelopment Plan"). The Project site is located within the boundaries of the Redevelopment Plan, which includes 750 acres generally extending along the length of the San Fernando Road corridor and bounded by the I-5 Freeway and the UPRR/MTA right-of-way to the west. The primary objective of the Redevelopment Plan is to eliminate and prevent the spread of blight and deterioration in the Redevelopment Plan.

ABx126 and AB1484 (collectively "The Dissolution Act") eliminated redevelopment agencies in California effective February 1, 2012. The City of Glendale elected to assume the power, duties, and obligations of the former Glendale Redevelopment Agency as the Glendale Successor Agency pursuant to the Dissolution Act. The Successor Agency[3] is responsible for winding down the activities of the former Glendale Redevelopment Agency.

2 The Glendale Redevelopment Agency was created in 1972 for the purpose of improving, upgrading and revitalizing areas within the City that had become blighted because of deterioration, disuse, and unproductive economic conditions. It was a legal and separate public body, with separate powers and a separate budget from the City.

3 The Successor Agency undertakes enforceable obligations, performs duties pursuant to the enforceable obligations in compliance with the Dissolution Act. The Successor Agency staff also serves as staff to the Oversight Board.



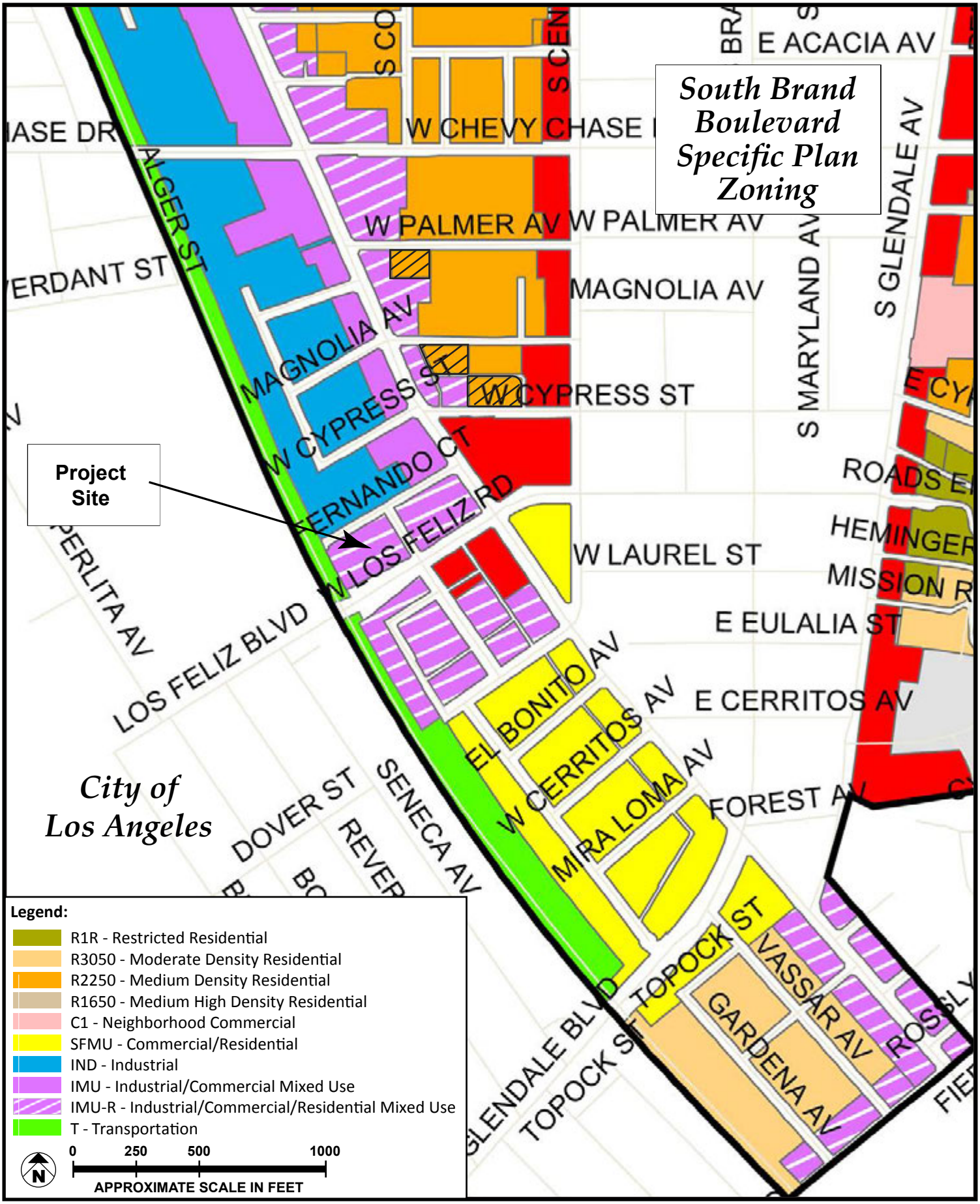
SOURCE: City of Glendale - April 2012

FIGURE **4.4-2**

Meridian Consultants

Land Use Designation Map

006-002-13



SOURCE: City of Glendale - November 2012

FIGURE **4.4-3**

Meridian Consultants

Zoning Designation Map

006-002-13

According to the Redevelopment Plan, the former Glendale Redevelopment Agency proposed the following actions to meet this objective:

- Permitting participation in the redevelopment process by owners and occupants of properties located in the Redevelopment Plan boundaries, consistent with the Redevelopment Plan and rules adopted by the Redevelopment Agency
- Acquisition of real property
- Management of property under the ownership and control of the Redevelopment Agency
- Relocation assistance to displaced occupants of property acquired by the Redevelopment Agency in the Redevelopment Plan boundaries
- Demolition or removal of buildings and improvements
- Installation, construction, expansion, addition, extraordinary maintenance, or reconstruction of streets, utilities, and other public facilities and improvements
- Disposition of property for uses in accordance with the Redevelopment Plan
- Redevelopment of land by private enterprise or public agencies for uses in accordance with the Redevelopment Plan
- Rehabilitation of structures and improvements by present owners, their successors, and the Redevelopment Agency
- Rehabilitation, development or construction of low and moderate income housing within the City
- Providing for the retention of controls and establishment of restrictions or covenants running with the land so that property will continue to be used in accordance with the Redevelopment Plan

As described above, the Project is located within the Redevelopment Plan boundaries and is subject to the applicable provisions of the Redevelopment Plan for the San Fernando Road Corridor Redevelopment Project Area. The Redevelopment Plan also grants the Successor Agency the authority to establish further requirements, restrictions, or design standards as appropriate. In addition, the Redevelopment Plan requires compliance with applicable provisions of the General Plan, Zoning Ordinance, Building Code, and other City ordinances, resolutions, and laws. However, pursuant to the Health and Safety Code 34173(i), all land use related plans and functions of the former redevelopment agency were transferred to the city.

Redevelopment Plan for the San Fernando Road Corridor Redevelopment Project Area (the "Redevelopment Plan")

As shown in **Figure 4.4-4, San Fernando Road Corridor Redevelopment Project Area**, the San Fernando Road Corridor Redevelopment Project Area includes 750 acres, generally extending along the length of the San Fernando Road corridor, including areas west to the I-5 Freeway and to the Southern Pacific Railroad right-of-way (the "Redevelopment Project area"). The primary objective of the Redevelopment Plan is to eliminate conditions of blight by revitalizing and upgrading the commercial and industrial properties and facilities within the Redevelopment Project area.

Improvements identified in the Redevelopment Plan include the removal or rehabilitation of physically obsolete or substandard structures, the elimination of non-conforming land uses, improvements to streets, drainage, and other public facilities, and general aesthetic improvement of the Redevelopment Project Area.[4] New General Plan and Zoning designations and development regulations were adopted by the Glendale City Council for the Redevelopment Project Area on August 17, 2004. Several commercial/office/retail projects and public improvement projects are located within the Redevelopment Project Area.

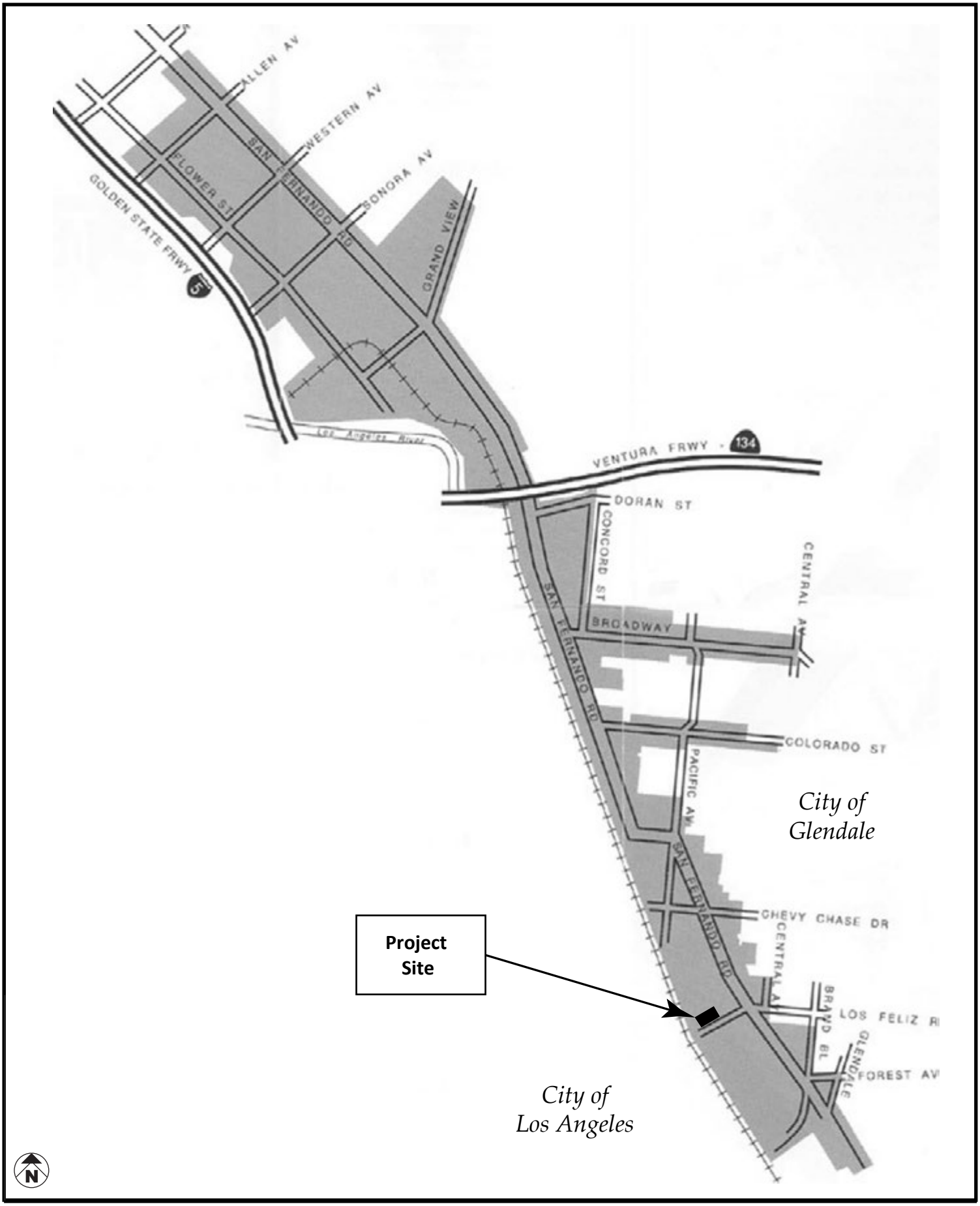
ENVIRONMENTAL IMPACTS

Thresholds of Significance

In order to assist in determining whether a project would have a significant effect on the environment, the City determines a project may be deemed to have a significant impact on land use and planning, if it would:

- Physically divide an established community.
- Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?
- Conflict with any applicable habitat conservation plan or natural community conservation plan (issue is addressed in **Section 6.0, Effects Found Not to Be Significant**).

4 City of Glendale, "San Fernando Road Redevelopment Project Area," http://www.ci.glendale.ca.us/dev-svcs/SFCorridor.asp, accessed January 11, 2013.



SOURCE: City of Glendale - 2008

FIGURE **4.4-4**

Meridian Consultants

San Fernando Road Corridor Redevelopment Project Area

006-002-13

Methodology

The determination of the Project's consistency with applicable land use plans and policies is based upon a review of the previously identified planning documents that regulate land use or guide land use decisions at and around the Project site. The Project is considered to be consistent with the provisions of the identified regional and local plans if it meets the general intent of the plans and would not preclude the attainment of the primary intent of the land use plan or policy.

Project Impacts

Threshold: Physically divide an established community.

The Southern Pacific Railroad right-of way, adjacent to the west of the Project site, serves as both a physical and jurisdictional boundary between the City of Glendale and the Atwater Village neighborhood in the City of Los Angeles. Land uses located in Atwater Village include commercial, residential, and institutional uses, while land uses surrounding the Project site include mostly commercial and industrial uses. The General Plan Land Use designations include Industrial to the north, Mixed Use to the northeast, Community Services to the east, Mixed-Use to the south, and Public/Semi-Public to the west of the Southern Pacific Railroad right-of-way. The zoning designations adjacent to the Project site include Industrial to the north, Industrial/Commercial/Residential Mixed-Use to the northeast, Commercial Service to the east, Industrial/Commercial/Residential Mixed-Use to the south, and Transportation to the west.

Additionally, the Project would include design features which would both emphasize the building as a "gateway" into Glendale from Atwater Village, and potentially encourage more pedestrian and future bicycle activity along West Los Feliz Road. Proposed street and sidewalk improvements would increase both pedestrian and automobile safety, and provide improved access to alternative transportation in the Project area.

Since the Project would not introduce new infrastructure (except where required by utility service providers to accommodate anticipated demand by the proposed uses) and the proposed uses would be consistent with the allowable uses in the IMU-R zone, impacts associated with the potential disruption of existing land uses would be less than significant. The surrounding sidewalks would be improved and enhanced to encourage pedestrian activity along West Los Feliz Road, which extends into the City of Los Angeles. In addition, the embankment area along West Los Feliz adjacent to the Project site would be improved. Given that the Project would increase connectivity between the existing uses in Atwater Village and provide an architectural element to one of the entrances to the City of Glendale, rather than physically divide the two cities, impacts would be less than significant.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than significant.

Threshold: **Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect.**

The Project would develop a total of 228 apartment units, indoor amenities including a gym, media room, event room, and common restrooms; and outdoor amenities including a jacuzzi, pool, and a pool deck, a courtyard, landscaping along the sewer easement, Gardena Avenue, Fernando Court, and West Los Feliz Road, and a six-level parking garage. Although the Project is eligible to have up to 270 units, the applicant is proposing to build only 225 units. Development activity within the Project area is subject to land use regulations set forth in the City of Glendale General Plan, the City of Glendale Zoning Ordinance, and San Fernando Road Corridor Redevelopment Project Area Plan.

As previously stated, the Project site is designated as Mixed Use by the General Plan and zoned as IMU-R by the Zoning Map. The Mixed Use designation permits a mix of commercial and residential uses as well as exclusively commercial, industrial, or residential land uses. Similarly, pursuant to Section 30.14.010(B) Table 30.14-A of the City's Zoning Ordinance, residential uses are permitted within the IMU-R Zone with approval of a Conditional Use Permit. Therefore, the residential uses as proposed would be permitted under the existing General Plan and zoning designations. No General Plan amendment or zone change is proposed or required.

The applicant is requesting the following discretionary approvals: a Stage I/II Design Approval, a Conditional Use Permit (CUP), and a modification of Development Standards. A Stage II Design Approval (a four -stage review process) would be required to approve conceptual design, design development, and final design of the Project. This is common practice in the City and is required to ensure consistency with the City's goals and policies.

Pursuant to Glendale Municipal Code Section 30.14.010 Table 30.14-A, approval of a CUP is required by the City Council for the development of stand-alone residential buildings within the IMU-R zone. The standards of the IMU-R zone would apply to the Project which include a maximum residential density of 100 dwelling units per acre, a minimum setback of 10 feet at the corner cutoff of an intersection, and a maximum height limit of 75 feet 6 inches.

The Project would request a modification of the Glendale Municipal Code to allow an above grade parking structure. This would be consistent with the provision allowed by the Glendale Municipal Code when a project provides affordable housing. In addition, the applicant is requesting a variance to the standard City of Glendale parking code and be allowed to park automobiles following Glendale's "Downtown Specific Plan" (DSP).

With approval of the CUP and modification of development standard for an above grade parking structure and variance for parking, the Project would be consistent with the Glendale Municipal Code and no significant impacts would result from these approvals.

As discussed above, the primary objective of the Redevelopment Plan is to eliminate conditions of blight by revitalizing and upgrading the commercial and industrial properties and facilities within the Redevelopment Project area. Implementation of the Project would introduce a new residential development onto a site which currently contains four foundations of previous structures and surface parking spaces. Therefore, the Project would comply with the primary objective of the Redevelopment Plan by removing the foundations of previous buildings and improving the use on site. The Project would not conflict with the implementation of other projects within the 750-acre redevelopment area. Additionally, the Redevelopment Plan is required by law to be compliant with applicable provisions of the General Plan and Municipal Code.

An analysis of the Project's consistency with the applicable goals of the land use plans, policies, and regulations of the General Plan and the San Fernando Road Corridor Redevelopment Plan is provided below.

Consistency with General Plan

Land Use Element

General

Goal: Effectuate a moderate growth policy for the City of Glendale consistent with community needs, available services and the environment.

As discussed in **Section 4.8, Population and Housing**, the expected increase in population and housing from the Project is within the anticipated increase for the City of Glendale. As such, the Project does not conflict with this goal.

Goal: Reinforce Glendale's image and community identity with the greater Los Angeles area metropolitan complex.

The Project would be consistent with the City's image and community identity by adding a residential project into the Redevelopment Area at an entrance, or "gateway" to the City. The Project would provide residential amenities, such as a jacuzzi, pool and deck, event room, gym, and media room which may be available in similar developments in the greater Los Angeles area. As such, the Project would be consistent with this goal.

The site is vacant. No historical significance is associated with the site; therefore, the Project is consistent with the Historic Preservation Element.

Goal: Form an urban environment which will provide for residential diversity and opportunity.

The Project would add to the diversity of existing residential housing types in the City by providing studios, one bedroom, and two bedroom apartments in an area with multiple transit options including the Beeline Bus Routes and Metro Bus Routes. Based on these characteristics, the Project would be consistent with this goal.

Goal: Improve the livability of the total community for all Glendale residents as expressed in living, working and shopping areas, as well as community facilities.

The Project would improve the livability of the City by creating a diversity of living opportunities that would enhance southern Glendale and one of the entrances to the City. The apartment building would provide a diverse range of living units which would consist of 49 studio units, 103 one bedroom apartments, and 73 two bedroom apartments within an underutilized portion of the City. The Project would pay Development Impact Fees to offset the impact on parks and recreation facilities. For these reasons the Project would be consistent with this goal.

Goal: Promote development and improvement within the community capitalizing on the location of, and access to, Glendale as adjacent to the regional core.

The Project would implement the goals of the City's Redevelopment Plan by developing and improving the Project site, which currently contains foundations of previous industrial buildings and surface parking spaces, in southern Glendale and in close proximity to public transportation. As such, this Project would be consistent with this goal.

Goal: Provide for measures to prevent the loss of life, injury, and economic dislocation resulting from fire, flood, and geologic hazards.

The Project would comply with all applicable City Fire and Building Codes, thus minimizing the loss of life or injury from fire and geologic hazards. In addition, the Project site is not located in a 100-year flood zone and therefore, is not subject to flooding hazards. As a result, the Project would be consistent with this goal.

Residential

Goal: Promote the revitalization or, if necessary, the replacement of deteriorating neighborhoods.

The Project would promote revitalization of the southern portion of the Redevelopment Project area by replacing a vacant lot with a residential project. The Project would introduce new residential uses, and would include residential amenities, as well as a courtyard, for the residents and any visitors to the Project site. For these reasons, the Project would be consistent with this goal.

Goal: Support the creation of higher density residential development and alternative forms of medium and high density housing in those areas best suited from the standpoint of accessibility, current development, community organization, transportation and circulation facilities and economic feasibility.

The Project would provide an alternative form of high density housing by providing studios, one bedroom, and two bedroom apartment units in the southern portion of the Redevelopment Area and at an entrance to the City, near multiple public transportation routes. The Project site is adjacent to necessary municipal services, maintains regional access, is near recreational amenities such as Adams Square Mini Park, Cerritos Park and Pacific Park and Community Center, and near multiple commercial opportunities such as commercial opportunities along San Fernando Road in Glendale and Atwater Village in the City of Los Angeles. As such, the Project would be consistent with this goal.

Goal: Provide opportunities for diversity in housing styles for all economic segments of the community.

The Project would add to the diversity of residential housing types in the City by providing 225 studio, one bedroom, and two bedroom apartment units, for City residents. For these reasons, the Project would be consistent with this goal.

Circulation

Goal: Insure that existing development is provided with adequate and safe streets.

Goal: Provide adequate streets in advance of development capable of accommodating traffic associated with proposed uses.

As part of the Project an eastbound left-turn storage modification and protected left turn arrow at the intersection of Gardena Avenue and Los Feliz Road would be provided as specified by the City of Glendale Traffic and Transportation Division. In addition, the project will be required to install an additional southbound to eastbound exclusive turn lane. The Project would be required to provide a two (2) foot widening, restriping and associated dedication of right-or-way along the site's entire frontage of Fernando Court. This widening and restriping would allow for the provision of two (2) 10 foot travel lanes and two (2) 8 foot parking lanes. A loading zone would also be installed west of the County Sewer easement. Parking would be retained along the site's Fernando frontage to the greatest extent possible. Lastly, the Project would provide a hammerhead on Fernando Court using a portion of the county sewer easement to provide a turnaround area for fire apparatus. To maintain the hammerhead free of obstructions, parking would not be allowed on an approximate 150' portion of the north side of Fernando Court.

The parking structure would be designed to City of Glendale Building Codes for above ground parking structures. Sight lines would be required according to Caltrans and City of Glendale Department of Public Works standards to ensure safe entry/exit from the parking structure. For these reasons, the Project would be consistent with these goals.

Goal: Develop clusters of uses which will facilitate the development of public transportation networks, decreasing dependence on the automobile.

The Project would develop residential uses within a commercial area of the City adjacent to an entrance to the City. The Project site is in close proximity to the Metro bus lines and the Beeline Bus lines provided by the City of Glendale. The Project would provide 16 bicycle spaces within the parking structure. As such, the Project would be consistent with this goal.

Housing Element

Goal 1: A city with a wide range of housing types to meet the needs of current and future residents

The Project would add to the diversity of residential housing types in the City by providing 225 apartments in a high density project within the Redevelopment Project area at an entrance to the City, as well as in close proximity to public transportation. These units would include studio, one bedroom, and two bedroom apartment units. As such, the Project would be consistent with this goal.

Goal 2: A city with high quality residential neighborhoods that are attractive and well designed.

The Project would comply with the design guidelines stipulated in the Redevelopment Project area. The Project site currently consists of the foundations of former commercial buildings and contains surface parking spaces in an underutilized area of the City. Redevelopment of this location along an entrance way into the City would improve the Redevelopment Project area as a whole and provide needed housing units. The landscaping and upkeep of the building would be maintained by a building management company. Based on these reasons, the Project would be consistent with this goal.

Goal 4: A city with housing services that address groups with special housing needs

The Project would provide 225 apartment units. These units would include studio, one bedroom, and two bedroom apartment units and thus be available to a diverse group person including single people to families. For this reason, the Project would be consistent with this goal.

Goal 6: A city with housing that is livable and sustainable.

As discussed in **Section 3.0, Project Description**, the Project would recycle a minimum of 50 percent of the demolition and construction debris, would incorporate trash and recycling receptacles for residents in the parking structure, would install low flow devices within the apartment units as well as water conservation techniques for the landscaping, and the Project would comply with the Urban Design Guidelines adopted by the City which incorporate livable community concepts by creating open space and facilitating pedestrian movement. The Project incorporates many of these concepts and the City would review the Project for consistency with the guidelines. As such, the Project would be consistent with this goal.

Circulation Element

Goal 2: Minimization of congestion, air pollution, and noise associated with motor vehicles.

The Project would provide 16 bicycle spaces and is close to major transportation lines for bus service, as well as a Metrolink station. The Project would be required to provide a two (2) foot widening, restriping and associated dedication of right-or-way along the site's entire frontage of Fernando Court. This widening and restriping would allow for the provision of two (2) 10 foot travel lanes and two (2) 8 foot parking lanes. A loading zone would also be installed west of the County Sewer easement. The Project would incorporate measures during the construction phase to minimize dust and erosion.

Goal 3: Reasonable access to services and goods in Glendale by a variety of transportation modes.

The Project would provide growth in an area that is served by public transportation. The Project would be located in a commercial and industrial area which would minimize lengths of automobile trips to these nearby land uses. In addition, the Project would construct Americans with Disabilities Act (ADA) compliant sidewalks. For these reasons, the Project would be consistent with this goal.

Goal 4: Functional and safe streetscapes that are aesthetically pleasing for both pedestrians and vehicular travel.

The Project would provide high quality streetscape and pedestrian amenities, such as street trees, shrubs, and wide sidewalks to improve the aesthetic view along West Los Feliz Road, Gardena Avenue and Fernando Court. The architectural design of the building would provide an aesthetic building to one of the entrances to the City of Glendale. As such, the Project would be consistent with this goal.

Noise Element

Goal 2: Reduce noise from non-transportation sources

The Project would install mechanical equipment in accordance with the City's Noise Ordinance. As such, the Project would be consistent with this goal.

Goal 3: Continue incorporating noise considerations into land use planning decisions.

The Project would be located within a 65 to 70 dBA CNEL zone identified in the City's Noise Element. Based on the Noise Element and the measurements performed on the Project site, the Project would experience 62 to 69 dBA CNEL along West Los Feliz Road. The Project would be located in the

conditionally acceptable land use compatibility designation according to the City's Noise Element. The Project would construct the residential building to the standards set forth in the California Building Code which specifies that the indoor noise levels for residential living spaces not exceed 45 dBA CNEL. For these reasons, the Project would be consistent with this goal.

Goal 4: Enhance measures to control construction noise impacts

The Project would conform to the Glendale Municipal Code by performing demolition, grading, and construction activities between the hours of 7:00 AM and 7:00 PM, would incorporate best management practices (BMPs) to reduce construction noise levels, and would locate construction staging areas away from vibration and noise sensitive land uses. For these reasons, the Project would be consistent with this Project.

Conservation and Open Space Element

Goal 7: Continue programs which enhance community design and protect environmental resource quality.

The Project would provide onsite recreational amenities in the form of a pool and deck, a media room, an event room, and a gym as well as provide a courtyard in the center for the residential building which would provide open space and bbq areas. The perimeter of the Project site would be landscaped with trees, shrubs, and grasses as well as contain architectural features. The Project would be constructed on an infill site that contains the foundations of former commercial and industrial buildings. As such, the Project would be consistent with this goal.

The property is location in Recreation Planning Area 7. This Area is served by Adams Square Mini Park, Cerritos Park, Elk Mini Park, Maple Park, the Pacific Park and Community Center, Palmer Park and the proposed Maryland Park. This Planning Area currently has a ratio of approximately 1.48 acres of parkland per 1,000 residents, less than the recommended ratio of 6 acres per 1,000 residents for combined neighborhood and community parkland. However, the Project would pay the park facilities mitigation fee, and the Project would not contribute appreciably to housing demand in the city, so it is consistent with the Recreation Element.

Goal 12: Continue to conserve water resources and provide for the protection and improvement of water quality

The Project would be required to maintain the first 0.75 inches of rainfall onsite through the infiltration of the soils or through the containment onsite and reused as irrigation. The Project would install low

flow water devices, such as low flow toilets and water faucets, in the apartments and water conservation irrigation systems. For these reasons, the Project would be consistent with this goal.

Consistency with San Fernando Road Corridor Redevelopment Project Plan

Goal: Improve neighborhood compatibility between industrial and adjacent residential land uses.

The Project would provide a "gateway" to the City of Glendale, improve pedestrian access along West Los Feliz Road, and revitalize an under used parcel within the Redevelopment Project area. The Project site is designated as Mixed Use by the General Plan and zoned as IMU-R by the Zoning Map. The Mixed Use designation permits a mix of commercial and residential uses as well as exclusively commercial, industrial, or residential land uses. Similarly, pursuant to Section 30.14.010(B) Table 30.14-A of the City's Zoning Ordinance, residential uses are permitted within the IMU-R Zone with approval of a Conditional Use Permit. Therefore, the residential uses as proposed would be permitted under the existing General Plan and zoning designations. These designations demonstrate that the City of Glendale envisioned this area as a transitional area.

Level of Significance Before Mitigation: Less than Significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than significant.

Cumulative Impacts

The identified related projects all consist of individual development projects that do not involve any site improvements that would combine to physically divide any existing community, neighborhood, or district in southern Glendale. No cumulative impacts, therefore, would result. As previously stated, Project implementation would increase connectivity between the existing uses in Atwater Village and would act as a "gateway" to the City of Glendale. Consequently, the incremental effect of the Project would not be cumulatively considerable and the Project's cumulative impacts would be less than significant.

As discussed above, implementation of the Project, on its own, would not result in land use incompatibilities or plan inconsistencies; thus, no significant land use impacts would occur. Development of the identified related projects would result in changes to existing land uses in the City through the conversion of vacant land and low-density uses to higher density uses. All identified Citywide related projects would be reviewed for consistency with adopted land use plans and policies by

the City of Glendale. For this reason, related projects are anticipated to be consistent with applicable General Plan and Zoning Ordinances, or be subject to an allowable exception, and further, would be subject to CEQA, mitigation requirements, and design review. Therefore, cumulative impacts to land use as a result of development conflicting with applicable land use plans and policies would be less than significant.

Level of Significance Before Mitigation: Less than Significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than significant.

4.5 NOISE

This section of the environmental impact report (EIR) presents the results of an analysis of both existing background conditions and future noise conditions following completion of the Project. This section incorporates the findings of the Acoustical Analysis Report prepared by Veneklasen Associates (contained in **Appendix 4.5**) and the Traffic Impact Analysis, prepared by Kunzman Associates, Inc. (contained in **Appendix 4.9**).

ENVIRONMENTAL SETTING

Fundamentals of Sound

Sound is technically described in terms of loudness and frequency. The loudness of sound or noise, two terms that are used interchangeably throughout this section, is measured using a logarithmic scale with 10 as the base. The standard unit of sound measurement is the decibel (dB), or dB scale, which describes the physical intensity of the pressure vibrations that make up any sound. The decibel scale sets the hearing threshold as 0 dB. The frequency of the sound is related to the pressure vibration which is measured in Hertz (Hz) which is measured in cycles per second.

The human ear can detect a wide range of frequencies and sound pressure levels. The subjective audible sound pressure range is from 0 dB to 140 dB. The just noticeable difference is typically around 1 dB for sound level. The hearing thresholds show considerable variability from individual to individual with a standard variation among individuals of about 5 dB. Human ears can detect not only changes in overall sound pressure level but can also detect sound with a sound pressure well below the background noise level. Studies have shown that sound is perceived to be twice as loud if the sound level increases by 10 dB. Similarly, a 20 dB increase in the sound level is perceived as four times as loud by the normal human ear.

In response to this sensitivity of the human ear to different frequencies, the A-weighted noise level, referenced in units of dBA, was developed to better correspond with subjective judgment of sound levels by individuals.

A doubling of sound energy results in a 3 dBA increase in sound, which means that a doubling of sound wave energy (e.g., doubling the volume of traffic on a roadway) would result in a barely perceptible change in sound level. In general, changes in a noise level of less than 3 dBA are not typically noticed by the human ear.[1] Changes from 3 to 5 dBA may be noticed by some individuals who are extremely

1 U.S. Department of Transportation, Federal Highway Administration, Fundamentals and Abatement of Highway Traffic Noise, (Springfield, Virginia: U.S. Department of Transportation, Federal Highway Administration, September 1980), p. 81.

sensitive to changes in noise. An increase of greater than 5 dBA is readily noticeable, while the human ear perceives a 10 dBA increase in sound level to be a doubling of sound volume.

Noise sources can generally be categorized as one of two types: (1) point sources, such as stationary mechanical equipment; and (2) line sources, such as a roadway. Noise levels generated by a variety of activities are shown in **Figure 4.5-1, Common Noise Levels**. Sound generated by a point source typically diminishes or attenuates at a rate of 6 dBA for each doubling of distance from the source to the receptor at acoustically hard sites and at a rate of 7.5 dBA at acoustically soft sites. A hard, or reflective, site consists of asphalt, concrete, and very hard-packed soil which does not provide any excess ground-effect attenuation while an acoustically soft site consists of normal earth and most ground with vegetation.[2]

As an example, a 60 dBA noise level measured at 50 feet from a point source at an acoustically hard site would be 54 dBA at 100 feet from the source and it would be 48 dBA at 200 feet from the source. Noise from the same point source at an acoustically soft site would be 52.5 dBA at 100 feet and 45 dBA at 200 feet from the source. Sound generated by a line source typically attenuates at a rate of 3 dBA and 4.5 dBA per doubling of distance from the source to the receptor for hard and soft sites, respectively.[3]

Man-made or natural barriers can also attenuate sound levels. Solid walls and berms may reduce noise levels by 5 to 10 dBA.[4] Sound levels from a source may also be attenuated 3 to 5 dBA by the first row of houses and 1.5 dBA for each additional row of houses in a residential neighborhood.

The minimum attenuation of exterior to interior noise provided by typical residential and institutional buildings in California is 17 dBA with open windows and 25 dBA with closed windows.

Environmental Noise

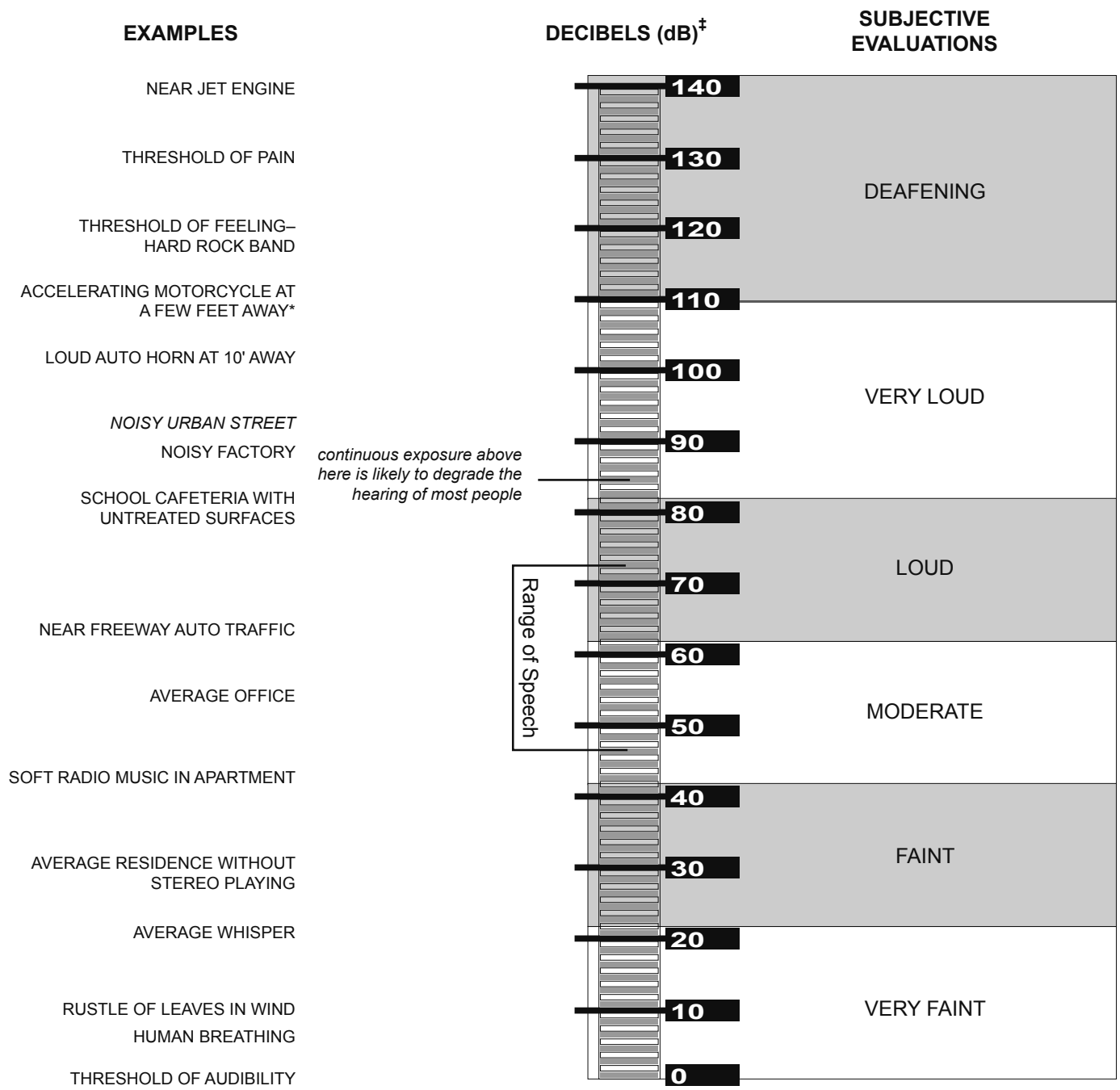
Noise level increases are used to determine the effect of noise in environmental settings. Many methods have been developed for evaluating community noise to account for, among other things:

- The variation of noise levels over time
- The influence of periodic individual loud events
- The community response to changes in the community noise environment

2 U.S. Department of Transportation, 1980. p. 97.

3 FHA, Fundamentals and Abatement of Highway Traffic Noise, 1980, p. 97.

4 FHA, 1980. p. 18.



** NOTE: 50' from motorcycle equals noise at about 2000' from a four-engine jet aircraft.*

‡*NOTE: dB are "average" values as measured on the A–scale of a sound–level meter.*

FIGURE **4.5-1**

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Common Noise Levels

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Table 4.5-1, Noise Descriptors, identifies various noise descriptors developed to measure sound levels over different periods of time.

Table 4.5-1
Noise Descriptors

Term	Definition
Decibel (dB)	The unit for measuring the volume of sound equal to 10 times the logarithm (base 10) of the ratio of the pressure of a measure sound to a reference pressure.
A-Weighted Decibel [dBA]	A sound measurement scale that adjusts the pressure of individual frequencies according to human sensitivities. The scale accounts for the fact that the region of highest sensitivity for the human ear is between 2,000 and 4,000 cycles per second (hertz).
Equivalent Sound Level (Leq)	The sound level containing the same total energy as a time varying signal over a given time period. The Leq is the value that expresses the time averaged total energy of a fluctuating sound level. Leq can be measured over any time period, but is typically measured for 1-minute, 15-minute, 1-hour, or 24-hour periods.
Community Noise Equivalent Level (CNEL)	A rating of community noise exposure to all sources of sound that differentiates between daytime, evening, and nighttime noise exposure. These adjustments add 5 dBA for the evening, 7:00 PM to 10:00 PM, and add 10 dBA for the night, 10:00 PM to 7:00 AM. The 5 and 10 decibel penalties are applied to account for increased noise sensitivity during the evening and nighttime hours. The logarithmic effect of adding these penalties to the 1-hour Leq measurements typically results in a CNEL measurement that is within approximately 3 dBA of the peak-hour Leq.1
sound pressure level	The sound pressure is the force of sound on a surface area perpendicular to the direction of the sound. The sound pressure level is expressed in dB.
Ambient Noise	The level of noise that is all encompassing within a given environment, being usually a composite of sounds from many and varied sources near to and far from the observer. No specific source is identified in the ambient.

Note:
1 - California Department of Transportation, Technical Noise Supplement; A Technical Supplement to the Traffic Noise Analysis Protocol, (Sacramento, California: November 2009), pp. N51-N54.

Health Effects of Noise

Human response to sound is highly individualized. Annoyance is the most common issue associated with community noise levels. Many factors influence the response to noise including the character of the

noise, the variability of the sound level, the presence of tones or impulses, and the time of day of the occurrence. Additionally, non-acoustical factors, such as individual opinion of the noise source, the ability to adapt to the noise, the attitude towards the source and those associated with it, and the predictability of the noise, all influence the response to noise. These factors result in the reaction to noise being highly subjective with the perceived effect of a particular noise varying widely among individuals in a community.

The effects of noise can be grouped into three general categories:

- Subjective effects of annoyance, nuisance, dissatisfaction
- Interference with activities such as speech, sleep, and learning
- Physiological effects such as starting hearing loss

Noise-induced hearing loss usually takes years to develop. Hearing loss is one of the most obvious and easily quantifiable effects of excessive exposure to noise. While the loss may be temporary at first, it can become permanent after continued exposure. When combined with hearing loss associated with aging, the amount of hearing loss directly due to the environment is difficult to quantify. Although the major cause of noise-induced hearing loss is occupational, non-occupational sources may also be a factor.

Noise can mask important sounds and disrupt communication between individuals in a variety of settings. This process can cause anything from a slight irritation to a serious safety hazard, depending on the circumstance. Noise can disrupt face-to-face communication and telephone communication, and the enjoyment of music and television in the home. Interference with communication has proved to be one of the most important components of noise-related annoyance. Noise-induced sleep interference is one of the critical components of community annoyance. Sound level, frequency distribution, duration, repetition, and variability can make it difficult to fall asleep and may cause momentary shifts in the natural sleep pattern, or level of sleep. It can produce short-term effects, with the possibility of more serious effects on health if it continues over long periods.

Annoyance can be defined as the expression of negative feelings resulting from interference with activities, as well as the disruption of one's peace of mind and the enjoyment of one's environment. The consequences of noise-induced annoyance are privately held dissatisfaction, publicly expressed complaints to authorities, and potential adverse health effects, as discussed above.

Fundamentals of Vibration

Vibration is commonly defined as an oscillatory motion through a solid medium in which the motion's amplitude can be described in terms of displacement, velocity, or acceleration. The peak particle velocity (PPV) or the root-mean-square (RMS) velocity is usually used to describe vibration amplitudes. PPV is defined as the maximum instantaneous peak of the vibration signal, while RMS is defined as the square-root of the average of the squared amplitude of the signal. PPV is typically used for evaluating potential building damage, whereas RMS is typically more suitable for evaluating human response to groundborne vibration. The RMS vibration velocity level can be presented in inches per second or in VdB (a decibel unit referenced to 1 micro-inch per second). Commonly, groundborne vibration generated by man-made activities (i.e., road traffic, construction activity) attenuates rapidly with distance from the source of the vibration.

The vibration velocity level threshold of perception for humans is approximately 65 VdB. A vibration velocity of 75 VdB is the approximate dividing line between barely perceptible and distinctly perceptible levels for many people. Most perceptible indoor vibration is caused by sources within buildings such as operation of mechanical equipment, movement of people, or the slamming of doors. Typical outdoor sources of perceptible groundborne vibration are construction equipment, steel-wheeled trains, and traffic on rough roads. If a roadway is smooth, the ground-borne vibration from traffic is barely perceptible. The range of interest is from approximately 50 VdB, which is the typical background vibration velocity, to 100 VdB, which is the general threshold where minor damage can occur in fragile buildings.

Local Setting

Land uses around the Project site include industrial uses and a homeless center to the north; commercial uses, a veterinary clinic and multi-family residential to the east; commercial retail, and light-industrial uses to the south; and the Union Pacific Railroad (UPRR) right-of-way to the west. The homeless center is considered a noise-sensitive use. The Project site and surrounding uses are located in an urban area of the City of Glendale and are exposed to noise sources typical of such a setting. No stationary sources of noise are currently located on the Project site.

Off-site stationary noise sources in the area that are audible on the site include activities associated with commercial uses surrounding the site, such as people talking, doors slamming, tires squealing, and truck deliveries. Mobile sources of noise that are audible on the site are related to road traffic along Fernando Court, Gardena Avenue, and West Los Feliz Road, and railroad traffic along the UPRR right-of-way. The UPRR right-of-way located west of the Project site is an active Metrolink route with over 50 trains per day. Amtrak and freight operations also use this railroad.

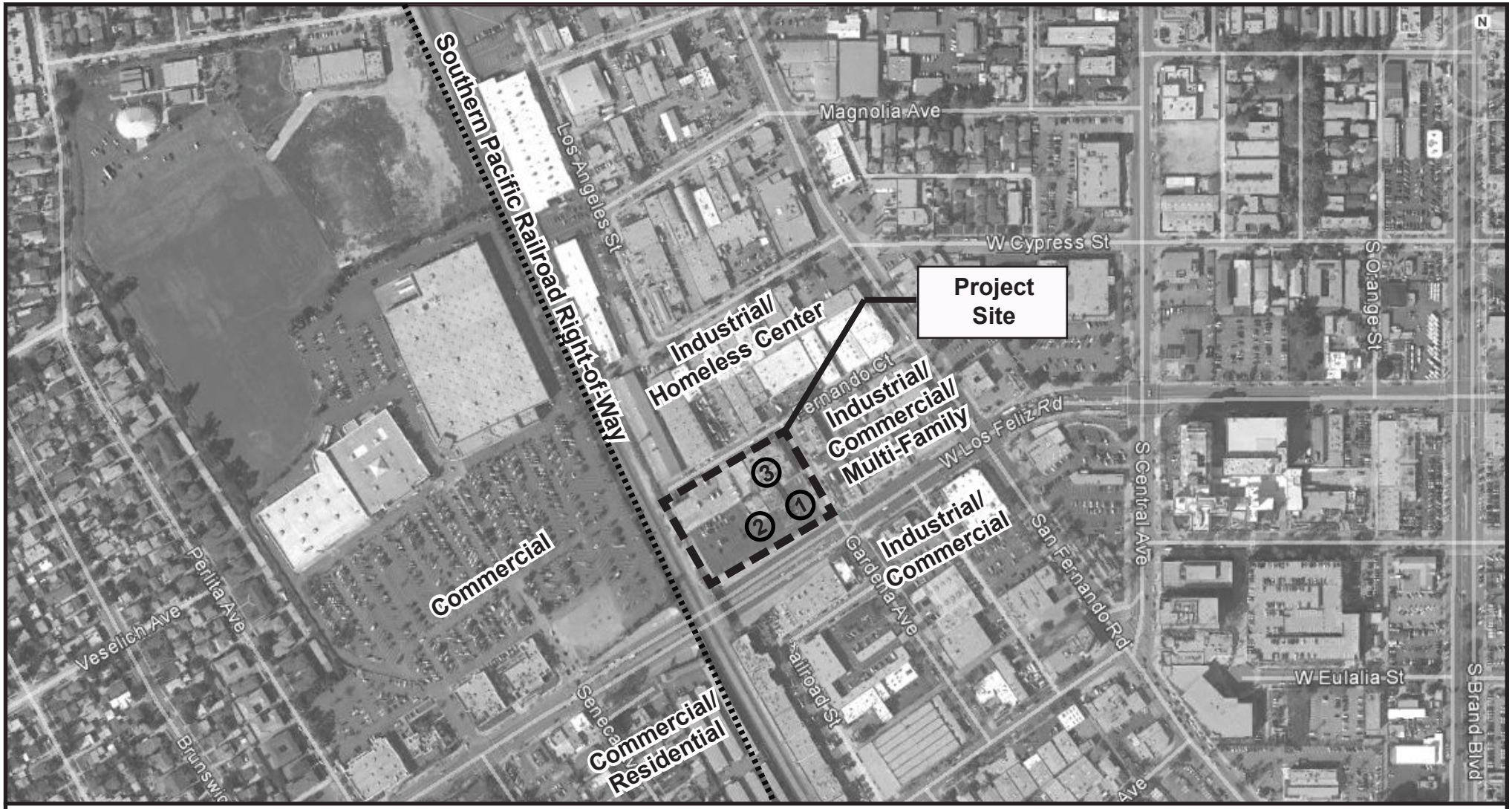
Noise Monitoring

In order to document existing noise levels, short term noise monitoring was conducted by Meridian Consultants at three locations on the Project site on January 9, 2013. Noise monitoring locations are illustrated on **Figure 4.5-2, Noise Monitoring Locations** and existing ambient measured noise levels associated with each monitoring location are provided in **Table 4.5-2, Existing Ambient Noise Levels**. Noise monitoring was conducted using a Larson-Davis Sound Level Meter (Model 831) which meets the American National Standards Institute (ANSI) for general environmental noise measurement instrumentation. Wind speeds were below 5 miles per hour and no unusual noise was occurring during the noise monitoring, such as intense construction activities or major special events. Noise readings at each location were taken in 1-second intervals for approximately 10 minutes. Noise levels ranged between 56.6 dBA near Fernando Court to 68.5 dBA near West Los Feliz Road. Noise levels on the Project site were primarily attributed to Metrolink activities along the UPRR and vehicle traffic along West Los Feliz Road.

Table 4.5-2
Existing Ambient Noise Levels

Location No.[1]			dBA Leq
1 Near Project site southern boundary approximately 35 feet from edge of West Los Feliz Road	9:10 AM to 9:20 AM	Vehicle traffic along West Los Feliz Road and two Metrolink train pass-bys	68.5
2 Near Project site southern boundary approximately 50 feet from edge of West Los Feliz Road	9:21 AM to 9:31 AM	Vehicle traffic along West Los Feliz Road	66.6
3 Near Project site northern boundary approximately 35 feet from Fernando Court in area of homeless shelter	9:33 AM to 9:43 AM	Human activity in area of homeless shelter and light industrial use, and one Metrolink pass-by	56.6

Note:
1 – *Location corresponds to **Figure 4.5-2**, Noise Monitoring Locations.*



Legend:

- Project Site
- City of Los Angeles/City of Glendale Boundary
- ① Noise Monitor Location

NOT TO SCALE

SOURCE: Google Earth - 2013

FIGURE **4.5-2**

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Noise Monitoring Locations

006-002-13

Veneklasen Associates also documented existing noise levels on the Project site in February 2011. Long term noise measurements were performed. In addition, hourly noise levels, minimum and maximum levels and various statistical levels were also measured. Based on these measurements, the predicted CNEL values for various zones on the Project site are shown on **Figure 4.5-3, Existing Noise Zones** and the corresponding noise levels for each zone are presented in **Table 4.5-3, Existing Noise Zones**. These noise level zones are consistent with the short-term noise monitoring conducted by Meridian Consultants.

Table 4.5-3
Existing Noise Zones

Zone	1	2	3	4
CNEL – dBA	65 to 69	65	62	Below 60

*Source: Veneklasen Associates, January and September 2013. Refer to **Appendix 4.5.***

Modeled Roadway Traffic Noise

The existing ambient noise environment for the roadways was determined by calculating noise levels based on average daily trips determined in the traffic analysis conducted for this EIR. The noise modeling effort was accomplished using the Federal Highway Administration Highway Traffic Noise Model. The results of the noise modeling are provided in **Table 4.5-4, Existing Roadway Modeled Noise Levels**.

As shown, roadway noise levels range from a low of 50.6 to a high of 65.7 dBA CNEL at 75 feet from roadway centerline.

Table 4.5-4
Existing Roadway Modeled Noise Levels

Roadway Segment	Noise Level in dBA CNEL at 75 ft. from Roadway Centerline
West Los Feliz Road between UPRR and Gardena Avenue	65.6
West Los Feliz Road between Gardena Avenue and San Fernando Road	65.7
West Los Feliz Road east of San Fernando Road	64.0
Gardena Avenue north of West Los Feliz Road	50.6
Gardena Avenue south of West Los Feliz Road	54.5
San Fernando Road between West Los Feliz Road and Fernando Court	64.8
San Fernando Road south of West Los Feliz Road	63.9

*Source: Refer to **Appendix 4.5** for Modeling Results*

Modeled noise levels along West Los Feliz Road on the Project site's southern boundary are consistent with those monitored by Meridian Consultants in January 2013 and those monitored by Veneklasen Associates in February 2011.

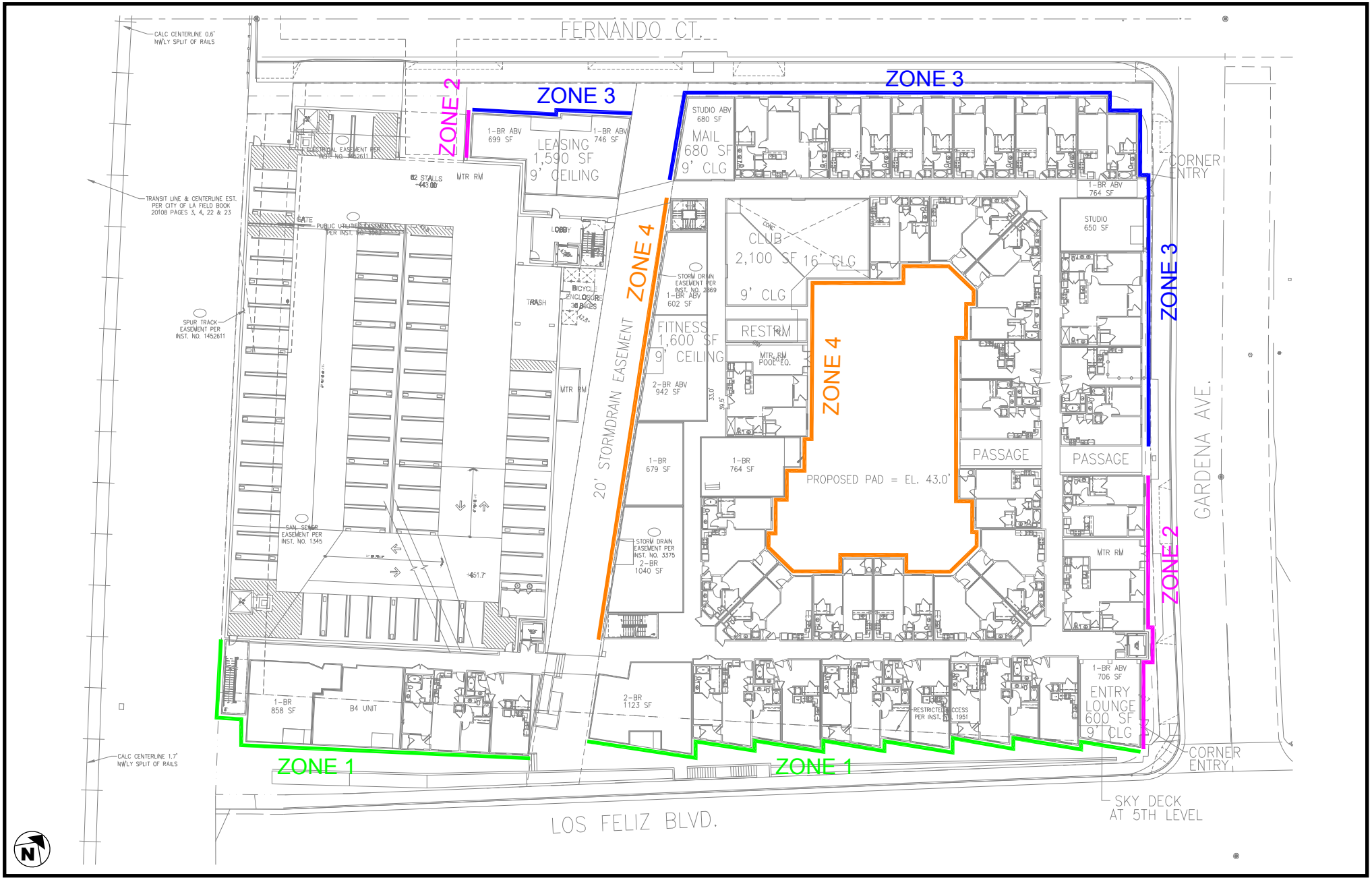
Regulatory Setting

City of Glendale General Plan Noise Element

The City of Glendale General Plan Noise Element (adopted June 7, 2007) establishes noise criteria for the various land uses throughout the City. **Figure 4.5-4, Land Use Compatibility to Noise**, identifies the acceptable limit of noise exposure for various land use categories within the City. Noise exposure for an multi-family uses is "normally acceptable" when the CNEL at exterior residential locations is equal to or below 65 dBA, "conditionally acceptable" when the CNEL is between 60 to 70 dBA, and "normally unacceptable" when the CNEL exceeds 70 dBA. These guidelines apply to noise sources such as vehicular traffic, aircraft, and rail movements. The Noise Element established an interior noise level standard for multi-family uses of 45 dBA CNEL or less.

Glendale Noise Ordinance

Noise standards for specific land uses are identified in the City of Glendale's Noise Ordinance, which is located in Chapter 8.36, Section 8.36.040 of the Municipal Code. Under Section 8.36.040 of the Noise Ordinance, exterior and interior noise is regulated by reference to "presumed noise standards," which are presented below in **Table 4.5-5, Exterior Presumed Noise Standards.** Under Section 8.36.050 of the Noise Ordinance, where noise levels are below the presumed noise standards, the actual ambient noise level controls, and any noise more than 5 dBA above the actual ambient noise level is considered a violation of the Noise Ordinance. Where the actual ambient noise level exceeds the presumed noise standard, the actual ambient noise level also controls, and any noise more than 5 dBA above the actual ambient noise level is also considered a violation of the Noise Ordinance. However, under the Noise Ordinance, the actual ambient noise levels are not allowed to exceed the presumed noise level by more than 5 dBA.



SOURCE: Veneklasen Associates - SEptember 2013

FIGURE **4.5-3**

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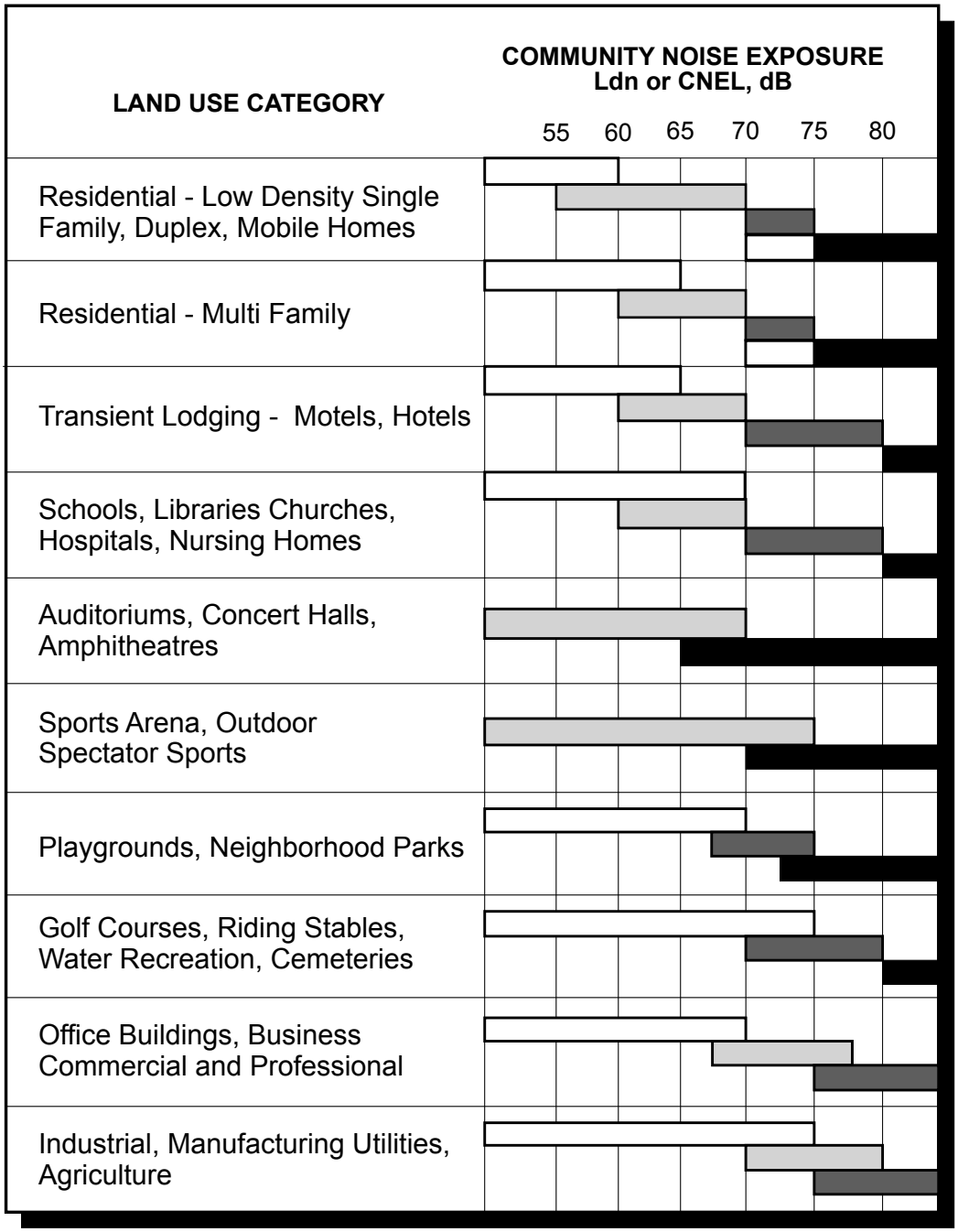
Existing Noise Zones

006-002-13



NORMALLY ACCEPTABLE
Specified land use is satisfactory, based upon the assumption that any buildings involved are of normal conventional construction, without any special noise insulation requirements.

CONDITIONALLY ACCEPTABLE
New construction or development should be undertaken only after a detailed analysis of the noise reduction requirements is made and needed noise insulation features included in the design. Conventional construction, but with closed windows and fresh air supply systems or air conditioning will normally suffice.

NORMALLY UNACCEPTABLE
New construction or development should generally be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise reduction features included in the design.

CLEARLY UNACCEPTABLE
New construction or development should generally not be undertaken.

SOURCE: California Governor's Office of Planning and Research, State of California General Plan Guidelines, Appendix C: Guidelines for the Preparation and Content of Noise Elements of the General Plan, October 2003.

FIGURE **4.5-4**

Meridian Consultants

State Land Use Compatibility Guidelines for Noise

006-002-13

Table 4.5-5
Exterior Presumed Noise Standards

Zone	Standard	Maximum	Time
Residential (multi-family, hotels, motels and transient lodgings)	60 dBA	65 dBA	Anytime
Central Business District and Commercial	65 dBA	70 dBA	Anytime

Source: City of Glendale Municipal Code

The City of Glendale does not have regulations that establish maximum construction noise levels. However, Section 8.36.290(K) provides an exemption from the Noise Ordinance for any activity, operation, or noise, which cannot be brought into compliance (with the Noise Ordinance) because it is technically infeasible to do so. "Technical infeasibility" for the purpose of this section means that noise limitations cannot be complied with despite the use of mufflers, shields, sound barriers and/or any other noise reduction devices or techniques during the operation of the equipment.

Section 8.36.210 of the Noise Ordinance provides that vibration created by the operation of any device would be a violation of City standards if such vibration were above the vibration perception threshold of an individual at or beyond the property boundary of a source on private property. For sources on a public space or public right-of-way, a violation would occur if the vibration perception threshold of an individual were exceeded at a distance of 150 feet from the source. The Noise Ordinance does not define the level of vibration that is deemed perceptible by an individual and does not establish maximum allowable vibration levels.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In order to assist in determining whether a project would have a significant effect on the environment, the City determines a project may be deemed to have a significant noise and vibration impact, if it would:

- Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies
- Exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels
- Result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project

- Result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project

- For a project located within an airport land use plan or, where such plan has not been adopted, within 2 miles of a public airport or public use airport, would expose people residing or working in the project area to excessive noise levels (issue is addressed in **Section 8.0, Effects Found Not to Be Significant**)

- For a project within the vicinity of a private airstrip would the project expose people residing or working in the project area to excessive noise levels (issue is addressed in **Section 8.0, Effects Found Not to Be Significant**)

The State *CEQA Guidelines* do not provide a definition for "substantial increase" in noise and they do not provide a threshold of significance for potential noise or vibration impacts. Therefore, the following thresholds of significance were developed for this noise analysis based upon the General Plan Noise Element and Noise Ordinance discussed previously in this EIR section. These thresholds apply to both Project impacts and cumulative impacts.

Noise

On-Site Noise Thresholds

As shown in **Figure 4.5-4**, exterior noise levels of up to 65 dBA CNEL are considered "normally acceptable" for multi-family uses, while noise levels between 60 dBA and 70 dBA CNEL are considered "conditionally acceptable" and noise levels exceeding 70 dBA CNEL are considered normally unacceptable. The Noise Element does establish an interior noise standard for multi-family residential uses of 45 dBA CNEL.

Off-Site Noise Thresholds

Off-site noise thresholds consider the following: the City's Noise Compatibility Criteria, community response to changes in noise levels, and CEQA standards. As stated earlier, changes in a noise level of less than 3 dBA are not typically noticed by the human ear. Some individuals who are extremely sensitive to changes in noise may notice changes from 3 to 5 dBA. Based on this information, the following thresholds have been established for this analysis:

- An increase of 3 dBA or greater in traffic noise level that occurs due to Project-related activities would be significant if the resulting noise levels would cause the City's noise compatibility thresholds for "normally acceptable" exterior or interior noise levels to be exceeded, or result in a 3 dBA increase in noise to a land use experiencing levels above the City's noise compatibility threshold

for "normally acceptable." A noise level increase of less than 3 dBA under either of the previously described scenarios is not considered to be significant.

- An increase of 5 dBA or less in traffic noise level that occurs from Project-related activities would be considered not significant if the resulting noise levels remain below the "acceptable" thresholds established by the City. Increases in traffic noise greater than 5 dBA would be considered to be significant even if the resulting noise levels are below City standards.

- Stationary noise sources proposed as part of the Project that could result in increases in noise levels at adjacent land uses that exceed City standards would be considered significant.

Vibration

The City's Municipal Code states that a violation of City standards would occur if the operation of a device creates a vibration above the vibration perception threshold. A numerical threshold to identify the point at which a vibration impact is deemed perceptible is not identified in the City's Municipal Code. In the absence of significance thresholds for vibration from construction and operations, the Federal Transit Administration (FTA) identifies ground-bourne vibration impact criteria. **Table 4.5-6, Ground Bourne Vibration Impact Criteria** presents the acceptable levels dependent on the number of vibration events per day.

Table 4.5-6
Ground Bourne Vibration Impact Criteria

	(VdB re 1 micro-inch/sec)		
Land Use Category	**Frequent Events[1]**	**Occasional Events[2]**	**Infrequent Events[3]**
Buildings where vibration would interfere with interior operations.	65 VdB[4]	65 VdB[4]	65 VdB[4]
Residences and buildings where people normally sleep.	72 VdB	75 VdB	80 VdB
Institutional land uses with primarily daytime use.	75 VdB	78 VdB	83 VdB

Notes:
1 – "Frequent Events" is defined as more than 70 vibration events of the same source per day. Most rapid transit projects fall into this category.
2 – "Occasional Events" is defined as between 30 and 70 vibration events of the same source per day. Most commuter trunk lines have this many operations.
3 – "Infrequent Events" is defined as fewer than 30 vibration events of the same kind per day. This category includes most rail branch lines.
4 – This criterion limit is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes. Vibration-sensitive manufacturing or research will require detailed evaluation to define the acceptable vibration levels. Ensuring lower vibration levels in a building often requires special design of the HVAC systems and stiffened floors.

The maximum acceptable level threshold of 65 VdB for buildings where low ambient vibration is essential for interior operations (such as hospitals and recording studios), 72 VdB for residences and buildings where people normally sleep, and 75 VdB for institutional land uses with primary daytime use (such as churches and schools). It should be noted that VdB levels are for frequent vibration events defined as greater than 70 vibration events per day. When less vibration events occur per day, the VdB levels are allowed to be increased.

Methodology

Analysis of the existing and future noise environments presented in this section is based on technical reports, noise monitoring, and noise prediction modeling. Predicted vibration impacts resulting from the implementation of the Project were determined using data from the FTA. Noise modeling procedures involved the calculation of existing and future vehicular noise levels along individual roadway segments. This was accomplished using the Federal Highway Administration Highway Traffic Noise Model. This model calculates the average noise levels at specific locations based on traffic volumes, average speeds, roadway geometry, and site conditions. Traffic volumes utilized as data inputs to the noise prediction model were calculated based on information provided by Kunzman Associates, Inc. and are consistent with the analysis provided in **Section 4.9, Traffic** of this EIR.

Impact Analysis

Thresholds: **Would result in the 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.**

Would result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

Based on noise monitoring and noise modeling conducted, the existing ambient noise level around the Project site already exceeds City threshold exterior noise levels for multi-family residential uses.

Vehicle Noise

Vehicular noise can potentially affect the Project site, as well as land uses located along the studied roadway system. Based on the distribution of traffic volumes, noise modeling was conducted for the roadways analyzed in **Section 4.9**. The results of the modeled weekday roadway noise levels are provided below in **Table 4.5-7, Existing with and without Project Noise Levels (dBA CNEL) at 75 Feet from Roadway Centerline**. As shown, no significant changes in CNEL would result from the proposed Project. As discussed above, an increase in CNEL of 3 dBA represents the point at which only the most

sensitive individuals notice a change in noise levels. Since the Project would not increase roadway noise levels by 3 dBA or greater, land uses located along study area roadway ways, would not be affected by traffic noise. Therefore, impacts would be less than significant.

Table 4.5-7
Existing with and without Project Noise Levels (dBA CNEL) at 75 Feet from Roadway Centerline

Roadway Segment	Existing	Existing +Project	Change Due to Project	Significant Impact?
West Los Feliz Road between UPRR and Gardena Avenue	65.6	65.6	0.0	No
West Los Feliz Road between Gardena Avenue and San Fernando Road	65.7	65.9	0.2	No
West Los Feliz Road east of San Fernando Road	64.0	64.1	0.1	No
Gardena Avenue north of West Los Feliz Road	50.6	53.0	2.4	No
Gardena Avenue south of West Los Feliz Road	54.5	54.5	0.0	No
San Fernando Road between West Los Feliz Road and Fernando Court	64.8	64.9	0.1	No
San Fernando Road south of West Los Feliz Road	63.9	64.0	0.1	No

*Source: Refer to **Appendix 4.5** for Modeling Results*

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than significant.

Parking Structure

Development of the Project would introduce a six-level parking garage on the western portion of the Project site. In general, noise associated with parking structures is not of sufficient volume to exceed community standards based on the time-weighted CNEL scale. Parking structures can be a source of annoyance due to automobile engine start-ups and acceleration, and the activation of car alarms. The Project apartment units would be the closest sensitive receptors within the Project area and would thus represent the worst-case impact associated with parking structure noise from the Project. Estimates of the maximum noise levels associated with parking lot activities are presented in **Table 4.5-8, Maximum Noise Levels Generated by Parking Lots**. These levels are based on numerous measurements conducted by Meridian Consultants. The noise levels presented are for a distance of 50 feet from the source and

are the maximum noise level generated. A range is provided to reflect the variability of noise generated by various automobile types and driving styles.

Table 4.5-8
Maximum Noise Levels Generated by Parking Lots

Parking Structure Event	Peak Noise levels at 50 feet
Door Slamming	60 to 70 dBA
Car Alarms	65 to 75 dBA
Engine Start Ups	60 to 70 dBA
Tire Squeals	50 to 70 dBA
Car Pass-bys	55 to 70 dBA

Due to the high level of traffic noise along West Los Feliz Road on the southern side of the site and operations on the UPRR, normal daytime parking structure Leq noise would not likely be audible due to the masking of noise by these sources. However, single noise events could be an annoyance to on-site residents and may exceed the 65 dBA Municipal Code threshold at receptor locations.

Level of Significance Before Mitigation: Significant.

Mitigation Measures: The following mitigation measure is provided to reduce noise levels associated the on- site parking structure to acceptable levels:

4.5-1 Sound attenuation measures shall be incorporated into the design to minimize noise leakage from the aboveground parking structure. These measures may include a half-wall on the grade-level parking deck and/or full walls on the sides of the structure that are facing on-site residential uses and/or noise control louvers on selected structure facades that potentially influence receptor areas. Acoustical analysis shall be performed to demonstrate that the aboveground parking structure does not result in noise levels that exceed City standards at on-site residences. These components shall be incorporated into the plans to be submitted by the applicant to the City of Glendale for review and approval prior to the issuance of building permits.

Level of Significance After Mitigation: Less than significant.

Sweepers

Other noise sources that may be associated with the parking structure areas include the use of sweepers in the early morning or late evening hours. Noise levels generated by sweepers are generally higher than

parking lot noise associated with automobile activities. Sweepers can generate noise levels of 68 dBA Leq at 50 feet for normal sweeping activities. The noise from sweepers would not cause an increase in long-term noise of more than 3 dBA over the time-weighted CNEL, and would not be significant from that perspective. However, the peak sound levels generated by the sweepers could exceed the single noise event threshold for on-site residences. Depending on the timing of operations, this noise source would result in significant noise impacts during quieter morning and evening periods, and would exceed the Municipal Code 65 dBA threshold for exterior uses at receptor locations.

Level of Significance Before Mitigation: Significant

Mitigation Measures: The following mitigation measure is provided to reduce noise levels associated with street sweeper operations to acceptable levels during the early morning and late evening periods:

4.5-2 On-site sweeper operations shall be restricted to between the hours of 7:00 AM to 10:00 PM.

Level of Significance After Mitigation: Less than significant.

Residential On-Site Development

Future residents located on the Project site, as well as off-site uses, including nearby sensitive receptors, may experience noise due to an increase in human activity within the area from people living on the premises and utilizing the on-site amenities including common areas. Potential residential-type noise sources include people talking, doors slamming, stereos, and other noises associated with human activity. These noise sources are not unique and generally contribute to the ambient noise levels experienced in all residential areas. Noise levels for residential areas are typically between 48 to 52 dBA CNEL. Overall, the noise generated by the Project's residential land uses would not exceed the City of Glendale's compatibility thresholds and is considered to be less than significant.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than significant.

On-site Roadway and Railroad Noise

As shown in **Figure 4.5-3** and **Table 4.5-3,** existing exterior noise levels on the Project site due to vehicle traffic and operation along UPRR along the West Los Feliz Road frontage and near the intersection of West Los Feliz Road and Gardena Avenue range from 65 to 69 dBA CNEL. In addition, the residential

units located on the western edge along the UPRR frontage would range from 65 to 69 dBA CNEL. These noise levels are consistent with the short-term monitored results conducted along the southern boundary of the Project site of between 66.6 dBA to 68.5 dBA. In both cases, noise levels would be above the City Municipal Code exterior noise threshold of 65 dBA for residential uses, and because the Project proposes exterior living areas along West Los Feliz Road, such as small balcony patios which are considered to be exterior useable areas, impacts would be significant. In addition, interior noise levels in the apartment building along these roadways could be above the interior threshold of 55 dBA during the daytime and 45 dBA during the nighttime resulting in significant interior noise levels as well.

Level of Significance Before Mitigation: Significant.

Mitigation Measures: The following mitigation measure is provided to reduce on-site noise levels associated vehicle traffic and operation on the UPRR to acceptable levels:

4.5-3 Noise sensitive residential land uses proposed in areas exceeding the exterior 65 dBA CNEL (such as those dwelling units facing West Los Feliz Road and the UPRR frontage) shall be designed so that interior noise levels attributable to exterior sources do not exceed 55 dBA during the daytime and 45 dBA during the nighttime when doors and windows are closed. An acoustical analysis of the noise insulation effectiveness of proposed construction shall be required and documented during permit review, showing that the building materials and construction specifications are adequate to meet the interior noise standard. Examples of building materials and construction specifications which may be used to meet the interior noise standard include but are not limited the following:

- Windows and sliding glass doors along West Los Feliz Road in Zone 1, along Gardena Avenue in Zone 1, and along the UPRR in Zone 1shall be doubled paned, mounted in low air filtration rate frames, and have a minimum sound transmission coefficient rating of 30 or greater
- Air conditioning units may be provided to allow for windows to remain closed
- Roof or attic vents facing Los Feliz Road and the UPRR shall be baffled

Level of Significance After Mitigation: Significant and unavoidable (exterior), less than significant (interior).

Threshold: **Would result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.**

Construction Vibration

Ground vibrations from construction activities very rarely reach the levels that can damage structures, but they can achieve the audible range and be felt in buildings close to the site. The primary and most intensive vibration source associated with the development of the Project would be the use of larger bulldozers and excavators. Although some piles may be used in some development locations to alleviate potential building loads on the County's flood control concrete piping, the piles would be installed through on-site drilling of the pile holes and not include pile driving. These types of equipment can create intense noise that is disturbing and can result in ground vibrations.

Vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibrations at moderate levels, to slight structural damage at the highest levels. Ground vibrations from construction activities rarely reach the levels that can damage structures, but they can achieve the audible and perceptible ranges in buildings close to the construction site. **Table 4.5-9, Vibration Source Levels for Construction Equipment**, lists vibration source levels for construction equipment.

Table 4.5-9
Vibration Source Levels for Construction Equipment

Equipment	VdB at 25 feet
Excavator	80
Large Bulldozer	87
Backhoe	80
Loaded Truck	86
Roller	74
Jackhammer	79
Small bulldozer	58

Source: Office of Planning and Environment, Federal Transit Administration, Transit Noise and Vibration Impact Assessment (May 2006) FTA-VA-90-1003-06, 12-9.

As indicated in **Table 4.5-9**, large bulldozers are capable of producing approximately 87 VdB at 25 feet, the approximate distance to the nearest structure and homeless shelter. Land uses surrounding the Project site consist mostly of warehouse and industrial uses, and do not contain sensitive equipment. However, the homeless shelter located to the north of the Project does provide transient lodging. The

residential neighborhoods southwest of the Project site in the City of Los Angeles and the Glendale Memorial Hospital to the east of the Project site would not be affected given their distance from the Project site. Individuals staying overnight at the homeless shelter check in the late afternoon and leave early in the morning. High noise-producing (and vibration-producing) activities during construction would be scheduled to occur between the hours of 8:00 AM and 5:00 PM to minimize disruption on sensitive uses. As high vibration-producing activities would occur after individuals staying overnight at the shelter are awake and have left the facility. Nonetheless, potential impacts due to vibration would be considered signficant.

Level of Significance Before Mitigation: Significant.

Mitigation Measures: The following mitigation measures are provided to reduce significant vibration impacts due to construction equipment:

4.5-4 All demolition, earthmoving, and ground-impacting operations shall be conducted so as not to occur in the same period.

4.5-5 Select demolition method to minimize vibration, where possible (e.g., sawing masonry into sections rather than demolishing it by pavement breakers).

4.5-6 Operate earthmoving equipment on the construction site as far away from vibration sensitive sites as possible.

Level of Significance After Mitigation: Significant and unavoidable.

Railroad Vibration

The City of General Plan does not address vibration impacts. Based on the Federal Transit Administration, the threshold of residential annoyance is 80 VdB for infrequent events (less than 30 events) such as the level freight trains typically produce at 50 feet. Residents will be annoyed by much more frequent events generating a lower level of 72 VdB (over 70 events), such as from rapid transit trains. Commuter rail trains (such as Metrolink and Amtrak) typically generate about 75 VdB velocity level, with a maximum of about 85 VdB for higher speed (>60 mph) commuter trains.[5] Based on very limited data monitored by Veneklasen, the vertical velocity vibration levels expected at the proposed Project site were estimated. The velocity level at the nearest residence on the Project site (61 feet from the rail line centerline) is expected to range between 70 and 75 VdB. This would be the level reached

5 Acoustical Analysis Associates, Inc., 2007.

momentarily as the locomotive passes by. Passenger and freight train cars generate much lower vibration levels during their passby. These levels are within the level expected to cause annoyance from relatively infrequent events. Consequently, vibration experienced at this future residence within the Project site could be significant.

Level of Significance Before Mitigation: Significant.

Mitigation Measures: The following mitigation measure is provided to reduce vibration impacts caused by the UPRR to acceptable levels.

4.5-7 Vibration sensitive residential land uses proposed in areas exceeding the 75 VdB (such as the dwelling unit near the UPRR frontage) shall be designed so that vibration levels attributable to the UPRR do not exceed acceptable levels. A vibration analysis of the effectiveness of proposed construction techniques shall be required and documented during permit review, showing that the building materials and construction specifications are adequate to meet the vibration standard. Examples of building materials and construction specifications which may be used to meet the vibration standard include but are not limited the following: providing for an open or closed trench along the western property boundary between the UPRR and the closest on-site residential use; increasing the buffer distance between the nearest on-site residential use and the UPRR; providing for an alternative use in this building area instead of a residential use; and/or providing for vibration isolation of the building consisting of supporting the building foundation on elastomer pads similar to bridge bearing pads.

Level of Significance After Mitigation: Less than significant.

Threshold: Would result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.

The construction period for the Project is anticipated to consist of three phases and would last approximately 18 months.

Phase I would involve the demolition and removal of the existing on-site building foundations. Demolition would involve the use of standard construction equipment such as bulldozers, loaders and haul trucks.

Phase II would involve the excavation of earth materials and replacement with properly compacted fill materials. Grading activities would involve the use of standard earth moving equipment, such as drop

hammer, dozers, loaders, excavators, graders, back hoes, pile drivers, dump trucks, and other related heavy-duty equipment, which would be stored on site during construction to minimize disruption of the surrounding land uses.

Phase III would consist of construction of the parking structure, residential building super structures, and would involve finishing of the structures, testing and operation. Above-grade construction activities would involve the use of standard construction equipment, such as hoists, cranes, mixer trucks, concrete pumps, laser screeds and other related equipment.

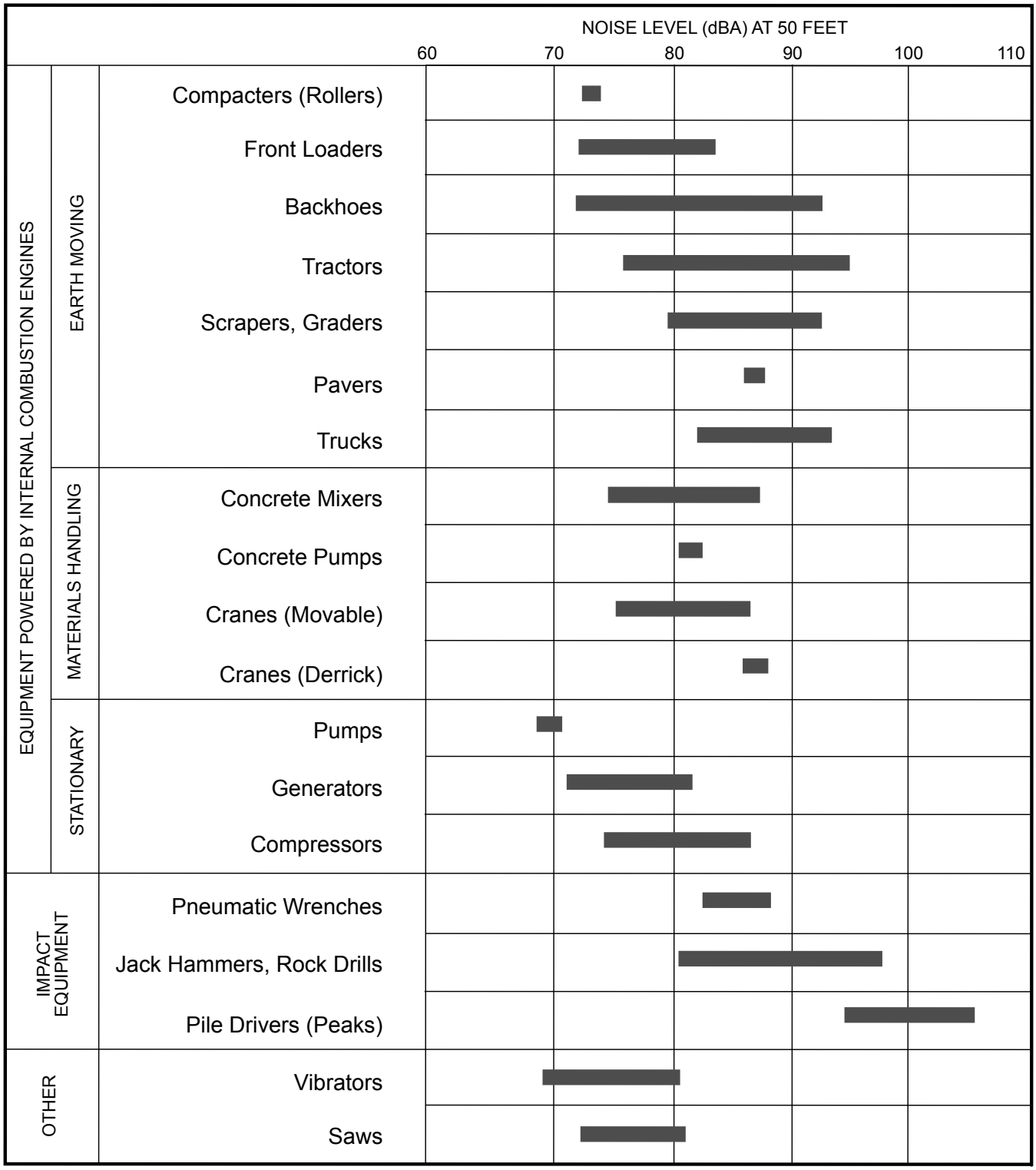
Equipment used during the construction phases would generate both steady state and episodic noise that would be heard both on and off the Project site. Noise levels generated during construction would primarily affect the warehouse and industrial uses adjacent to the Project site. The U.S. Department of Transportation has compiled data regarding the noise generating characteristics of specific types of construction equipment. This data is presented in **Figure 4.5-5, Noise Levels of Typical Construction Equipment**. As shown, noise levels generated by heavy equipment can range from approximately 73 dBA to noise levels in excess of 80 dBA when measured at 50 feet.

Construction activities associated with the Project would occur at approximately 75 feet from the existing warehouse and industrial uses. Noise levels generated during each of the Project phases are presented in **Table 4.5-10, Typical Maximum Noise Levels for Construction Phases**. Equipment estimates used for the analysis for demolition, grading, and building construction noise levels are representative of worse-case conditions, since it very unlikely that all the equipment contained on site would operate simultaneously. As presented, potential construction-related noise impacts are considered significant due to exceeding the noise threshold of 65 dBA for transient lodging and 70 dBA for industrial area, as allowed by the Municipal Code.

Table 4.5-10
Typical Maximum Noise Levels for Construction Phases

	Approximate L_{eq} dBA without Noise Attenuation			
Construction Phase	**25 Feet**	**50 Feet**	**100 Feet**	**200 Feet**
Clearing	90	84	78	72
Excavation	94	88	82	78
Foundation/Conditioning	94	88	82	78
Laying Subbase, Paving	85	79	73	67

Source: U.S Department of Transportation, Construction Noise Handbook, Chapter 9.0, August 2006.



Note: Based on limited available data samples.

SOURCE: United States Environmental Protection Agency, 1971, "Noise from Construction Equipment and Operations, Building Equipment, and Home Appliances," NTID 300-1.

FIGURE **4.5-5**

Meridian Consultants

Noise Levels of Typical Construction Equipment

006-002-13

In addition to equipment-generated noise associated with construction activities, construction traffic would generate noise along access routes to the proposed development areas. The major pieces of heavy equipment would be moved onto the development only one time for each construction activity (i.e., demolition, grading, etc.). In addition, daily transportation of construction workers and the hauling of materials both on and off the Project site are expected to cause increases in noise levels along study area roadways, although noise levels from such trips would be less than peak hour noise levels generated by Project trips during Project operation. Average daily trips associated with construction activities would not result in a doubling of trip volumes along study area roadways. Given that it takes a doubling of average daily trips on roadways to increase noise by 3 dBA, the noise level increases associated with construction vehicle trips along major arterials in the City of Glendale would be less than 3 dBA, and potential impacts would be less than significant.

Level of Significance Before Mitigation: Significant impacts during construction operations.

Mitigation Measures: The following mitigation measures are provided to reduce significant noise impacts due to construction equipment:

4.5-8 All construction activity within the City shall be conducted in accordance with Section 8.36.080, Construction on buildings, structures and projects, of the City of Glendale Municipal Code.

4.5-9 The following construction best management practices (BMPs) shall be implemented to reduce construction noise levels:

- Ensure that construction equipment is properly muffled according to industry standards and be in good working condition.
- Place noise-generating construction equipment and locate construction staging areas away from sensitive uses, where feasible.
- Schedule high noise-producing activities between the hours of 8:00 AM and 5:00 PM to minimize disruption on sensitive uses.
- Implement noise attenuation measures to the extent feasible, which may include, but are not limited to, temporary noise barriers or noise blankets around stationary construction noise sources.
- Use electric air compressors and similar power tools rather than diesel equipment, where feasible.

- Construction-related equipment, including heavy-duty equipment, motor vehicles, and portable equipment, shall be turned off when not in use for more than 30 minutes.

- Construction hours, allowable workdays, and the phone number of the job superintendent shall be clearly posted at all construction entrances to allow for surrounding owners to contact the job superintendent. If the City or the job superintendent receives a complaint, the superintendent shall investigate, take appropriate corrective action, and report the action taken to the reporting party.

4.5-10 Construction staging areas along with the operation of earthmoving equipment within the Project area shall be located as far away from vibration-and noise-sensitive sites as possible.

Level of Significance After Mitigation: Although the mitigation measures identified would reduce noise levels to the maximum extent feasible, impacts during construction would remain significant and unavoidable.

Cumulative Impacts

For purposes of this analysis, development of the related projects provided in **Table 4.0-1, Related Projects**, in **Section 4.0**, **Environmental Impact Analysis**, will be considered to contribute to cumulative noise impacts. Noise by definition is a localized phenomenon, and drastically reduces as distance from the source increases. Consequently, only projects and growth in the general area of the Project site would contribute to cumulative noise impacts.

Thresholds: **Would result in the 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.**

Would result in a substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project.

Cumulative development from related projects would not result in a cumulative impact in terms of a substantial permanent increase in ambient noise levels. A substantial permanent increase is most likely to originate from an increase in noise levels due to roadway traffic. For the purposes of this analysis, an increase of 5 dBA at any roadway location is considered a significant impact, and if the resulting noise level would exceed the land use compatibility criteria, then an increase of 3 dBA is considered significant. In order to determine whether the Project would result in a cumulatively significant impact,

the increase between existing conditions and future with Project conditions was determined. Refer to **Table 4.5-11, Cumulative With and Without Project Noise Levels (dBA CNEL) at 75 Feet from Roadway Centerline**, the Project's contribution to these cumulative noise level increases would be less than 3.0 dBA. Overall, the Project's contribution would not be considered to be cumulatively considerable and would be less than significant.

Table 4.5-11
Cumulative with and without Project Noise Levels (dBA CNEL) at 75 Feet from Roadway Centerline

Roadway Segment	Existing	Cumulative Without Project	Cumulative With Project	Change Due to Project	Significant Impact?
West Los Feliz Road between UPRR and Gardena Avenue	65.6	65.8	65.9	0.1	No
West Los Feliz Road between Gardena Avenue and San Fernando Road	65.7	66.0	66.2	0.2	No
West Los Feliz Road east of San Fernando Road	64.0	64.3	64.6	0.3	No
Gardena Avenue north of West Los Feliz Road	50.6	50.6	53.0	2.4	No
Gardena Avenue south of West Los Feliz Road	54.5	54.6	54.6	0.0	No
San Fernando Road between West Los Feliz Road and Fernando Court	64.8	65.1	65.2	0.1	No
San Fernando Road south of West Los Feliz Road	63.9	64.2	64.3	0.1	No

*Source: Refer to **Appendix 4.5** for Noise Modeling Results*

With regard to stationary sources, a cumulatively significant impact could result from cumulative development. The major stationary sources of noise that would be introduced in the area by related projects would include parking structures and sweeper operations. Since these projects would be required to adhere to City of Glendale noise standards, all the stationary sources would be required to provide shielding or other noise abatement measures so as not to cause a substantial increase in ambient noise levels. Moreover, due to distance, it is unlikely that noise from multiple related projects would interact to create a significant combined noise impact. Therefore, it is not anticipated that a significant cumulative increase in permanent ambient noise levels would occur and, therefore, the impact would be less than significant. Consequently, the Project contribution to cumulative noise impacts is not considered to be cumulatively considerable.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than significant.

Threshold: **Would result in the exposure of persons to or generation of excessive groundborne vibration or groundborne noise levels.**

Vibration impacts are localized in nature and decrease with distance. Consequently, in order to achieve a cumulative increase in vibration, more than one source emitting high levels of vibration would need to be in close proximity to the noise receptor. The closest related project, the residential-commercial mixed-use project at 3900 San Fernando Road, is located 580 feet from the Project site. This related project would not be located close enough to the Project site where significant vibration impacts would occur from concurrent construction. The combined vibration impact of the related projects and the Project's contribution would not be cumulatively significant.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than significant.

Threshold: **Would result in a substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project.**

Noise impacts are localized in nature and decrease with distance. Consequently, in order to achieve a cumulative increase in noise, more than one source emitting high levels of noise would need to be in close proximity to the noise receptor. One such related project, the residential-commercial mixed-use project at 3900 San Fernando Road, is located in close enough proximity to the Project site to result in cumulative noise impacts during construction. As discussed above, because loud construction equipment, such as tractors, backhoes, trucks, and jackhammers, would be utilized during project construction, noise levels over 95 dBA are anticipated within 50 feet of operation. The 3900 San Fernando Road project by itself could generate noise levels in excess of City standards at adjacent locations. If construction of the proposed Project and this related project were to occur simultaneously, there is the potential for combined construction impacts. Therefore, the Project contribution to a significant cumulative construction noise impact would be cumulatively considerable. Cumulative construction noise impacts would be significant and unavoidable.

Level of Significance Before Mitigation: Significant.

Mitigation Measures: Implementation of **Mitigation Measures 4.5-1** to **4.5-6** would reduce construction noise levels generated by the Project.

Level of Significance After Mitigation: Although the mitigation measures identified above would reduce noise levels to the maximum extent feasible, impacts during construction would remain significant and unavoidable.

4.6 PUBLIC SERVICES

This section addresses the potential impact of the Project on fire protection, emergency medical services, police protection, and schools. The Glendale Fire Department, Glendale Police Department, and the Glendale Unified School District provided the information referred to in this section.

ENVIRONMENTAL SETTING

Existing Conditions

The Glendale Fire Department (Fire Department) provides comprehensive emergency services for the City of Glendale (City), including fire, rescue, and emergency medical (paramedic) services, as well as fire prevention and code enforcement functions. The Fire Department is a Certified Unified Program Agency, meaning the Fire Department is responsible for regulation and inspection of all phases of hazardous materials and wastes.

The Fire Department Operations Section consists of nine fire stations, which house nine engine companies, three truck companies, and four basic life support (BLS) ambulances. The Fire Department also has a Hazardous Materials Unit and a full-service Fire Prevention Bureau. A daily contingent of approximately 60 firefighter personnel is on duty at all times, with a combined staff of 240 personnel, including uniformed firefighters, administrative, fire prevention, and support personnel.[1] The ratio of firefighters to residents in the City presently stands at 1 firefighter to 803 residents.

The Fire Department and the City are both designated Class 1 (highest) by the Insurance Service Organization. In 2012, the Fire Department responded to 16,312 fire, medical, service and other types of incidents, which equates to about 84 incidents per 1,000 residents.[2] An incident may be as simple as responding to a false alarm in a commercial building or as complex as fighting a brush fire with assistance from other fire agencies.

Three fire stations have primary responsibility for providing fire protection services to the Project site. The equipment and personnel at each of these facilities, Station Nos. 21, 22,and 25, is summarized in **Table 4.6.1-1, Fire Protection and Emergency Medical Service Staffing and Equipment**, and the location of these stations in relation to the Project site is shown in **Figure 4.6.1-1, Fire Stations Responding to the Project Site**. Station 22 would have first response duties, as the Project site is located within the Station 22 service district.

1 Glendale Fire Department, "Fire Administration," http://fire.ci.glendale.ca.us/fireadm.asp, accessed August 21, 2013.

2 Glendale Fire Department. 2013.

Table 4.6.1-1
Fire Protection and Emergency Medical Service Staffing and Equipment

Station Number	Location	Distance from Site	Equipment/Staff
21	421 Oak Street	Approximately 1.0 miles	1 engine with 4 personnel; 1 BLS ambulance with 2ambulance operators ; 1 truck with 4 firefighters; 1 Battalion Chief
22	1201 South Glendale Avenue	Approximately 0.4-miles	1 engine with 4 personnel; 1 BLS ambulance with 2ambulance operators.
25	353 N. Chevy Chase Drive	Approximately 1.9 miles	1 engine with 4 personnel; 1 BLS ambulance with 2 ambulance operators

Source: Glendale Fire Department, May 2013.

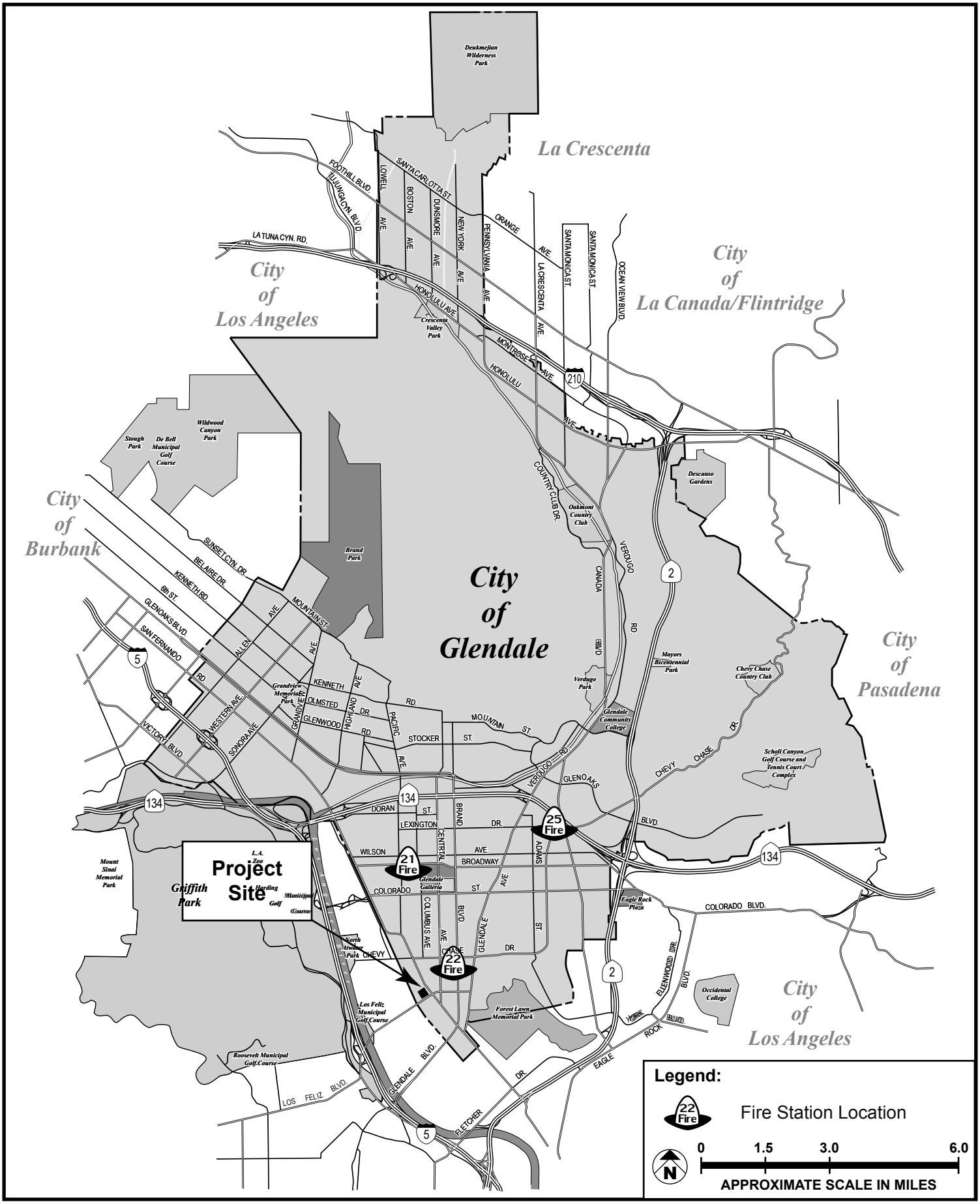
All three stations serving the Project site house BLS ambulances and have primary responsibility for providing emergency medical services to the Project site. As the Project is located in the Station 22 service district, BLS ambulance 22 has primary response duties to the Project site. In 2010, BLS 22 responded to approximately 197 medical incidents in the month of January.3 BLS 21 responded to approximately 4,027 medical incidents, or about 336 incidents per month, while BLS 25 responded to approximately 3,788 medical incidents, or about 317 incidents per month.4

Other Glendale Fire Department stations in the City of Glendale, as well as stations in the cities of Burbank and Pasadena, provide secondary response to the site through the "Verdugo Fire" system. Under the Verdugo Fire system, units from the cities of Burbank, Glendale, and Pasadena are dispatched by a common dispatch center and respond to incidents at any location in the three cities. Similarly, the Fire Department has mutual aid agreements with the City of Los Angeles and the County of Los Angeles.

In addition to equipment, personnel, and workload, fire flow is an important factor in fire suppression activities. Fire flow is defined as the quantity of water available for fire protection in a given area and is normally measured in gallons per minute (gpm). The Fire Department requires the provision of fire flows to serve individual developments, in accordance with the 2010 California Fire Code/2011 Glendale Building and Safety Code amendments, which allows up to a 75 percent reduction in required fire flows

3 Glendale Fire Department, 2010 Annual Report, 2011, page 4.

4 Glendale Fire Department. 2011.



SOURCE: Meridian Consultants – January 2013

FIGURE **4.6-1-1**

Meridian Consultants

Fire Stations Responding to the Project Site

006-002-13

for buildings constructed with an approved sprinkler system, the City of Glendale only allows up to a 50 percent reduction in fire flows for a building with sprinklers. Depending on the type of building construction and square footage, fire flow requirements range from 1,500 gpm for 2 hours to 8,000 gpm for 4 hours. For sprinkler-equipped buildings, the City of Glendale's fire flow requirements are at least 1,500 gpm to as much as 4,000 gpm, depending on the type of building.

Regulatory Setting

There are a number of goals and policies set forth by the City of Glendale in the General Plan Community Facilities and Safety Elements that relate to fire protection services. An analysis of the consistency of these applicable goals and policies with the proposed Project is provided in **Section 4.4, Land Use and Planning**. As discussed in **Section 4.4**, the Project does not conflict with the City's General Plan.

Funding for the Fire Department in the City of Glendale is derived from various types of tax revenue (e.g., tax increment in the form of property taxes, sales taxes, user taxes, vehicle license fees, deed transfer fees, etc.), which are deposited in the City's general fund. The City Council then allocates the revenue for various public infrastructure improvements and public services and facilities that the City provides, including fire protection services. As the Project is developed, tax revenues from property and sales taxes would be generated and deposited in the City's general fund and the State Treasury. A portion of these revenues would then be allocated to the Fire Department during the City's annual budget process to maintain staffing and equipment levels and facilities within the City of Glendale in numbers adequate to serve Project-related increases in service call demands

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In order to assist in determining whether a project would have a significant effect on the environment, the City determines a project may be deemed to have a significant impact on public services, including fire protection and emergency medical services, if it would:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection and emergency medical services.

Methodology

Potential Project impacts were evaluated based on the ability of the Glendale Fire Department to maintain adequate service ratios, response times, or other performance objectives in the City resulting from development of the Project.

Project Impacts

Threshold: **Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for fire protection.**

Fire Service

The Project would develop three separate five-story residential locations that would have 225 residential units, and parking structure that would provide 330 parking spaces as well residential amenities. Based on the mix of apartment units, the Project would generate approximately 525 residents. The new residential units would create additional demand on the Glendale Fire Department, specifically to Station 22 which would have first response duties. The present fire fighter to resident ratio-based on a population of 192,654 persons is one to 803. The Project would increase the City's population to 193,179 residents which would result in an overall ratio of one fire fighter to 805 residents. The increase in residents within the City would not substantially impact the current fire services and would not result in the need for any new or the physical alteration to any existing governmental facility. Consequently, potential impacts are considered to be less than significant

Emergency Medical Services

The additional residents associated with the Project would result in an increase in emergency medical responses. The Project is located within the response district for RA 21, which currently averages 336 calls per month. The City has no formal service ratios or performance objectives for Rescue Ambulance service, but has considered a performance workload of 350 responses per month for a paramedic rescue ambulance. The Project would generate additional emergency medical services (EMS) calls every month,5 but not be above the current performance workload of 350 responses per month for a rescue

5 Doug Nickles, Fire Prevention Coordinator, City of Glendale Fire Department, electronic communication with Meridian Consultants, December 11, 2012.

ambulance; and would not result in the need for any new or the physical alteration to any existing governmental facility. Consequently, potential impacts are considered to be less than significant.

Fire Flow

The City of Glendale's minimum fire flow requirement for water mains in the streets surrounding the Project site is 6,000 gpm at 20 pounds per square inch (psi) of residual pressure. Water service to the Project site is presently provided by existing water lines on and adjacent to the site. City of Glendale policy requires upgrades to water lines serving new development as needed to meet minimum fire flow requirements for new development. As such, impacts would be potentially significant.

Level of Significance Before Mitigation: Impacts would be significant related to fire flow requirements. Impacts would be less than significant related to fire and emergency medical services.

Mitigation Measures: The following mitigation measures are required by the Fire Department to mitigate the impact of the Project on fire flow.

4.6.1-1 Replace the existing water main in West Los Feliz Road with minimum 12-inch-diameter water main until connection to San Fernando Road. Provide a new water main in Gardena Avenue between West Los Feliz Road and Fernando Court, minimum 12 inches. Make water main improvements in Fernando Court, as dictated by Glendale Water and Power Water Engineering for possible removal of 4-inch water main. If existing 12-inch water main in Fernando Court is not in good condition, it shall be replaced or cleaned-and-lined to the satisfaction of GWP.

4.6.1-2 The project applicant shall provide city standard fire hydrants on Fernando Court, Gardena Avenue, and West Los Feliz Road at approximately 300 feet on center or as approved by the Glendale Fire Department and Glendale Water and Power. Fire hydrant shall have three outlets (three, 2.5 x 4 x 4) with 6-inch minimum lateral supply.

Level of Significance After Mitigation: Less than significant.

Cumulative Impacts

The Project and related projects (refer to **Section 4.0, Environmental Impact Analysis,** for a list of commercial, residential, and office projects) together would result in the addition of approximately 10.712 residents (assumes 2.6 residents per unit). The introduction of the new uses by the Project and related projects would reduce the present fire personnel-to-resident ratio. Impacts associated with these additional residents would include an increase in fire protection responses, public education

activities, participation in community events, and ongoing relations with homeowners associations. For these reasons, the implementation of the related project was considered to result in a significant fire service impact. As discussed previously, the Project would not result in significant impacts to the Glendale Fire Department on a project-specific level. The Project, however, would contribute to the significant impact and would be considered to be cumulatively considerable. For this reason, fire impacts are considered to be significant.

Level of Significance before Mitigation: Significant.

Mitigation Measures: No mitigation measures are available at this time.

Level of Significance after Mitigation: Significant and unavoidable.

ENVIRONMENTAL SETTING

Existing Conditions

The Glendale Police Department provides police protection services in the City of Glendale. The Department operates out of its headquarters building located at 131 North Isabel Street approximately 1.9 miles northeast of the Project site.[6]

In October 2009 the Glendale Police Department implemented an Area Command service delivery model. The objective of this command structure is to address crime issues and improve quality of life through accountability, professional responsibility, and strategic utilization of our limited police resources.[7] The City is divided into five distinct geographic areas. Each Area Commander is held accountable for understanding the issues and concerns unique to their service area. This includes developing strategies and directing resources to solve problems resulting in an improved quality of life for City of Glendale citizens. The Project is located in the South Command Geographic Area Police Patrol District 2, Reporting District 274.[8]

The Glendale Police Department has approximately 255 sworn officers.[9] The Department does not have a target officer-to-population staffing ratio.[10] However, the Federal Bureau of Investigation (FBI) traditionally recommends a ratio of 2 officers per 1,000 residents for minimum staffing levels. The officer-to-population ratio in the City was approximately 1.324 sworn officers per 1,000 residents in 2012. Therefore, the City is currently below recommended staffing levels.

There are various special units within the Department including the K-9 Unit, the Traffic Bureau and the Special Enforcement Detail (SED). In 2010, the Glendale Police Traffic Bureau was comprised of a traffic lieutenant, two sergeants, two civilian supervisors, two traffic investigators, seventeen motorcycle officers, two collision investigators (in police cars), twelve parking enforcement officers and three

6 Glendale Police Department, "Geographic Area–South Command," http://www.ci.glendale.ca.us/police/area_command_south_command.aspx, accessed May 24, 2013.

7 City of Glendale Police Department, "Area Command" http://police.ci.glendale.ca.us/area_command.aspx accessed on May 24, 2013.

8 City of Glendale, Police Department, "Geographic Area—Central Business District" http://police.ci.glendale.ca.us/area_command_central_business_district.aspx accessed on May 24, 2013.

9 Lt. Steve Robertson, Bureau Commander Glendale Police Department, electronic communication with Meridian Consultants, June 13, 2013.

10 Lt. Steve Robertson. June 13, 2013.

customer service employees.[11] The Traffic Bureau's responsibilities include, but are not limited to, investigation of traffic collisions and analysis, traffic safety education and public information, operation of speed-measuring devices ("lidar"), and parking enforcement.[12] Additionally, the Department also has a Special Enforcement Detail (SED) which is a field-based unit that concentrates on problems for trends that Patrol does not have the resources to handle.[13]

In 2012, the Department reported 3,284 major (Type I) crimes and 7,412 minor (Type II) crimes for a rate of 56 crimes per 1,000 residents.[14] The Department produces monthly crime statistics and activity reports. In April 2013, the Department had 290 Uniform Crime Report (UCR) Part I crimes and 593 UCR Part II crimes.[15] In total, there were 10,206 calls for police services in April 2013.[16] **Table 4.6.2-1, Arrests in April 2013**, illustrates the arrests for felonies and misdemeanors in the month of April 2013 and compares the year to date (2013) to the previous year's (2012) totals.

Table 4.6.2-1
Arrests in April 2013

Arrests	Month (April 2013)	Year to Date (2013)	Last Year to Date (2012)
Felonies	214	795	778
Misdemeanors	517	2,030	2,083

Source: Glendale Police Department, Monthly Crime Statistics and Activity Report, April 2013.

The average response time for emergency calls as of the 2013 first quarter was 4:28 minutes. The response time for non-emergency calls was between 5:32 minutes to 35:20 minutes (Priority 1, 2 and 3 calls) for the same quarter.[17] The Department has an overall response time goal of 3 minutes for emergencies. Currently, the Department's average response time from call entry to the scene is 4

11 Glendale Police Department, Glendale Crime Trends Bulletin, Spring 2012, accessed at http://www.ci.glendale.ca.us/police/PDFs/CommunityNewsletter_Spring2012_Vol1_Issue1.pdf

12 Glendale Police Department, Glendale Department Newsletter Fall 2010, accessed at http://www.ci.glendale.ca.us/police/PDFs/COPPSNewsletter_Fall2010.pdf on May 31, 2013.

13 Glendale Police Department, 2012 Year in Review, accessed at http://www.ci.glendale.ca.us/police/pdfs/crimetrends/crimetrendscrimetrends_Spring2012.pdf on May 31, 2013.

14 Glendale Police Department, Monthly Crime Statistics and Activity Report, December 2012.

15 Glendale Police Department, Monthly Crime Statistics and Activity Report, April 2013.

16 Glendale Police Department, Glendale Police Incidents/Calls for Service, April 2013.

17 Lt. Steve Robertson. June 13, 2013.

minutes and 18 seconds for emergencies, 4 minutes and 46 seconds for Priority 1 crimes, 15 minutes and 25 seconds for Priority 2 crimes, and 46 minutes and 28 seconds for Priority 3 crimes.[18]

Regulatory Setting

All law enforcement agencies within the State of California are organized and operated in accordance with the applicable provisions of the California Penal Code. This code sets forth the authority, rules of conduct, and training for peace officers. Under state law, all sworn municipal and county officers are State Peace Officers.

The County of Los Angeles is required by state law to organize a formal mutual aid agreement between all police departments within its jurisdiction. This agreement is set forth in the Mutual Aid Operations Plan for Los Angeles County. The Mutual Aid Operations Plan provides a structure of response should an emergency in Glendale arise that requires immediate response by more law enforcement personnel than would be available to the Glendale Police Department using all available resources.

The Glendale Police Department has implemented Community Oriented Policing and Problem Solving (COPPS), a community-policing program that promotes proactive long-term problem solving through community police partnerships that address community concerns, causes of crime, and the fear of crime. The goal of the program is to improve the quality of life for those living, working, or visiting the City of Glendale.

There are a number of goals and policies set forth by the City of Glendale in the General Plan Community Facilities and Safety Elements that relate to police protection services. An analysis of the consistency of these applicable goals and policies with the proposed Project is provided in **Section 4.4**. As discussed in **Section 4.4**, the Project does not conflict with the City's General Plan.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In order to assist in determining whether a project would have a significant effect on the environment, the City determines a project may be deemed to have a significant impact on police services, if it would:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection.

18 Glendale Police Department, Monthly Crime Statistics and Activity Report, April 2013.

Methodology

Potential Project impacts were evaluated based on the adequacy of existing and anticipated staffing, equipment, and facilities to meet the additional demand for police protection services resulting from development of the Project. Effects on the officer-to-population ratio and the net increase in reported incidents and calls for service were taken into consideration when determining the impact of the Project on police protection services.

Project Impacts

Threshold: **Would the project result in substantial adverse impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for police protection.**

Officer to Resident Ratio

The Project would develop three separate five-story residential locations that would have 225 residential units, and parking structure that would provide 330 parking spaces as well as residential amenities. Based on the mix of apartment units, the Project would generate approximately 525 residents. The new residential units would create additional demand on Glendale Police Department, specifically in Reporting District No. 274 in the southern portion of the City. The 2012 officer-to-population ratio within the City was 1.324 sworn officers per 1,000 residents. Based upon a target officer to population ratio, Project residents would result in a need for 0.5 sworn officers per 1,000 residents.[19] The Project would increase the City's population to 193,179 residents which would result in an overall ratio of 1.320 sworn officers per 1,000 residents. The increase in residents within the City would not substantially impact the current officer to population ratio and would not result in the need for any new or the physical alteration to any existing governmental facility. Consequently, potential impacts are considered to be less than significant.

Calls For Service

The increase in City residents by the Project would generate additional calls for service. Based on the existing estimated number of calls for police services per 1,000 residents, the Project would generate

19 Lt. Steve Robertson, Bureau Commander Glendale Police Department Traffic & Air Support, electronic communication with Meridian Consultants, January 30, 2013.

approximately 29 calls per year for police services. The increase in 29 additional calls per year, or approximately 2.5 calls per month, would not seriously impact police department operations. The Project would not result in the need for any new or the physical alteration to any existing governmental facility. Consequently, potential impacts are considered to be less than significant.

Response Time

As discussed above, the department has an overall response time goal of 3 minutes for emergencies. Currently, the average department response time from call entry to the scene is 4 minutes and 18 seconds for emergencies, 4 minutes and 46 seconds for Priority 1 crimes, 15 minutes and 25 seconds for Priority 2 crimes, and 46 minutes and 28 seconds for Priority 3 crimes. However, the Glendale Police Department considers current response times in the City adequate and due to distance of the Project from the nearest police station and the increase in calls for service, the Project would not adversely affect response times in the City. The Project would not result in the need for any new or the physical alteration to any existing governmental facility. Consequently, potential impacts are considered to be less than significant.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than significant.

Cumulative Impacts

The Project and related projects (refer to **Section 4.0** for list of commercial, residential, and office projects) would result in the addition of approximately 10,712 residents (assumes 2.6 residents per unit) to the City of Glendale. Implementation of the related project and associated increase in population would increase the demand for police protection services and could require the need for the construction of new or physically altered facilities to accommodate the increased demand associated with the related projects. This would result in a significant cumulative impact. As discussed previously, the Project would not result in significant impacts to the Glendale Police Department on a project-specific level. The Project, however, would contribute to the significant impact and would be considered to be cumulatively considerable. For this reason, impacts are considered to be significant.

Level of Significance Before Mitigation: Significant.

Mitigation Measures: No mitigation measures are available at this time.

Level of Significance After Mitigation: Significant and unavoidable.

ENVIRONMENTAL SETTING

Existing Conditions

The Project site is located within the boundaries of the Glendale Unified School District (GUSD). The western and southern boundaries of the GUSD are coterminous with the boundaries of the City of Glendale, while the eastern and northern portions of the GUSD include two unincorporated Los Angeles County communities, La Crescenta and Montrose, and a small portion of the City of La Cañada-Flintridge.

GUSD facilities include 15 elementary schools with grades K–6 and five elementary schools with grades K—5; three middle schools with grades 6–8 and one middle school with grades 7–8; three comprehensive senior high schools with grades 9–12; one magnet high school; one continuation high school; and a developmental center for multi-handicapped students.

During the 2011-2012 school year, the GUSD had a total enrollment of 26,250 students.[20] Approximately 45 percent of the students were enrolled in elementary schools (grades K–6), approximately 18 percent were enrolled in middle school (grades 7–8), approximately 34 percent were enrolled in high school (grades 9–12), approximately one percent was enrolled in continuation programs, and less than one percent was enrolled in special education programs.

Based on the most current data, the capacity of the GUSD is 17,476 students for grades K–6; 5,292 students for grades 7–8; and 8,613 students for grades 9–12 for a total capacity of 31,381 students.[21]

During the 2011-12 school year, 11,903 students were enrolled in GUSD elementary schools; 4,668 students were enrolled in GUSD middle schools; and 8,990 students were enrolled in GUSD high schools.[22] The GUSD has grown from 20,036 K-12 grade students in 1981 to 26,243 K-12 students in 2011 for an average annual increase of 282 students per year over 30 years.

The Project site is located within the attendance boundaries of Cerritos Elementary School, Roosevelt Middle School, and Glendale High School. According to the latest site capacity study prepared by the GUSD in 2010, the current capacity of these neighborhood schools is 620 students at Cerritos

20 Karolin Savarani, Executive Secretary, Business Services, Glendale Unified School District, electronic communication between Meridian Consultants, June 12, 2013.

21 Karolin Savarani. June 12, 2013.

22 Karolin Savarani. June 12, 2013.

Elementary School, 1,206 students at Roosevelt Middle School, and 3,802 students at Glendale High School.[23]

During the 2011-2012 school year, Cerritos Elementary had an enrollment of 390 students, Roosevelt Middle School had an enrollment of 808 students, and Glendale High School had an enrollment of 2,749 students.[24] When compared with current enrollment, none of the schools serving the Project site are currently operating over capacity.

Regulatory Setting

The regulatory framework for schools is established at the school district and state level. The GUSD has adopted the site size standards from the School Facilities Planning Division of the State Department of Education. The state has traditionally been responsible for the funding of local public schools. To assist in providing facilities to serve students generated by new development projects, the state passed Assembly Bill 2926 in 1986. This bill allowed school districts to collect impact fees from developers of new residential and commercial/industrial building space.

In addition, the Glendale General Plan Community Facilities Element sets forth goals and policies that relate to schools. An analysis of the consistency of these applicable goals and policies with the proposed Project is provided in **Section 4.4**. As discussed in **Section 4.4**, the Project as proposed does not conflict with the City's General Plan.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In order to assist in determining whether a project would have a significant effect on the environment, the City determines a project may be deemed to have a significant impact on public services, including schools, if it would:

- Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered government facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for schools.

23 Karolin Savarani. June 12, 2013.

24 Karolin Savarani, Executive Secretary, Business Services, Glendale Unified School District, electronic communication between Meridian Consultants, November 28, 2012.

Methodology

Potential Project impacts on the GUSD were evaluated by applying current district student generation ratios for multi-family dwelling units by grade level to units proposed by the Project.[25] The number of students generated directly by the Project was applied to individual schools serving the Project site to determine if these facilities could accommodate an increase in students.

Project Impacts

Threshold: **Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for schools.**

As shown in **Table 4.6.3-1, Student Generation Table**, the 225 apartment units associated with the Project would generate approximately 68 students grades K–6, 24 students grades 7 –8, and 51 students grades 9–12 for a total of 142 students based on the student generation ratios utilized by the GUSD.

Table 4.6.3-1
Student Generation Table (Project)

Grade Levels	Generation Rates (Students per Unit)	Proposed Residential Units	Total
K-6	0.304	225	68
7-8	0.107	225	24
9-12	0.225	225	51
		Total Students	**142**

Source: Glendale Unified School District, Impact of Residential Development on the Need for Additional School Facilities, February 2012, page 10.
Note: The generated student numbers were rounded if calculation resulted in decimal numbers.

The Project would add 68 students to Cerritos Elementary for a projected enrollment of 458 students which would be below the operating capacity of 620 students; would add 24 students to Roosevelt Middle School for a projected enrollment of 832 students which would be below the operating capacity of 1,206; and would add 51 students to Glendale High School for a projected enrollment of had an enrollment of 2,800 students which is below the operating capacity of 3,802 students. All schools

25 Glendale Unified School District, Impact of Residential Development On the Need for Additional School Facilities, February 2012.

serving the Project site are currently operating under capacity and would not require the provision of new or physically alter existing school facilities. As authorized by SB 50, the project applicant shall pay school impact fees to the GUSD prior to the issuance of building permits. The current fee schedule for residential development is $3.20 per square foot. Potential school impacts would be considered to be less than significant.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than significant.

Cumulative Impacts

As discussed in **Section 4.9, Population and Housing**, the Project would result in 225 residential units, and related projects would result in the addition of 3,334 residential and 561 live/work units in the City of Glendale (total of 4,120 dwelling units) Combined, these additional units would generate approximately 1,265 students grades K–6, 441 students grades 7–8, and 927students grades 9–12, for a total of 2,633 students.

Table 4.6.3-2
Student Generation Table (Cumulative)

Grade Levels	Generation Rates (Students per Unit)	Proposed Residential Units	Total
K-6	0.304	4,120	1,265
7-8	0.107	4,120	441
9-12	0.225	4,120	927
		Total Students	**2,633**

Source: Glendale Unified School District, Impact of Residential Development on the Need for Additional School Facilities, February 2012, page 10.
Note: The generated student numbers were rounded if calculation resulted in decimal numbers.

The Project and related projects would result in a project capacity of 13,168 students for grades K-6, 5,109 students for grades 7-8, and 9,917 students for grades 9-12. Based on these enrollment projections, there would be enough school capacity for grades K-6 and 7-8. However, due to a projected lack of school capacity for grades 9-12 in the GUSD, these additional students would result in a significant impact.

According to Government Code Section 65995, the payment of school impact fees, authorized by Senate Bill 50, by each project will fully mitigate the impact of the Project and related projects on local schools

from cumulative development. Therefore, through payment of these fees, the cumulative impact of the Project and related projects would be reduced to a less than significant level.

Level of Significance before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance after Mitigation: Less than significant.

4.7 RECREATION

This section describes and evaluates potential impacts to existing and future parks and recreation facilities in the City of Glendale. This section incorporates information from the City of Glendale Recreation Element, the City of Glendale Open Space and Conservation Element, and communications with City staff.

ENVIRONMENTAL SETTING

Existing Conditions

Developed Park and Recreation Facilities

The City of Glendale Parks, Recreation, and Community Services Department owns and operates public parks and recreation facilities in the City. Approximately 7,647 acres of public open space exists within the boundaries of the City, of which 5,360 acres are City owned. City-owned open space consists of undeveloped parkland in the form of regional and community parks such as Brand Park, Deukmejian Wilderness Park, Deerpass, and Flint Canyon. The remaining 1,296 acres of public open space includes lands owned by the California Department of Transportation (Caltrans), Los Angeles County, Southern California Edison Company, and the Los Angeles County Department of Public Works, Flood Control Division.[1]

In addition, privately held properties comprise a total of 991 acres of open space. Privately held open space includes unsubdivided land and developed recreation and education facilities (e.g., golf courses, youth camps, and religious retreats).[2] Privately held golf courses include the Oakmont Golf course which lies approximately five miles from the center of Glendale. The Oakmont Country Club maintains a privately owned and operated Oakmont Course located at 3100 Country Club Drive and the Chevy Chase Country Club and Golf Course located at 3067 E Chevy Chase Drive.

The City's park system consists of approximately 285.5 acres of developed parkland in 45 parks and facilities.[3] Six types of parks within the City are defined in the general plan Recreation Element; these include regional parks, community parks, neighborhood parks, mini parks, community centers, and special facilities. Definitions of each recreation facility type and the associated characteristics of each are summarized in **Table 4.7-1, Park and Recreation Facilities Classification and Service Area Standards.**

1 City of Glendale, Open Space and Conservation Element, Table 4-7, revised on September 27, 2005.

2 City of Glendale. September 27, 2005.

3 Emil Tatevosian, Park Planning & Development Administrator, City of Glendale, Public Works Department, electronic communication with Meridian Consultants, January 22, 2013.

Table 4.7-1
Park and Recreation Facilities Classification and Service Area Standards

Component	Service Area	Size (acres)	Amount per 1,000 population (acres)	Desirable Uses	Site Characteristics
Regional Park	Several cities (1 hour drive time)	More than 30	N/A	Picnicking, play area, boating, fishing, swimming, camping, trails	Contiguous to or encompassing natural resources.
Community Park	1-mile radius	10 to 30	5.0 to 6.0	Athletic fields and courts, gymnasiums, swimming pools, picnic sites, play areas	Suited for intense development. May encompass natural resources.
Neighborhood Park	0.5-mile radius	2 to 10	1.0 to 2.0	Athletic field and courts, play areas, picnic sites, wading pools	Suited for intense development with safe pedestrian and bike access. May be developed as a school site facility.
Mini Park	Less than a 0.25-mile radius	0.33 to 1	0.25 to 0.5	Play equipment areas, wading pools	Suite for high density multi-family and senior housing units.
Community Center	2-mile radius	1 to 5	N/A	Multipurpose building and gymnasium, open play area	Suited for intense development with safe pedestrian access.
Special Facilities	No applicable standard	N/A	N/A	May include golf courses, historic grounds or buildings, botanical gardens, commercial plazas or squares, nature centers	

Source: City of Glendale, General Plan, Recreation Element, 1996.
Note:
Abbreviations: N/A = not available

In addition to City recreation facilities, trailhead access to regional trail systems, including trail systems in the Verdugo Mountains, San Rafael Hills, Santa Monica Mountains, and Angeles National Forest (San Gabriel Mountains), is provided from the City's community parks.

For purposes of planning its recreation facilities, the City has established 11 "Recreation Planning Areas" in accordance with patterns of community boundaries and park facility accessibility, as defined by mountains, freeways, and other barriers to use. The Project site is located in Recreation Planning Area No. 7, which encompasses a 640-acre area characterized by multi-family residential and industrial uses.

Several City park and recreation facilities are located within a 1-mile radius of the Project site. The locations of these facilities are shown on **Figure 4.7-1, Glendale Parks and Recreation Facilities within One Mile Radius of the Project Site**, and the characteristics of each are summarized below in **Table 4.7-2, Glendale Parks and Recreation Facilities within 1 Mile of the Project Site**. Currently, the closest facilities to the Project site are Cerritos Park, located approximately 0.4 miles to the southeast and Palmer Park, located approximately 0.8 miles to the northeast. Amenities at Cerritos Park include a children's play area and picnic facilities and amenities at Palmer Park include a basketball court, children's play area, picnic areas, a community garden, and a wading and spray pool.

The Recreation Element indicates this Recreation Planning Area has 0.35 acre of parkland per 1,000 residents.[4] Currently, the City's parkland-to-resident ratio is 1.48 acres per 1,000 residents.[5]

Table 4.7-2
Glendale Parks and Recreation Facilities within 1 Mile of the Project Site

Facilities	Acres	Features
Adams Square Mini Park	0.29	Children's Play Area, 3 picnic tables and benches, open lawn, and drinking fountain
Cerritos Park	1.36	Children's Play Area, water play features, 6 picnic tables, benches, open lawn, drinking fountain, parking lot & restroom facility
Elk Mini Park	0.31	Children's Play Area, picnic and seating areas
Maple Park – Park renovation currently being designed FY 2012-2013	3.8	Children's Play Area, Community building, gymnasium, picnic areas, special facilities, and tennis court
Maryland Park-proposed	N/A	Approved Design
Pacific Park and Community Center	5.3	Community building with 2 barbeques, Children's Play Area, 7 meeting rooms, nine picnic tables, benches, lit softball/baseball fields, unlit outdoor basketball court, 2 gymnasiums, 1 lit soccer field, and an indoor volleyball court
Pacific Community Pool	0.46	Pool, pool deck, grand stands, restrooms, showers, lockers
Palmer Park – target for renovation FY 2013-2014	2.8	Basketball court, children's play area, picnic areas, special facilities, and wading pool

Source: City of Glendale Parks, Community Services and Parks, "Parks, Historic Sites & Facilities," http://www.ci.glendale.ca.us/parks/facilities_parks_historic-sites.aspx, accessed August 27, 2013.
Abbreviation: N/A = not available

4 City of Glendale, General Plan, Recreation Element, 1996, 5-9.

5 192,654 residents / 1,000 = 192.654; 285.56 acres of parkland / 192.654 = 1.48 acres of parkland per 1,000 residents.

Planned Park Acquisition, Development, and Construction

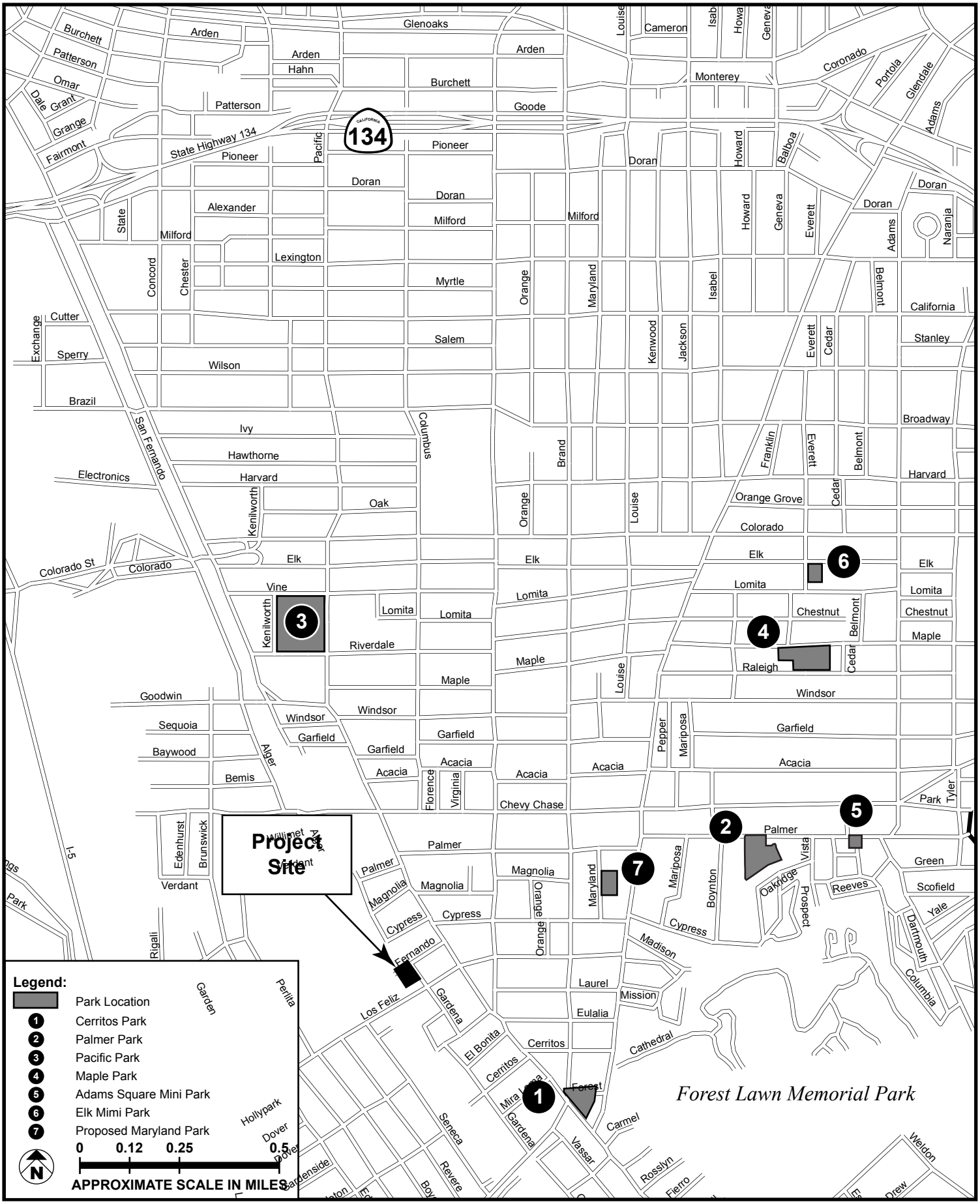
The City of Glendale is currently devoting additional resources for the acquisition, development, and construction of parks within residential areas throughout the City. Future acquisition of land for recreational use will provide a wide array of activities and facilities. The following is a list of tasks currently being undertaken by the City related to acquiring land for park recreation purposes. It should be noted that the tasks listed below are in different stages of acquisition, development, and/or construction or recently completed.

- Catalina Trail – completed
- Civic Auditorium – development stage
- Pacific Edison Artificial Turf – construction to start in fall 2013
- Deukmejian Barn Seismic Retrofit –Completed
- Deukmejian Nature Educational Center – development stage
- Glendale Narrows Riverwalk Phase II –design stage
- Maple Park Site Improvement Project – construction to start in fall 2013
- Maryland Park - in bid process
- Mountain Do Trail – completed
- Pacific Park/Pool/Community Center Wayfinding – construction to start in fall 2013
- Palmer Park Renovation – design stage
- Batting Cages at Sports Complex – design stage

Regulatory Setting

Recreation Element of the General Plan

The Recreation Element of the Glendale General Plan addresses the City's parks and recreation needs, management of parks and use of these facilities, and the development of additional park resources. The City's park classification system recommended that service radii and area standards adhere closely to those established by the National Recreation and Park Association's (NRPA) Recreation, Park and Open Space Standards (1983), which serves as the national standard for the assessment of park land in cities.



SOURCE: Meridian Consultants – January 2013

FIGURE **4.7-1**

Meridian Consultants

Glendale Parks and Recreation Facilities Within One Mile Radius of the Project Site

006-002-13

Specifically, the Recreation Element establishes a standard of 6 acres per 1,000 residents of neighborhood park and community parkland combined.[6] This standard calls for the provision of 1 acre of neighborhood parkland per 1,000 residents and 5 acres of community parkland per 1,000 residents, for a total of 6 acres of parkland per 1,000 residents. It should be noted that this standard represents a goal and is not considered a threshold of significance for determining the significance of impacts of individual development projects.

Parks and Recreation Goals, Policies and Objectives

The Recreation Element also contains general recreation-related goals, objectives, and policies. Goals in the Recreation Element include: having a variety of recreational opportunities and programs for all residents; the conservation and preservation of cultural, historical, archaeological, and paleontological structures and sites as links to community identity; the management of aesthetic resources, both natural and manmade to create a visually pleasing City; and the development of new parks and recreation facilities responsive to particular neighborhoods or areas in the City, as identified in the Recreation Element.

As indicated in the Recreation Element, these parkland standards are desired goals for the City of Glendale, and are not applied to development projects on an individual basis. None of the Goals, Objectives, or Policies of the Recreation Element requires that individual development projects meet these standards. In addition, the Recreation Element does not require that new residential development comply with these standards, acknowledging that, "…[s]trict adherence to these standards would dictate that the City not permit anymore [sic] housing units in areas with a deficiency of park land," and that, "…[f]ollowing this argument to its logical conclusion, based on existing neighborhood park supply, it would be difficult to permit any additional residential development."[7] This language recognizes the problems faced by the City with respect to imposing a fee or exaction on new development.

The Recreation Element also discusses the relationship of this element to the other elements of the general plan and other plans, policies, and programs. This discussion notes that the streetscape improvements and open space acquisitions discussed in the Strategic Plan will provide passive recreation opportunities and an improved quality of life for residents in the immediate area and Glendale's general daytime population.[8] In addition, the Recreation Element sets forth a policy to promote and, when possible, provide recreational opportunities for the daytime population, specifically in the downtown, commercial, and industrial areas of the City.

6 City of Glendale, General Plan, Recreation Element, 1996, 6-11.

7 City of Glendale, 1996. 1-3.

8 City of Glendale, 1996. 2-5.

City of Glendale Municipal Code

Ordinance No. 5575, Public Use Facilities Development Impact Fee Ordinance, of the Municipal Code was adopted in September 2007 to provide funding for the development of additional parks and recreation facilities and to maintain the current parkland to population ratio.[9] It applies to residential, commercial, office, and industrial development projects within the City, and is supported by the City's Public Facilities Fee Study (June 2007) and related staff reports, which are available for public review and inspection at the Glendale City Clerk's Office, and are incorporated herein by this reference. The Development Impact Fees are imposed on new development as a condition of the issuance of a building permit or subdivision tract map for a development project. If a project is approved, the Development Impact Fee for park land and park facilities will be imposed on that project as a condition of approval.

Public Facilities Fee Study

The City of Glendale Public Facilities Fee Study provides an analysis of the need for public facilities and capital improvements to support future development within the City of Glendale through 2030.

It is the City's intent that the costs representing future development's share of these facilities and improvements be imposed on that development in the form of a development impact fee, as discussed above. It is important to note that the Parks and Parkland Dedication fee includes community centers and special use recreational facilities.

The City could collect two separate fees based on the Quimby Act and the Mitigation Fee Act. The Quimby Act would not apply to residential development on future approved projects on single parcels, such as many types of multi-family development.[10] The applicable fee for the Project is the Mitigation Fee Act. The Mitigation Fee Act does not indicate use of a particular type or level of facility standard or public facilities fees. To comply with the findings required under the law, facility standards must not burden new development with any cost associated with facility deficiencies attributable to existing development.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In order to assist in determining whether a project would have a significant effect on the environment, the City determines a project may be deemed to have a significant impact on recreation, if it would:

9 City of Glendale, Municipal Code, Section 4.10, "Public Use Facilities Development Impact Fees."

10 The Quimby Act only applies to land subdivisions. A city cannot apply the Quimby Act to development on land subdivided prior to adoption of a Quimby ordinance, such as development on infill lots.

- 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?

- Include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment?

Methodology

An assessment of the impact of the Project on recreation facilities in the City is provided below. This assessment is based on the City's planning standards for recreation facilities and the increase in population that would result from the Project. This analysis calculates a facility standard is to use the City's existing ratio of park acreage per 1,000 residents. New development is required to fund new park facilities at the same level as existing residents have provided those same types of facilities to date.

Project Impacts

Threshold: **Would the project 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.**

The proposed Project would develop three separate residential locations which would house 49 studios, 103 one-bedroom apartments, and 73 two-bedroom apartments for a total of 225 residential units. Based on the mix of apartment units, the Project would generate approximately 525 residents.

As discussed above, the City currently has a park land-to-resident ratio of approximately 1.48 acres of parkland for every 1,000 residents. This increase in population would incrementally increase the use of existing neighborhood and community parks in the City. While Cerritos Park and Palmer Park are physically the closest facilities to the Project site, and all parks in the city could be affected as residents could use any park and recreation facility anywhere in the city. Based upon the ideal park land-to-resident ratio standard, Project residents would require approximately 0.5 additional acres of parkland. In order to maintain the existing park land-to-resident ratio, the Project's residents would require approximately 0.1 acre. Even with implementation of all parkland under development including the proposed Maryland Park, the park land-to-resident ratio would remain relatively the same.

Existing park facilities are currently heavily used due to the deficit in parkland in the City. The increase in use of neighborhood and community parks in the City that would result from the increase in residents associated with the Project is considered significant. In addition, the Project would be required to comply with Ordinance No. 5575 (the Ordinance), which established Development Impact Fees on new development in order to provide parks, park facilities, and library facilities. The Ordinance was adopted

to minimize further deficiency in the City's park and recreation facilities and to maintain the current parkland to population ratio. It applies to residential, commercial, office, and industrial development projects within the City. As such, the Project applicant would be required to pay Development Impact Fees to assist in funding capital improvement projects, upgrades to existing recreational facilities, and acquisition and development of new park and recreation facilities throughout the City.

Consistent with the adopted Development Impact Fee schedule, the Project would be required to pay the park component of the Phase-in fees. The current Phase-in fees amount to $7,000 per residential unit which is scheduled to increase to $10,500 per unit in December 2014. The development impact fee payments are required to minimize the Project's impact on park and recreation land and facilities. Under CEQA, the development impact fee payments constitute mitigation of Project-related impacts on park and recreation land and facilities within Glendale. However, the fee payment is not considered "full" mitigation because the project's fee payment does not equal the full fair-share per unit fee for multi-family residential projects, which amounts to $14,251 per multi-family unit under the City's Public Facilities Fee Study.

Level of Significance Before Mitigation: Significant.

Mitigation Measures: The following mitigation measure is required per the City's Public Use Facilities Development Impact Fees to mitigate the impact of the Project on park and recreational facilities.

4.7-1 In accordance with the requirements of the City of Glendale Municipal Code Section 4.10 (Ordinance No. 5575 and Resolution No. 07-164 as amended on Resolution 10-199, 11-93, 11-123, 12-86, 13-102), the project applicant shall pay the Development Impact Fee to the City. The current fee schedule is $7,000 per residential unit, which is scheduled to increase to $10,500 per unit in December 2014.

Level of Significance After Mitigation: The Project would be required to pay development impact fees to minimize the project's impact on parks and recreation land and facilities. Under CEQA, the development impact fee payments constitute mitigation of project-related impacts on parks and recreation land and facilities within Glendale. However, the fee payment is not considered to fully mitigate this impact, because the fee amount to be paid would not equal the full fair-share per-unit fee for multifamily residential projects, which was determined to be $14,251 per multifamily unit in the City's Public Facilities Fee Study. Consequently, impacts would be significant and unavoidable.

Threshold: **Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment.**

The Project would include amenities which consist of a fitness center, club room, mail room, roof top observation deck, resident lobby on the corner of Los Feliz Blvd and Gardena Avenue, resort style pool & spa located in the private community courtyard, community restroom, secured parking structure, secured residential building, courtyard resident bar and grill and landscaped grounds. The recreational amenities are incorporated into the design of the Project and would be constructed concurrently with the Project. The short-term impacts associated with the construction of these facilities are addressed in **Sections 4.2, Air Quality & Greenhouse Gas Emissions; 4.5, Noise;** and **4.9, Traffic.** Construction of the recreational amenities would not result in significant impacts, but would contribute to the overall construction impacts.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than significant.

Cumulative Impacts

Threshold: **Would the project 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.**

Implementation of the Project and related projects would increase the use of existing recreational facilities in the City. The Project and related projects together would result in the addition of approximately 10,712 residents (assumes 2.6 residents per dwelling unit). As discussed above, the existing ratio of parkland to residents of the City is approximately 1.48 acres per 1,000, which is below the City's planning standard of 6 acres per 1,000 residents. The addition of 10,712 residents would lower this ratio to 1.40 acres per 1,000 residents without the addition of new park land and recreation facilities.

Given the existing deficiency of parkland in the City, the combined effects of the Project and related projects on existing facilities is considered cumulatively significant because the use of existing parks would increase, thus contributing to an acceleration in the physical deterioration of these facilities. Even with the provision of Project amenities, the Project's contribution to this significant impact would be cumulatively considerable.

Level of Significance Before Mitigation: Significant.

Mitigation Measures: As discussed above, under CEQA, the development impact fee payments constitute mitigation of project-related impacts on parks and recreation land and facilities within Glendale. However, the fee payment is not considered to fully mitigate this impact, because the fee amount to be paid would not equal the full fair-share per-unit fee for residential projects, which was determined to be $14,251 per multifamily unit in the City's Public Facilities Fee Study. Consequently, impacts would be significant and unavoidable.

Level of Significance After Mitigation: Significant and unavoidable.

Threshold: **Does the project include recreational facilities or require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment.**

In order to accommodate future related projects, as well as the existing deficiency of parkland within Glendale, the City is devoting additional resources to the acquisition and development of parks within residential areas throughout the City. It is reasonable to expect that all of these facilities will undergo CEQA review and that Project-specific impacts associated with the development of each will be mitigated to the extent feasible. As a result, cumulative impacts associated with construction of future parks are expected to be less than significant.

The Project would include amenities such as fitness center, club room, mail room, roof top observation deck, resident lobby on the corner of Los Feliz Blvd and Gardena Avenue, resort style pool & spa located in the private community courtyard, community restroom, secured parking structure, secured residential building, courtyard resident bar and grill and landscaped grounds. This space would be incorporated into the design of the Project and would be constructed concurrently with the Project. While the Project as a whole is expected to result in significant impacts associated with the construction, this construction activity is not anticipated to result in a significant impact when considered in conjunction with the construction of future parks and recreational facilities elsewhere in the City of Glendale. The closest proposed park is the Maryland Park, located approximately 0.5 mile from the Project site. Therefore, none of the future parks or recreational facilities are adjacent to the Project site to potentially result in cumulative impacts. Consequently, the incremental effect of the Project would not be cumulatively considerable and cumulative impacts associated with the Project would be less than significant.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than significant.

4.8 POPULATION AND HOUSING

This section analyzes the potential impacts of the proposed Project on population and housing in the City of Glendale. Information used in this section was obtained from the Southern California Association of Governments (SCAG) and the California Department of Finance.

ENVIRONMENTAL SETTING

Existing Conditions

As discussed in **Section 4.5, Land Use and Planning**, the City of Glendale is located within the planning area of SCAG, the lead planning agency for the Southern California region. SCAG consists of local governments from Los Angeles, Ventura, Orange, San Bernardino, Riverside, and Imperial counties. To facilitate regional planning efforts, the planning area of SCAG is further divided into 13 sub-regions. The City of Glendale is located in the Arroyo-Verdugo Subregion, which also includes the cities of Burbank, La Cañada-Flintridge, and the unincorporated communities of La Crescenta and Montrose.

One of SCAG's primary functions is to forecast population, housing, and employment growth for each region, sub-region, and city. The latest forecast was completed in 2012 as part of the 2012 Regional Transportation Plan (RTP) and Sustainable Communities Strategies (SCS) update.[1] As indicated in **Table 4.9-1, SCAG Demographic Projections**, the City of Glendale is predicted to undergo sustained growth through the year 2035. Current SCAG growth forecasts for the City of Glendale project a population of 198,900 in 2020, with 75,200 households and employment of 98,200. In 2035, SCAG forecasts a population of 209,300, 78,600 households and 103,000 employees in the City of Glendale.

Table 4.8-1
SCAG Demographic Projections

	2008	2020	2035	Growth 2008-2035	Growth 2008-2035 %
Population	191,600	198,900	209,300	17,700	8.5 %
Households	72,200	75,200	78,600	6,400	8.1 %
Employment	93,600	98,200	103,000	9,400	9.1 %

Source: Southern California Association of Governments, 2012 Adopted Growth Forecast, April 2012.

1 Southern California Associations of Governments, 2012-2035 Regional Transportation Plan/Sustainable Communities Strategy, April 2012.

According to the California Department of Finance estimates, the current population (2012) within the City of Glendale is 192,654 residents with 72,355 occupied housing units which equates to an average household of 2.6 residents.[2]

Regulatory Setting

A number of goals and policies are set forth in the City of Glendale General Plan that relate to population and housing growth. An analysis of the consistency of these applicable goals and policies with the proposed Project is provided in **Section 4.4**. As discussed in **Section 4.4**, the proposed Project does not conflict with applicable General Plan goals and policies related to population and housing growth.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In order to assist in determining whether a project would have a significant effect on the environment, the City determines a project may be deemed to have a significant impact on population and housing, if it would:

- Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)
- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere (issue is addressed in **Section 6.0, Effects Found Not To Be Significant**.)
- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere (issue is addressed in **Section 6.0, Effects Found Not To Be Significant**.)

Methodology

The most recent California Department of Finance population and housing estimates for the City were used in conjunction with the SCAG population projections to determine potential population and housing impacts.

2 California Department of Finance, E-5: City/County Population and Housing Estimates January 1, 2012.

Project Impacts

Threshold: **Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through the extension of roads or other infrastructure)?**

Whether a project's added development would directly induce a substantial population increase or housing growth are evaluated by whether the direct project-related growth could be accommodated within the appropriate population and housing projections. As shown in the analysis that follows, direct growth from the Project's residential component falls within both SCAG's and the City's projections.

A project's population impacts are based on an analysis of the probable number of residents associated with the number of residential dwelling units planned in the project. The project's estimated population is then compared with official population growth forecasts for the City. The Project would develop three separate residential locations which would house 49 studios, 103 one-bedroom apartments, and 73 two-bedroom apartments for a total of 225 residential units. Based on the mix of apartment units and an average household size of 1.17 residents for studio units and 2.6 residents for one-bedroom and two-bedroom apartments, the Project would generate approximately 525 residents. The Project would account for approximately 8.4 percent of the anticipated increase of residents within the City between 2012 and 2020.[3] New residents generated by the Project are consistent with the estimated growth projection. Therefore, the Project would not result in substantial population growth in the area.

Housing impacts are typically based on the number of new dwelling units planned within the proposed Project, as compared to the housing projections. Based on the California Department of Finance there are 72,355 occupied housing units within the City and according to SCAG projections that number is to increase to 75,200 housing units between 2012 and 2020, an increase of approximately 2,845 housing units. The Project would account for approximately 7.9 percent of the anticipated 2,845 housing units within the City between 2012 and 2020. The residential component of the Project would not result in substantial or unplanned housing growth.

Indirect growth in population and housing can also occur from major infrastructure improvements that facilitate additional growth beyond the proposed Project. The Project site is characterized as an urban area which is currently served by existing circulation and utility infrastructure. The Project developers will fund their share of allocation for any necessary public infrastructure associated with development. Indirect growth from extension of roads and infrastructure would not be anticipated from the Project, as it would be served by existing infrastructure and would not add any new roadways. Some infrastructure

3 525 Project residents / 6,246 (the increase in residents in Glendale between 2012 and 2020) = 0.084.

upgrades and connections are proposed and may be required as mitigation. The proposed Project does not include any major road improvements or substantial infrastructure modifications that would facilitate additional growth in the general area. Due to the fact that new infrastructure upgrades would be minimal, it is not anticipated that the infrastructure improvements would result in measurable population growth in or around the project area. As such, the indirect population growth impact resulting from infrastructure improvements associated with the Project are considered less than significant.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than significant.

Cumulative Impacts

According to **Table 4.0-1**, related projects would result in development of approximately 3,334 residential units and 561 live/work units, and when combined with the Project would result in 4,120 dwelling units. Based on an average household size of 2.6 persons per dwelling unit within the City, these units would add approximately 10,712 residents to the population of the City of Glendale.

According to the California Department of Finance estimates and SCAG's regional growth forecasts, the population of the City is projected to increase approximately 16,646 residents between 2012 and 2035.[4] As discussed above, it is projected that the proposed Project and related projects would increase the City's population by 10,712 residents. The cumulative projects would account for less than the anticipated population increase of 16,646 residents within the City between 2012 and 2035. Therefore, the proposed Project and related projects would result in a less than significant cumulative population impact.

The number of Project residential units and related projects would add approximately 4,120 dwelling units in the City. According to SCAG's regional growth forecasts, the number of residential units in the City is projected to increase approximately 6,245 additional units between 2012 and 2035.[5] The cumulative projects would account for less than the anticipated housing unit increase within the City during this time period. Therefore, the proposed Project and related projects would result in less than significant cumulative housing unit impacts.

4 209,300 residents (2035 projected population) – 192,654 residents = 16,646 increase in residents.

5 78,600 housing units (2035 projection) – 72,355 housing units = 6,245 increase in housing units.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than significant.

4.9 TRAFFIC

This section describes and evaluates the potential transportation and traffic impacts of the Project. A Traffic Impact Analysis, dated August 31, 2012, May 13, 2013, and September 9, 2013 was prepared by Kunzman Associates, Inc. and this section incorporates information from these Traffic Impact Analyses. The Traffic Impact Analyses are contained in **Appendix 4.9**.

ENVIRONMENTAL SETTING

Existing Conditions

Regional Highway System

The Golden State Freeway (I-5), Ventura Freeway (State Route [SR] 134), and Glendale Freeway (SR-2) provide regional access in the Project vicinity. A brief description of each freeway is provided below.

Interstate 5

The I-5 is a north-south freeway that extends between Northern and Southern California. Five mainline travel lanes are generally provided in each direction on the I-5 freeway in the Glendale area. Full interchanges are provided at Los Feliz Boulevard and Glendale Boulevard.

State Route 134

SR-134 is an east-west freeway that extends from the Foothill Freeway (I-210) in Pasadena to the Ventura Freeway (US 101) in North Hollywood. Four mixed-flow travel lanes and one high-occupancy vehicle (HOV) lane are provided in each direction on SR-134 in the Glendale area. Full interchanges are provided at San Fernando Road, Pacific Avenue, Central Avenue/Brand Boulevard, and Glendale Avenue/Monterey Road. The SR-134 freeway ramps at Central Avenue and Brand Boulevard are connected by one-way connector roadways (Goode Avenue and Sanchez Drive). At Central Avenue, a westbound on-ramp and an eastbound off-ramp are provided in connection with the Goode Avenue and Sanchez Drive freeway frontage roadways. At Brand Boulevard, a westbound off-ramp and an eastbound on-ramp are provided in connection with these two freeway frontage roadways. At Glendale Avenue, an eastbound off-ramp, a southbound-to-eastbound loop on-ramp, and a northbound-to-eastbound carpool on-ramp are provided. Westbound on- and off-ramps are provided at Monterey Road.

State Route 2

The Glendale Freeway, SR-2, is a north-south freeway that extends from just south of I-5 near Echo Park to just north of I-210 near La Canada-Flintridge. The northern terminus of the freeway occurs at Foothill

Boulevard. A full set of on/off-ramps are provided in both directions southeast of the Project site at San Fernando Road. The SR-2 freeway generally provides four mixed-flow travel lanes in each direction in the vicinity of the Project site.

Local Street System

The following three study intersections, located in the City of Glendale and City of Los Angeles, were selected for analysis by the City of Glendale Traffic and Transportation Division in order to determine potential impacts related to the Project:

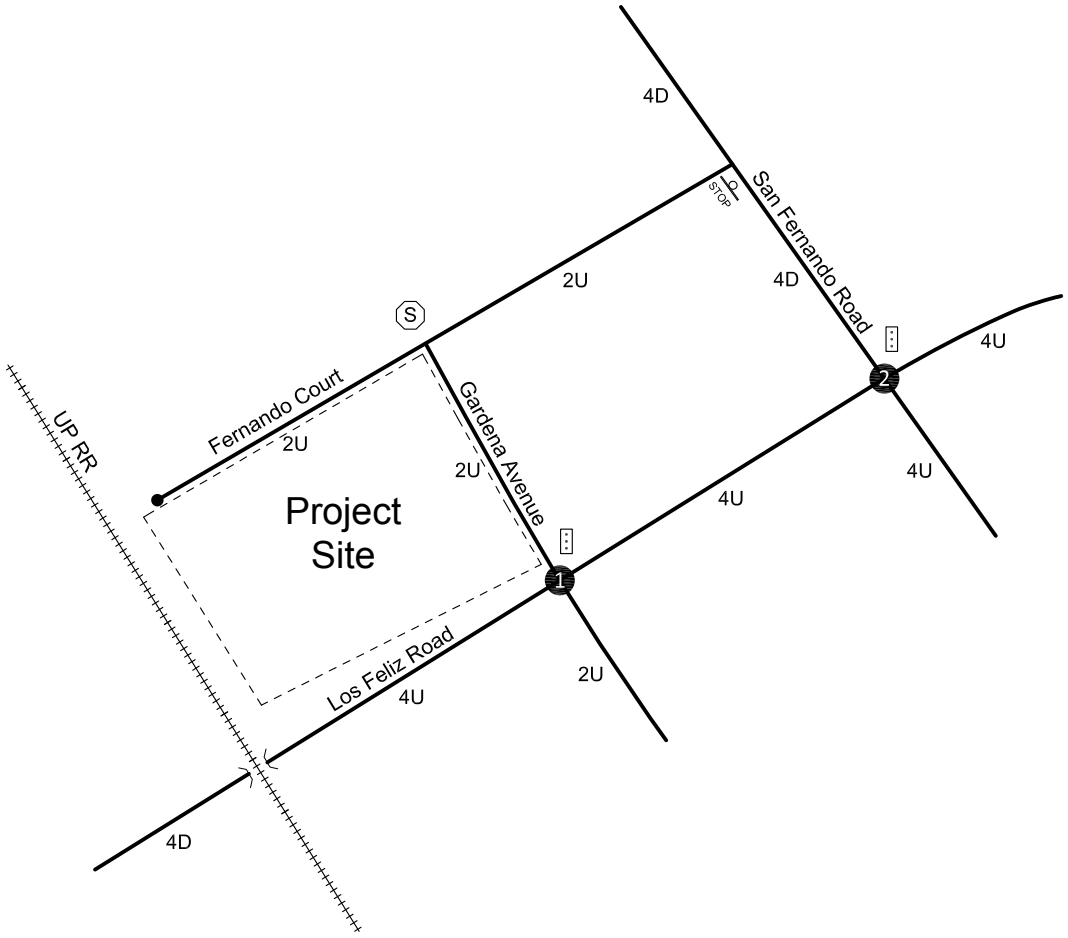
- Gardena Avenue/West Los Feliz Road
- San Fernando Road/West Los Feliz Road
- Seneca Avenue/Los Feliz Road

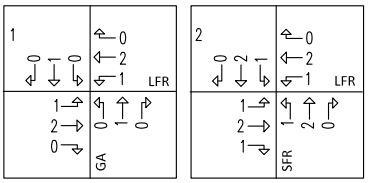
The traffic analysis study area is generally comprised of those locations that have the greatest potential to experience significant traffic impacts due to the Project. The two intersections were selected because they are (1) immediately adjacent or in proximity to the Project site, (2) in the vicinity of the Project site and are documented to have current or projected adverse operational issues, and/or (3) are in the vicinity of the Project and are forecast to experience a relatively greater percentage of Project-related vehicular turning movements. Both intersections are presently controlled by traffic signals. The existing lane configurations and locations of the two study intersections are shown in **Figure 4.9-1, Existing Travel Lanes & Intersection Locations.**

Nearby intersections also in the Project site vicinity include Fernando Court/Gardena Avenue and San Fernando Road/Fernando Court. The intersection of Fernando Court/Gardena Avenue is all-way stop-controlled while the intersection of San Fernando Road/Fernando Court is stop-sign controlled.

Gardena Avenue

Gardena Avenue is a north-south oriented roadway that borders the Project site on the east. The roadway is two lanes undivided and carries approximately 1,500 to 3,500 vehicles per day. Gardena Avenue is designated as a Local Street in the Circulation Element of the City of Glendale General Plan.





Gardena Avenue/
Los Feliz Road

San Fernando Road/
Los Feliz Road

Legend

- = Traffic Signal
- S = All Way Stop
- STOP = Stop Sign
- 4 = Through Travel Lanes
- D = Divided
- U = Undivided
- 1 = Intersection Reference Number
- = Project Boundary

N **NOT TO SCALE**

SOURCE: Kunzman Associates, Inc.

FIGURE **4.9-1**

Meridian Consultants

Existing Travel Lanes & Intersection Locations

006-002-13

San Fernando Road

San Fernando Road is a north-south oriented roadway that is located to the east of the Project site. San Fernando Road is designated as a Major Arterial in the Circulation Element of the City of Glendale General Plan. The roadway is four lanes undivided to four lanes divided in the Project area and carries approximately 16,300 to 19,900 vehicles per day.

Fernando Court

Fernando Court is an east-west-oriented two lanes undivided roadway that borders the Project site on the north. Fernando Court is designated as a Local Street in the Circulation Element of the City of Glendale General Plan.

Los Feliz Road

Los Feliz Road is an east-west oriented roadway that borders the Project site on the south. Los Feliz Road is designated as a Major Arterial with a width of 76 feet within a right-of-way of 90 feet in the Circulation Element of the City of Glendale General Plan. The roadway is four lanes undivided to four lanes divided in the Project area and carries approximately 17,600 to 29,200 vehicles per day.

Existing Traffic

There are two peak hours in a weekday. The morning peak hour is typically between 7:00 AM and 9:00 AM, and the evening peak hour is typically between 4:00 PM and 6:00 PM. The actual peak hour within the 2-hour interval is the four consecutive 15-minute periods with the highest total volume when all movements are added together. Thus, the evening peak hour at one intersection may be 4:45 PM to 5:45 PM if those four consecutive 15-minute periods have the highest combined volume.

Intersections

The existing level of service (LOS) for the Project area intersections are based upon manual morning and evening peak-hour intersection turning-movement counts conducted in 2012 and factored to year 2012 utilizing an annual growth rate of 1 percent per year.

Level of service varies from LOS A (free flow) to LOS F (jammed condition). LOS definitions for signalized intersections are provided in **Table 4.9-1, Level of Service Definitions for Signalized Intersections**.

Table 4.9-1
Level of Service Definitions for Signalized Intersections

LOS	Description	Volume/Capacity Ratio
A	Level of Service A occurs when progression is extremely favorable and vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.	0.600 and below
B	Level of Service B generally occurs with good progression and/or short cycle lengths. More vehicles stop than for Level of Service A, causing higher levels of average delay.	0.601 to 0.700
C	Level of Service C generally results when there is fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear in this level. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.	0.701 to 0.800
D	Level of Service D generally results in noticeable congestion. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high volume to capacity ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	0.801 to 0.900
E	Level of Service E is considered to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high volume to capacity ratios. Individual cycle failures are frequent.	0.901 to 1.000
F	Level of Service F is considered to be unacceptable to most drivers. This condition often occurs when oversaturation, i.e., when arrival flow rates exceed the capacity of the intersection. It may also occur at high volume to capacity ratios below 1.00 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.	1.001 and up

Source: Transportation Research Board, National Research Council, Highway Capacity Manual Special Report 209, (Washington, D.C.) 2000.

As indicated in **Table 4.9-2, Existing Levels of Service**, the intersections of Gardena Avenue/West Los Feliz Road intersection and Seneca Avenue/Los Feliz Road are presently operating at LOS D or better during the AM and PM peak hours under existing conditions. The intersection of San Fernando Road/West Los Feliz Road is currently operating at LOS E during both the AM and PM peak hour.

Table 4.9-2
Existing Levels of Service

	Intersection Approach Lanes												Peak Hour Level of Service			
	Northbound			Southbound			Eastbound			Westbound			Morning		Evening	
Intersection	L	T	R	L	T	R	L	T	R	L	T	R	V/C Ratio	LOS	V/C Ratio	LOS
Gardena Avenue (NS) at: Los Feliz Road (EW)	0	1	0	0	1	0	1	2	0	1	2	0	0.538	A	0.721	C
San Fernando Road (NS) at: Los Feliz Road (EW)	1	2	0	1	2	0	1	2	1	1	2	0	0.971	E	0.920	E
Seneca Avenue (NS) at: Los Feliz Road (EW)	0	1	0	1	0	1	1	2	0	1	2	2	0.443	A	0.605	B

Source: Kunzman Associates, Inc., Glen Village Apartments (retitled as Tropico Apartments) Traffic Impact Analysis, August 31, 2012 and May 13, 2013.
Note:
Both intersections are traffic controlled with traffic signals.
Abbreviations: L = Left; T = Through; R = Right; V/C = volume to capacity; LOS = Level of Service; NS = north/south; EW = east/west

Roadways

The existing average daily traffic volumes on area roadways are shown in **Figure 4.9-2, Existing Average Daily Traffic Volumes** as well as identified in **Table 4.9-3, Existing Average Daily Traffic Volumes**.

Table 4.9-3
Existing Average Daily Traffic Volumes

Roadway Segment	Average Daily Trip Volumes
San Fernando Rd: Fernando Ct to Los Feliz Rd	19,900
San Fernando Rd: south of Los Feliz Rd	16,300
Gardena Ave: Fernando Ct to Los Feliz Rd	1,500
Gardena Ave: south of Los Feliz Rd	3,600
Los Feliz Rd: east of San Fernando Rd	17,600
Los Feliz Rd: San Fernando Rd to Gardena Ave	26,000
Los Feliz Rd: Gardena Ave to Southern Pacific RR	29,200

Source: Kunzman Associates, Inc.

Public Transit Service

The Los Angeles County Metropolitan Transportation Authority (Metro) and the City of Glendale Beeline Bus currently provide public bus transit service in the Project area. The Metro system includes Routes 180, 181, and 780 along Los Feliz Road, and Routes 94, 201, 603, and 794 along San Fernando Road. The Beeline Bus system includes Route 12 along San Fernando Road.

Off-Street Parking Spaces

The Project site currently leases off-street parking spaces to nearby businesses. There are approximately 45 vehicle parking spaces on the Project site. In addition, there are approximately 29 on-street parking spaces along Fernando Court and Gardena Avenue adjacent to the Project site.

Bicycle/Pedestrian Transportation System

The Project site presently contains sidewalks along the southern side of Fernando Court, the western side along Gardena Avenue, and the northern side along West Los Feliz Road.

There are no existing bicycle paths along the roadways adjacent to the Project site.[1]

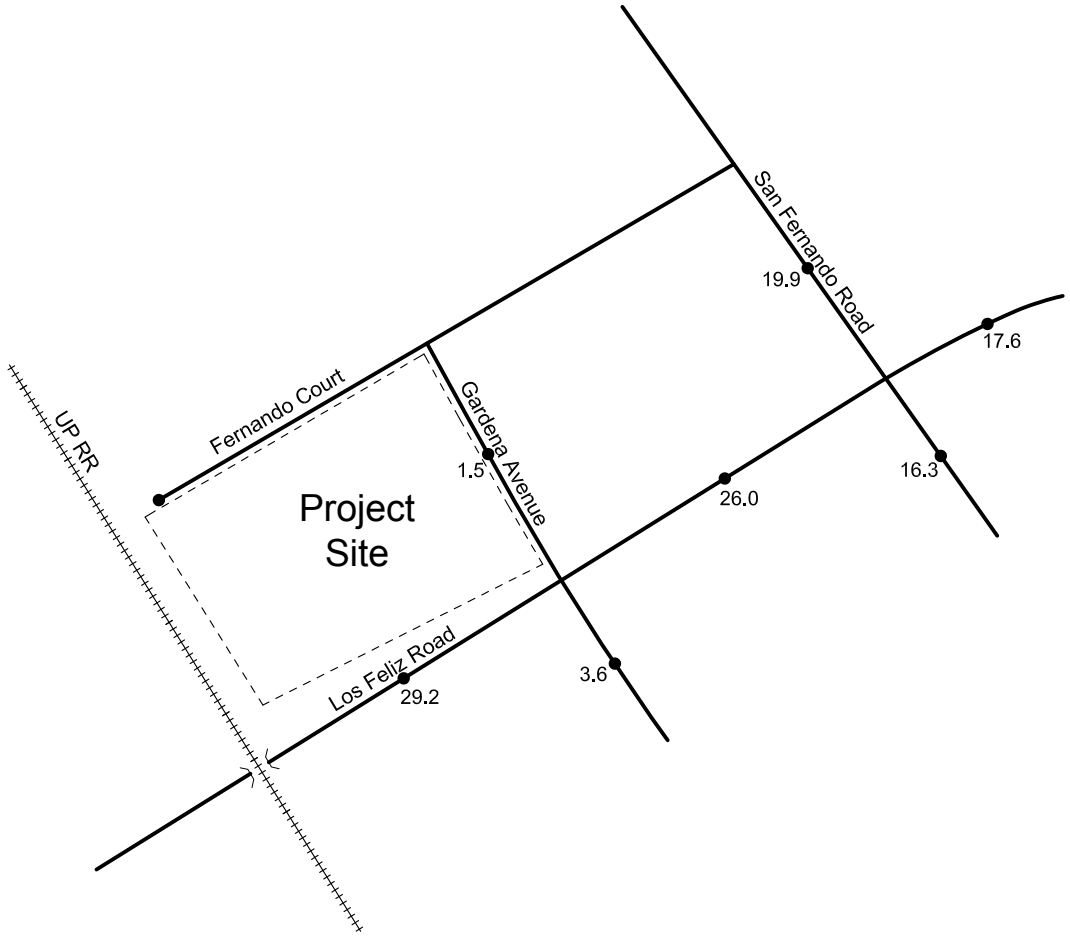
Regulatory Setting

State

California Department of Transportation (Caltrans) regulates and maintains State and Interstate (State Routes, Highways, Freeways) in the State of California. In areas with State roadways, Caltrans has the responsibility to maintain these roadways while the local jurisdictions (e.g., City and County transportation departments) are responsible for maintaining local roads. Local jurisdictions work with Caltrans to achieve transportation service requirements and improvements.

The Project site is located in Caltrans District 7, which includes Los Angeles County. This district is responsible for planning, designing, and maintaining state highways in the general area of the Project site, including I-5, SR-134, and SR-2.

1 City of Glendale, Bicycle Transportation Plan Final Draft, May 2012, Map 5-1: Existing Bikeways.



Legend

3.6 = Vehicles Per Day (1,000's)

= Project Boundary

N

NOT TO SCALE

SOURCE: Kunzman Associates, Inc.

FIGURE **4.9-2**

Meridian Consultants

Existing Average Daily Traffic Volumes

Regional

Southern California Association of Governments

The Southern California Association of Governments (SCAG) Regional Transportation Plan (RTP) is a long term vision document that outlines transportation goals, objectives, and policies for the SCAG region, including Los Angeles County. The latest SCAG RTP, adopted in April 2012, includes an assessment of overall growth and economic trends in the region and provides strategic direction for transportation capital investments to support more efficient and "sustainable" modes of transportation from 2012 through 2035. Future planning will promote use of bus and light rail transit, passenger high speed rail, and other Transportation Demand Management strategies.

Congestion Management Program

The Congestion Management Program (CMP) is a state-mandated program that was enacted by the State Legislature with the passage of Proposition 111 in 1990. The program is intended to address the impact of local growth on the regional transportation system. Metro is the responsible agency for implementing the CMP. The most recent CMP was adopted by the Metro Board on October 28, 2010. The 2010 CMP summarizes the results of 18 years of CMP highway and transit monitoring and 15 years of monitoring local growth. CMP implementation guidelines for local jurisdictions are also contained in the 2010 CMP.

There are no CMP intersections within the Project area.

Local

There are a number of goals and policies set forth by the City of Glendale in the General Plan Circulation Element that relate to traffic and circulation. An analysis of the consistency of these applicable goals and policies with the proposed Project is provided in **Section 4.4**. As discussed in **Section 4.4**, the Project does not conflict with the City's General Plan.

City of Glendale Bicycle Transportation Plan

The Glendale Bicycle Transportation Plan serves as a guide to the City in planning, development, design, and maintenance for new and upgraded bicycle facilities for the next 20 years. The Bicycle Transportation Plan will be updated every five years to inventory and evaluate changes to infrastructure, and to adjust planned facilities based on changing future conditions. The Glendale Bicycle Transportation Plan is compliant with Caltrans Bicycle Transportation Account requirements.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In order to assist in determining whether a project would have a significant effect on the environment, the City determines a project may be deemed to have a significant impact on traffic and transportation, if it would:

- Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit

- Conflict with an applicable congestion management program, including, but not limited to, level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways

- Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks (issue is addressed in **Section 6.0, Effects Found Not to be Significant**)

- Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)

- Result in inadequate emergency access

- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities

City of Glendale

In the City of Glendale, the impact is considered significant for signalized intersections if the project-related increase in the volume to capacity (V/C) ratio equals or exceeds 0.02 that have LOS D or worse. The impact is considered significant for unsignalized intersections if the project-related increase in the delay equals or exceeds 3 seconds that have LOS D, E, or F.

City of Los Angeles

In the City of Los Angeles, the impact is considered significant for intersections if the project-related increase in the volume to capacity (V/C) ratio equals or exceeds 0.04 for an intersection operating and

LOS C, equals or exceeds 0.02 for an intersection operating at LOS D, or equals or exceeds 0.01 for an intersection operating at LOS E or worse.

Methodology

Construction Traffic Analysis

The number of construction worker vehicles is estimated using the average ridership of 1.135 persons per vehicle.[2] The typical construction activity is anticipated to begin at 7:00 AM and end at 4:00 PM. In general, the majority of the construction workers are expected to arrive at the Project site during off-peak hours (i.e., arrive prior to 7:00 AM). It is anticipated that the majority of the construction workers would remain on-site throughout the day and would not leave the site for lunch via their vehicles. The truck delivery period has been assumed for eight hours per day beginning at 7:00 AM, with the last delivery at 3:00 PM. A Passenger Car Equivalent factor of 2.0 has been assumed.

Based on the information provided by the applicant, the construction workers would park off-site at a nearby church parking lot located within 0.5 mile of the Project site behind the Costco/Best Buy shopping center (near the intersection of Revere Avenue and Los Feliz Boulevard). Shuttle services would be provided by the Project applicant between the off-site parking area and the Project site. The shuttle bus(es) would use the following travel route to/from the Project site: exit Project site at Gardena Avenue and travel west on Los Feliz Boulevard and turn north on Revere Avenue at Los Feliz Boulevard. It is assumed that 55 percent of the workers would exit Revere Avenue onto westbound Los Feliz Boulevard and 45 percent of the workers would exit Revere Avenue onto eastbound Los Feliz Boulevard. The LOS analyses were then conducted for the scenario of Existing Plus Project Construction traffic conditions.

Intersections Analysis

In the City of Glendale, the technique used to assess the operation of a signalized intersection is known as the Intersection Capacity Utilization (ICU) method. This method determines V/C ratios on a critical lane basis. The overall intersection V/C ratio is subsequently assigned a level of service value to describe intersection operations, as described above in **Table 4.9-1.** To calculate an ICU value, the volume of traffic using the intersection is compared with the capacity of the intersection. The ICU value represents that portion of the hour required to provide sufficient capacity to accommodate all intersection traffic if all approaches operate at capacity.

2 South Coast Air Quality Management District, CEQA Air Quality Handbook, 1993.

In the City of Glendale, the technique used to assess the capacity needs of an unsignalized intersection is known as the Intersection Delay Method (refer to **Appendix 4.9**). To calculate delay, the volume of traffic using the intersection is compared with the capacity of the intersection. The impact is considered significant for unsignalized intersections if the project-related increase in the delay equals or exceeds 3 seconds that have LOS D, E, or F.

Trip Generation

Traffic generated by the Project was determined by multiplying an appropriate trip generation rate by the quantities of land uses. Trip generation rates are predicated on the assumption that energy costs, the availability of roadway capacity, the availability of vehicles to drive, and our life styles remain similar to what we know today. A major change in these variables may affect trip generation rates.

Trip generation rates were determined for daily traffic, morning peak hour inbound and outbound traffic, and evening peak hour inbound and outbound traffic for the Project. By multiplying the traffic generation rates by the land use quantities, the traffic volumes are determined. The traffic generation rates are from the Institute of Transportation Engineers[3], and the San Diego Association of Governments.[4] The traffic analysis was prepared in accordance with the traffic impact analysis requirements which also examined the CMP system of roads and intersections, as well as other roads and systems.

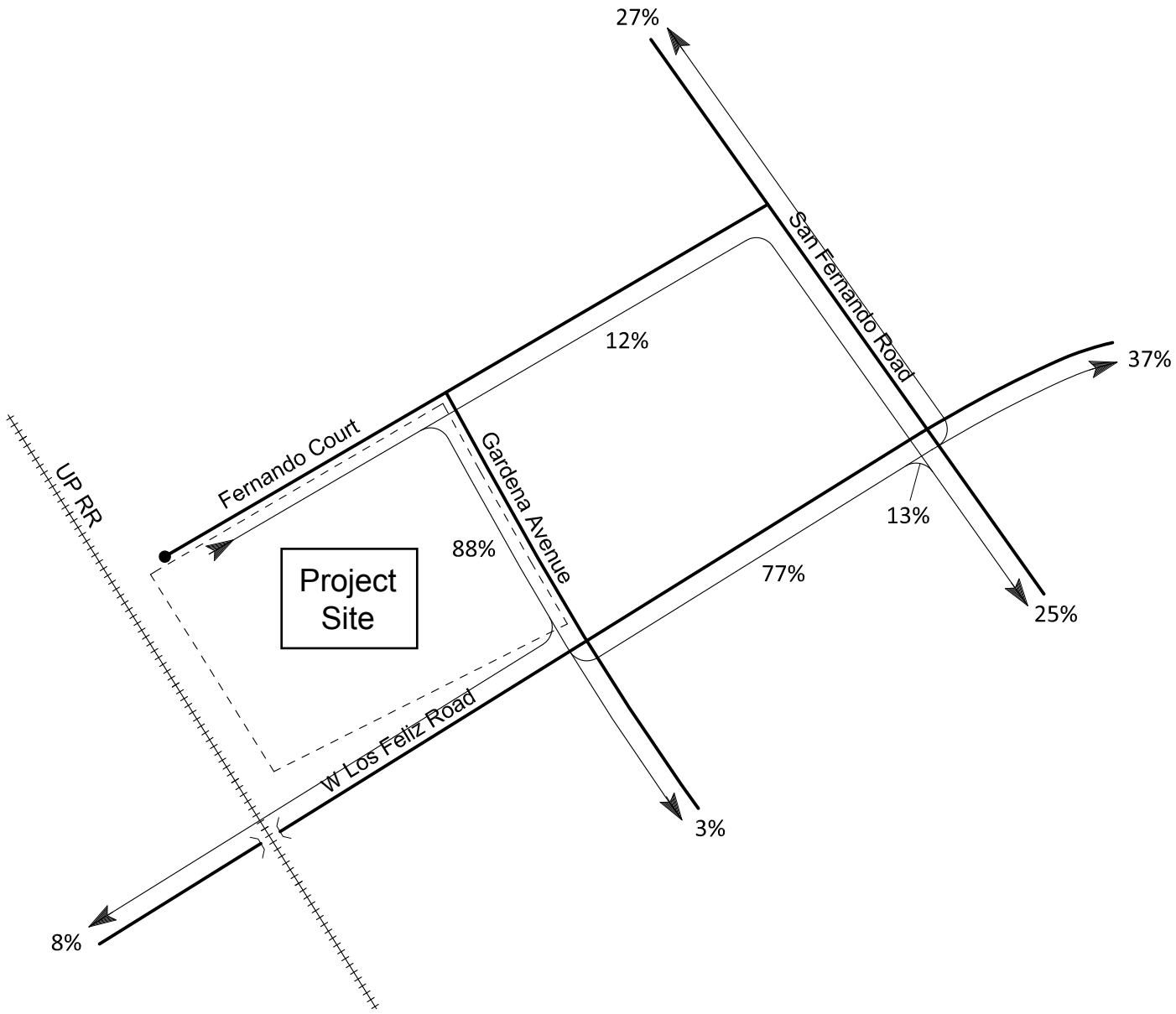
The Project-generated traffic was added to intersections and a full intersection analysis was conducted, even when the Project-added traffic failed to meet the minimum thresholds that require an intersection analysis.

Trip Distribution

To determine the traffic distributions for the Project, peak-hour traffic counts of the existing directional distribution of traffic for existing areas in the vicinity of the site, the City of Glendale computerized traffic model, and other additional information on future development and traffic impacts in the area were reviewed. **Figure 4.9-3, Project Traffic Outbound Distribution,** and **Figure 4.9-4, Project Traffic Inbound Distribution**, provide the directional distributions of Project traffic for the proposed land use. These distributions reflect the Project traffic with a traffic signal at the intersection of San Fernando Road/Fernando Court.

3 Institute of Transportation Engineers, Trip Generation, 8th Edition, 2008.

4 San Diego Association of Governments, Traffic Generators, April 2002.



Legend

10% = Percent From Project

= Project Boundary

NOT TO SCALE

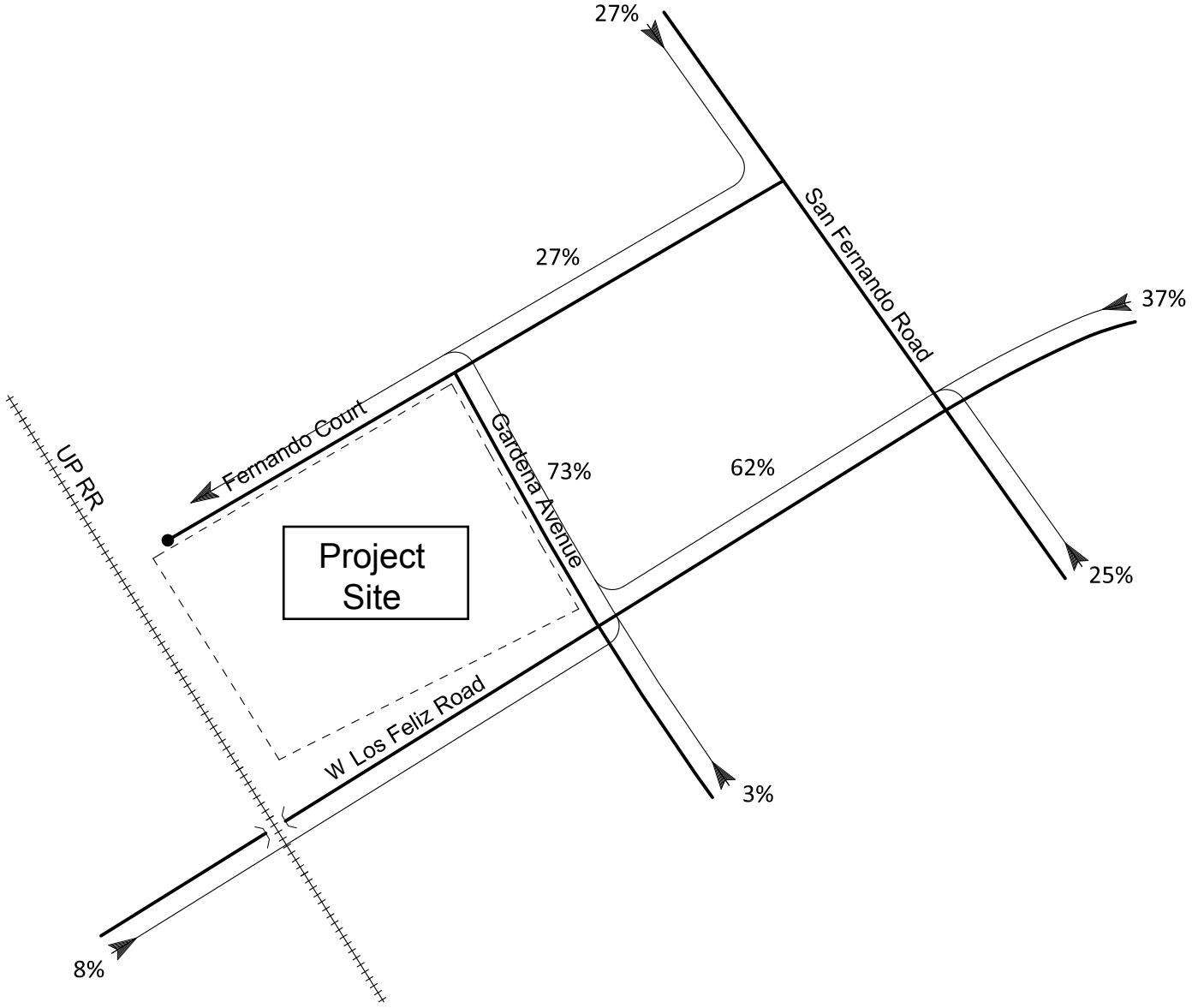
SOURCE: Kunzman Associates, Inc.

FIGURE **4.9-3**

Meridian Consultants

Project Traffic Outbound Distribution

006-002-13



Legend

10% = Percent To Project

= Project Boundary

NOT TO SCALE

SOURCE: Kunzman Associates, Inc.

FIGURE **4.9-4**

Meridian Consultants

Project Traffic Inbound Distribution

006-002-13

Trip Assignment

Based on the identified traffic generation and distributions, Project average daily traffic volumes have been calculated and are shown on **Figure 4.9-5, Project Average Daily Traffic Volumes**.

Transit Analysis

The Traffic Impact Analysis also includes a review of the CMP transit service system. Transit service is provided in the Project area. The Project transit calculations are based upon values stated in the CMP to estimate the transit trip generation. The person trips are equal to 1.4 times vehicle trips and the transit trips are equal to 3.5 percent of the total person trips.

Parking Analysis

The Project site is currently leased to certain nearby businesses for off-street parking. Parking occupancy surveys were conducted to determine the number of off-street parking spaces that would be potentially impacted by the construction of the Project.

Cumulative Analysis

In order to assess cumulative Without Project traffic conditions, existing traffic is combined with related projects and areawide growth. An annual growth rate has been utilized to account for areawide growth on study area roadways. Per the City of Glendale Traffic and Transportation Division, the traffic counts have been applied with an annual growth rate of 1 percent per year.

In order to assess Cumulative With Project traffic conditions, existing traffic is combined with the traffic of the Project, related projects, and areawide growth. Similar to the Cumulative Without Project traffic conditions, an annual growth rate of 1 percent per year.

Traffic volumes expected to be generated by the related projects during the weekday were estimated using rates published in the Institute of Transportation Engineer's (ITE) Trip Generation manual or other approved documents. The related projects were organized by traffic analysis zone.

Related projects are expected to generate 1,629 vehicle trips (591 inbound and 1,039 outbound) during the AM peak hour. During the PM peak hour, the related projects are expected to generate 2,315 vehicle trips (1,349 inbound and 967 outbound). Over a 24-hour period, the related projects are forecast to generate 25,752 daily trips. Refer to **Figure 4.9-6, Other Development Traffic Analysis Zone Map**, for the location of related traffic analysis zones relative to the Project. Refer to **Appendix 4.9** of this EIR for a detailed breakdown of the related projects' weekday trip generation.

Project Impacts

Threshold: **Conflict with an applicable plan, ordinance or policy establishing measures of effectiveness for the performance of the circulation system, taking into account all modes of transportation including mass transit and non-motorized travel and relevant components of the circulation system, including but not limited to intersections, streets, highways and freeways, pedestrian and bicycle paths, and mass transit?**

Construction

Project construction would generate traffic from construction worker travel, as well from the arrival and departure of trucks delivering construction materials, and the removal of debris generated by on-site activities. Both the number of construction workers and trucks would vary throughout the construction process in order to maintain a reasonable schedule of completion.

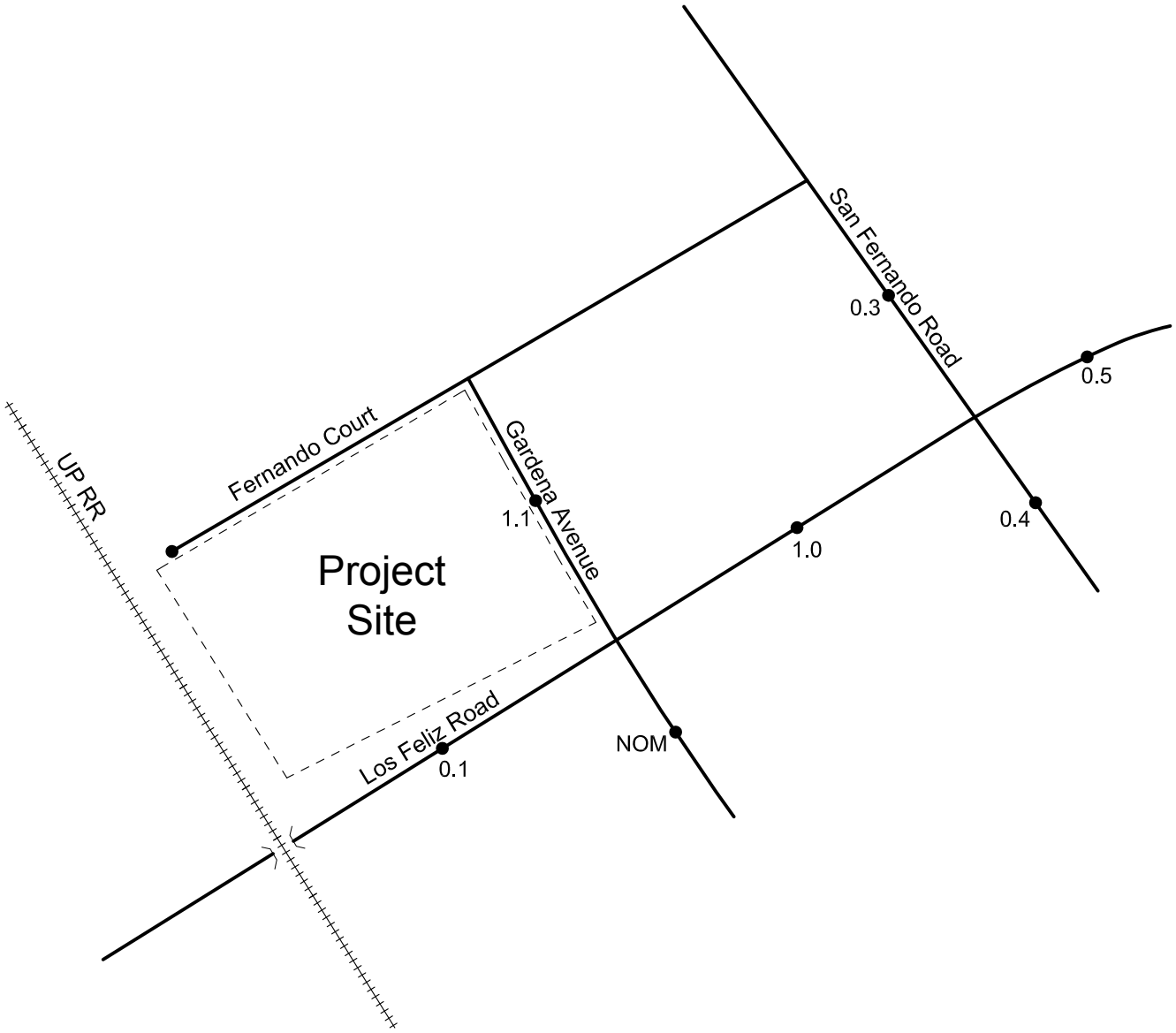
The construction of the Project is anticipated to consist of three phases: (1) demolition, (2) grading/excavation, and (3) above-grade building construction. The total construction period is anticipated to last approximately 23 months.

Demolition

This phase of construction would include the demolition and removal of the existing foundation structures. Removal of materials would involve the use of standard construction equipment such as loaders, dozers, backhoes, cranes, and other related equipment. The duration for this phase of construction is anticipated to be approximately 4 weeks. This work is anticipated to produce approximately 1,000 cubic yards of export material. This corresponds to approximately 70 trucks, assuming tandem trucks with the capacity to carry up to 14 cubic yards of material per truck. With a five-day construction work-week and one-week duration, this phase of construction is anticipated to generate a total of approximately 70 truckloads.

Grading/Excavation

The grading phase would include the excavation of existing fill materials and replacement with properly compacted fill materials. Heavy construction equipment would be located on site during grading activities and would not travel to and from the Project site on a daily basis. It is anticipated that equipment needs associated with grading activities would include loaders, dozers, scrapers, compactors, vibratory rollers, and other related heavy-duty equipment. It is estimated that this work would likely produce an estimated 100 cubic yards of soil/material export. This corresponds to approximately 7



Legend

0.1 = Vehicles Per Day (1,000's)
NOM = Nominal, Less Than 50 Vehicles Per Day
= Project Boundary

NOT TO SCALE

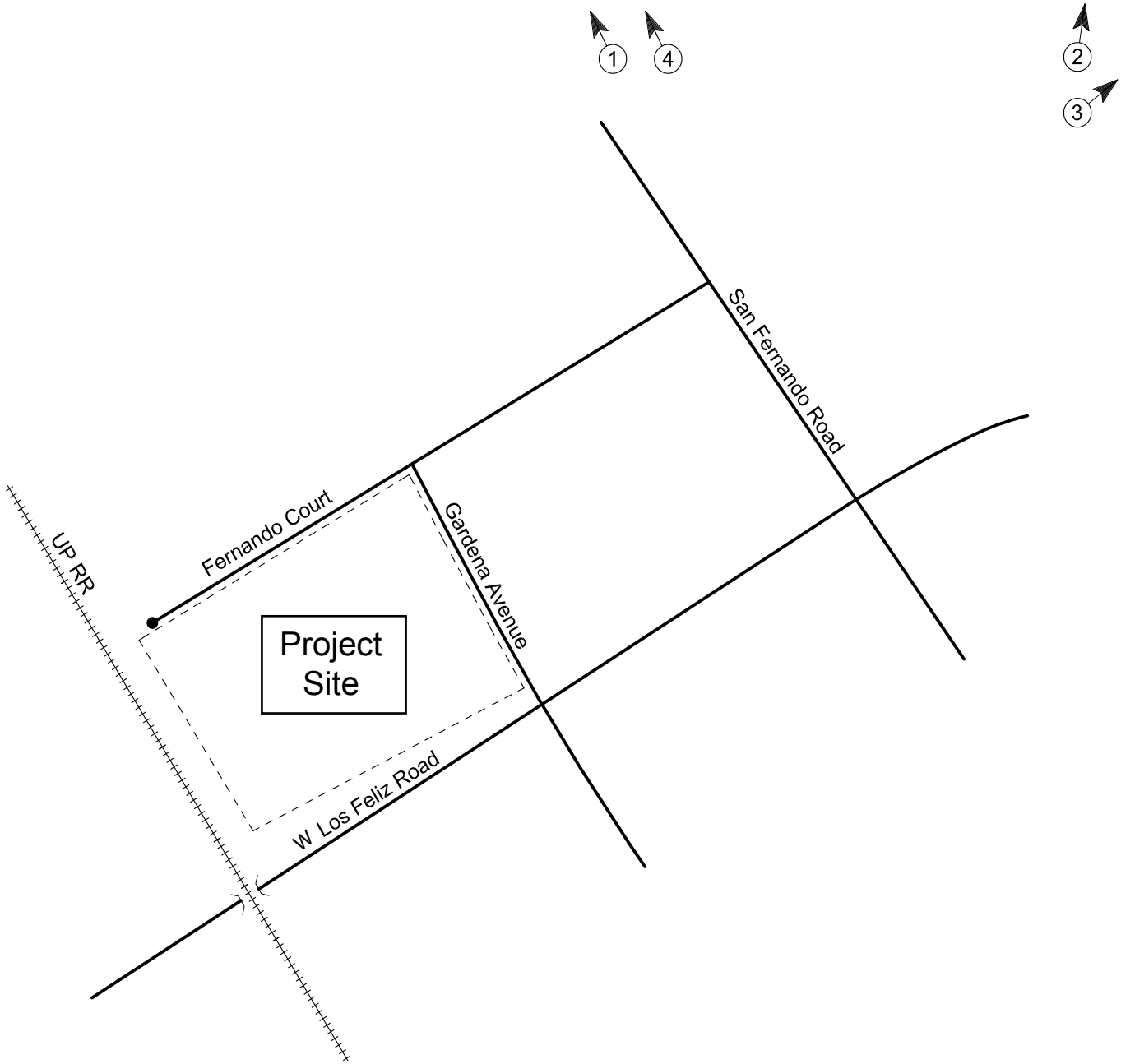
SOURCE: Kunzman Associates, Inc.

FIGURE **4.9-5**

Meridian Consultants

Project Average Daily Traffic Volumes

006-002-13



Legend

1 = Traffic Analysis Zone Number

= Project Boundary

N NOT TO SCALE

SOURCE: Kunzman Associates, Inc.

FIGURE **4.9-6**

Meridian Consultants

Other Development Traffic Analysis Zone Map

006-002-13

truckloads, assuming tandem trucks with the capacity to carry 14 cubic yards of material per truck. As such, there will be very little soil export from the Project site with no more than a day's worth of truckloads for the Project as a whole. This phase is anticipated to be completed in approximately one month.

Above-Grade Building Construction

This phase would include the above-grade structure construction of the Project. It is anticipated that equipment needs associated with above-grade construction activities would include loaders, dozers, cranes, pumps, and various miscellaneous machinery and related equipment. During the peak period of this construction phase, a work force of 180 construction workers would be necessary, while a workforce of 100 to 150 construction workers is anticipated for the latter portion of this construction phase. Material delivery trucks and other miscellaneous trucks are anticipated during this phase of construction. This work would likely produce approximately six to seven material delivery trucks trips per day, although deliveries are not envisioned to occur for each day of this phase. This phase is anticipated to be completed in approximately 14.75 months.

As indicated in **Table 4.9-4, Construction Trips**, it is estimated that construction workers would generate a total of approximately 346 daily vehicle trips, four of which will occur during the morning peak hour and 159 of which will occur during the evening peak hour. The number of construction worker vehicles peak hour tips as previously d discussed within this section was estimated using the average ridership of 1.135 persons per vehicle.[5] The truck trips were estimated using a Passenger Car Equivalent factor of 2.0.

Table 4.9-4
Construction Trips

	Peak Hour				
	Employees		Trucks		
Time Period	Inbound	Outbound	Inbound	Outbound	Daily
6:00– 7:00 AM	159	0	0	0	159
7:00 – 8:00 AM	0	0	2	0	2
8:00 – 9:00 AM	0	0	2	2	4
9:00 – 10:00 AM	0	0	2	2	4
10:00 – 11:00 AM	0	0	2	2	4
11:00 AM – Noon	0	0	2	2	4
Noon – 1:00 PM	0	0	0	2	2
1:00 – 2:00 PM	0	0	2	0	2

5 South Coast Air Quality Management District, CEQA Air Quality Handbook, 1993.

	Peak Hour				
	Employees		Trucks		
Time Period	**Inbound**	**Outbound**	**Inbound**	**Outbound**	**Daily**
2:00 – 3:00 PM	0	0	2	2	4
3:00 – 4:00 PM	0	0	0	2	2
4:00 – 5:00 PM	0	159	0	0	159
Total	**159**	**159**	**14**	**14**	**346**

Source: Kunzman Associates, Inc., Traffic Impact Analysis, August 31, 2012, 47.

In terms of construction-related traffic impacts during the critical 7:00 AM – 9:00 AM and 4:00 PM – 6:00 PM peak periods, **Table 4.9-4** indicates that the 4:00 PM – 5:00 PM peak hour could be significantly impacted by the 180 workers exiting the area (resulting in approximately 159 outbound vehicles). Based upon the assumption that 55 percent of the workers would exit the church parking area behind Costco/Best Buy onto Los Feliz Road westbound, and 45 percent of the workers onto Los Feliz Road eastbound, these 159 vehicle trips were assigned to the study intersections. **Table 4.9-5, Existing Plus Project Construction Traffic Conditions**, provides the LOS analysis for Existing Plus Project Construction traffic conditions. Only intersections that would experience 50 or more peak-hour trips were selected for analysis.

Table 4.9-5
Existing Plus Project Construction Traffic Conditions

	Peak Hour		
	Morning	Evening	
Intersection		**V/C Ratio**	**LOS**
I-5 Freeway NB Off-Ramp (NS) at: Los Feliz Boulevard (EW)	N/A[1]	0.610	B
Glenfeliz Boulevard (NS) at: Los Feliz Boulevard (EW)	N/A	0.757	C
Brunswick Avenue (NS) at: Los Feliz Boulevard (EW)	N/A	0.760	C
Revere Avenue (NS) at: Los Feliz Boulevard (EW)	N/A	0.893	D
Gardena Avenue (NS) at: Los Feliz Road (EW)	N/A	0.744	C
San Fernando Road (NS) at: Los Feliz Road (EW)	N/A	0.936	E

Source: Kunzman Associates, Inc., Traffic Impact Analysis, August 31, 2012, 48.
Note:
[1] Less than 50 peak hour trips during the morning peak hour.
Abbreviations: V/C = volume to capacity ratio; LOS = level of service; NB = northbound; NS = north/south; EW = east/west; N/A = not available.

As discussed above, it is anticipated that truck trips would range from 14 truck/trailer loads per day during the demolition phase to six to seven material delivery truck trips per day during the above-ground building construction phase. Typically as conditions of approval, the City of Glendale requires a truck-haul route program during construction to minimize potential conflicts between construction activities and through traffic. The truck-haul route program would include features to limit any potential lane closures to off-peak travel periods; schedule receipt of construction materials during non-peak travel periods, to the extent possible; maintain existing access for land uses in proximity of the Project site; require the construction workers to park on the predetermined off-street parking lot specified by the applicant; and coordinate deliveries to minimize loading and unloading time.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than significant.

Operation Impacts

As part of the Project an eastbound left-turn storage modification and protected left turn arrow at the intersection of Gardena Avenue and Los Feliz Road would be provided as specified by the City of Glendale Traffic and Transportation Division. In addition, the project will be required to install an additional southbound to eastbound exclusive turn lane. The Project would be required to provide a two (2) foot widening, restriping and associated dedication of right-or-way along the site's entire frontage of Fernando Court. This widening and restriping would allow for the provision of two (2) 10 foot travel lanes and two (2) 8 foot parking lanes. A loading zone would also be installed west of the County Sewer easement. Parking would be retained along the site's Fernando frontage to the greatest extent possible. Lastly, the Project would provide a hammerhead on Fernando Court using a portion of the county sewer easement to provide a turnaround area for fire apparatus. To maintain the hammerhead free of obstructions, parking would not be allowed on an approximate 150' portion of the north side of Fernando Court.

Intersection Analysis

Table 4.9-6, Trip Generation, identifies the traffic generation rates, Project peak-hour volumes, and Project daily traffic volumes. As presented in **Table 4.9-6**, the Project is projected to generate approximately 1,350 daily vehicle trips, 67 of which occur during the morning peak hour and 88 of which will occur during the evening peak hour.

Table 4.9-6
Trip Generation

Land Use	Quantity	Units	AM Peak Hour Inbound	AM Peak Hour Outbound	AM Peak Hour Total	PM Peak Hour Inbound	PM Peak Hour Outbound	PM Peak Hour Total	Daily
Trip Generation Rate									
Mid Rise Apartments	225	du	0.09	0.21	0.30	0.23	0.16	0.39	6.00
Trips Generated									
Mid Rise Apartments	225	du	20	47	67	52	36	88	1,350

Source: Institute of Transportation Engineers, Trip Generation, 8th Edition, 2008, Land Use Category 223; San Diego Association of Governments, Traffic Generators, April 2002 for apartment daily rates.
Abbreviations: du = dwelling units; AM Peak Hour = 7:00 AM to 9:00 AM; PM Peak Hour = 4:00 PM to 6:00 PM.

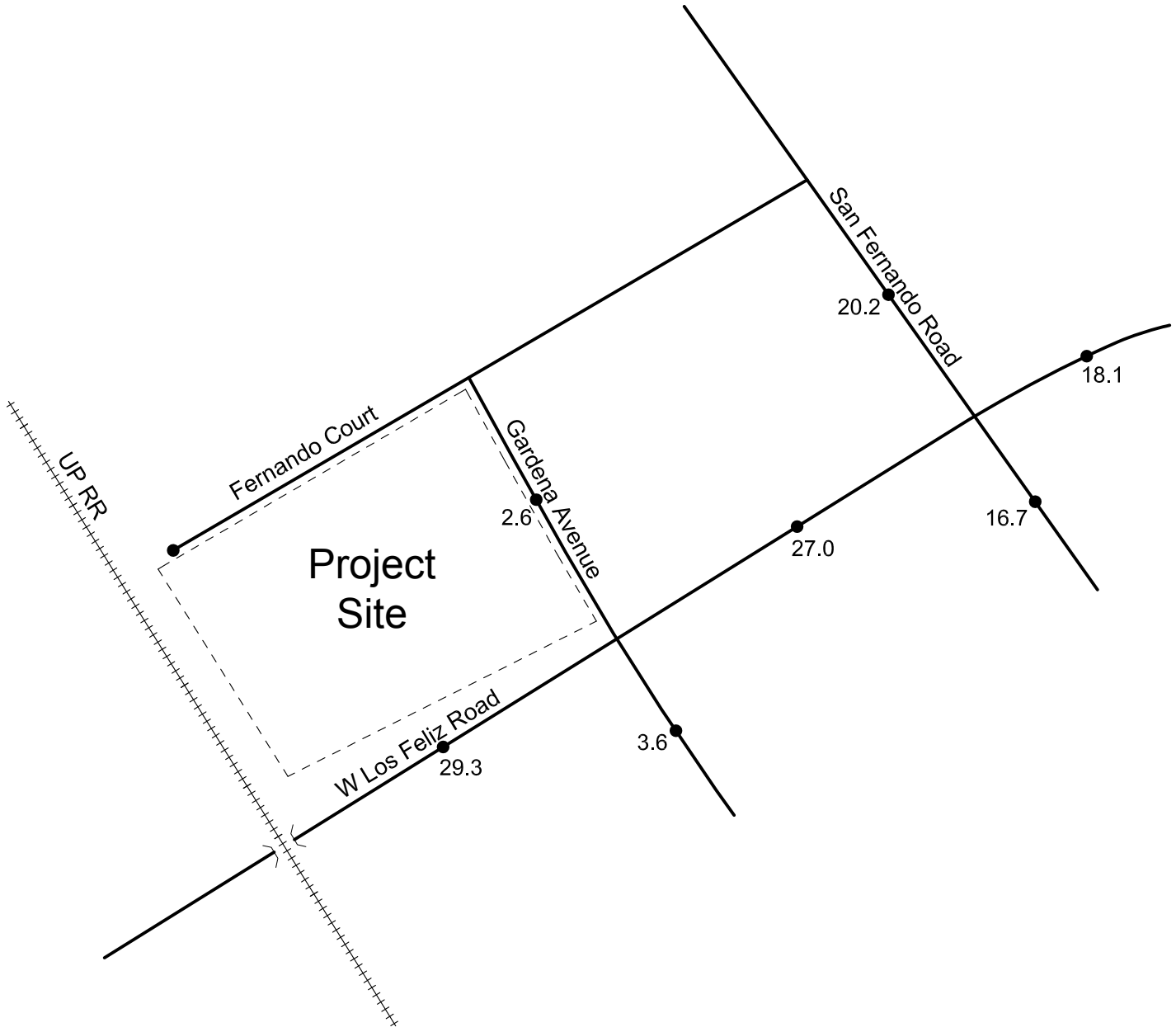
To determine the potential impact of the Project on each study area intersection, Project traffic volumes were added to existing traffic conditions. **Table 4.9-7, Existing Plus Project Levels of Service**, depicts the Existing Plus Project traffic contribution at the study area intersections.

Table 4.9-7
Existing Plus Project Levels of Service

Intersection	Peak Hour	Existing Conditions ICU	Existing Conditions LOS	Existing Plus Project ICU	Existing Plus Project LOS	Change	Significant Impact?[1]
Gardena Avenue (NS) at:	Morning	0.538	A	0.573	A	0.035	No
Los Feliz Road (EW)	Evening	0.721	C	0.742	C	0.021	No
San Fernando Road (NS) at:	Morning	0.971	E	0.988	E	0.017	No
Los Feliz Road (EW)	Evening	0.920	E	0.944	E	0.023	Yes
Seneca Avenue (NS) at:	Morning	0.443	A	0.444	A	0.001	No
Los Feliz Road(EW)	Evening	0.605	B	0.606	B	0.001	No

Source: Kunzman Associates, Inc., Traffic Impact Analysis, August 31, 2012, and May 13, 2013.
Note:
[1] *In the City of Glendale, the impact is considered significant for signalized intersections if the project related increase in the V/C ratio equals or exceeds 0.02 that have LOS D or worse. For nonsignalized intersections, the impact is considered significant if the intersection delay increases by 3 seconds or more for LOS D or worse. In the City of Los Angeles, the impact is considered significant for intersections if the project-related increase in the volume to capacity (V/C) ratio equals or exceeds 0.04 for an intersection operating and LOS C, equals or exceeds 0.02 for an intersection operating at LOS D, or equals or exceeds 0.01 for an intersection operating at LOS E or worse.*

As shown in **Table 4.9-7**, Project traffic would significantly impact one study area intersection. This intersection includes the Los Feliz Road and San Fernando Road.



Legend

3.6 = Vehicles Per Day (1,000's)

= Project Boundary

NOT TO SCALE

SOURCE: Kunzman Associates, Inc.

FIGURE **4.9-7**

Meridian Consultants

Existing Plus Project Average Daily Traffic Volumes

006-002-13

Level of Significance Before Mitigation: Significant.

Mitigation Measures: No mitigation measures are available to improve this intersection.

Level of Significance After Mitigation: Significant and unavoidable at intersection of Los Feliz Road and San Fernando Road.

Roadway Analysis

The existing plus Project average daily traffic volumes on area roadways are shown in **Figure 4.9-7, Existing Plus Project Average Daily Traffic Volumes**. **Table 4.9-8, Existing Plus Project Average Daily Traffic Volumes**, identifies the distribution of the Project generated trips along roadways in the City.

Table 4.9-8
Existing Plus Project Average Daily Traffic Volumes

Roadway Segment	Existing	Existing Plus Project	Change
San Fernando Rd: Fernando Ct to Los Feliz Rd	19,900	20,200	300
San Fernando Rd: south of Los Feliz Rd	16,300	16,700	400
Gardena Ave: Fernando Ct to Los Feliz Rd	1,500	2,600	900
Gardena Ave: south of Los Feliz Rd	3,600	3,600	0
Los Feliz Rd: east of San Fernando Rd	17,600	18,100	500
Los Feliz Rd: San Fernando Rd to Gardena Ave	26,000	27,000	1,000
Los Feliz Rd: Gardena Ave to Southern Pacific RR	29,200	29,300	100

Source: Kunzman Associates, Inc.

The estimated existing average daily traffic on the nearby local streets range from a minimum of 1,500 vehicles per day along Gardena Avenue between Fernando Court and West Los Feliz Road to 29,200 vehicles per day along West Los Feliz Road between Gardena Avenue and the Union Pacific Railroad/City of Glendale limit. The improvements along Gardena Avenue, identified in **Mitigation Measures 4.9-3** and **4.9-6**, would improve the lane capacity between Fernando Court and West Los Feliz Road. The percentage increases in average daily trips along the other Project area roadways would be less than five percent. Therefore, the Project-related increase would not significantly impact local residential streets in the City of Glendale, and the impact of Project-related traffic on these roadways is less than significant.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than significant.

Parking

The Project proposes 225 residential apartment units consisting of 49 studio units, 103 one-bedroom apartments, and 73 two-bedroom apartments. The studio and one-bedroom apartment units would range in size from 600 square feet to 725 square feet.

The City of Glendale parking requirements for residential land uses are set forth in Section 30.32.090 of the Glendale Municipal Code. The parking requirements for residential uses that contain zero to one-bedroom units are 1 space per unit. Two-to three bedroom units require 2 parking spaces per unit. The proposed studio and one-bedroom apartments are be required to provide only 1 parking space per residential unit. Under the GMC, the Project would be required to provide 507 parking spaces. The applicant is requesting a variance to the standard City of Glendale parking code to be allowed to park automobiles following Glendale's "Downtown Specific Plan" (DSP). Under the DSP, the Project would be required to provide for 321 parking spaces and is providing 330 parking spaces.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than significant.

Threshold: **Conflict with an applicable congestion management program, including, but not limited to level of service standards and travel demand measures, or other standards established by the county congestion management agency for designated roads or highways.**

CMP Intersection Analysis

There are no CMP-intersection monitoring locations in the Project vicinity. The CMP TIA guidelines require that intersection-monitoring locations must be examined if the Project will add 50 or more trips during either the AM or PM weekday peak periods. The Project would not add 50 or more trips during the AM or PM peak hours at any CMP monitoring intersections, which is the threshold for preparing a traffic impact assessment, as stated in the CMP manual. Therefore, the Project would have a less than significant impact to intersection monitoring locations that are part of the CMP highway system.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than significant.

Thresholds: **Would the project substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment).**

Would the project result in inadequate emergency access.

The Project would use the existing network of regional and local roadways located in the vicinity of the Project site. Vehicle access to the parking structure on the Project site would be provided via one driveway along Fernando Court near the western Project boundary, which would provide ingress and egress. The full access driveway entrance serving the Project parking garage accommodating exiting traffic from the parking garage will be controlled by a stop sign.

Sidewalks along the frontages of the Project site would be replaced to improve pedestrian access to the site. Pedestrian access to residential building and the parking garage would be provided along the southern and eastern façade of the buildings. All pedestrian improvements would be designed to adhere to standard engineering practices and requirements by the City of Glendale Public Works and Fire departments. Given these precautions, the Project would not substantially increase traffic hazards associated with the Project site.

Furthermore, the Project has a high level of accessibility for emergency vehicles, both from a regional and a site perspective. West Los Feliz Road provides a direct route to the Project site for emergency vehicles. Smaller emergency vehicles, such as police cars and ambulances, would be able to access the parking structure as necessary. As a result, Project impacts on emergency vehicle access would be less than significant.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than significant.

Threshold: **Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities**

Public Transit Analysis

As required by the 2010 Congestion Management Program for Los Angeles County, a review has been made of the CMP transit service. As previously discussed, existing transit service is provided in the vicinity of the Project.

Pursuant to the CMP guidelines, over a 24-hour period, the Project is forecast to generate demand for 66 daily transit trips, 3 of which would occur during the AM peak hour and 4 of which would occur during the PM peak hour. The calculations for the morning, evening, and daily traffic conditions are as follows:

- Morning (AM) Peak Hour = 67 * 1.4 * 0.035 = 3 Transit Trips
- Evening (PM) Peak Hour = 88* 1.4 * 0.035 = 4 Transit Trips
- Daily = 1,350 * 1.4 * 0.035 = 66 Transit Trips

As discussed above in the subsection Existing Public Transit Service, transit service is provided by Metro and the Beeline Service. The Metro system includes Routes 180, 181, and 780 along Los Feliz Road, and Routes 94, 201, 603, and 794 along San Fernando Road. The Beeline Bus system includes Route 12 along San Fernando Road.

Based on the projected increased demand for transit services generated by the Project, it is anticipated that the existing transit service in the Project area would adequately accommodate the Project-generated transit trips. Thus, based on the calculated number of generated transit trips, no Project impacts on existing or future transit services in the Project area are expected to occur.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than significant.

Bicycle/Pedestrian Analysis

There are currently no bike paths along the roadways adjacent to the Project site. The Glendale Bicycle Transportation Plan indicates that the roadway segment along Los Feliz Road from the City of Los

Angeles city limit to San Fernando Road would be designated as a B-type bicycle route.[6] A Class I bike path has also been proposed along the Union Pacific Railroad right-of-way, which is officially the Southern California Regional Rail Authority (SCRRA), and would require coordination with Metro and SCRRA.

The Project would not interfere with the future B-type sharrows bicycle route along Los Feliz Road. The Project would not encroach into the SCRRA right-of-way and as such would not impact the potential use of the right-of-way for a Class I bike path.

Sidewalks along the frontages of the Project site would be replaced to improve pedestrian access to the site. Pedestrian access to the residential building would be provided along the southern and eastern façades of the building while the main pedestrian access to the parking garage would be provided along the southern façade of the building. The corner of Gardena Avenue and Fernando Court and Gardena Avenue and West Los Feliz Road within the Project site would provide a 25-foot radius curb return and American with Disabilities Act (ADA)-compliant handicap ramps.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than significant.

Cumulative Impacts

Construction

It is anticipated that construction of related projects would result in periods of heavy truck traffic due to the delivery of construction materials and the hauling of demolition materials. Although the time frame for construction of these projects is uncertain, as well as the degree to which construction of these projects would overlap and the location at which impacts could occur, it is possible that the construction of these related projects could affect roadway segments and intersections, which could result in a significant cumulative impact. Specifically, if construction of the related project located approximately at 3900 San Fernando Road (the Glendale Triangle Project) would overlap with construction of the Project a significant cumulative impact could result. However, as discussed under Project Impacts, the Project would implement numerous measures to reduce construction-related traffic impacts, including preparation and implementation of a truck haul route program as a condition of approval and the commute of workers to the Project site during non-peak hours. Consequently, the Project's contribution

6 City of Glendale, Bicycle Transportation Plan Final Draft, 2012, 6-32.

to construction-related traffic is not cumulatively considerable and thus, the Project's cumulative impacts are less than significant.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than significant.

Operation

Cumulative Without Project Conditions

As indicated in **Table 4.9-9, Cumulative without Project Levels of Service**, one of the study intersections would operate at LOS D or better during the AM and PM peak hours under Cumulative Without Project conditions. The intersection of San Fernando Road and West Los Feliz Road would operate at LOS F during AM peak hours and LOS E during PM peak hours.

Table 4.9-9
Cumulative without Project Levels of Service

	Intersection Approach Lanes												Peak Hour Level of Service			
	Northbound			Southbound			Eastbound			Westbound			Morning		Evening	
Intersection	L	T	R	L	T	R	L	T	R	L	T	R	V/C Ratio	LOS	V/C Ratio	LOS
Gardena Avenue (NS) at: Los Feliz Road (EW)	0	1	0	0	1	0	1	2	0	1	2	0	0.564	A	0.755	C
San Fernando Road (NS) at: Los Feliz Road (EW)	1	2	1*	1	2	0	1	2	1	1	2	0	1.015	F	0.976	E
Seneca Avenue (NS) at: Los Feliz Road (EW)	0	1	0	1	0	1	1	2	0	1	2	1	0.478	A	0.652	B

Source: Kunzman Associates, Inc., Glen Village Apartments (retitled as Tropico Apartments) Traffic Impact Analysis, August 31, 2012, and May 13, 2013.
Note:
** The improvement is scheduled to be constructed by the Glendale Triangle Project.*
Both intersections are traffic controlled with traffic signals.
Abbreviations: L = Left; T = Through; R = Right; V/C = volume to capacity; LOS = Level of Service; NS = north/south; EW = east/west

Cumulative without Project average daily traffic volumes on area roadways are shown in **Figure 4.9-8, Cumulative without Project Average Daily Traffic Volumes**.

Cumulative With Project Conditions

To determine the potential cumulative impact of the Project on each study area intersection, Project traffic volumes were added to year 2014 traffic conditions. **Table 4.9-10, Cumulative Plus Project Traffic Levels of Service**, depicts the Cumulative Plus Project traffic contribution at the study area intersections. As shown in **Table 4.9-10**, Project traffic would significantly impact one study area intersection during the PM peak hour without any improvements.

Table 4.9-10
Cumulative Plus Project Levels of Service

Intersection	Peak Hour	Cumulative Without Project		Cumulative With Project			Significant Impact?[1]
		ICU	LOS	ICU	LOS	Change	
Gardena Avenue (NS) at:	Morning	0.564	A	0.600	A	0.036	No
Los Feliz Road (EW)	Evening	0.755	C	0.777	C	0.022	No
San Fernando Road (NS) at:	Morning	1.015	F	1.033	F	0.018	No
Los Feliz Road (EW)	Evening	0.976	E	1.000	F	0.024	Yes
Seneca Avenue (NS) at:	Morning	0.478	A	0.479	A	0.001	No
Los Feliz Road (EW)	Evening	0.652	B	0.653	B	0.001	No

Source: Kunzman Associates, Inc., Traffic Impact Analysis, August 31, 2012, Table 7.
Note:
[1] *In the City of Glendale, the impact is considered significant for signalized intersections if the project related increase in the V/C ratio equals or exceeds 0.02 that have LOS D or worse. For nonsignalized intersections, the impact is considered significant if the intersection delay increases by 3 seconds or more for LOS D or worse. In the City of Los Angeles, the impact is considered significant for intersections if the project-related increase in the volume to capacity (V/C) ratio equals or exceeds 0.04 for an intersection operating and LOS C, equals or exceeds 0.02 for an intersection operating at LOS D, or equals or exceeds 0.01 for an intersection operating at LOS E or worse.*

Level of Significance Before Mitigation: Significant.

Mitigation Measures: No mitigation measures are available.

Level of Significance After Mitigation: Significant and unavoidable at the intersection of Los Feliz Road and San Fernando Road.

Residential Roadway Analysis

The cumulative with Project average daily traffic volumes on area roadways are shown in **Figure 4.9-9, Cumulative with Project Average Daily Traffic Volumes**. **Table 4.9-11, Cumulative with Project Average Daily Traffic Volumes**, identifies the distribution of the Project generated trips along roadways in the City. The estimated cumulative without Project average daily traffic on the nearby local streets range from a minimum of 1,500 vehicles per day along Gardena between Fernando Court and Los Feliz Road to 31,100 vehicles per day along Los Feliz Road between Gardena Avenue and the Southern Pacific Railroad/City of Glendale limit. The improvements along Gardena Avenue, identified in Mitigation Measures 4.9-3 and 4.9-6, would improve the lane capacity between Fernando Court and Los Feliz Road. The percentage increases in average daily trips along the other Project area roadways would be less than five percent. Therefore, the Project-related increase would not result in a cumulatively significant impact on local residential streets in the City of Glendale, and the contribution of the Project to this impact would not be cumulatively considerable.

Table 4.9-11
Cumulative with Project Average Daily Traffic Volumes

Roadway Segment	Cumulative Without Project	Cumulative With Project	Change
San Fernando Rd: Fernando Ct to Los Feliz Rd	21,500	21,800	300
San Fernando Rd: south of Los Feliz Rd	17,400	17,800	400
Gardena Ave: Fernando Ct to Los Feliz Rd	1,500	2,600	900
Gardena Ave: south of Los Feliz Rd	3,700	3,700	0
Los Feliz Rd: east of San Fernando Rd	18,900	19,400	500
Los Feliz Rd: San Fernando Rd to Gardena Ave	27,800	28,800	1,000
Los Feliz Rd: Gardena Ave to Southern Pacific RR	31,100	31,200	100

Source: Kunzman Associates, Inc.

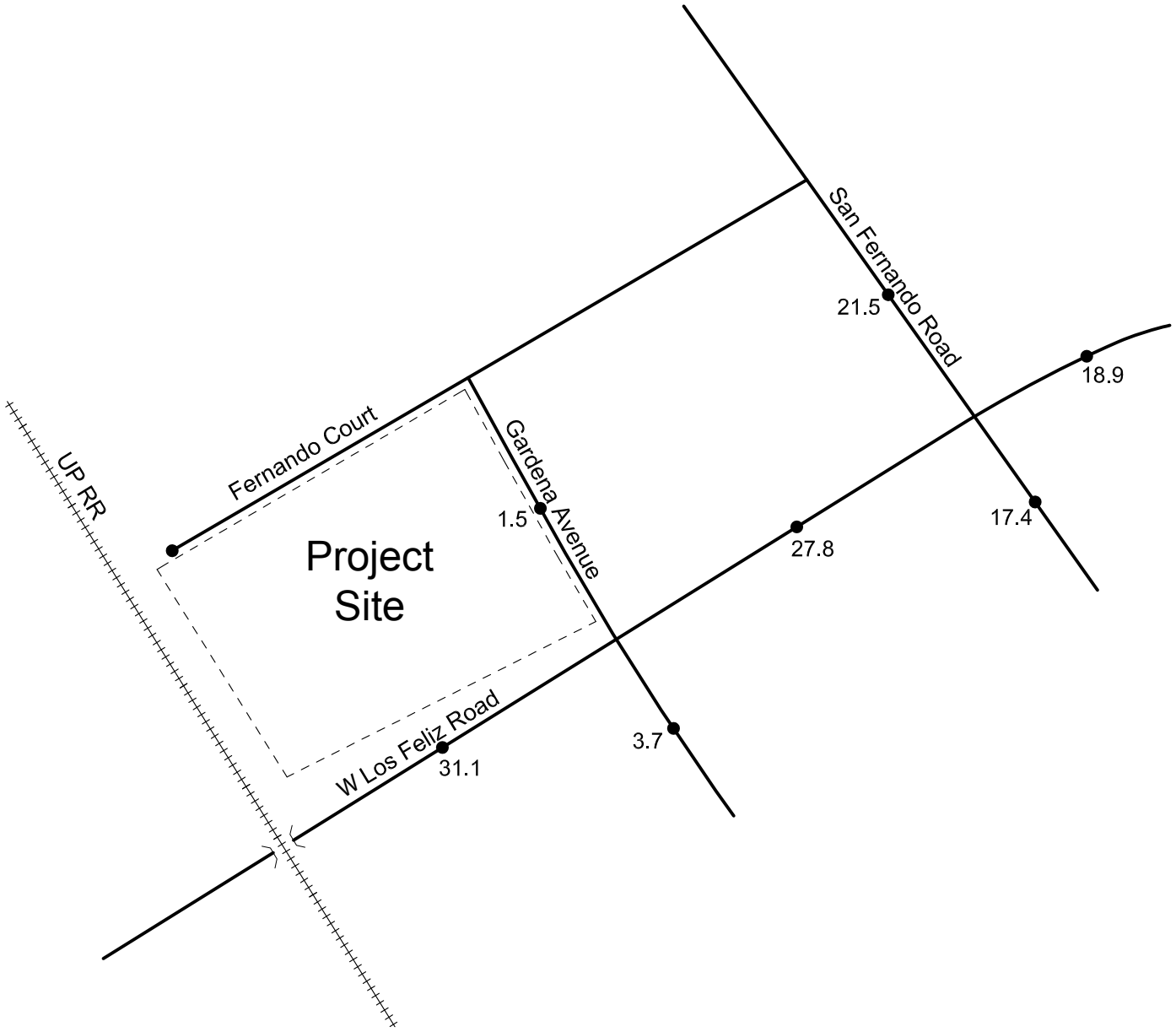
Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than significant.

CMP Analysis

By its nature, the Los Angeles County CMP is a cumulative scenario that considers the impact of single projects in the context of cumulative traffic demand on CMP roadways. The CMP defines regional



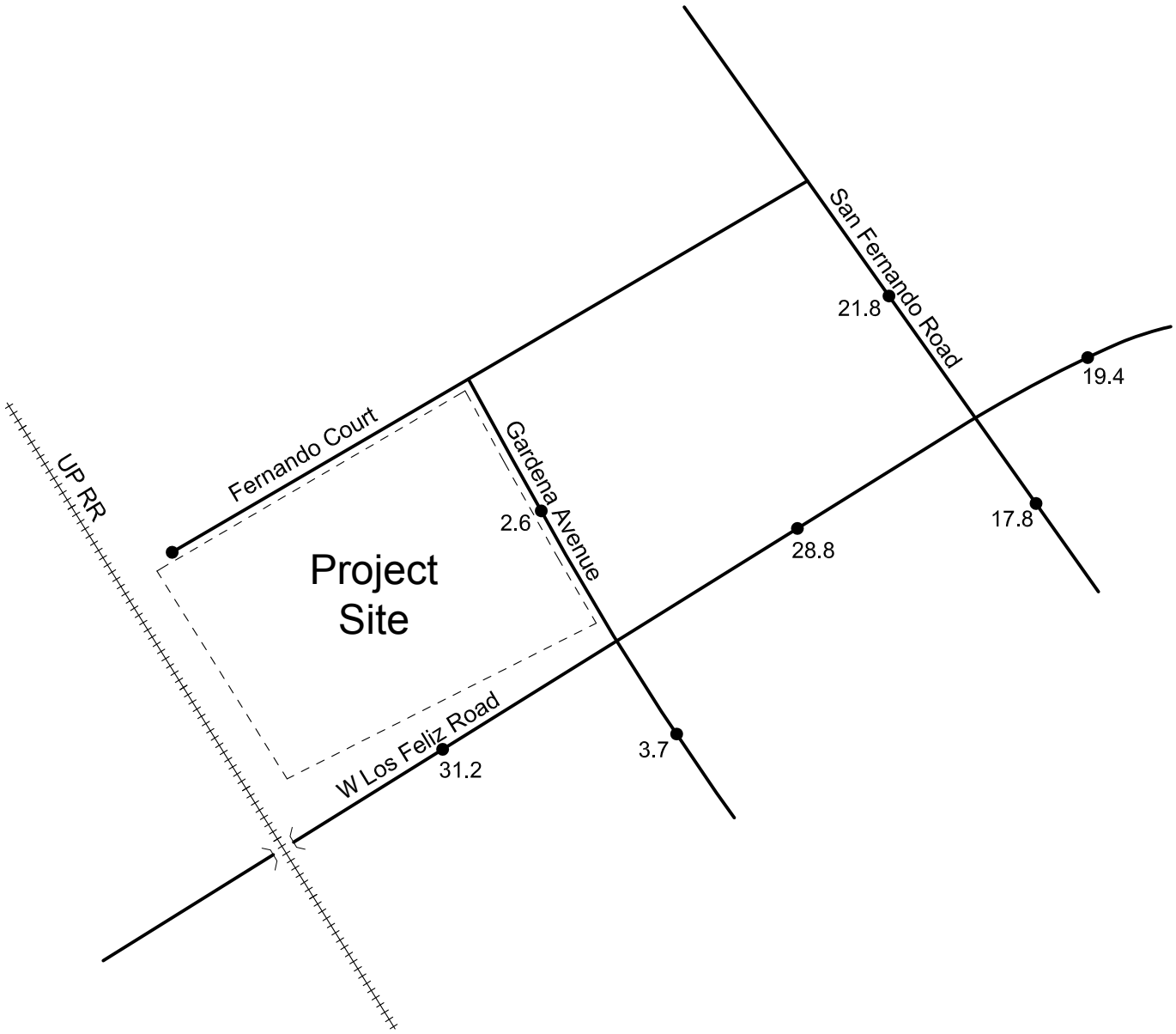
SOURCE: Kunzman Associates, Inc.

FIGURE **4.9-8**

Meridian Consultants

Cumulative Without Project Average Daily Traffic Volumes

006-002-13



Legend

3.7 = Vehicles Per Day (1,000's)

= Project Boundary

NOT TO SCALE

SOURCE: Kunzman Associates, Inc.

FIGURE **4.9-9**

Meridian Consultants

Cumulative With Project Average Daily Traffic Volumes

006-002-13

project impacts as significant (in terms of contribution to cumulative impact) if a project results in an increase in the V/C ratio by more than 0.02 (2 percent) and the final LOS is F. It is possible that traffic impacts created by related projects and cumulative growth could combine to exceed CMP standards of significance and to the extent that occurs, a significant impact would result. However, even if that occurs the CMP guidelines require that freeway monitoring locations must be examined if the Project would add 150 or more trips (in either direction) during either the AM or PM weekday peak hours or 50 or more trips at CMP intersections during either the AM or PM weekday peak hours. The Project would not add 50 or more trips during either the AM or PM weekday peak hours at CMP intersections, which is the threshold for preparing a traffic impact assessment. Consequently, the Project does not meet the criteria to be analyzed and thus the Project's contribution is not cumulatively considerable.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than significant.

Design Feature/Emergency Access

Related projects would be required to adhere to standard engineering practices and requirements, and would be subject to planning and design review by the City of Glendale to avoid traffic hazards created by design features and land use incompatibilities, or inadequate emergency access. For this reason, and because such impacts are relatively site-specific, cumulative impacts associated with such hazards are less than significant. In addition, none of the related projects are located directly adjacent to the Project site to result in cumulative traffic hazards due to design features or inadequate emergency access. All design development associated with the Project would include the use of standard engineering practices to avoid design elements that would increase roadway hazards or inadequate emergency access. Moreover, the Project would not result in land use incompatibilities that would lead to the creation of traffic hazards, or emergency access. Consequently, the Project would not be cumulatively considerable and the Project's cumulative impacts would be less than significant.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than significant.

Parking Capacity

In accordance with City of Glendale requirements, related projects would either accommodate construction workers on site or through other suitable means to reduce impacts to surrounding parking facilities. For these reasons, impacts to parking capacity due to cumulative construction activity associated with the related projects would be less than significant. As discussed under the Project Impacts subsection of the EIR, the Project would accommodate workers at a nearby church. Shuttle services would be provided by the Project applicant between the off-site parking area and the Project site, and thus impacts would be less than significant. Consequently, the Project construction-related parking capacity impacts would not be cumulatively considerable and the Project's cumulative impacts would be less than significant.

Under the City of Glendale Municipal Code, the related projects would be required to provide adequate on-site parking as conditions of development approval, and thus it is unlikely that the related projects would have a significant cumulative effect on parking demand in the area. In addition, as illustrated in **Figure 4.9-6**, most of the related projects are a sufficient distance from one another to reduce the potential for parking shortages at any one location to have an effect elsewhere. It is further anticipated that on-site parking at many of the related project sites would be regulated by monthly permits and user fees (generally limited to building tenants and visitors), and validations by merchants and other businesses. For these reasons, cumulative related project impacts to parking capacity are not anticipated. As previously stated under Project Impacts, the Project is anticipated to provide sufficient parking to accommodate the parking demand for the residential uses. Consequently, the Project would not be cumulatively considerable and the Project's cumulative impacts would be less than significant.

Should other related projects in the Glendale area eliminate parking spaces as result of development, the combination of the parking space loss due to the Project and these related projects could result in significant and unavoidable impacts.

Level of Significance Before Mitigation: Significant due to loss of on-street parking.

Mitigation Measures: No mitigation measures are available.

Level of Significance After Mitigation: Significant.

4.10 UTILITIES AND SERVICE SYSTEMS

The following sections address water supply, sewage conveyance, collection, and treatment, and solid waste. The 2010 Urban Water Management Plan prepared by the Glendale Water and Power Department provided information on domestic water supply referred to in this section. Information on sewage conveyance and treatment referred to in this section was collected from public agencies providing service to the City of Glendale. Solid waste information was collected from public agencies providing service to the City.

ENVIRONMENTAL SETTING

Existing Conditions

Water Supply

The Glendale Water and Power Department provides water service for domestic, irrigation, and fire protection purposes to the City of Glendale. The City currently has three sources of water to meet demands which include local groundwater, imported from the Metropolitan Water District (MWD), and recycled water.

Glendale consumed approximately 28,000 acre-feet of water during fiscal year 2009-10. Of this total, approximately 7,701 acre-feet, or 28 percent, was pumped from the San Fernando Basin, approximately 2,087 acre-feet, or 7 percent, was pumped from the Verdugo Basin, approximately 16,550 acre-feet, or 59 percent, was provided by the MWD, and approximately 1,662 acre-feet, approximately 6 percent, was supplied by the City's water reclamation system.[1] Each of the City's water sources is described below.

Local Groundwater Supplies

The City receives its groundwater supply from the San Fernando and Verdugo Groundwater Basins. The rights of the City to San Fernando and Verdugo Basin groundwater supplies are defined by the decision of the California Supreme Court in "The City of Los Angeles vs. The City of San Fernando, et al." in 1975. In addition, a 10-year agreement between the Cities of Glendale, Burbank and Los Angeles, effective October 1, 2007, also affects the parties' pumping rights in the San Fernando Basin. In the stipulated judgment, the Court found that under "Pueblo" Water Rights, the City of Los Angeles owns all San Fernando Basin surface and groundwater supplies, and that Glendale is entitled to an annual 21 percent "Return Flow Credit" from the San Fernando Basin. The 21 percent figure is based on the assumption that 21 percent of the water used by the City percolates into the groundwater table and ranges from 5,000 to 5,400 acre-feet per year, depending on the overall municipal use each year. This return flow credit is the City's primary water right in the San Fernando Basin. The City was also allowed to accumulate these credits if its water rights are not used.

In the water year October 1, 2010, the City has accumulated approximately 50,861 acre-feet of unused return flow credits in the San Fernando groundwater basin. Much of this accumulation was a result of the City not being able to pump from the basin because of the groundwater contamination. Glendale

1 City of Glendale Water & Power, 2010 Urban Water Management Plan (2010 UWMP), adopted June 2011, Table 3-2, 28.

also has the right to extract additional water subject to payment to the City of Los Angeles at a cost generally equivalent to the cost of MWD alternative supplies. This right to produce water in excess of the return flow credit and the accumulated credits are significant to the operation of the Glendale Water Treatment Plant, which is part of a US Environmental protection Agency (US EPA) Superfund clean-up project in the City. Significant production from the basin and delivery to Glendale has occurred since the system began operation in 2000.[2]

Under the stipulated judgment, Glendale could extract all of these accumulated stored water credits. Pursuant to the 10-year agreement, Glendale, in any one year, may extract a limited portion of these accumulated stored water credits. The amount that can be extracted is determined annually by the watermaster based upon a formula that ensures that the parties' combined pumping does not cause water levels in the San Fernando Basin aquifer to drop below a defined level (-655,370 acre-feet). The agreement also provides that Los Angeles will invest in capital projects to improve the recharge of groundwater into the San Fernando Basin. The agreement further provides that the parties will agree upon the scope of a study to reevaluate the amount of water that can safely be extracted without harming the San Fernando Basin. In the future, this may affect the parties' groundwater rights.

In addition to current extractions of return flow water and stored water, Glendale may, in any one year, extract from the San Fernando Basin an amount not to exceed 10 percent of its last annual credit for import return water, subject to an obligation to replace such over-extraction by reduced extraction during the next water year.

Water in the San Fernando Basin is currently available for municipal use. The City currently uses 7,701 acre-feet from the basin annually. The Glendale Water Treatment Plant and eight extraction wells pump, treat, and deliver water from the basin to Glendale via its Grandview Pumping Station. The plant, with a capacity of 5,000 gallons per minute, can reliably provide a maximum of 7,800 acre-feet per year for municipal use in Glendale.[3]

The groundwater supplies from the Verdugo groundwater basin also contribute to the City's water supplies. The judgment described above also gives Glendale the right to extract 3,856 acre-feet per year from this basin annually. The City currently utilizes approximately 2,100 acre-feet per year from the basin. Production of water has been highly variable in the past due to water quality problems, groundwater levels, and limited extraction capacity. The Verdugo Park Water Treatment Plant and five

2 US EPA, Pacific Southwest, Region 9: Superfund, "San Fernando Valley (area 2 Glendale)," http://yosemite.epa.gov/r9/sfund/r9sfdocw.nsf/vwsoalphabetic/San+Fernando+Valley+(Area+2+Glendale)?OpenDocument, accessed August 2013.

3 City of Glendale Water & Power, 2010 UWMP, 20.

extraction wells pump, treat, and deliver water to the City for municipal use. The existing wells and Verdugo Park Water Treatment Plant produce approximately 2,000 acre-feet per year.[4] However, due to extraction problems, additional extraction capacity will need to be developed in order for the City to utilize its full rights to the basin.[5]

Metropolitan Water District

For the five fiscal years ended June 30, 2010, Glendale received an average of approximately 21,090 acre-feet per year of MWD supplies, which constituted approximately 66 percent of Glendale's total water supply. Metropolitan supplies are delivered to Glendale through three service connections with capacities of 48, 10, and 20 cubic-feet per second, respectively.

Recycled Water System

The Los Angeles/Glendale Water Reclamation Plant provides recycled water to Glendale for non-potable uses such as irrigation. The reclamation plant has a capacity of 20-million gallons-per-day and has been delivering recycled water to the City since the late 1970s. Based on a contract between the Cities of Los Angeles and Glendale, the City is entitled to 50 percent of any effluent produced at the plant. In 2010, the City utilized approximately 1,785 acre-feet of water from the reclamation plant for non-potable uses. Treated wastewater not utilized by either Glendale or Los Angeles is discharged into the Los Angeles River. Glendale currently has a "backbone" recycled water distribution system consisting of 21 miles of mains, 6 pumping plants, and 5 storage tanks to deliver recycled water to users.[6]

Potable Water System

The main water distribution system in the Glendale includes 397 miles of water mains, 28 pumping plants and 30 reservoirs and water tanks. Together, the Glendale Water Treatment Plant and the Verdugo Park Water Treatment Plant provide treatment for up to 9 million gallons of water per day.[7] Of the approximately 28,000 acre-feet of water consumed by users in fiscal year 2009–10, residential customers used approximately 80 percent, commercial customers used approximately 15 percent, industrial customers used approximately 2 percent, and approximately 4 percent was used for irrigation.

There are seven water pressure zones in the City's water system. The Project site is located within the Elevation 724 service zone, which is served by the Western and Diederich Reservoirs. The Western

4 City of Glendale Water & Power, 2010 UWMP, 21.

5 City of Glendale Water & Power. 2010.

6 City of Glendale Water & Power, 2010. 55.

7 Glendale Water & Power, Annual Report: 2010-2011 Water Utility Operating Statistics, http://www.glendalewaterandpower.com/reports/annual_reports.aspx.

Reservoir has a 14.6-million-gallon capacity and is located at 1705 Bel Aire Drive, approximately 3.5 miles northwest of the Project site. The Diederich Reservoir has a 57.5-million gallon capacity and is located at 1430 Campbell Street, approximately 2.5 miles northeast of the Project site.[8]

Water service to the Project site is presently provided by existing water lines on and adjacent to the Project site. A 4-inch and 12-inch water main is located in Fernando Court, and a 6-inch water main is located in Gardena Avenue at West Los Feliz Road. There are no structures currently on the Project site.

Recycled water lines currently do not extend to the Project site. The closest recycled water line is a 30-inch line located in Central Avenue, approximately 950 feet to the east.

Existing Water Use

The Project site contains four foundations of vacant structures, previously occupied by light industrial and warehouse uses. As such, the Project site is not currently using any water.

Regulatory Setting

Federal

Safe Drinking Water Act

The Safe Drinking Water Act (SDWA) was originally passed by Congress in 1974 to protect public health by regulating the nation's public drinking water supply.[9] The law was amended in 1986 and 1996 and requires a variety of actions to protect drinking water and its sources. SDWA authorizes the US EPA to set national health-based standards for drinking water to protect against both naturally-occurring and man-made contaminants that may be found in drinking water. The US EPA, state agencies, and water purveyors work together to ensure that SDWA standards are met.

Clean Water Act

The federal Clean Water Act (CWA) Section 401 regulates the discharges of pollutants into “waters of the US” from any point or non-point source.[10] Individual permits are issued for certain defined sources of discharge, while non-point source runoff from construction sites and urban development is regulated under a series of general permits. Construction that disturbs 1 acre or more is regulated under the

8 Glendale Water and Power, 2007–2008 Annual Report: Operating Statistics: Water Utility, http://www.glendalewaterandpower.com/pdf/annual_reports/07-08/OperatingStatistics.pdf, Figure 3.

9 42 USC § 300f.

10 33 USC § 404.

National Pollutant Discharge Elimination System (NPDES) stormwater program. In the State of California, the program is administered by the local Regional Water Quality Control Board (RWQCB).

Federal Pretreatment Regulations

Part 403 in the Code of Federal Regulations[11] establishes responsibilities of Federal, State, and local government, industry and the public to implement National Pretreatment Standards to control pollutants which pass through or interfere with treatment processes in Publicly Owned Treatment Works (POTW) or which may contaminate sewage sludge.

State

Title 17 Potable Water

Potable water supplies are protected by Title 17 of state law, which controls cross-connections with potential contaminants, including non-potable water supplies such as recycled water. Title 17 specifies the minimum backflow protection required on the potable water system for situations in which there is potential for contamination to the potable water supply.[12]

Title 20 Water Efficiency Standards

Title 20[13] establishes water efficiency standards (i.e., maximum flow rates) for specific appliances including all new showerheads (2.5 gallons per minute at 80 pounds per square inch), lavatory and kitchen sink faucets (2.2 gallons per minute at 60 pounds per square inch), and commercial pre-rinse spray valves (1.2 gallons per minute at 60 pounds per square inch). Title 20 also establishes maximum water consumption standards for urinals and water closets (1.6 gallons per flush per unit for most units).

Title 22 Recycled Water

Title 22[14] sets bacteriological water quality standards based on the expected degree of public contact with recycled water. Title 22 establishes the quality and/or treatment processes required for an effluent to be used for a specific non-potable application. The following categories of recycled water are identified:

- Disinfected tertiary recycled water

11 40 CFR, Protection of Environment, Part 403, "General Pretreatment Regulations for Existing and New Sources of Pollution."

12 22 CCR Group 4, Article 2, "Protection of Water System," Table 1.

13 20 CCR §§ 1605.1 and 1605.3, "Federal and State Standards for Federally-Regulated Appliances," and "State Standards for Non-Federally Regulated Appliances."

14 20 CCR §§ Title 22, Division 4, Chapter 3, "Water Recycling Criteria."

- Disinfected secondary-2.2 recycled water
- Disinfected secondary-23 recycled water
- Un-disinfected secondary recycled water

In addition to recycled water uses and treatment requirements, Title 22 addresses sampling and analysis requirements at the treatment plant, preparation of an engineering report prior to production or use of recycled water, general treatment design requirements, reliability requirements, and alternative methods of treatment.

Urban Water Management Planning Act

The Urban Water Management Planning Act[15] (UWMPA) requires urban water suppliers that provide water for municipal purposes to more than 3,000 customers, or more than 3,000 acre-feet per year (afy) of water, to prepare an Urban Water Management Plan (UWMP). The intent of the UWMP is to assist water supply agencies in water resource planning given their existing and anticipated future demands. The UWMP must include a water supply and demand assessment comparing total water supply available to the water supplier with the total projected water use over a 20-year period. It is also mandatory that the management plans be updated every five years.

The most recent UWMP is the 2010 UWMP and relevant information was incorporated by reference in this water supply evaluation. The 2010 UWMP is a revision of the 2005 report, outlining the numerous changes that have occurred in the City for the last five years. The City has been actively developing local water resources, advocating the greater use of recycled water and has also implemented many of the Best Management Conservation Practices.

California Water Quality Control Board

The State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Boards (RWQCBs) are the principal state agencies with primary responsibility for the coordination and control of water quality. In the Porter-Cologne Water Quality Control Act[16] (Porter-Cologne), the California State Legislature declared that the "state must be prepared to exercise its full power and jurisdiction to protect the quality of the waters in the state from degradation." Porter-Cologne grants the boards

15 Department of Water Resources, Urban Water Management Planning Act (commonly referred to as SB 610)., California Water Code §§ 10610–10656.

16 State Water Resources Control Board, "Porter Cologne Water Quality Control Act," California Water Code, Division 7, Water Quality, effective January 1, 2008.

authority to implement and enforce water quality laws, regulations, policies, and plans to protect the state's groundwater and surface waters.

The Project is located within the Los Angeles Region of the California Regional Water Quality Control Board (Los Angeles RWQCB), which provides guidelines for sewage disposal from land developments. The guidelines provide an explanation of the principal statutory authority and administrative procedures under which the RWQCB will fulfill its responsibilities to protect against pollution, nuisance, contamination, unreasonable degradation of water quality, and violation of water quality objectives, as each may occur from the disposal of sewage from land developments.

2009 Comprehensive Water Legislation

In November 2009, four legislative bills (SBX7-1, SBX7-6, SBX7-7, and SBX7-8) and the supporting bond bill (SBX7-2), creating a comprehensive water package designed to meet California's water challenges, were approved by Governor Schwarzenegger.[17] The legislation establishes the governmental framework to achieve the co-equal goals of providing a more reliable water supply to California and restoring and enhancing the Sacramento-San Joaquin Delta ecosystem. The package includes requirements to improve the management of our water resources by monitoring groundwater basins, developing agricultural water management plans, reducing statewide per capita water consumption 20 percent by 2020, and reporting water diversions and uses in the Delta. It also appropriates $250 million for grants and expenditures for projects to reduce dependence on the Delta if the bond issue is approved by the voters in the future.

The Safe, Clean, and Reliable Drinking Water Supply Act of 2010 (SBX7-2) will come before the California voters in the future. If enacted, it would provide funding for California's aging water infrastructure and for projects and programs to improve the ecosystem and water supply reliability for California. The bond bill includes $2.25 billion for actions improving Delta sustainability. These investments will help to reduce seismic risk to Delta water supplies, protect drinking water quality, and reduce conflict between water management and environmental protection.

Part of the comprehensive water package included SBX7-7 (Steinberg, Chapter 4, Statutes of 2009) – Statewide Water Conservation. This bill creates a framework for future planning and actions by urban and agricultural water suppliers to reduce California's water use. This bill requires the development of agricultural water management plans and requires urban water agencies to reduce statewide per capita water consumption 20 percent by 2020.

17 Department of Water Resources, California Water Plan Update 2009, Volume 4, (December 2009). Reference Guide, Legislation, 2009 Comprehensive Water Package, Special Session Policy Bills and Bond Summary, (November 2009).

Metropolitan Water District of Southern California

Primary Source of Water

The Department relies on Metropolitan sales of water to meet most of its current water supply requirements. For the five fiscal years ended June 30, 2012, water deliveries from Metropolitan averaged 15.5 million gallons per day (approximately 17,319 acre-feet per year), which constituted approximately 60 percent of the Department's total water supply. The Department expects to continue reliance on Metropolitan sales of water to meet most of its future water supply requirements.

History and Background

Metropolitan was created in 1928 by vote of the electorates of 11 Southern California cities, including the City, under authority of the Metropolitan Water District Act (California Statutes 1927, Chapter 429, as reenacted in 1969 as Chapter 209, as amended (herein referred to as the "Metropolitan Act")). The Metropolitan Act authorizes Metropolitan to levy property taxes within its service area; establish water rates; impose charges for water standby and service availability; incur general obligation bonded indebtedness and issue revenue bonds, notes and short-term revenue certificates; execute contracts; and exercise the power of eminent domain for the purpose of acquiring property. In addition, Metropolitan's Board of Directors ("Metropolitan's Board") is authorized to establish terms and conditions under which additional areas may be annexed to Metropolitan's service area.

Metropolitan's primary purpose is to provide a supplemental supply of water for domestic and municipal uses at wholesale rates to its member public agencies. The City is one of the 26 Metropolitan member public agencies. If additional water is available, such water may be sold for other beneficial uses. Metropolitan serves its member agencies as a water wholesaler and has no retail customers.

Metropolitan's charges for water sales and availability are fixed by Metropolitan's Board and are not subject to regulation by the California Public Utilities Commission or any other State or federal agency. Metropolitan imports water from two principal sources: northern California via the Edmund G. Brown California Aqueduct (the "California Aqueduct") of the State Water Project owned by the State of California and the Colorado River via the Colorado River Aqueduct owned by Metropolitan. Metropolitan owns and operates the Colorado River Aqueduct and has a long-term contract for water (the "State Water Contract") with the Department of Water Resources to receive water from the State Water Project.

State Water Project

One of Metropolitan's two major sources of water is the State Water Project, which is owned by the State and operated by the State Department of Water Resources ("DWR"). The State Water Project

transports water from the San Francisco Bay/Sacramento-San Joaquin River Delta ("Bay-Delta") south via the California Aqueduct to Metropolitan. The total length of the California Aqueduct is approximately 444 miles.

The State Water Contract, under a 100 percent allocation, provides Metropolitan 1,911,500 acre-feet of water. (An acre-foot is the amount of water that will cover one acre to a depth of one foot and equals approximately 326,000 gallons, which represents the needs of two average families in and around the home for one year.) Water received from the State Water Project by Metropolitan over the ten years from 2002 through 2011, including water from water transfer, groundwater banking and exchange programs delivered through the California Aqueduct, varied from a low of 908,000 acre-feet in calendar year 2009 to a high of 1,800,000 acre-feet in 2004.

For calendar year 2011, DWR's allocation to State Water Project contractors was 80 percent of contracted amounts, reflecting significantly above-normal precipitation over the entire Sierra Nevada range and accumulating snowpack to levels of 185 percent of normal and greater. The 80 percent allocation enabled Metropolitan to take up to 1,529,200 acre-feet of its 1,911,500 acre-foot contractual amount. The 80 percent allocation for 2011 was the highest water supply allocation in five years. In 2011, Metropolitan took delivery of approximately 1.4 million acre-feet to its service area, including supplies from water transfers, exchanges and other deliveries through the California Aqueduct. Additional amounts were stored and exchanged with Metropolitan's out of service area storage and exchange partners.

For calendar year 2012, DWR's initial allocation estimate to State Water Project contractors was 60 percent of contracted amounts. This estimate was reduced to 50 percent of contracted amounts on February 21, 2012 and adjusted upward to 60 percent of contracted amounts as of April 16, 2012. The allocation was increased again on May 23, 2012, to 65 percent of contracted amounts due to April's wetter-than-usual weather. For Metropolitan, the increased 2012 allocation will provide 1,242,475 acre-feet, or 65 percent of its 1,911,500-acre-foot contractual amount. In addition, Metropolitan began 2012 with 200,000 acre-feet of carryover supplies in San Luis Reservoir, a joint use facility of the State Water Project and federal Central Valley Project, all of which can be drawn in 2012.

Bay-Delta Regulatory and Planning Activities

The California State Water Resources Control Board is responsible for setting water quality standards and administering water rights throughout the State, and its decisions can affect the availability of water to Metropolitan from the State Water Project. The California State Water Resources Control Board exercises its regulatory authority over the Bay-Delta by means of public proceedings leading to regulations and decisions. These include the Bay-Delta Water Quality Control Plan ("WQCP"), which

establishes the water quality objectives and proposed flow regime of the estuary, and water rights decisions, which assign responsibility for implementing the objectives of the WQCP to users throughout the system by adjusting their respective water rights. The California State Water Resources Control Board is required by law to periodically review its WQCP to ensure that it meets the changing needs of this complex system. Since 2000, the California State Water Resources Control Board's Water Rights Decision 1641 ("D-1641") has governed the State Water Project's ability to export water from the Bay-Delta for delivery to Metropolitan and other agencies receiving water from the State Water Project. D-1641 was challenged in a dozen lawsuits, filed primarily by Bay-Delta interests and environmental groups. D-1641 was, for the most part, affirmed by the California Court of Appeal, and the California Supreme Court denied petitions for review of the Court of Appeal's decision. In December 2006, the California State Water Resources Control Board adopted limited amendments to D-1641 and identified additional issues to review, which could result in future changes in water quality objectives and flows that could affect exports of water by the State Water Project. The California State Water Resources Control Board is in the process of reviewing salinity objectives in the Bay-Delta intended to protect Bay-Delta farming and inflow requirements upstream of the Delta to protect aquatic species.

Environmental Considerations

The listing of several fish species as threatened or endangered under the federal and/or California Endangered Species Acts (respectively, the "Federal ESA" and the "California ESA" and, collectively, the "ESAs") have impacted State Water Project operations and limited the flexibility of the State Water Project.

Federal ESA Litigation

Litigation filed by several environmental interest groups (NRDC v. Kempthorne; and Pacific Coast Federation of Fishermen's Associations v. Gutierrez) in the United States District Court for the Eastern District of California alleged that the 2004 and 2005 biological opinions and incidental take statements inadequately analyzed impacts on listed species under the Federal ESA.

On May 25, 2007, Federal District Judge Wanger issued a decision on summary judgment in NRDC v. Kempthorne, finding the USFWS biological opinion for Delta smelt to be invalid. The USFWS released a new biological opinion on the impacts of the State Water Project and Central Valley Project on Delta smelt on December 15, 2008. Metropolitan, the San Luis & Delta Mendota Water Authority, Westlands Water District, Kern County Water Agency, Coalition for a Sustainable Delta and State Water Contractors, a California nonprofit corporation formed by agencies contracting with DWR for water from the State Water Project (the "State Water Contractors"), the Family Farm Alliance and the Pacific Legal Foundation on behalf of several owners of small farms in California's Central Valley filed separate

lawsuits in federal district court challenging the biological opinion, which the federal court consolidated under the caption Delta Smelt Consolidated Cases.

On December 14, 2010, Judge Wanger issued a decision on summary judgment finding that there were major scientific and legal flaws in the Delta smelt biological opinion. The court found that some but not all of the restrictions on project operations contained in the 2008 Delta smelt biological opinion were arbitrary, capricious and unlawful. On May 18, 2011, Judge Wanger issued a final amended judgment directing the USFWS to complete a new draft biological opinion by October 1, 2011, and a final biological opinion with environmental documentation by December 1, 2013. Later stipulations and orders changed the October 1, 2011 due date for a draft biological opinion to December 14, 2011. A draft biological opinion was issued on December 14, 2011. The draft biological opinion deferred specification of a reasonable and prudent alternative and an incidental take statement pending completion of environmental impact review under the National Environmental Policy Act ("NEPA"). The federal defendants and environmental interveners appealed the final judgment invalidating the 2008 Delta smelt biological opinion to the U.S. Court of Appeals for the Ninth Circuit. State Water Project and Central Valley Project contractor plaintiffs, including Metropolitan, have cross-appealed from the final judgment. Those appeals and cross-appeals are currently pending in the Ninth Circuit.

On February 25, 2011, the federal court approved a settlement agreement modifying biological opinion restrictions on Old and Middle River flows that would have otherwise applied in spring 2011. The settlement agreement expired on June 30, 2011. State Water Project and Central Valley Project contractors also moved to enjoin certain fall salinity requirements in the biological opinion that were set to become operable in September and October 2011. After an evidentiary hearing on the water contractors' motion in July 2011, Judge Wanger issued a decision on August 31, 2011, modifying the fall salinity related requirements in the biological opinion. The effect of the injunction was to reduce water supply impacts from the biological opinion's fall salinity requirements. The federal defendants and the environmental interveners appealed the injunction on fall salinity requirements but the federal defendants subsequently dismissed their appeal in October 2011. The environmental interveners' appeal to the Ninth Circuit on the fall salinity requirement injunction is pending. The State Water Project and Central Valley Project contractors have moved to dismiss the environmental interveners' appeal of the fall salinity requirement on the ground that the salinity requirement for 2011 has expired, and is therefore moot.

On April 16, 2008, in Pacific Coast Federation of Fishermen's Associations v. Gutierrez, the court invalidated the 2004 National Marine Fisheries Service's biological opinion for the salmon and other fish species that spawn in rivers flowing into the Bay-Delta. Among other things, the court found that the no-jeopardy conclusions in the biological opinion were inconsistent with some of the factual findings in the

biological opinion; that the biological opinion failed to adequately address the impacts of State Water Project and Central Valley Project operations on critical habitat and that there was a failure to consider how climate change and global warming might affect the impacts of the projects on salmonid species.

The National Marine Fisheries Service released a new biological opinion for salmonid species to replace the 2004 biological opinion on June 4, 2009. The 2009 salmonid species biological opinion contains additional restrictions on State Water Project and Central Valley Project operations. The National Marine Fisheries Service calculated that these restrictions will reduce the amount of water the State Water Project and Central Valley Project combined will be able to export from the Bay-Delta by 5 to 7 percent. DWR had estimated a 10 percent average water loss under this biological opinion. See "—State Water Project Operational Constraints" below for the estimated impact to Metropolitan's water supply. Six lawsuits were filed challenging the 2009 salmon biological opinion. These various lawsuits have been brought by the San Luis & Delta Mendota Water Authority, Westlands Water District, Stockton East Water District, Oakdale Irrigation District, Kern County Water Agency, the State Water Contractors and Metropolitan. The court consolidated the cases under the caption Consolidated Salmon Cases.

On May 25, 2010, the court granted the plaintiffs' request for preliminary injunction in the Consolidated Salmon Cases, restraining enforcement of two requirements under the salmon biological opinion that limit exported water during the spring months based on San Joaquin River flows into the Bay-Delta and reverse flows on the Old and Middle Rivers. Hearings on motions for summary judgment in the Consolidated Salmon Cases were held on December 16, 2010. On September 20, 2011, Judge Wanger issued a decision on summary judgment, finding that the salmon biological opinion was flawed, and that some but not all of the project restrictions in the biological opinion were arbitrary and capricious. On December 12, 2011, Judge O'Neill (who was assigned to this case following Judge Wanger's retirement) issued a final judgment in the Consolidated Salmon Cases. The final judgment remands the 2009 salmon biological opinion to the National Marine Fisheries Service, and directs that a new draft salmon biological opinion be issued by October 1, 2014, and that a final biological opinion be issued by February 1, 2016, after completion of environmental impact review under NEPA. On January 19, 2012, Judge O'Neill approved a joint stipulation of the parties that specifies how to comply with one of the salmon biological opinion restrictions that applies to water project operations in April and May of 2012. In January and February 2012, the federal defendants and environmental interveners filed appeals of the final judgment in the Consolidated Salmon Cases, and the State Water Project and Central Valley Project contractors filed cross-appeals. Those appeals and cross-appeals are now pending in the Ninth Circuit.

On November 13, 2009, the Center for Biological Diversity filed separate lawsuits challenging the USFWS' failure to respond to a petition to change the Delta smelt's federal status from threatened to endangered and the USFWS' denial of federal listing for the longfin smelt. On April 2, 2010, the USFWS

issued a finding that uplisting the Delta smelt was warranted but precluded by the need to devote resources to higher-priority matters. This "warranted but precluded" finding did not change the regulatory restrictions applicable to Delta smelt. For the longfin smelt litigation, a settlement agreement was approved on February 2, 2011. Under the agreement, the USFWS agreed to complete a range-wide status review of the longfin smelt and consider whether the Bay-Delta longfin smelt population, or any other longfin smelt population from California to Alaska, qualifies as a "distinct population" that warrants federal protection. On April 2, 2012, the USFWS issued its finding that the Bay-Delta longfin smelt population warrants protection under the ESA but is precluded from listing as a threatened or endangered species by the need to address other higher priority listing actions. The review identified several threats facing longfin smelt in the Bay-Delta, including reduced freshwater Bay-Delta outflows. The finding includes the determination that the Bay-Delta longfin smelt will be added to the list of candidates for ESA protection, where its status will be reviewed annually.

California ESA Litigation

In addition to the litigation under the Federal ESA, other environmental groups sued DWR on October 4, 2006 in the Superior Court of the State of California for Alameda County alleging that DWR was "taking" listed species without authorization under the California ESA. This litigation (Watershed Enforcers, a project of the California Sportfishing Protection Alliance v. California Department of Water Resources) requested that DWR be mandated to either cease operation of the State Water Project pumps, which deliver water to the California Aqueduct, in a manner that results in such "taking" of listed species or obtain authorization for such "taking" under the California ESA. On April 18, 2007, the Alameda County Superior Court issued its Statement of Decision finding that DWR was illegally "taking" listed fish through operation of the State Water Project export facilities. The Superior Court ordered DWR to "cease and desist from further operation" of those facilities within 60 days unless it obtained take authorization from the California Department of Fish and Game.

DWR appealed the Alameda County Superior Court's order on May 7, 2007. This appeal stayed the order pending the outcome of the appeal. The Court of Appeal stayed processing of the appeal in 2009 to allow time for DWR to obtain incidental take authorization for the Delta smelt and salmon under the California ESA, based on the consistency of the federal biological opinions with California ESA requirements ("Consistency Determinations"). After the California Department of Fish & Game issued the Consistency Determinations under the California ESA, authorizing the incidental take of both Delta smelt and salmon, appellants DWR and State Water Contractors dismissed their appeals of the Watershed Enforcers decision. The Court of Appeal subsequently issued a decision finding that DWR was a "person" under the California ESA and subject to its take prohibitions, which was the only issue left in the case. The State Water Contractors and Kern County Water Agency have filed suit in State court

challenging the Consistency Determinations under the California ESA that have been issued for both Delta smelt and salmon. Those lawsuits challenging the Consistency Determinations are pending. The parties are continuing discussions of adjustments to the incidental take authorizations in light of the summary judgment ruling in the Delta Smelt Consolidated Cases and the Consolidated Salmon Cases, discussed under the heading "—Federal ESA Litigation" above.

The California Fish and Game Commission listed the longfin smelt as a threatened species under the California ESA on June 25, 2009. On February 23, 2009, in anticipation of the listing action, the California Department of Fish and Game issued a California ESA section 2081 incidental take permit to DWR authorizing the incidental take of longfin smelt by the State Water Project. This permit authorizes continued operation of the State Water Project under the conditions specified in the section 2081 permit. The State Water Contractors filed suit against the California Department of Fish and Game on March 25, 2009, alleging that the export restrictions imposed by the section 2081 permit have no reasonable relationship to any harm to longfin smelt caused by State Water Project operations, are arbitrary and capricious and are not supported by the best available science. The lawsuit is pending and the administrative record for the cases has been completed.

State Water Project Operational Constraints

DWR has altered the operations of the State Water Project to accommodate species of fish listed under the ESAs. These changes in project operations have adversely affected State Water Project deliveries. The impact on total State Water Project deliveries attributable to the Delta smelt and salmonid species biological opinions combined is estimated to be one million acre-feet in an average year, reducing State Water Project deliveries from approximately 3.3 million acre-feet to approximately 2.3 million acre-feet for the year under average hydrology, and are estimated to range from 0.3 million acre-feet during critically dry years to 1.3 million acre-feet in above normal water years. State Water Project deliveries to contractors were reduced by approximately 285,000 acre-feet of water in calendar year 2011 as a result of pumping restrictions, with 135,000 acre-feet of export reductions in January and February, and 150,000 acre-feet in the fall. Despite operational restrictions in 2011, high flows from above-normal precipitation in late 2010 and early 2011 reaching the Bay-Delta resulted in above average storage levels remaining in Lake Oroville through May 2012.

Operational constraints likely will continue until long-term solutions to the problems in the Bay-Delta are identified and implemented. The Delta Vision process, established by then-Governor Schwarzenegger, was aimed at identifying long-term solutions to the conflicts in the Bay-Delta, including natural resource, infrastructure, land use, and governance issues. In addition, State and federal resource agencies and various environmental and water user entities are currently engaged in the development

of the Bay-Delta Conservation Plan, which is aimed at addressing ecosystem needs and securing long-term operating permits for the State Water Project, and includes the Delta Habitat Conservation and Conveyance Program (DHCCP) (together, the "BDCP"). The DHCCP's current efforts consist of the preparation of the environmental documentation and preliminary engineering design for Bay-Delta water conveyance and related habitat conservation measures under the BDCP.

Other issues, such as the decline of some fish populations in the Bay-Delta and surrounding regions and certain operational actions in the Bay-Delta, may significantly reduce Metropolitan's water supply from the Bay-Delta. State Water Project operational requirements may be further modified under new biological opinions for listed species under the Federal ESA or by the California Department of Fish and Game's issuance of incidental take authorizations under the California ESA. Biological opinions or incidental take authorizations under the Federal ESA and California ESA might further adversely affect State Water Project and Central Valley Project operations. Additionally, new litigation, listings of additional species or new regulatory requirements could further adversely affect State Water Project operations in the future by requiring additional export reductions, releases of additional water from storage or other operational changes impacting water supply operations. Metropolitan has indicated that it cannot predict the ultimate outcome of any of the litigation or regulatory processes described above but believes they could have a materially adverse impact on the operation of the State Water Project pumps, Metropolitan's State Water Project supplies and Metropolitan's water reserves.

"Area of Origin" Litigation

Four State Water Project contractors located north of the State Water Project's Bay-Delta pumping plant filed litigation against DWR on July 17, 2008, asserting that since they are located in the "area of origin" of State Water Project water they are entitled to receive their entire contract amount before any water is delivered to contractors south of the Bay-Delta. If the plaintiffs are successful in this litigation, State Water Project water available to Metropolitan in a drought period could be reduced by approximately 25,000 acre-feet each year of a multi-year drought or by as much as 40,000 acre-feet in an exceedingly dry year. Metropolitan and twelve other State Water Project contractors located south of the Bay-Delta filed motions to intervene in this litigation, which were granted on February 25, 2009. In May 2012, the parties reached an agreement in principle that plaintiffs will dismiss the action with prejudice and agree to certain limitations on asserting area of origin arguments in the future; in return DWR and the interveners will agree to operational changes that will increase the reliability of plaintiffs' SWP supplies at little or minimal cost to other SWP water contractors.

Colorado River Aqueduct

Metropolitan has a legal entitlement to receive water from the Colorado River under a permanent service contract with the Secretary of the Interior. Water from the Colorado River or its tributaries is also available to other users in California, as well as users in the states of Arizona, Colorado, Nevada, New Mexico, Utah, and Wyoming, resulting in both competition and the need for cooperation among these holders of Colorado River entitlements. The Colorado River Aqueduct, which is owned and operated by Metropolitan, transports water from the Colorado River approximately 242 miles to its terminus at Lake Mathews in Riverside County.

Historically, Metropolitan had been able to take full advantage of the availability of surplus water and apportioned but unused water. However, other users increased their use of water from the Colorado River beginning in 1998. Although use of water is expected to fluctuate annually, this trend is projected to continue in the future. In addition, a severe drought in the Colorado River Basin has reduced water supplies.

Metropolitan has taken steps to augment its share of Colorado River water through agreements with other agencies that have rights to use such water. Under a 1988 water conservation agreement between Metropolitan and the Imperial Irrigation District ("IID"), IID has constructed and is operating a number of conservation projects that are currently conserving approximately 100,000 acre-feet of water per year.

Management of California's Colorado River Water Supply

In 2003, California had to reduce its use of Colorado River water, and since that time has been limited to its basic apportionment of 4.4 million acre-feet per year. To maintain reliable deliveries to urban agencies, the State has implemented a number of agricultural to urban water conservation and transfer programs. Those programs included the lining of the All-American and Coachella Canals, funding water conservation measures in the Imperial Valley, and implementing a land fallowing and crop rotation program with Palo Verde Irrigation District. Additionally, in 2007 agencies were allowed to store conserved water in Lake Mead for future use. As of 2012, Metropolitan has more than 500,000 acre-feet of storage credits in Lake Mead.

SWP Water Delivery Reliability

In the Final State Water Project Delivery Reliability Report 2011, DWR presents its method for calculating SWP delivery reliability, the factors affecting SWP delivery reliability, and the limitations to estimating future water delivery reliability. In the report, "water delivery reliability" is defined as the annual amount of water that can be expected to be delivered with a certain numeric frequency. SWP

delivery reliability is calculated using CALSIM II, a computer model jointly developed by DWR and Reclamation, which simulates operation of the CVP/SWP system based upon 82 years of historic data. The annual amounts of SWP water deliveries are ranked from smallest to largest and a probability is calculated for each amount. These results are then displayed graphically as an exceedance plot, and presented in tabular format.

The amount of SWP water supply delivered to the SWP Contractors in a given year depends on the demand for the supply, the amount of rainfall, snowpack, runoff, water in storage, pumping capacity from the Delta, and legal constraints on SWP operation. According to DWR, more generally, water delivery reliability depends on three general factors: (1) the availability of water at the source; (2) regulatory restrictions on SWP Delta exports (imposed by federal biological opinions (BOs) and State water quality plans); and (3) the effects of climate change.

SWP Availability of Source Water

As to availability of source water, the factors of uncertainty include the inherent annual variable location, timing, amount, and form of precipitation in California. The second source of uncertainty is due to global climate change. Current literature suggests that global warming is likely to significant impact the hydrological cycle, changing California's precipitation pattern and amount from that shown by the historical record. According to DWR, there is evidence that some changes have already occurred, such as an earlier beginning of snowmelt in the Sierras, an increase in water runoff as a fraction of the total runoff, and an increase in winter flooding frequency. More variability in rainfall, wetter at times and drier at times, would place more stress on the reliability of existing flood management and water supply systems, such as the SWP.

SWP Ability to Convey Source Water

As to ability to convey source water to the desired point of availability, DWR reports that an uncertainty factor exists with respect to SWP operations, because they are closely regulated by Delta water quality standards established by the State Water Resources Control Board and set forth in Water Rights Decision 1641. DWR also reports other factors of uncertainty due to the continuing unexplained decline in many pelagic (open water) fish species, including the Delta smelt since the early 2000s, and the legal challenges to SWP operation and ongoing planning activities related to the Delta. Other uncertainties include future sea level rise associated with global climate change, which could increase salinity in the Delta and the risk of interruptions in SWP diversions from the Delta due to levy failures. The referenced litigation challenges are described in more detail in the Final State Water Project Delivery Reliability Report 2011.

Demand for System Water

As to estimating future demand for SWP water, DWR has identified uncertainty factors, including population growth, water conservation, recycling efforts, other supply sources, and global climate change. In addition to the above-identified factors affecting water delivery reliability, DWR has reported other limitations and assumptions, all of which are explained in the Final State Water Project Delivery Reliability Report 2011. This report has also identified the status of two large scale plans for the Delta as underway with objectives related to providing a sustainable Delta over the long term. These planning efforts may propose changes to SWP operations, which in turn could affect SWP delivery reliability. The planning efforts are the Delta Plan and the Bay-Delta Conservation Plan. According to DWR, each planning effort could affect SWP and CVP operations in the Delta and each are explained in detail in the Final State Water Project Delivery Reliability Report 2011.

City of Glendale

Glendale's water system is also interconnected with the City of Burbank and Crescenta Valley Water District for short-term/emergency water service (2010 UWMP, Figure 3.2). When the need arises, these connections can be opened to deliver water into the Glendale distribution system to supplement demands and vice versa. These should be viewed as only short-term transfer of water.

For the long term, MWD is engaged in "out-of-area" dry transfer and exchanges to improve local water supply reliability. These are discussed in MWD's Regional 2010 UWMP and are summarized in Chapter 3, Implementing the Plan. Glendale does not have the basic capability to implement these types of programs; it relies on MWD to perform these activities.

The interconnection with Crescenta Valley Water District was recently completed. The preliminary design for an interconnection with Los Angeles has begun.

Glendale General Plan Policies

Goals and policies that relate to water services are set forth by the City of Glendale in the General Plan Community Facilities Element. An analysis of the consistency of these applicable goals and policies with the proposed Project is provided in **Section 4.4, Land Use and Planning**. As discussed in **Section 4.4**, the Project does not conflict with the City's General Plan.

Glendale Water Conservation Policies

Glendale has adopted a mandatory water conservation plan. Section 13.36 of the Glendale Municipal Code describes programs the City is implementing to reduce demand for water. For example, this section of the Code contains a "no water waste" policy which outlines prohibited uses of water such as

hosing of sidewalks, walkways, driveways or parking areas. This section also prohibits landscape irrigation between 9:00 AM and 6:00 PM, failure to repair leaks of any sort, and water fountains without a recirculating water system.[18]

All commercial and industrial customers of the Public Service Department using 25,000 billing units per year (1 unit equals 748 gallons) or more must submit a quarterly water conservation plan to the City Manager's Office and the Director of Glendale Water and Power.

The existing recycled water system is only available in limited sections of the City. Where recycled water use is feasible, the City requires its use in lieu of potable water. Service connections and extensions to areas outside of this system are subject to approval by the Director of Public Works. Recycled water facilities are required in new developments when it is determined that recycled water would be supplied in the future, regardless of whether or not the area is being served by the City's recycled water system during new construction.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In order to assist in determining whether a project would have a significant effect on the environment, the City determines a project may be deemed to have a significant impact on water supply, if it would:

- Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed
- Require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects (issue is addressed in **Section 8.0, Effects Found Not To Be Significant**)

Methodology

Existing and future water demand calculations were based on water use factors by land use provided by Glendale Water and Power. The water use factors were determined by assuming 125 percent of the wastewater generation rates provided by the City of Los Angeles. To demonstrate how water demand resulting from implementation of the Project would be accommodated, the evaluation was based on the conceptual development program described in **Section 3.0, Project Description**.

18 City of Glendale Municipal Code, Section 13.36.060, "No Water Waste Policy."

Impact Analysis

Threshold: **Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.**

Construction Water Demand

Demolition of the foundations of previous buildings, grading, and construction activities associated with the Project would require the use of water for dust control and clean-up purposes. The use of water for construction purposes would be short-term in nature and the amount would be much less than water consumption during project operation. Therefore, construction activities are not considered to result in a significant impact on the existing water system or available water supplies.

Operational Water Demand

New development on the Project site would result in an increase in demand for operational uses, including landscape irrigation, maintenance and other activities on the site. As indicated in **Table 4.10.1-1, Project Water Demand**, water demand at buildout would be approximately 39.2 acre-feet per year.

Table 4.10.1-1
Project Water Demand

Use	Size of Use	Demand Factor	Daily Demand (gpd)	Annual Demand (gallons)	Annual Demand (acre-feet/year)
Studio	49du	100[1]	4,900	1,788,500	5.5
One Bedroom	103 du	150[1]	15,450	5,639,250	17.3
Two Bedroom	73du	200[1]	14,600	5,329,000	16.4
Total			**34,950**	**12,756,750**	**39.2**

Note:
1 - *125 percent sewage generation loading factor.*
2 - *Calculated using the Maximum Applied Water Allowance equation (Section 492.4 Water Efficient Landscape Worksheet, California Code of Regulations Title 23 Water, Division 2, Chapter 2.7, Model Water Efficient Landscape Ordinance.)*
Abbreviations: gpd = gallons-per-day; gpy = gallons per year; du = dwelling unit; sf = square feet

Normal Weather Conditions

Glendale has identified an adequate supply of water to meet future City demands under normal conditions. As indicated in **Table 4.10.1-2, Normal Weather Water Supply and Demand Comparison**, a surplus exists that provides a reasonable buffer of approximately 1,500 to 2,500 acre-feet per year of water. Future water demand in the City is based on projected development contained in the General

Plan. For purposes of this assessment, the demand of the Project was assumed not to have been included in this demand projection. However, even with the addition of 39.2 acre-feet per year of demand generated by the Project, there is ample supply to meet remaining City demand under normal weather conditions.

Table 4.10.1-2
Normal Weather Water Supply and Demand Comparison

Source	2010	2015	2020	2025	2030	2035
Supply						
San Fernando Wells	7,701	7,800	7,800	7,800	7,800	7,800
Verdugo Wells	2,087	3,856	3,856	3,856	3,856	3,856
MWD	16,550	17,620	17,755	17,890	18,025	18,162
Recycled Water	1,662	1,662	1,662	1,662	1,662	1,662
Total Supply	28,000	30,938	31,073	31,208	31,343	31,480
Demand	26,448	28,866	28,946	29,070	29,198	29,323
Difference (Surplus)	**1,552**	**2,072**	**2,127**	**2,138**	**2,145**	**2,157**

Source: Glendale Water & Power, 2010 Urban Water Management Plan, adopted June 2011, Table 3-3 and Table 3-4.

Dry Weather Conditions

Table 4.10.1-3, Multiple Dry Year Period Water Supply and Demand Comparison, provides a multiple-year water supply that Glendale has identified under average drought conditions. Water supply would increase during all five years due to more imported supplies. If there is a need for significant demand reduction efforts, various voluntary or mandatory conservation efforts could be implemented.

Table 4.10.1-3
Multiple Dry Year Period Water Supply and Demand Comparison

	2016	2017	2018	2019	2020
Supply	30,696	31,006	31,319	31,636	31,955
Demand	28,640	28,929	29,221	29,517	29,815
Difference (Surplus)	**2,056**	**2,077**	**2,098**	**2,119**	**2,141**

Source: Glendale Water & Water, 2010 Urban Water Management Plan, adopted June 2011, Table 3-11.

Water supplies from the San Fernando and Verdugo Basins and recycled water would remain unaffected by drought conditions. If there is a shortage in water supply from MWD, the Glendale distribution system could be affected. However, MWD's completion of the Diamond Valley Reservoir near Hemet added to the reliability of MWD's supplies. This reservoir, plus other MWD storage/banking operations

would be able to meet demands reliably. MWD is also proposing contracts with its member agencies to supply water, including supply during drought conditions. These contracts will define, by agreement, the MWD's obligation to provide "firm" water supply to the City.

It is anticipated that during any multiple-year drought, the City would have sufficient water supply to meet demand. According to the 2010 UMWP, the City would use a smaller percentage of MWD water supplies in the future compared to its current use. With the City's reduction of dependency on imported MWD supplies, there would be a higher level of reliable water supplies to meet demand during drought conditions.

As indicated in **Table 4.10.1-3**, the City would continue to have adequate supply to meet citywide demand under drought conditions. Similar to normal weather conditions, even with the addition of 39.2 acre-feet per year of demand generated by the Project, there is sufficient supply to meet City demand under drought conditions.

As indicated above, even with implementation of the Project, the City would continue to have adequate supply to meet citywide demand under normal and drought conditions.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than significant.

Cumulative Impacts

Threshold: **Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed.**

As indicated in **Table 4.10.1-4, Water Demand of Related Projects**, development of related projects would result in a demand of approximately 933.1 acre-feet per year. Combined with the increase of 39.2 acre-feet per year generated by the Project, the cumulative amount demanded by the Project and related projects would generate an overall future water demand of approximately 972.3 acre-feet per year.

Table 4.10.1-4
Water Demand of Related Projects

Use	Unit	Demand Factor[1]	Daily Demand (gpd)	Annual Demand (afy)
Residential	3,334	200 gpd/unit	666,800	746.9
Live/Work	561	100 gpd/unit	56,100	62.8
Commercial	410,000	100 gpd/1,000 sf	41,000	45.9
Restaurant	32,241	100 gpd/1,000 sf	3,224	3.6
Hotel	266	162.5 gpd/room	43,225	48.4
Cinema	14,690	1 gpd/1,000 sf	14,690	16.5
Church	9,500	75 gpd/1,000 sf	712.5	0.8
Office	12,802	187.5 gpd/1,000sf	2,400.1	2.6
Industrial	50,400	100 gpd/1,000 sf	5,040	5.6
TOTAL				**933.1**

Glendale has identified sufficient water supplies to meet additional demand associated with the Project and through General Plan buildout, which includes related projects. The City has identified local supplies that could be accessed to make up for any deficiency in imported (MWD) water. In addition, MWD water has been, and continues to become, a more reliable source through the construction of new water storage facilities and agreements with member agencies. Therefore, the cumulative impact of the Project and related projects to water supply is less than significant, and the Project's contribution to this impact would not be cumulatively considerable.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than significant.

ENVIRONMENTAL SETTING

Existing Conditions

The City of Glendale Public Works Department provides sewer collection and treatment services in the City of Glendale. Sewage from Glendale and other jurisdictions is treated by the City of Los Angeles Hyperion System, which includes the Los Angeles/Glendale Water Reclamation Plant, located outside the Glendale City limits in Los Angeles, and the Hyperion Treatment Plant, located in Playa del Rey.[19] The City of Glendale and the City of Los Angeles jointly own and share operating capacity of the Los Angeles/Glendale Water Reclamation Plant. Glendale entered into an amalgamated treatment and disposal agreement (Amalgamated Agreement) with the City of Los Angeles, which eliminates entitlements and reduces limitations on the amount of sewage discharged into the Hyperion system.

Wastewater generated by residents and businesses is collected and conveyed by the City's sewer infrastructure and discharge to either the City of Los Angeles's Hyperion Treatment Plant (LAHTP or Hyperion Treatment Plant) or to the LAGWRP, with the sludge discharged to the Hyperion System.[20] LAGWRP has a capacity of about 20 MGD.[21] Sewage from the Project would be treated by the Hyperion Treatment Plant. The Hyperion Treatment Plant has a dry-weather design capacity of 450 million gallons per day (gpd) and is currently operating below its design capacity at 362 million gpd.[22]

Approximately 360 miles of underground sewer mains ranging in size from 8 inches to 42 inches in diameter are located throughout Glendale.[23] The City owns and maintains the sewer lines within its public rights-of-way. These sewer mains collect sewage and convey it to trunk lines and into regional interceptor sewers for conveyance to either the Los Angeles/Glendale Water Reclamation Plant or the Hyperion Treatment Plant for treatment. The sewer system uses the rolling topography in Glendale to allow gravity to convey the majority of its sewage with minimum pumping costs. Sewage from connections located north of the Los Angeles/Glendale Water Reclamation Plant generally flows to this facility, and connections located south of the Los Angeles/Glendale Water Reclamation Plant flow to the Hyperion Treatment Plant. However, if the Los Angeles/Glendale Water Reclamation Plant is at capacity

19 City of Glendale Water & Power, 2010 Urban Water Management Plan, adopted June 2011, 52.

20 City of Glendale Water & Power, June 2011. page 52.

21 City of Glendale Water & Power, June 2011. page 53.

22 City of Los Angeles Department of Public Works, Bureau of Sanitation, Wastewater Facts and Figures, http://www.lacitysan.org/wastewater/factsfigures.htm, accessed August 22, 2013.

23 City of Los Angeles Department of Public Works.

sewage generated in the northern portion of the City will be pumped to the Hyperion Treatment Plant.[24]

Existing Glendale sewer lines within and adjacent to the Project site include 8-inch lines in West Los Feliz Road, Fernando Court and along the western Project boundary.[25] Sewer laterals presently extend from these lines to the structures on the Project site.

The Project site presently contains the foundations of former buildings and surface parking spaces. As such, the Project site is not currently generating any wastewater.

Planned Improvements

Glendale Public Works Division Department is currently designing upgrades to the sewer lines located in the Tyburn Flume, named the Tyburn Wastewater Capacity Improvement Project. This upgrade will involve upgrading the existing sewer lines two to four pipe sizes, removing existing manholes and constructing new lined concrete manholes, and installing a sewage-metering device and other appurtenances.[26] The limits of the proposed upgrades include Tyburn Street: from Tyburn Flume to Gardena Avenue; Gardena Avenue: from Tyburn Street to Central Avenue; Central Avenue: from Gardena Avenue to San Fernando Road; Mira Loma Avenue: from Gardena Avenue to San Fernando Road; and San Fernando Road: from Mira Loma Avenue to Cerritos Avenue. The Tyburn Wastewater Capacity Improvement Project is a sewer improvement project that is in the design stage.[27] The Project limits and the exact size of the proposed sewer lines are still being determined. Tentative Project limits for the Tyburn Wastewater Capacity Improvement Project include Tyburn Street – Tyburn Flume to Gardena Avenue; Gardena Avenue – from Tyburn Street to Central Avenue; Central Avenue – from Gardena Avenue to San Fernando Road; Mira Loma Avenue – from Gardena Avenue to San Fernando Road; and San Fernando Road – from Mira Loma Avenue to Cerritos Avenue.[28]

Regulatory Setting

Goals and policies that relate to the City's sewage collection and treatment system are set forth by the City in the General Plan Community Facilities Element. An analysis of the consistency of these applicable goals and policies with the proposed Project is provided in **Section 4.4**. As discussed in **Section 4.4**, the

24 Maurice Oillataguerre, Senior Environmental Program Specialist, City of Glendale, Public Works Department, personal communication with Meridian Consultants, January 22, 2013.

25 Maurice Oillataguerre. January 22, 2013.

26 Maurice Oillataguerre. January 22, 2013.

27 City of Glendale, Public Works, Capital Improvement Program, May 8, 2012.

28 Maurice Oillataguerre. January 22, 2013.

Project does not conflict with applicable General Plan goals and policies relating to the City's sewage collection and treatment system.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In order to assist in determining whether a project would have a significant effect on the environment, the City determines a project may be deemed to have a significant impact on public services, including schools, if it would:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board (issue is addressed in **Section 6.0, Effects Found Not To Be Significant**)
- 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
- Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments

Methodology

The impact of the Project on the existing sewage collection and treatment system was determined by evaluating existing sewage treatment and sewage conveyance capacity. To perform this evaluation, estimates of both existing and future sewage amounts were calculated. The projected increase in sewage from the Project site was then compared against existing system capacity to determine if sufficient capacity would be available to serve the Project.

Project Impacts

Threshold: **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.**

As discussed above, sewage from the Project site goes to the Hyperion Treatment Plant, which Glendale has access to through the Amalgamated Agreement. With the Hyperion Treatment Plant currently operating 88 million gallons-per-day below capacity, adequate capacity exists to treat Project-generated average effluent of 24,224 gallons-per-day (see **Table 4.11.2-1**, below). Therefore, the Project would not require the expansion or construction of sewage treatment facilities, the construction of which could cause significant environmental effects.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: No significant impact would result with regard to impacts to the available sewage treatment capacity.

Threshold: **Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.**

As shown in **Table 4.10.2-1, Projected Project Sewage Generation**, the Project would, on average, generate 24,224 gallons of sewage per day.

Table 4.10.2-1
Projected Project Sewage Generation

Use	Units	Average Loading Factor	Daily Generation (gpd)
Studio	49	80 gpd/unit	3,920
One Bedroom	103	120 gpd/unit	12,360
Two Bedroom	73	160 gpd/unit	11,680
Subtotal	225		27,960
Existing Credit (applied by Glendale Public Works)			3,736
Total	**238**		**24,224**

Note:
Sewage generation rates were based on the City of Los Angeles Department of Public Works, Bureau of Sanitation Sewer Generation Rates Table which was effective June 6, 1996.
gpd = gallons-per-day

Sewage generated on the Project site would be conveyed to the Hyperion Treatment Plant for treatment, as discussed above. With the Hyperion Treatment Plant currently operating 88 million gallons-per-day below capacity, the addition of approximately 24,224 gallons of average sewage per day generated by the Project would not result in the plant exceeding capacity. Therefore, adequate capacity exists to treat the sewage increase generated by the Project, and the impact of the Project on the sewage treatment system is less than significant.

The Project would be served by the existing 8-inch lines in West Los Feliz Road, Fernando Court and adjacent to the western Project boundary, all of which are located in the Tyburn Flume and would be upgraded as part of the City's Tyburn Wastewater Capacity Improvement Project. Laterals would connect the Project to these lines. As part of the Project design, the 8-inch sanitary sewer line along the western boundary of the site would be moved so as to not to conflict with the parking structure.

The City imposes a sewer capacity increase fee on new developments, based on a computer modeling assessment of Glendale's sewer system's hydraulic capacity. The fee is charged when development of a parcel leads to an increase in the volume of wastewater discharged to the collection system. The City has elected to calculate these fees based on proportional increases in wastewater flow, in order to impose the fee in an equitable manner.

The City's methodology for assessing the fee began with dividing Glendale's sewer system into eight drainage basins, and then determining the capital budget required to expand the capacity of each basin over the next 20 years, and the corresponding future peak flow for each basin.[29] The Project would increase flows within the Tyburn Wastewater Capacity Improvement Project, which has an estimated cost of $3,856,500 and projected future flows of 2.31 million gallons-per-day. As stated above, the Project is expected to create an increase to the sewer system of 27,960 gallons-per-day. The City applies a credit for the former uses at the Project site, which equated to 3,736 gallons-per-day. As such, the net increase in average sewage flow from the Project is 24,224 gallons-per-day, which equates to a peak wet weather flow of 60,560 gallons-per-day when multiplied by a 2.5 peak wet weather factor. The Project's peak wet weather flow is then calculated as a percentage of the total future peak wet weather flow for which the Project would be required to mitigate. Based on the City's methodology, the Project would be responsible for a percentage of the total capital budget for the Tyburn Flume, which resulting in sewer capacity fee assessed to the Project.

The collected fees, which would be charged for each proposed development, would be deposited into a specially created account to be used to fund capacity improvements of the specific drainage basin. The City would undertake a new hydraulic analysis of the specific drainage basin every five years from the date of the first deposit into the special account.

In the event the City receives proposals for new developments not considered in the current hydraulic analysis, intermediate and more frequent hydraulic analyses would be performed to evaluate capacity in the given drainage basin. As part of the City's annual Capital Improvement Program, the City Council annually budgets CIP programs, including, when necessary, funds for the balance of the cost of

29 City of Glendale Municipal Code, Chapter 13.40 Sewer System, Article II.

increasing the sewer capacity for any of the drainage basins. The City's Public Works Engineering Department would design and construct the necessary improvements using the impact fees. The payment of this fee is available to reduce potential impacts of the Project on the sewer conveyance system, thus Project impacts would be less than significant with implementation of the sewer conveyance system mitigation fee.

Level of Significance Before Mitigation: Significant.

Mitigation Measures: The following mitigation measure would reduce Project-related sewer impacts.

4.10.2-1 The project applicant shall pay a sewer capacity increase fee for the Project's sewage increase to the lines in the Tyburn Flume area to alleviate sewer impacts. These collected fees shall be deposited by the City of Glendale into a specially created account to be used to fund capacity improvements to the Tyburn Flume drainage basin.

Level of Significance After Mitigation: Less than significant.

Cumulative Impacts

Threshold: **Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.**

As discussed above, when the Los Angeles/Glendale Water Reclamation Plant reaches capacity, the Hyperion Treatment Plant, which Glendale has access to through the Amalgamated Agreement, would treat a majority of the waste generated by the Project and related projects. With the Hyperion Treatment Plant currently operating 88 million gallons-per-day below capacity, adequate capacity exists to treat the 718,668 (including project at 24,224 gallons per day) gallons-per-day of effluent generated by cumulative development (see **Table 4.10.2-2**, below). Therefore, the Project and related projects would not require the expansion or construction of sewage treatment facilities, the construction of which could cause significant environmental effects. The cumulative impact of the Project and related projects is less than significant.

Development of the related projects may also require relocation/upgrades of existing sewer lines. These relocations/upgrades could result in short-term service interruptions for service area users, representing a significant impact as well. However, the City would require capacity upgrades to the sewer conveyance system prior to occupancy to avoid overloading the system on a project-by-project basis. Similarly, the City would also require that temporary sewer lines be installed and operational prior to construction to avoid service interruptions on a project-by-project basis. The inclusion of these requirements would

reduce cumulative impacts to less than significant. As the Project would require the provision of temporary replacement sewer lines, the Project's contribution would not be cumulatively considerable and, therefore, is less than significant.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than significant.

Threshold: **Result in a determination by the wastewater treatment provider, which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.**

As shown in **Table 4.10.2-2, Generation of Sewage by Related Projects**, development of related projects would add 694,444 gallons-per-day to the Hyperion Treatment Plant or the City's sewage conveyance system. Combined with the increase of 24,224 gallons-per-day generated by the Project, the Project and related projects would generate an overall cumulative sewage demand of 718,668 gallons-per-day.

As discussed above, when the Los Angeles/Glendale Reclamation Plant reaches capacity, the Hyperion Treatment Plant would treat the remaining generated sewage. Therefore, a majority of the waste generated by the Project and related projects would be treated by the Hyperion Treatment Plant. With the Hyperion Treatment Plant currently operating 88 million gallons-per-day below capacity, the additional 718,668 gallons of sewage per day generated by cumulative development would not exceed the plant's capacity. With excess capacity available to Glendale upon payment of fees to the City of Los Angeles, adequate capacity exists to treat sewage generated by the Project and related projects. Therefore, the cumulative impact of the Project and related projects on available sewage treatment capacity is less than significant.

Table 4.10.2-2
Generation of Sewage by Related Projects

Residential	3,334 du	165 du	550,110
Live/Work	561 du	160 du	56,100
Commercial	410,000 sf	80/1000 sf	32,800
Restaurant	32,241 sf	80/1000 sf	2,580
Hotel	266 rooms	130 rm	34,580
Cinema	14,690 sf	800/1000 sf	11,752
Church	9,500 sf	60/1000 sf	570
Office	12,802 sf	150/1000 sf	1,920
Industrial	50,400 sf	80/1000 sf	4,032
TOTAL			**694,444**

Note:
Sewage generation rates were based on the City of Los Angeles Department of Public Works, Bureau of Sanitation Sewer Generation Rates Table which was effective June 6, 1996.
sf = square foot; du = dwelling units; gal = gallon; gpd = gallons per day

Development of the related projects would place additional demand on the City's sewage conveyance system. Sewage conveyance infrastructure serving the individual related projects may not have adequate capacity to handle additional sewage loads, and such lack of capacity represents a significant impact. It should be noted, planned upgrades to the City's sewage conveyance system include the Tyburn Flume Wastewater Capacity Improvement Project, which would upgrade the sewer lines in Tyburn Street, Gardena Avenue, Central Avenue, Mira Loma Avenue, and San Fernando Road. Additionally, in an effort to alleviate sewer impacts, the City will impose a sewer capacity increase fee on all future developments adding demand for sewer system capacity. The fee will be charged when development of a parcel leads to an increase in the volume of wastewater discharged to the collection system. The City has elected to calculate these fees based on proportional increases in wastewater flow. The collected fees will be deposited into a specially created account to be used to fund capacity improvements of the specific drainage basin. The City will undertake a new hydraulic analysis of the specific drainage basin every five years from the date of the first deposit into the special account. In the event the City receives proposals for new developments not considered in the current hydraulic analysis, intermediate and more frequent hydraulic analyses will be performed to evaluate capacity in the given drainage basin. The Public Works Director will request consideration from the City Council to budget the funds for the balance of the cost of increasing the sewer capacity for any of the drainage basins, as part of its annual Capital Improvement Program when it determines such action to be appropriate and

justifiable. The City's Public Works Engineering Division will then be able to design and construct the necessary improvements.

Level of Significance Before Mitigation: Significant.

Mitigation Measures: The following mitigation measure would reduce potential cumulative sewer impacts.

4.10.2-2 Each project shall contribute sewer capacity increase fees for improvements and upgrades to alleviate sewer impacts within the specific drainage basin where the particular project is located. Fees would be determined based on the City's sewer capacity increase fee methodology. These collected fees would be deposited into a specially created account to be used to fund capacity improvements of the specific drainage basin.

Level of Significance After Mitigation: Less than significant.

ENVIRONMENTAL SETTING

Existing Conditions

Regional Facilities

Over 250 private waste haulers and several City governments collect solid waste in Los Angeles County. The City of Glendale Integrated Waste Management Division is the primary hauler for single family residences in Glendale. Private companies haul waste for multifamily residences with greater than 5 dwelling units and nonresidential land uses.[30] The majority of the waste is disposed of at various landfills within the County. However, some of the waste is delivered to waste-to-energy transformation facilities or to intermodal facilities for transport to facilities outside of Los Angeles County.

Within Los Angeles County, there are four classifications of solid waste disposal facilities: (1) Class III landfills, (2) Unclassified landfills, (3) transformation facilities, and (4) materials recovery facilities (MRF). Class III landfills accept all types of non-hazardous solid waste, while Unclassified landfills accept only inert waste, including soil, concrete, asphalt, and other construction and demolition debris, as defined by California Code of Regulations, Title 23, Section 2554. Transformation facilities incinerate municipal solid waste in order to generate energy. MRFs recover recyclable materials from other waste to provide for the efficient transfer of the residual waste to permitted landfills for proper disposal.

The County of Los Angeles Countywide Integrated Waste Management Plan: 2011 Annual Report, prepared by the County of Los Angeles Department of Public Works, indicates that residents and businesses in Los Angeles County (both incorporated cities and unincorporated areas) disposed of 8.22 million tons of solid waste in landfills in and out of Los Angeles County and at inert waste facilities in 2011. Of this amount, approximately 6.25 million tons were disposed of at Class III landfills within Los Angeles County; approximately 1.9 million tons were exported to out-of-County Class III landfills; approximately 72,000 tons were disposed of in Unclassified (Inert) landfills; and approximately 524,000 tons were disposed of at waste-to-energy facilities.[31]

The estimated remaining capacity of permitted Class III landfills at the end of 2011 in Los Angeles County was approximately 127 million tons.[32] Based on the 2011 average disposal rate of 28,187 tons per day

30 Mike Whiederkehr, Assistant Integrated Waste Management Administrator, City of Glendale, Public Works Department, personal communication with Meridian Consultants, January 28, 2013.

31 County of Los Angeles Department of Public Works, Los Angeles County Countywide Integrated Waste Management Plan, 2011 Annual Report, August 2012, 18.

32 County of Los Angeles Department of Public Works, August 2012. 25.

(6 days a week), including waste being imported to the County, local permitted Class III landfills will be at capacity in the year 2025. However, ultimate landfill capacity would be determined by several factors, including (1) expiration of various permits (e.g., Land Use Permits, Waste Discharge Requirements Permits, Solid Waste Facilities Permits, and air quality permits); (2) restrictions to accepting waste generated only within a landfill's particular jurisdiction and/or watershed boundary; and (3) operational constraints.

The capacities of Unclassified landfills are affected by these same factors, but they are not affected to the same extent. The total estimated remaining capacity of Unclassified landfills at the end of 2011 in Los Angeles County was approximately 64.2 million tons.[33] Based on a 2011 average disposal rate of 357 tons of inert waste per day (6 days per week), there is remaining capacity for approximately 576 years.

Currently most solid waste collected within Los Angeles County by private haulers is disposed of within the County. However, it is likely that independent solid waste haulers do and will continue to take solid wastes to facilities outside the County. Greater inter-County transfer of solid waste may occur in the near future if landfills outside of Los Angeles County provide greater economic advantages to haulers, or if landfills within the County reach capacity.

According to the 2011 Annual Report on the Countywide Summary Plan and Countywide Siting Element, there will be a shortage of permitted solid waste disposal capacity in the County. This is due to a lack of suitable sites for developing new landfills, limited potential expansion of existing landfills, and strong public opposition to the siting of proposed solid waste management facilities. To address this issue, several landfills in the County have been recently expanded, including the Chiquita Canyon, Lancaster, Scholl Canyon, and Whittier (Savage Canyon) Landfills. In addition, the County transports solid waste out-of-county to the El Sobrante Landfill in Riverside County, three landfills in Orange County, Simi Valley Landfill & Recycling Center in Ventura County, and the Mesquite Regional Landfill in Imperial County.[34] The combined out of county landfills would accept up to 24,350 tons per day from the County.

Local Facilities

In 1989, residential and non-residential uses in Glendale disposed of approximately 345,000 tons of solid waste.[35] Glendale has reduced the amount of disposed solid waste by approximately 53 percent in

33 County of Los Angeles Department of Public Works, August 2012. Page 26.

34 County of Los Angeles Department of Public Works, August 2012. Page 43.

35 City of Glendale, Source Reduction and Recycling Element, June 1991, ES-2.

2006.[36] Similar to the disposal patterns Countywide, the decline can be attributed primarily to waste diversion programs, including waste reduction, recycling, and composting.

The City's Department of Public Works, Integrated Waste Management Division disposed of approximately 141,208 tons of solid waste in the 2011-2012 fiscal year.[37] The breakdown of the solid waste is as follows: 35,419 tons from residential units which consist of single family units and multi-family units with 4 units or less, and 31,596 tons from commercial uses and multi-family units with 5 or more units; 19,299 tons of greenwaste from residential uses; 10,706 tons of recycled material from residential uses; and approximately 51,188 tons from private haulers.

In 2011, the report to CalRecycle (formerly the California Integrated Waste Management Board) indicated that the City disposed of 143,751.5 tons of solid waste.[38] The 2011 population for the City of Glendale was 192,654. The per capita disposal population rate was 4.1 pounds per person per day (PPD). The per-resident disposal rate target is 5.5 PPD.

Table 4.10.3-1, Disposal Capacities of Primary Landfills Serving the City of Glendale, provides the annual disposal quantity, annual capacity, remaining capacity, and permit status for the five landfills that received the majority of the City's waste. As shown in **Table 4.10.3-1** the combined remaining capacity of the five landfills was approximately 98.5 million tons.

36 California Department of Resources Recycling and Recovery (CalRecycle), "Jurisdictional Diversion/Disposal Rate Summary (1995-2006), Jurisdiction Glendale," http://www.calrecycle.ca.gov/LGCentral/reports/diversionprogram/JurisdictionDiversion.aspx, Accessed January 21, 2013.

37 Mike Whiederkehr. January 28, 2013.

38 CalRecycle, "Jurisdiction/Diversion Rate Detail," http://www.calrecycle.ca.gov/LGCentral/reports/diversionprogram/JurisdictionDiversionDetail.aspx?JurisdictionID=176&Year=2011, accessed June 4, 2013.

Table 4.10.3-1
Disposal Capacities of Primary Landfills Serving the City of Glendale

Chiquita Canyon	Valencia	1.6	1.3	4.9	4
Proposed Chiquita Canyon Expansion	Valencia	3.7	--	35.1	26
Nu-Way Arrow	Irwindale	2.3	0.5	--	--
Puente Hills	Near City of Industry	4.1	1.6	7.6	2
Scholl Canyon	Glendale	1.1	0.2	3.6	16
Proposed Scholl Expansion	Glendale	1.1	--	6.0	21*
Sunshine Canyon	Valencia	3.8	2.4	82.4	25
Total Remaining Capacity (2011)				**98.5**	

Source: County of Los Angeles Department of Public Works, Los Angeles County Countywide Integrated Waste Management Plan, 2011 Annual Report, August 2012, Appendix E-2, Table 1.
Note: The proposed expansion capacities of Chiquita Canyon and Scholl Canyon are not included in the total remaining capacity. CalRecycle has not reported the Nu-Way Arrow facility remaining permitted capacity.

Scholl Canyon Landfill, which is located at 3100 Scholl Canyon Road, is the main facility that receives the City's solid waste; however, other landfills in Los Angeles County may accept solid waste from Glendale's private haulers.[39] This site consists of 530 acres of which Los Angeles County owns 25 acres, Southern California Edison owns 30 acres, and the City of Glendale owns the remaining 475 acres. According to Glendale Municipal Code Chapter 8.56, only solid waste generated by residential and non-residential uses in the Scholl Canyon Watershed can be disposed at the Scholl Canyon Facility.

Approximately one-half, or about 128,000 tons, of the solid waste disposed of at the Scholl Canyon landfill came from outside sources. This landfill had a remaining permitted capacity of 3.6 million tons, or an estimated remaining life of approximately 16 years. The City, if needed, would have access to all the remaining capacity of the landfill by no longer accepting solid waste from other jurisdictions, extending the life of the landfill.

39 Maurice Oillataguerre. January 22, 2013.

Another local facility that the City of Glendale owns is the Brand Park Recycling Facility, which is located at 1602 West Mountain Street in Glendale. This facility is a Recycling Facility and is limited in use to City work crews and is not open to the public. The facility collects concrete and asphalt from street renovation projects and is stockpiled for recycling.[40]

Construction debris generated by projects in the area is recycled at certified mixed debris recycling facilities. The City's Integrated Waste Management Division recommends six certified mixed debris recycling facilities, including California Waste Services in Los Angeles, Community Recycling in Sun Valley, Direct Disposal in Los Angeles, Interior Removal Specialist in South Gate, Looney Bins/Downtown Diversion in Los Angeles, and Looney Bins/East Valley Diversion in Sun Valley. As shown in **Table 4.10.3-2, Annual Permitted Capacities of Certified Recycling Facilities**, the permitted annual capacities at the six certified mixed-debris recycling facilities can accept a range of annual permitted capacity from 37,440 to 530,400 tons.

Table 4.10.3-2
Annual Permitted Capacities of Certified Recycling Facilities

Landfill Site	Location	Annual Permitted Capacity (tons)
California Waste Services	Los Angeles	300,000
Community Recycling	Sun Valley	530,400
Direct Disposal[1]	Sun Valley	37,440
Interior Removal Specialist	South Gate	n/a[2]
Looney Bins – Downtown Diversion	Los Angeles	525,000
Looney Bins – East Valley Diversion	Los Angeles	273,750

Note:
1 - *Used a conversion factor of 1,200 lb/cy. 200 cy/day * 1,200 lb/cy = 240,000 lb/day / 2,000 lb/ton = 120 tons/day.*
2 - *Annual permitted capacity information was not available on the CalRecycle website.*

Project Site Generation

The Project site presently contains the foundations of former buildings and surface parking spaces and, therefore, does not currently generate solid waste.

40 Maurice Oillataguerre. January 22, 2013.

Regulatory Setting

California Integrated Waste Management Act

As many of the landfills in the state are approaching capacity and the siting of new landfills becomes increasingly difficult, the need for source reduction, recycling, and composting has become readily apparent. In response to this increasing solid waste problem, in September 1989 the state assembly passed Assembly Bill 989, known as the California Integrated Waste Management Act. This statute emphasizes conservation of natural resources through the reduction, recycling and reuse of solid waste. Assembly Bill 989 required cities and counties in the state to divert 25 percent of their solid waste stream from landfills by 1995 and 50 percent by year 2000, or face potential fines of millions of dollars per year. On June 30, 2008, State Assembly Amended Senate Bill 1252 to include further waste diversion goals of 60 percent by the year 2015 and 75 percent by the year 2025.[41]

The California Integrated Waste Management Act also requires that all cities conduct a Solid Waste Generation Study and prepare a Source Reduction Recycling Element. Glendale prepared a Solid Waste Generation Study in 1990 that established 1989 as the baseline for use in measuring diversion required under Assembly Bill 939. The study measured current and projected quantities of waste that will be generated, disposed, and diverted from disposal in Glendale. In addition, the City also prepared a Source Reduction Recycling Element in 1991 to describe how it has attained the diversion goals established by Assembly Bill 939 through source reduction, recycling, and composting. The following describes each of the Source Reduction Recycling Element's components.

Source Reduction

The City identified five programs to reduce waste at the source: (1) in-house local government programs, such as purchasing preferences and specifications for durable and reusable products, waste evaluation and employee education, increased use of electronic mail, and low-maintenance landscaping; (2) encouraging source reduction in the private sector through technical assistance, business evaluation, education, and promoting backyard and institutional composting; (3) use of recycled materials that would require waste reduction planning through the business license process and ban of products that cannot be recycled or reused; (4) rate structure modifications; and (5) economic incentives to encourage waste reduction.

41 CalRecycle, formally known as the California Integrated Waste Management Board, Senate Bill 1252 Amendment, June 30, 2008.

Recycling

Recycling programs include (1) development of materials recovery facilities; (2) continuation and expansion of commercial recycling activities; (3) development of a municipal buy-back center and drop-off center; (4) expansion of the Civic Center office paper recycling program; (5) increasing the frequency of the curbside recycling program; and (6) implementation of a salvaging program at Scholl Canyon for white goods (e.g., paper), metals, and woods.

Composting

The City has developed its own yard waste composting facility, which will potentially involve neighboring cities. The City is also investigating the feasibility of composting mixed solid waste. The City currently has an active backyard composting effort underway. City collected yard trimmings are not composted but are ground and used as alternative daily cover at the Scholl Canyon Landfill.

SB 1016

With the implementation of Senate Bill 1016, CalRecycle no longer calculates diversion rate based on actual disposal and estimated annual generation using CalRecycle's adjustment methodology. As a result, Countywide diversion rates area no longer calculated. The last diversion rates approved by CalRecycle were for 2006. Considering each jurisdiction's approved diversion rate, a countywide diversion rate for 2006 was estimated to be 58 percent.

Under SB 1016, a target per capita disposal rate, which is equivalent to a 50 percent diversion rate, is calculated using an approved jurisdiction specific average of per capita generation rates of years 2003 to 2006. To establish compliance with AB 939, each jurisdiction's per capita disposal rate is calculated for each reporting year and compared with their individual target rates.

Using projections of population, employment, and real taxable sales from the University of California, Los Angeles, it is estimated that in order to meet the per capita disposal requirements, jurisdictions in Los Angeles County would need to continue their diversion programs as well as other disposal reduction strategies.

California's 75-Percent "Recycling" Goal

On October 6, 2011, Governor Brown signed Assembly Bill 341 establishing a State policy goal that no less than 75 percent of solid waste generated be source reduced, recycled, or composted by 2020, and requiring CalRecycle to provide a report to the Legislature that recommends strategies to achieve the policy goal by January 1, 2014. The bill also mandated that local jurisdictions implement commercial recycling by July 1, 2012.

Local Regulations

Chapter 8.58 of Glendale Municipal Code requires that all construction and demolition debris be taken to a "certified mixed debris recycling facility" or a recycler must divert all accepted waste from the landfill. A certified mixed debris recycling facility is a processing facility, which is certified as having obtained all applicable federal, state, and local permits and diverts a minimum of 50 percent of all incoming mixed construction and demolition debris.[42] In addition, project applicants must pay a diversion security deposit and prepare a waste reduction and recycling plan. The diversion security deposit is refundable upon request within one year of the certificate of occupancy and upon the determination by the director that the applicant has complied with the diversion requirements and submitted a waste reduction and recycling plan.

ENVIRONMENTAL IMPACTS

Thresholds of Significance

In order to assist in determining whether a project would have a significant effect on the environment, the City determines a project may be deemed to have a significant impact on solid waste, if it would:

- be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs
- comply with federal, state, and local statutes and regulations related to solid waste

Methodology

Solid waste generation resulting from construction of the Project was estimated based on demolition volumes and compared with available landfill capacity. Solid waste generation associated with Project operation was estimated using CalRecycle factors, determined by land use type. The factors are provided in pounds of solid waste generated per residential unit. The increase associated with operation of the Project was then compared with landfill capacity in order to evaluate potential impacts on solid waste disposal capacity.

42 Glendale Municipal Code 8.58.010, amended October 23, 2008.

Project Impacts

Threshold: **Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.**

Construction

Construction of the Project would involve site preparation activities (e.g., demolition and building) that would generate waste materials. Approximately 1,000 cubic yards of demolition material would be generated. The Project applicant would be required to take all the construction and demolition debris to a certified mixed debris recycling facility, which recycles a minimum of 50 percent of all waste received, or a recycler must divert all accepted waste from the landfill. Construction debris generated on the Project site would be disposed of at one of the recommended facilities or at a recycling facility that diverts all construction and demolition waste, in accordance with Chapter 8.58 of the Municipal Code. As shown in **Table 4.10.3-2**, the permitted annual capacities at the six certified mixed-debris recycling facilities can accept a range of annual permitted capacity from 37,440 to 530,400 tons. The one-time disposal of 1,000 cubic yards of demolition debris generated by the Project would be served by the certified facilities; therefore, the impact of the Project on the certified facilities would be less than significant.

In addition, construction of the proposed structure would generate waste materials. A majority of the construction waste would be readily recyclable materials such as wood, concrete, metals and soil. This material will be collected on site in accordance with the City's Construction and Demolition Debris Recycling Ordinance and sent to commercial facilities located in Los Angeles County. Therefore, the impact of waste generated during the construction of the proposed structure is less than significant.

Operation

Project implementation would result in an increase in residential development on site. The projected amount of solid waste that would be generated at buildout would total approximately 164.3 tons of solid waste per year.[43] With implementation of the Project, the citywide projected solid waste disposal would be 141,915.8 tons per year and the per City's capita disposal population rate would be 4.03 PPD which would be under the 5.5 PPD population target for the City.

Solid waste generated on the Project site would be deposited at the Scholl Canyon Landfill, which is owned by the City of Glendale, or one of the landfills located within the County of Los Angeles. As

43 225 multi-family units * 4 lbs/unit/day = 900 lbs/day, or 164.3 tons/year of solid waste. Solid waste generation factor from CalRecycle, "Waste Characterization, Residential Developments: Estimated Solid Waste Generation Rates," http://www.calrecycle.ca.gov/wastechar/wastegenrates/Residential.htm, accessed August 22, 2013.

indicated in **Table 4.10.3-1**, the annual disposal rate at the Scholl Canyon facility is 200,000 tons per year. Combined with the increase of approximately 164.3 tons per year in solid waste generated by the Project, the annual disposal amount would increase to approximately 200,164 tons per year. With a total remaining capacity of 3.6 million tons, the Scholl Canyon facility would meet the needs of the City and the Project for approximately 16 years. Furthermore, once the permitted capacity is exhausted at the Scholl Canyon facility, approximately 6 million tons of potentially available capacity would remain at the site.[44] Because the Project would be required to implement a waste-diversion program aimed at reducing the amount of solid waste disposed in the landfill, the amount of solid waste generated would likely be less than the amount estimated. Examples of waste diversion efforts would include recycling programs for cardboard boxes, paper, aluminum cans, and bottles through the provision of recycling areas within garbage disposal areas.

The Scholl Canyon facility would have sufficient capacity to continue to accommodate the demand for Class III disposal facilities generated by the Project site. As such, the increase in solid waste generation associated with the operation of the Project would not exacerbate landfill capacity shortages in the region to the point of altering the projected timeline of any landfill to reach capacity. Therefore, the impact of the Project on permitted landfill capacity is less than significant.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than significant.

Threshold: **Comply with federal, state, and local statutes and regulations related to solid waste.**

As discussed above, the City met the waste diversion requirements of AB 939 for 2011 for per capita disposal population rate targets. The Project would comply with AB 939 and AB 231 and the City's Construction and Demolition Diversion section of the Municipal Code which states that demolition, construction, and remodeling shall divert 50 percent of waste tonnage. Separate calculations and reports are required for demolition and for the construction portion of projects involving both demolition and construction. The Project would provide a recycling area to reduce the amount of solid waste sent to the landfill. Waste carts for household trash, recycling, and green waste will be provided.

44 County of Los Angeles Department of Public Works, Los Angeles County Countywide Integrated Waste Management Plan, 2011 Annual Report, August 2012, 62.

In addition, the Project would enclose trash collection areas. No federal statutes apply to the Project. Therefore, the impact of the Project on compliance with federal, state, and local statues and regulations is less than significant.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than significant.

Cumulative Impacts

Threshold: **Not be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs.**

As shown in **Table 4.10.3-3, Projected Cumulative Solid Waste Generation**, development of related projects would dispose of a projected 3,576 tons of solid waste into landfills every year. Combined with the additional annual tonnage of solid waste generated by the Project, the cumulative amount generated by new projects would be approximately 3,740 tons of solid waste per year.

Table 4.10.3-3
Projected Cumulative Solid Waste Generation

Land Use	Square Feet/Unit	Generation Rate (lb/sf (unit)/day	Waste Generated (tons/year)
Residential	3,334 du	4	2,433.8
Live/Work	561 du	4	409.5
Commercial	410,000 sf	0.005	374.1
Restaurant	32,241 sf	0.005	29.4
Hotel	266 rm	2	97.1
Cinema	14,690 sf	0.046	123.3
Church	9,500 sf	0.007	12.1
Office	12,802 sf	0.006	14.0
Industrial	50,400 sf	0.009	82.7
TOTAL			**3,576.0**

Source: CalRecycle, "Waste Characterization: Estimated Solid Waste Generation Rates," http://www.calrecycle.ca.gov/wastechar/wastegenrates/default.htm, accessed October 31, 2013.
Abbreviations: sf = square feet; lb = pounds; du/u = dwelling unit.

The current capacity of the Scholl Canyon Landfill is adequate to accommodate solid waste disposal needs of the Project, and development of all related projects, for at least 16 years, if not longer. The City also utilizes four additional landfills, all of which are still currently accepting materials. The combined remaining capacity of the four landfills is estimated to last 99 years.

The County of Los Angeles landfills are a part of the County Sanitation Districts of Los Angeles County (CSDLAC). The CSDLAC provides solid waste management for over half the population in Los Angeles County. CSDLAC's service area covers approximately 815 square miles and encompasses unincorporated County territory, as well as 78 cities, including Glendale. CSDLAC operates a comprehensive solid waste management system, which includes landfills, recycling centers, transfer/materials recovery facilities, and gas-to-energy facilities.

Although there is insufficient permitted disposal capacity within the existing system serving Los Angeles County to provide for its long-term disposal needs, there is additional capacity potentially available within Los Angeles County through the expansion of local landfills, study, promote, and develop conversion technologies, expand transfer and processing infrastructure, and outside of Los Angeles County with a regional waste-by-rail system and remote landfills. As currently proposed by CSDLAC, this regional system would utilize disposal capacity at the planned Mesquite Regional Landfill (MRL) in Imperial County.

CSDLAC entered into Purchase and Sale Agreements in August 2000 for the MRL landfill, which is one of the only fully permitted rail-haul landfills in California. MRL has received all required permits, including the Land Use and SWF permits. CSDLAC is currently in the planning and development process for that landfill. Following completion of the master plan, CSDLAC intends to pursue concurrent final design and construction of the facilities necessary to begin operation. The MRL is not yet operational but would be able to provide approximately 100 years of disposal capacity for Los Angeles County.[45] MRL was completed in late 2008, and is permitted to accept up to 20,000 tons of waste each day from Los Angeles County and has a capacity of 600 million tons.[46] However, waste from Los Angeles County would not be permitted until rail infrastructure to the landfill is completed, which is expected to occur by the end of 2013. CSDLAC intends to utilize a regional waste-by-rail system to transport municipal

45 County of Los Angeles Department of Public Works, Los Angeles County Countywide Integrated Waste Management Plan, 2011 Annual Report, August 2012, 57.

46 Sanitation Districts of Los Angeles County, Mesquite Regional Landfill http://www.mrlf.org/index.php?build=view&idr=122&page2=&pid=32, October 2008; County of Los Angeles, Draft Regional Comprehensive Plan: Solid Waste, http://dpw.lacounty.gov/epd/tf/Attachments/Minutes_Attachments/June_19_2008_TF/Item_VIII_RCP_Solid_Waste.pdf, 2008; County of Los Angeles Sanitation District, Future Solid Waste Management Activities, http://www.lacsd.org/info/publications_n_reports/fiscal04_05/futureactivities.asp, October 31, 2013.

solid waste approximately 210 miles to MRL via the Union Pacific Railroad main line, which extends from the Metropolitan Los Angeles to Glamis, California. From Glamis, a 4.5-mile dedicated rail spur would be built to the site.

Although CSDLAC is in the process of increasing the capacity to accommodate future increases in solid waste, these improvements are not yet in place and will not be completed until at least 2014. Further, there is presently insufficient permitted disposal capacity within the existing system serving Los Angeles County. The Project, in combination with other development, could contribute to insufficient permitted disposal capacity by contributing additional solid waste to regional landfills. Therefore, the Project's contribution to the cumulative impact would be considered cumulatively considerable, and would be a significant and unavoidable impact.

Level of Significance Before Mitigation: Significant.

Mitigation Measures: None feasible.

Level of Significance After Mitigation: Significant and unavoidable.

Threshold: **Comply with federal, state, and local statutes and regulations related to solid waste.**

The City will continue to implement programs for source reduction and recycling and require that subsequent projects complete environmental review to minimize solid waste disposal at disposal facilities. Furthermore, the State has set a goal to recycle, source-reduce, or compost 75 percent of solid waste generated. In addition, related projects are also required to comply with applicable municipal codes. As a result, the cumulative impact of the Project and related projects regarding compliance with applicable state and local solid waste statutes and regulations is less than significant.

Level of Significance Before Mitigation: Less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance After Mitigation: Less than significant.

5.0 ALTERNATIVES

This section of the EIR provides a comparative analysis of the merits of alternatives to the Project pursuant to Section 15126.6 of the California Environmental Quality Act (CEQA) Guidelines, as amended. The purpose of the alternatives analysis is to explain potentially feasible ways to avoid or minimize significant effects of the Project. According to the State *CEQA Guidelines*, the EIR need only examine in detail those alternatives that could feasibly meet most of the basic objectives of the Project. When addressing feasibility, the State *CEQA Guidelines* Section 15126.6 states that "among the factors that may be taken into account when addressing the feasibility of alternatives are site suitability, economic viability, availability of infrastructure, general plan consistency, jurisdictional boundaries, and whether the applicant can reasonably acquire, control or otherwise have access to alternative sites." The State *CEQA Guidelines* also specify that the alternatives discussion should not be remote or speculative, and need not be presented in the same level of detail as the assessment of the Project.

Therefore, based on the State *CEQA Guidelines*, several factors need to be considered in determining the range of alternatives to be analyzed in an EIR and the level of analytical detail that should be provided for each alternative. These factors include (1) the nature of the significant impacts of the project, (2) the ability of alternatives to avoid or lessen the significant impacts associated with the project, (3) the ability of the alternatives to meet the objectives of the project, and (4) the feasibility of the alternatives. These factors would be unique for each project.

SELECTION OF ALTERNATIVES FOR ANALYSIS

According to the State *CEQA Guidelines*, the discussion of alternatives should focus on alternatives to a project or its location that can feasibly avoid or substantially lessen the significant effects of the Project. The State *CEQA Guidelines* indicate that the range of alternatives included in this discussion should be sufficient to allow decision makers a reasoned choice. The alternative discussion should provide decision makers with an understanding of the merits and disadvantages of these alternatives.

Section 4.0, Environmental Impact Analysis, of this EIR concludes that Project implementation would result in significant and unavoidable environmental impacts. These include: Project-specific short-term noise impacts during construction; long-term on-site noise impacts due to vehicle and railroad operations; long-term impacts due to the loss of on-street parking spaces; long-term impacts to the intersection of San Fernando Road and West Los Feliz Road; long-term and cumulative impacts to recreation facilities; cumulative impacts to fire; cumulative impacts to police; and cumulative impacts to solid waste. In response to these impacts, the City of Glendale identified and considered several alternatives to the Project to determine if these alternatives could avoid or substantially lessen these

significant impacts. These alternatives included the no-project alternative, development of the Project consistent with the existing Mitaa Plaza entitlements, and the development of the Project at reduced density on the Project site.

ALTERNATIVES CONSIDERED BUT NOT EVALUATED IN DETAIL

Section 15126.6(c) of the State *CEQA Guidelines* states that an EIR should briefly describe the rationale for selecting the alternatives to be discussed and the reasons for eliminating alternatives from detailed consideration in an EIR. Among the factors that may be used to eliminate alternatives from detailed consideration in an EIR is failure to meet most of the basic Project objectives, infeasibility, or inability to avoid or substantially reduce significant environmental impacts. Provided below are the reasons for not providing a detailed evaluation of an off-site alternative.

Off-Site Alternative

An alternative site would involve the development of the Project at a different location. Given that neither the Project applicant nor the City of Glendale owns or controls any other property in the vicinity of the Project site, the ability of the applicant to find and purchase an alternative site on which to develop the Project is considered speculative. In addition, the development of an alternative site may not be able to meet the Project objectives. Lastly, the development of the same uses at a different location could result in similar project-specific short-term noise impacts during construction; long-term on-site noise impacts due to vehicle; long-term and cumulative impacts to recreation facilities; cumulative impacts to fire; cumulative impacts to police; and cumulative impacts to solid waste. Thus, the selection of an alternative site would not avoid many of the significant impacts. As indicated in CEQA 15126.6(c), "among factors that may be used to eliminate alternatives from detailed consideration in an EIR are (i) failure to meet most of the project objectives, (ii) infeasibility, or (iii) inability to avoid significant environmental impacts." As discussed above, the relocation of the Project to an alternative site would not be feasible because the obtaining of an alternative site is considered speculative and because development on an alternative site would not avoid or substantially lessen any of the significant effects of the Project. Therefore, this alternative has been eliminated from detailed consideration within this EIR.

ALTERNATIVES EVALUATED IN DETAIL

As discussed above, the City of Glendale identified several alternatives for analysis in this EIR to determine if these alternatives could avoid or substantially lessen the significant impacts of the Project and meet the basic Project objectives. The following objectives for the Project are listed in **Section 3.0, Project Description.** The objectives of the Project are to:

- Redevelop an underutilized property with residential uses for the community of Glendale
- Utilize architectural design, lighting, and landscape design to enhance the architectural character of the proposed building and create a gateway building to the City of Glendale
- Implementation of the Redevelopment Plan Objectives – but without redevelopment agency assistance

Section 4.0, Environmental Impact Analysis, of this EIR concludes that Project implementation would result in some significant environmental impacts. These include Project-specific: 1) short-term noise impacts during construction; 2) long-term on-site noise impact due vehicle and railroad operations; 3) long-term off-site noise impact due to increased vehicle trips; 4) long-term impact due to the loss of on-street parking spaces; 5) long-term impact to the intersection of San Fernando Road and West Los Feliz Road; 6) long-term and cumulative impact to recreation facilities, 7) cumulative impacts to fire, 8) cumulative impacts to police, and 9) cumulative impacts to solid waste. Based on the environmental analysis, alternatives were developed which would provide decision makers with a reasonable range of alternatives that would eliminate or reduce the impacts of the Project. A list of the alternatives selected for evaluation in this analysis is provided below.

- Alternative 1 – No Project/No Development
- Alternative 2 – Development of Mitaa Plaza Project
- Alternative 3 – Reduced Density (25 Percent Reduction)
- Alternative 4 – Reduced Density (50 Percent Reduction)

Alternative 1 – No Project/No Development Alternative

The No Project/No Development Alternative is required to be evaluated by Section 15126(2)(4) of the State *CEQA Guidelines*. As required by the State *CEQA Guidelines*, the analysis must examine the impacts which might occur if the site is left in its present condition, as well as what may reasonably be expected to occur in the foreseeable future if the Project were not approved, based on current plans and consistent with available infrastructure and community services.

Under the No Project/No Development Alternative, the Project site would not be developed with additional uses, and would remain in its current state. The building foundations and associated surface parking would remain. None of the impacts associated with construction and operational activities would occur if the No Project/No Development Alternative were selected. These include Project-specific short-term noise impacts during construction; long-term on-site noise impacts due to vehicle and

railroad operations; long-term impacts due to the loss of on-street parking spaces; long-term impacts to the intersection of San Fernando Road and West Los Feliz Road; long-term and cumulative impacts to recreation facilities; cumulative impacts to fire; cumulative impacts to police; and cumulative impacts to solid waste. This alternative is environmentally superior to the Project for these reasons.

Alternative 2 – Development of the Mitaa Plaza Project

The Glendale Redevelopment Agency, which is now the Successor Agency, and City of Glendale approved the Mitaa Plaza Project in December 2010. The approved Mitaa Plaza Project included the development of a 163,090 square-foot mixed use development consisting of a grocery store, day spa, restaurants, retail, and medical/general office uses with a five-story parking structure. Entitlements included design review, a sign program, a 125-space parking exception, Conditional Use Permits for various on-site uses such as massage services and for the sale of alcoholic beverages, a standards variance for parking structure height and building corner treatment, and two sign variances. This is what is currently approved to be built on the Project site.

Aesthetics

The height of the structures would be reduced from six stories under the Project to four stories under Alternative 2. Similarly, all visual impacts under this alternative would be incrementally reduced compared to the Project. Since impacts to visual resources associated with the Project would be less than significant, the impact associated with Alternative 2 would not be substantially less than the Project.

Air Quality

Construction activities (e.g., equipment use assumptions) under Alternative 2 would be similar to those of the Project on a daily basis but may occur over a longer period, due to the increased building mass associated with Alternative 2. As with the Project, the increase in emissions resulting from Alternative 2 would not exceed daily thresholds recommended by the South Coast Air Quality Management District (SCAQMD) with the exception of reactive organic gases (ROG). Under Alternative 2, ROG emissions with the implementation of mitigation measures would be reduced to less than significant. Impacts for ROG would be less than significant for the Project without the implementation of mitigation.

Like the Project, Alternative 2 would not generate daily operational emissions of reactive organic gases (ROG), oxides of nitrogen (NOX), carbon monoxide (CO), sulfur oxides (SOX), and particulate matter less than 10 microns in diameter (PM10) and 2.5 microns in diameter (PM2.5) that would exceed the thresholds of significance recommended by the SCAQMD. Given that neither the Project nor Alternative

2 would result in a significant impact with regard to operational air quality, impacts associated with Alternative 2 would not be substantially less than the Project.

The SCAQMD has published draft GHG guidelines for assessing the significance of GHG emissions. The draft guidelines recommend that all land use or mixed-use projects meet a threshold of 3,000 metric tons of carbon dioxide equivalents (MTCO2e). Alternative 2 was estimated to result in 8,683.9 MTCO2e, while the Project is estimated to result in 2,384.9 MTCO2e. Under the GHG guidance, Alternative 2 would result in significant GHG impacts, while the Project would result in less than significant impacts. Consequently, the Project would be environmentally superior to this alternative.

Hazards

The Phase I Environmental Site Assessment (ESA) prepared for the Project site indicated the presence of three anomalies under the southeast parking lot, indicating the presence of Underground Storage Tanks (USTs). Alternative 2 and the Project would implement **Mitigation Measures 4.3-1** and **4.3-2,** which would require an investigation of the anomalies and the removal of USTs if necessary. As such, Alternative 2 would be similar to the Project and impacts would be reduced to a less than significant level. The severity of impacts associated with Alternative 2 would remain the same.

Soils and groundwater beneath the site are contaminated with several pollutants associated with past uses on site and past and present uses off site. Alternative 2 and the Project would both require the disturbance of soils and potential encountering of groundwater for the development of the Project. The construction and operation of this alternative could 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. With the incorporation of **Mitigation Measures 4.3-3** recommended for the Project, the impacts of Alternative 2 would be similar to the Project and would be reduced to less than significant. The severity of impacts associated with Alternative 2 would remain the same.

Land Use and Planning

Alternative 2 would establish commercial uses on the Project site that are allowed by the current General Plan and Zoning designations. The intensity of the commercial uses would be within the maximum amounts allowed these designations and this alternative would not conflict with the use or density standards in the General Plan or Zoning Code.

Like the Project, this alternative would not conflict with any of the goals, objectives, or policies of the Glendale General Plan. This alternative would result in the redevelopment of the Project site and the development of new commercial uses in southern Glendale, which are presently served by existing

utilities and public services. As a result, neither this alternative nor the Project would conflict with the goals of the Redevelopment Plan and would not result in a significant impact with regard to land use. Given that neither the Project nor Alternative 2 would result in a significant impact, impacts associated with Alternative 2 would not be substantially less than the Project.

Noise

Development activities associated with the Project and Alternative 2 during construction such as earthmoving, and construction of on-site infrastructure would involve the use of heavy equipment, such as backhoe, dozer, loaders, concrete mixers, forklifts, and cranes. Under either the Project or Alternative 2, these construction equipment sources would cause significant noise impacts. These impacts could be reduced but not eliminated with either development scenario through the implementation of mitigation measures recommended for the Project. In addition, the construction duration associated with Alternative 2 would be longer when compared to the Project due to the increased density of the alternative. However, construction duration would not be lengthened to the extent that noise impacts would be substantially increased. As a result, construction of the Project under both scenarios would result in short-term significant and unavoidable impacts. Therefore, Alternative 2 would not avoid or substantially lessen a significant noise impact.

Long-term operational noise generated by traffic under this alternative would increase compared to the Project. This is due to the increase in the amount of traffic generated by this alternative. This alternative would increase traffic generation under the Project from 1,350 ADT to 8,338 ADT, from 67 AM peak-hour trips to 368 AM peak-hour trips, and from 88 PM peak-hour trips to 825 PM peak-hour trips. This alternative would result in an increase of 3 A-weighted decibels (dB(A)) in the noise levels on roadway segments adjacent to the Project site. In addition, this alternative's increase in noise levels would be much greater than those experienced under the Project. Alternative 2 would not avoid or substantially lessen a significant noise impact.

Public Services

Fire Protection

Alternative 2, like the Project, would increase demand on the City of Glendale Fire Department for fire protection services and emergency medical services. Alternative 2, however, would result in fewer calls for service due to being a commercial use versus a residential use like the Project. Under either the Project or Alterative 2, any increase in fire protection or emergency medical services within the City would not substantially impact the current fire fighter to population ratio and would not result in the need for any new or the physical alteration to any existing governmental facility. Given that neither the Project nor Alternative 2 would result in a significant project-specific impact, impacts to fire associated

with Alternative 2 would not be substantially less than the Project. However, like the Project, this alternative would contribute to significant and unavoidable cumulative fire impacts in the City of Glendale.

Police Protection

Alternative 2, like the Project, would increase demand on the City of Glendale Police Department for calls for service. Alternative 2, however, would result in fewer calls for service due to being a commercial use versus a residential use like the Project. Under either the Project or Alterative 2, any increase in calls within the City would not substantially impact the current officer to population ratio and would not result in the need for any new or the physical alteration to any existing governmental facility. Given that neither the Project nor Alternative 2 would result in a significant project-specific impact, impacts to police associated with Alternative 2 would not be substantially less than the Project. However, like the Project, this alternative would contribute to significant and unavoidable cumulative police impacts in the City of Glendale.

Recreation

Alternative 2, like the Project, would result in an increase in use of existing neighborhood and community parks. The City currently has a parkland-to-resident ratio of approximately 1.4 acres of parkland for every 1,000 residents, while the City's park planning standard is 6 acres of neighborhood and community parkland per 1,000 residents. Existing park facilities are currently heavily used due to the deficiency in parkland in the City. Alternative 2 would result in the direct generation of 150 persons due to the introduction of commercial uses, while the Project would result in direct generation of 525 persons due to the introduction of 225 residential uses. These persons would utilize parks within the City of Glendale. As required by the adopted Development Impact Fee schedule, Alternative 2, like the Project, would be required to pay the Phase-in development impact fees to minimize the Project's impact on park and recreation land and facilities. Under CEQA, the development impact fee payments constitute mitigation of Project-related impacts on park and recreation land and facilities within Glendale. However, the fee payment is not considered to fully mitigate this impact, because the fee amount to be paid does not equal the full fair-share fee for commercial or multi-family residential projects. Consequently, Alternative 2, like the Project, would also result in significant and unavoidable park and recreation impacts. Alternative 2, however, would reduce the population projections of the Project by approximately 72 percent thus reducing the amount of people utilizing City parks.

Traffic

This alternative would increase traffic generation under the Project from 1,350 ADT to 8,338 ADT, from 68 AM peak-hour trips to 368 AM peak-hour trips, and from 88 PM peak-hour trips to 825 PM peak-hour

trips. This alternative's Project traffic would significantly impact six study area intersections assuming no improvements. Listed below are two significantly impacted study area intersections for which feasible mitigation measures exist.

- Gardena Avenue/Los Feliz Boulevard

  Construct a northbound left-turn lane
  Construct a southbound left-turn lane
  Construct a southbound right-turn lane

- San Fernando Road/Fernando Court

  Construct a traffic signal

However, feasible mitigation measures do not exist or only partial mitigation measures exist at the following four intersections:

- San Fernando Road/Chevy Chase Drive
- San Fernando Road/West Los Feliz Road
- San Fernando Road/Brand Boulevard – Partial Mitigation

  Construct a westbound left-turn lane

- Glendale Avenue/Chevy Chase Drive

The Project does not significantly impact any area intersections with the exception of San Fernando Road/West Los Feliz Road. This is primarily due to the almost 83 percent reduction in traffic between the Project and this alternative. Consequently, the Project is considered to be environmentally superior to Alternative 2.

Public Utilities

Water

As with the Project, Alternative 2 would result in an increase in water demand. Alternative 2 would result in a demand for water of 65.4 acre-feet per year compared to the Project demand of 39.2 acre-feet per year. The provision of water as a result of the Project implementation would be within the projections of the GWP. Alternative 2, which would demand more water than the Project, would also be within the established GWP projections. Water demand impacts under both Alternative 2 and the Project would be less than significant. Neither the Project nor Alternative 2 would result in a significant impact.

Sewer

Alternative 2, like the Project, would result in an increase in sewage generation. Alternative 2 would result in an increase of 46,699 gallons of sewage per day while the Project would result in an increase of 24,224 gallons of sewage per day. There is adequate treatment capacity at the Hyperion Treatment Plant to accommodate either Alternative 2 or the Project. In addition, sewer lines in the vicinity of the Project would be upgraded as part of the City's Tyburn Wastewater Capacity Improvement Project. However, the City imposes a sewer capacity increase fee on new developments that lead to an increase in the volume of wastewater discharged to the collection system. The alternative's sewage increase to the lines in the Tyburn Flume would be mitigated through payment of the sewer capacity increase fee, as required by the Project, and Alternative 2 impacts would be reduced to a less than significant level.

Solid Waste

Alternative 2, like the Project, would result in an increase in the demand for solid waste services. Alternative 2 would result in the generation of 59.7 tons of solid waste per year compared to the Project increase of 164.3 tons of solid waste per year. Alternative 2 would generate less solid waste than the Project. There is adequate landfill capacity at the Scholl Canyon Landfill to accommodate either Alternative 2 or the Project. Therefore, impacts under both Alternative 2 and the Project would be less than significant. Both alternatives would contribute to cumulative significant and unavoidable solid waste impacts due to County landfill capacity.

Alternative 3 – 25 Percent Reduced Density

The 25 Percent Reduced Density Alternative considers development of the entire 2.25-acre site with a reduced residential density. This alternative would include a development of 169 dwelling units on site and approximately 248 parking spaces. This alternative would allow for the Project building to be reduced to four levels and parking garage to four levels (assuming a straight 25 percent reduction). The layout for the land uses under this alternative would not change. By reducing the amount of development, the construction duration for this alternative would also be reduced. In addition, a reduction in the amount of residential dwelling units would reduce the amount of direct population generated under this alternative.

Aesthetics

The height of the structures would be reduced from six stories under the Project to four stories under Alternative 3. Similarly, all visual impacts under this alternative would be incrementally reduced compared to the Project. Since impacts to visual resources associated with the Project would be less than significant, the impact associated with Alternative 3 would not be substantially less than the Project.

Air Quality

Construction activities (e.g., equipment use assumptions) under Alternative 3 would be similar to those of the Project on a daily basis but may occur over a shorter period, due to the reduced development associated with Alternative 3. As with the Project, the increase in emissions resulting from Alternative 3 would not exceed daily thresholds recommended by the South Coast Air Quality Management District (SCAQMD).

Like the Project, Alternative 3 would not generate daily operational emissions of reactive organic gases (ROG), oxides of nitrogen (NOX), carbon monoxide (CO), sulfur oxides (SOX), and particulate matter less than 10 microns in diameter (PM10) and 2.5 microns in diameter (PM2.5) that would exceed the thresholds of significance recommended by the SCAQMD. Given that neither the Project nor Alternative 3 would result in a significant impact with regard to operational air quality, impacts associated with Alternative 3 would not be substantially less than the Project.

Implementation of the Project would not expose sensitive receptors near roadway intersections to substantial pollutant concentrations. Alternative 3 would generate less vehicular traffic to and from the Project site during the AM and PM peak-hour periods than the Project when localized concentrations of CO are the highest. Neither the Project nor Alternative 3 would result in a significant impact with regard to exposure to sensitive receptors to pollutant concentrations. Therefore, impacts associated with Alternative 3 would not be substantially less than the Project.

Hazards

The Phase I Environmental Site Assessment (ESA) prepared for the Project site indicated the presence of three anomalies under the southeast parking lot, indicating the presence of Underground Storage Tanks (USTs). Alternative 3 and the Project would implement **Mitigation Measures 4.3-1** and **4.3-2**, which would require an investigation of the anomalies and the removal of USTs if necessary. As such, Alternative 3 would be similar to the Project and impacts would be reduced to a less than significant level. The severity of impacts associated with Alternative 3 would remain the same.

Soils and groundwater beneath the site are contaminated with several pollutants associated with past uses on site and past and present uses off site. Alternative 3 and the Project would both require the disturbance of soils and potential encountering of groundwater for the development of the Project. The construction and operation of this alternative could 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. With the incorporation of **Mitigation Measures 4.3-3** recommended for the Project, the impacts of Alternative 3 would be similar to the Project and would be

reduced to a less than significant level. The severity of impacts associated with Alternative 3 would remain the same.

Land Use and Planning

Alternative 3 would establish residential units on the Project site that are allowed by the current General Plan and Zoning designations. The intensity of the residential dwellings would be within the maximum amounts allowed of 270 dwelling units by these designations and this alternative would not conflict with the use or density standards in the General Plan or Zoning Code.

Like the Project, this alternative would not conflict with any of the goals, objectives, or policies of the Glendale General Plan. This alternative would result in the redevelopment of the Project site and the development of new residential uses in southern Glendale, which are presently served by existing utilities and public services. As a result, neither this alternative nor the Project would conflict with the goals of the Redevelopment Plan and would not result in a significant impact with regard to land use. Given that neither the Project nor Alternative 3 would result in a significant impact, impacts associated with Alternative 3 would not be substantially less than the Project.

Noise

Development activities associated with the Project and Alternative 3 during construction such as earthmoving, and construction of on-site infrastructure would involve the use of heavy equipment, such as backhoe, dozer, loaders, concrete mixers, forklifts, and cranes. Under either the Project or Alternative 3, these construction equipment sources would cause significant noise impacts. These impacts could be reduced but not eliminated with either development scenario through the implementation of mitigation measures recommended for the Project. In addition, the construction duration associated with Alternative 3 would be shorter when compared to the Project due to the reduced density of the alternative. However, construction duration would not be shortened to the extent that noise impacts would be substantially reduced. As a result, construction of the Project under both scenarios would result in short-term significant and unavoidable impacts. Therefore, Alternative 3 would not avoid or substantially lessen a significant noise impact.

Long-term operational noise generated by traffic under this alternative would decrease compared to the Project. This is due to the decrease in the amount of traffic generated by this alternative. However, like the Project, this alternative would not result in an increase of 3 A-weighted decibels (dB(A)) in the noise levels on roadway segments adjacent to the Project site. Any reduction in roadway noise levels would not be noticeable. Although the reduced development of Alternative 3 would create less noise along

area roadways, the long-term on-site noise impact due vehicle and railroad operations would not be lessened to the extent that significant impacts would be substantially reduced or avoided.

Public Services

Fire Protection

Alternative 3, like the Project, would increase demand on the City of Glendale Fire Department for fire protection services and emergency medical services. Alternative 3, however, would result in 25 percent fewer calls for service due to the reduced amount of dwelling units. Under either the Project or Alterative 3, any increase in fire protection or emergency medical services within the City would not substantially impact the current fire fighter to population ratio and would not result in the need for any new or the physical alteration to any existing governmental facility. Given that neither the Project nor Alternative 3 would result in a significant project-specific impact, impacts to fire associated with Alternative 3 would not be substantially less than the Project. However, like the Project, this alternative would contribute to significant and unavoidable cumulative fire impacts in the City of Glendale.

Police Protection

Alternative 3, like the Project, would increase demand on the City of Glendale Police Department for calls for service. Alternative 3, however, would result in 25 percent fewer calls for service due to the reduced amount of dwelling units. Under either the Project or Alterative 3, any increase in calls within the City would not substantially impact the current officer to population ratio and would not result in the need for any new or the physical alteration to any existing governmental facility. Given that neither the Project nor Alternative 3 would result in a significant project-specific impact, impacts to fire associated with Alternative 3 would not be substantially less than the Project. However, like the Project, this alternative would contribute to significant and unavoidable cumulative police impacts in the City of Glendale.

Recreation

Alternative 3, like the Project, would result in an increase in use of existing neighborhood and community parks. The City currently has a parkland-to-resident ratio of approximately 1.4 acres of parkland for every 1,000 residents, while the City's park planning standard is 6 acres of neighborhood and community parkland per 1,000 residents. Existing park facilities are currently heavily used due to the deficiency in parkland in the City. Alternative 3 would result in the direct generation of 393 persons, while the Project would result in direct generation of 525 persons utilizing City parks. As required by the adopted Development Impact Fee schedule, Alternative 3, like the Project, would be required to pay the Phase-in fees of $7,000 per residential unit for impacts to parks. The development impact fee payments

are required to minimize the project's impact on park and recreation land and facilities. Under CEQA, the development impact fee payments constitute mitigation of project-related impacts on park and recreation land and facilities within Glendale. However, the fee payment is not considered to fully mitigate this impact, because the fee amount to be paid does not equal the full fair-share per-unit fee for multi-family residential projects, which was determined to be $14,251 per multi-family unit in the City's Public Facilities Fee Study. Consequently, Alternative 3, like the Project, would also result in significant and unavoidable park and recreation impacts, but Alternative 3 would reduce direct population by approximately 25 percent thus reducing person utilizing City parks.

Population and Housing

The Project is not anticipated to induce substantial population growth in an area directly or indirectly. Alternative 3 would be a smaller project in terms of density and residents as compared to the Project, and would therefore result in similar less than significant impacts in regards to inducing substantial population growth in an area. All of the residents anticipated to occupy the Project site after development of the Project are within the population and household projections for the City of Glendale. Therefore, under this alternative which is smaller and less dense than Project, the residents to occupy the Project site would also be within the population and household growth projections for the City of Glendale.

Traffic

The Project would generate 1,350 ADT, 67 AM peak hour trips, and 88 PM peak hour trips. In the City of Glendale, an impact is considered to be significant for signalized intersections if the project-related increase in the volume to capacity (V/C) exceeds 0.02 at an intersection operating at Level of Service (LOS) D or worse. The Project was determined to result in a significant and unavoidable impact at the intersection of San Fernando Road and West Los Feliz Road during the PM peak hours due to an increase in the V/C of 0.024. Alternative 3 would generate 1,013 ADT, 50 AM peak-hour trips, and 66 PM peak-hour trips. Alternative 3 during the PM peak hour at the intersection of San Fernando Road and West Los Feliz Road would result in an increase in the V/C of 0.017. This increase would reduce the V/C ratio but would not reduce the significant an unavoidable impact at this intersection. Alternative 3, like the Project, would result in significant an unavoidable traffic impacts.

Public Utilities

Water

As with the Project, Alternative 3 would result in an increase in water demand. Alternative 3 would result in a demand for water of 29.3 acre-feet per year compared to the Project demand of 39.2 acre-

feet per year. The provision of water as a result of the Project implementation would be within the projections of the Glendale Water and Power (GWP). Alternative 3, which would demand less water than the Project, would also be within the established GWP projections. Water demand impacts under both Alternative 3 and the Project would be less than significant. Given that neither the Project nor Alternative 3 would result in a significant impact, impacts associated with Alternative 3 would not be substantially less than the Project.

Sewer

Alternative 3, like the Project, would result in an increase in sewage generation. Alternative 3 would result in an increase of 18,168 gallons of sewage per day while the Project would result in an increase of 24,224 gallons of sewage per day. There is adequate treatment capacity at the Hyperion Treatment Plant to accommodate either Alternative 3 or the Project. In addition, sewer lines in the vicinity of the Project would be upgraded as part of the City's Tyburn Wastewater Capacity Improvement Project. However, the City imposes a sewer capacity increase fee on new developments that lead to an increase in the volume of wastewater discharged to the collection system. The alternative's sewage increase to the lines in the Tyburn Flume would be mitigated through payment of the sewer capacity increase fee, as required by the Project, and Alternative 3 impacts would be reduced to a less than significant level. Given that neither the Project nor Alternative 3 would result in a significant impact, impacts associated with Alternative 3 would not be substantially less than the Project.

Solid Waste

Alternative 3, like the Project, would result in an increase in the demand for solid waste services. Alternative 3 would generate an increase of 123.2 tons of solid waste per year compared to the Project increase of 164.3 tons of solid waste per year. There is adequate landfill capacity at the Scholl Canyon Landfill to accommodate either Alternative 3 or the Project. Therefore, impacts under both Alternative 3 and the Project would be less than significant and impacts associated with Alternative 3 would not be substantially less than the Project. Both alternatives would contribute to cumulative significant and unavoidable solid waste impacts due to County landfill capacity.

Alternative 4 – 50 Percent Reduced Density

The 50 Percent Reduced Density Alternative considers development of the entire 2.25-acre site with a reduced residential density. This alternative would include a development of 113 dwelling units on site and approximately 165 parking spaces. This alternative would allow for the Project building to be reduced to three floors and parking garage to three levels (assuming a straight 50 percent reduction). The layout for the land uses under this alternative would not change. By reducing the amount of development, the construction duration for this alternative would also be reduced. In addition, a

reduction in the amount of residential dwelling units would reduce the amount of direct population generated under this alternative.

Aesthetics

The height of the structures would be reduced from six stories under the Project to three stories under Alternative 4. Similarly, all visual impacts under this alternative would be incrementally reduced compared to the Project. Since impacts to visual resources associated with the Project would be less than significant, the impact associated with Alternative 4 would not be substantially less than the Project.

Air Quality

Construction activities (e.g., equipment use assumptions) under Alternative 4 would be similar to those of the Project on a daily basis but may occur over a shorter period, due to the reduced development associated with Alternative 4. As with the Project, the increase in emissions resulting from Alternative 4 would not exceed daily thresholds recommended by the South Coast Air Quality Management District (SCAQMD).

Like the Project, Alternative 4 would not generate daily operational emissions of reactive organic gases (ROG), oxides of nitrogen (NOX), carbon monoxide (CO), sulfur oxides (SOX), and particulate matter less than 10 microns in diameter (PM10) and 2.5 microns in diameter (PM2.5) that would exceed the thresholds of significance recommended by the SCAQMD. Given that neither the Project nor Alternative 4 would result in a significant impact with regard to operational air quality, impacts associated with Alternative 4 would not be substantially less than the Project.

Implementation of the Project would not expose sensitive receptors near roadway intersections to substantial pollutant concentrations. Alternative 4 would generate less vehicular traffic to and from the project site during the AM and PM peak-hour periods than the Project when localized concentrations of CO are the highest. Neither the Project nor Alternative 4 would result in a significant impact with regard to exposure to sensitive receptors to pollutant concentrations. Therefore, impacts associated with Alternative 4 would not be substantially less than the Project.

Hazards

The Phase I Environmental Site Assessment (ESA) prepared for the Project site indicated the presence of three anomalies under the southeast parking lot, indicating the presence of Underground Storage Tanks (USTs). Alternative 4 and the Project would implement **Mitigation Measures 4.3-1** and **4.3-2,** which would require an investigation of the anomalies and the removal of USTs if necessary. As such,

Alternative 4 would be similar to the Project and impacts would be reduced to a less than significant level. The severity of impacts associated with Alternative 4 would remain the same.

Soils and groundwater beneath the site are contaminated with several pollutants associated with past uses on site and past and present uses off site. Alternative 4 and the Project would both require the disturbance of soils and potential encountering of groundwater for the development of the Project. The construction and operation of this alternative could 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. With the incorporation of **Mitigation Measures 4.3-3** recommended for the Project, the impacts of Alternative 4 would be similar to the Project and would be reduced to a less than significant level. The severity of impacts associated with Alternative 4 would remain the same.

Land Use and Planning

Alternative 4 would establish residential units on the Project site that are allowed by the current General Plan and Zoning designations. The intensity of the residential dwellings would be within the maximum amounts allowed of 270 dwelling units by these designations and this alternative would not conflict with the use or density standards in the General Plan or Zoning Code.

Like the Project, this alternative would not conflict with any of the goals, objectives, or policies of the Glendale General Plan. This alternative would result in the redevelopment of the Project site and the development of new residential uses in southern Glendale, which are presently served by existing utilities and public services. As a result, neither this alternative nor the Project would conflict with the goals of the Redevelopment Plan and would not result in a significant impact with regard to land use. Given that neither the Project nor Alternative 4 would result in a significant impact, impacts associated with Alternative 4 would not be substantially less than the Project.

Noise

Development activities associated with the Project and Alternative 4 during construction such as earthmoving, and construction of on-site infrastructure would involve the use of heavy equipment, such as backhoe, dozer, loaders, concrete mixers, forklifts, and cranes. Under either the Project or Alternative 4, these construction equipment sources would cause significant noise vibration impacts. These impacts could be reduced but not eliminated with either development scenario through the implementation of mitigation measures recommended for the Project. In addition, the construction duration associated with Alternative 4 would be shorter when compared to the Project due to the reduced density of the alternative. However, construction duration would not be shortened to the extent that noise impacts

would be substantially reduced. As a result, construction of the Project under both scenarios would result in short-term significant and unavoidable impacts. Therefore, Alternative 4 would not avoid or substantially lessen a significant noise impact.

Long-term operational noise generated by traffic under this alternative would decrease compared to the Project. This is due to the decrease in the amount of traffic generated by this alternative. However, like the Project, this alternative would result in an increase of 3 A-weighted decibels (dB(A)) in the noise levels on roadway segments adjacent to the Project site. Any reduction in roadway noise levels would not be noticeable. Although the reduced development of Alternative 4 would create less noise along area roadways, the long-term on-site noise impact due vehicle and railroad operations would not be lessened to the extent that significant impacts would be substantially reduced or avoided.

Public Services

Fire Protection

Alternative 4, like the Project, would increase demand on the City of Glendale Fire Department for fire protection services and emergency medical services. Alternative 4, however, would result in 50 percent fewer calls for service due to the reduced amount of dwelling units. Under either the Project or Alterative 4, any increase in fire protection or emergency medical services within the City would not substantially impact the current fire fighter to population ratio and would not result in the need for any new or the physical alteration to any existing governmental facility. Given that neither the Project nor Alternative 4 would result in a significant project-specific impact, impacts to fire associated with Alternative 4 would not be substantially less than the Project. However, like the Project, this alternative would contribute to significant and unavoidable cumulative fire impacts in the City of Glendale.

Police Protection

Alternative 4, like the Project, would increase demand on the City of Glendale Police Department for calls for service. Alternative 4, however, would result in 50 percent fewer calls for service due to the reduced amount of dwelling units Under either the Project or Alterative 4, any increase in calls within the City would not substantially impact the current officer to population ratio and would not result in the need for any new or the physical alteration to any existing governmental facility. Given that neither the Project nor Alternative 4 would result in a significant project-specific impact, impacts to fire associated with Alternative 4 would not be substantially less than the Project. However, like the Project, this alternative would contribute to significant and unavoidable cumulative police impacts in the City of Glendale.

Recreation

Alternative 4, like the Project, would result in an increase in use of existing neighborhood and community parks. The City currently has a parkland-to-resident ratio of approximately 1.4 acres of parkland for every 1,000 residents, while the City's park planning standard is 6 acres of neighborhood and community parkland per 1,000 residents. Existing park facilities are currently heavily used due to the deficiency in parkland in the City. Alternative 4 would result in the direct generation of 263 persons, while the Project would result in direct generation of 525 persons utilizing City parks. As required by the adopted Development Impact Fee schedule, Alternative 4, like the Project, would be required to pay the Phase-in fees of $7,000 per residential unit for impacts to parks. The development impact fee payments are required to minimize the Project's impact on park and recreation land and facilities. Under CEQA, the development impact fee payments constitute mitigation of project-related impacts on park and recreation land and facilities within Glendale. However, the fee payment is not considered to fully mitigate this impact, because the fee amount to be paid does not equal the full fair-share per-unit fee for multi-family residential projects, which was determined to be $14,251 per multi-family unit in the City's Public Facilities Fee Study. Consequently, Alternative 4, like the Project, would also result in significant and unavoidable park and recreation impacts, but Alternative 4 would reduce direct population by approximately 50 percent thus reducing the amount of people utilizing City parks.

Population and Housing

The Project is not anticipated to induce substantial population growth in an area directly or indirectly. Alternative 4 would be a smaller project in terms of density and residents as compared to the Project, and would therefore result in similar less than significant impacts in regards to inducing substantial population growth in an area. All of the residents anticipated to occupy the Project site after development of the Project are within the population and household projections for the City of Glendale. Therefore, under this alternative which is smaller and less dense than the Project, the residents to occupy the Project site would also be within the population and household growth projections for the City of Glendale.

Traffic

The Project would generate 1,350 ADT, 67 AM peak-hour trips, and 88 PM peak-hour trips. In the City of Glendale, an impact is considered to be significant for signalized intersections if the project-related increase in the volume to capacity (V/C) exceeds 0.02 at an intersection operating at Level of Service (LOS) D or worse. The Project was determined to result in a significant and unavoidable impact at the intersection of San Fernando Road and West Los Feliz Road during the PM peak hours due to an increase in the V/C of 0.023. Alternative 4 would generate 675 ADT, 34 AM peak-hour trips, and 44 PM peak-hour

trips. Alternative 4 during the PM peak hour at the intersection of San Fernando Road and West Los Feliz Road would result in an increase in the V/C of 0.012. This alternative would reduce the V/C ratio to below 0.02 and would reduce the impact at this intersection to less than significant.

Public Utilities

Water

As with the Project, Alternative 4 would result in an increase in water demand. Alternative 4 would result in a demand for water of 19.6 acre-feet per year compared to the Project demand of 39.3 acre-feet per year. The provision of water as a result of the Project implementation would be within the projections of the Glendale Water and Power (GWP). Alternative 4, which would demand less water than the Project, would also be within the established GWP projections. Water demand impacts under both Alternative 4 and the Project would be less than significant. Given that neither the Project nor Alternative 4 would result in a significant impact, impacts associated with Alternative 4 would not be substantially less than the Project.

Sewer

Alternative 4, like the Project, would result in an increase in sewage generation. Alternative 3 would result in an increase of 12,112 gallons of sewage per day while the Project would result in an increase of 24,224 gallons of sewage per day. There is adequate treatment capacity at the Hyperion Treatment Plant to accommodate either Alternative 4 or the Project. In addition, sewer lines in the vicinity of the Project would be upgraded as part of the City's Tyburn Wastewater Capacity Improvement Project. However, the City imposes a sewer capacity increase fee on new developments that lead to an increase in the volume of wastewater discharged to the collection system. The alternative's sewage increase to the lines in the Tyburn Flume would be mitigated through payment of the sewer capacity increase fee, as required by the Project, and Alternative 4 impacts would be reduced to a less than significant level. Given that neither the Project nor Alternative 4 would result in a significant impact, impacts associated with Alternative 4 would not be substantially less than the Project.

Solid Waste

Alternative 4, like the Project, would result in an increase in the demand for solid waste services. Alternative 4 would generate an increase of 82.2 tons of solid waste per year compared to the Project increase of 164.3 tons of solid waste per year. There is adequate landfill capacity at the Scholl Canyon Landfill to accommodate either Alternative 4 or the Project. Therefore, impacts under both Alternative 4 and the Project would be less than significant and impacts associated with Alternative 4 would not be substantially less than the Project. Both alternatives would contribute to cumulative significant and unavoidable solid waste impacts due to County landfill capacity.

Environmentally Superior Alternative

State *CEQA Guidelines* Section 15126.6(e)(2) requires an EIR to identify an environmentally superior alternative among those evaluated in an EIR. Of the alternatives considered in this section, the No Project/No Development Alternative is environmentally superior to the other alternatives, because this alternative would avoid the significant and unavoidable impacts identified for the Project.

According to the State *CEQA Guidelines,* if the No Project/No Development Alternative is identified as the environmentally superior alternative, the EIR shall also identify an environmentally superior alternative among the other alternatives. Of the other alternatives considered, Alternative 4 – 50 Percent Reduced Density would be considered environmentally superior, as it would result in the greatest incremental reduction of the overall level of impact when compared to the Project due to the reduction in intensity on the Project site. However, the only significant and unavoidable impact this alternative would eliminate would be traffic impacts to the intersection of San Fernando Road and West Los Feliz Road. Overall, the significant and unavoidable short-term noise impact during construction; long-term on-site noise impact due to vehicle and railroad operations; long-term impact due to the loss of on-street parking spaces; long-term and cumulative impact to recreation facilities, and cumulative impacts to fire, police, and solid waste would not be eliminated by this alternative. In addition, the development density and resulting revenue due to the size of the alternative may not be sufficient to offset the cost of the land and may not be economically feasible for the applicant for this reason.

6.0 EFFECTS FOUND NOT TO BE SIGNIFICANT

INTRODUCTION

Section 15128 of the California Environmental Quality Act (CEQA) Guidelines requires an EIR to briefly describe any possible significant effects that were determined not to be significant and were, therefore, not discussed in detail in the EIR. The items listed below were not found to be significant. Any items not addressed in this section were addressed in **Section 4.0, Environmental Impact Analysis**, of this EIR.

AESTHETICS

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

The Project site is developed with building foundations and associated parking and does not contain any natural scenic resources, such as native trees or rock outcroppings. In addition, the Project site is not located within the view corridor of any state scenic highway, as there are no state-designated scenic highways within the City of Glendale.[1] Therefore, the proposed Project would not significantly damage scenic resources within a state scenic highway, and no impact would result.

AGRICULTURE AND FORESTRY RESOURCES

- **Would the project convert Prime Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?**

The Project site and surrounding area are characterized by features typical of the urban landscape and include industrial, commercial, and residential uses. No Farmland, agricultural land, or related operations are found in the area or on the Project site. Implementation of the Project would not involve changes that could result in conversion of Farmland to non-agricultural uses because there are no agricultural uses or Farmland in proximity to the Project site. Therefore, there would be no conversion of Prime Farmland, Unique Farmland, or Farmlands of Statewide Importance to non-agricultural use. No impact to agricultural resources would result.

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

The Project site and surrounding area are currently zoned for urban development. Specifically, the Project site is currently zoned Industrial/Commercial-Residential Mixed Use (IMU-R), which is intended

1 California Department of Transportation. Officially Designated State Scenic Highways. January 2013. http://www.dot.ca.gov/hq/LandArch/scenic/cahisys.htm.

for urban land uses. Therefore, no conflict with zoning for agricultural uses or a Williamson Act contract would occur and no impact to agricultural resources would result.

- **Would the project conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code section 12220(g)), timberland (as defined by Public Resources Code section 4526), or timberland zoned Timberland Production (as defined by Government Code section 51104(g))?**

The Project site and surrounding area are currently zoned for urban development. Specifically, the Project site is currently zoned Industrial/Commercial-Residential Mixed Use (IMU-R), which is intended for urban land uses. Therefore, no conflict with zoning for forest land, timberland, or timberland zoned Timberland Production would occur and no impact to forestry resources would result.

- **Would the project result in the loss of forest land or conversion of forest land to non-forest use?**

The Project site contains the foundations of former buildings and a surface parking lot. As such, the Project would not result in the loss of forest land or would not result in the conversion of forest land to non-forest use. No impacts would occur.

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

There is no farmland or forest land in the vicinity of the Project site, as the area is highly urbanized and developed with commercial uses. No farmland or forest land would be converted to non-agricultural or non-forest uses under the Project. No impact would occur.

AIR QUALITY

- **Would the project create objectionable odors affecting a substantial number of people?**

During Project construction, certain pieces of construction equipment could emit odors associated with exhaust. However, odors emitted from certain pieces of construction equipment would dissipate quickly and be short term in duration. Odors resulting from spray coating applications of paint and related materials during construction would be regulated by SCAQMD Rule 481. This rule imposes equipment and operational restrictions during construction for all spray painting and spray coating operations. Compliance with SCAQMD rules and permit requirements would ensure that no objectionable odors are created during construction. Therefore, impacts from odors during construction would be less than significant.

The Project would develop additional urban uses on the Project site, similar to uses already existing in the surrounding area, and it does not include uses that would generate significant objectionable odors. Operation of the Project would involve the disposal of refuse. This refuse would be disposed of in outdoor trash receptacles and could generate occasional odors pending regular collection and ultimate disposal into a sanitary landfill. However, Project-generated refuse would be disposed into appropriate garbage collection containers, which would be covered and enclosed as required by the City of Glendale. Additionally, garbage collection containers would be emptied on a regular basis, in compliance with City of Glendale regulations for the collection of solid waste. As a result, impacts from odors would remain less than significant.

BIOLOGICAL RESOURCES

- **Would the project have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?**

The majority of the local area has been developed or landscaped and supports largely non-native plant communities and species. Therefore, only a limited number of plant species that flourish in urban environments, none of which are considered Rare or Endangered, can be found on the Project site. Suitable habitat for sensitive mammal, reptile, amphibian, or fish species does not exist on the Project site or within the surrounding area. No impact would occur.

- **Would the project have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, and regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?**

The Project site and the surrounding area are completely developed and disturbed. No riparian habitat or sensitive natural community is located in the surrounding area or on the Project site. Therefore, no impact would occur.

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

The Project site is neither in proximity to, nor does it contain, wetland habitat or a blue-line stream. Therefore, Project implementation would not have a substantial adverse effect on federally protected wetlands, as defined by Section 404 of the Clean Water Act (CWA), through direct removal, filling, hydrological interruption, or other means. No impact would occur.

- **Would the project interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?**

The local area consists of established, highly urbanized, and developed properties. The Project site and the immediate area are almost entirely paved or otherwise developed and do not contain native resident or migratory species or native nursery sites. In addition, there are no wildlife migration corridors in the Project area. No impact would occur.

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

The Glendale Municipal Code, Chapter 12.44 Indigenous Trees, contains guidelines for the protection and removal of indigenous trees. These trees are defined as any Valley oak, California live oak, Scrub Oak, Mesa Oak, California bay, and California sycamore, which measure 6 inches or more in diameter breast height (DBH). No indigenous trees are located on the Project site and implementation of the Project would not conflict with any local policies or ordinances protecting biological resources. Thus, no impact would occur.

- **Would the project conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?**

The Project site and the surrounding area have been developed and heavily affected by past activities. No adopted Habitat Conservation Plan or Natural Conservation Plan exists for the Project site or immediate area. Consequently, implementation of the Project would not conflict with the provisions of any adopted conservation plan. Thus, no impact would occur.

CULTURAL RESOURCES

- **Would the project cause a substantial adverse change in the significance of a historical resource as defined in State CEQA Guidelines Section 15064.5?**

A historic resources survey of the San Fernando Road Redevelopment Area, which includes the Project site, was prepared in November 1996. The survey identified properties eligible for listing on the National Register as well as other properties constructed before 1945. The survey did not identify any structure on the property as a "historical resource" as defined by CEQA.[2] Therefore, no impact would occur.

2 City of Glendale Redevelopment Agency, Initial Study No. 2004-43, (2005).

- **Would the project cause a substantial adverse change in the significance of an archaeological resource pursuant to State CEQA Guidelines Section 15064.5?**

Prehistoric and historic archaeological sites are not known to exist within the local area. In addition, the Project site has already been subject to extensive disruption and contains fill materials. Any archaeological resources which may have existed at one time on or beneath the site have likely been disturbed. Nonetheless, construction activities associated with Project implementation would have the potential to unearth undocumented resources and result in a significant impact. In the event that archaeological resources are unearthed during Project subsurface activities, all earth-disturbing work within a 100-meter radius (328 feet) must be temporarily suspended or redirected until an archaeologist has evaluated the nature and significance of the find. After the find has been appropriately mitigated, work in the area may resume. With implementation of this standard requirement, which is incorporated as a Project design feature, no impact would occur.

- **Would the project directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?**

Plant and animal fossils are typically found within sedimentary rock deposits. Most of the City of Glendale consists of igneous and metamorphic rock, and the local area is not known to contain paleontological resources. In addition, the Project site has already been subject to extensive disruption and development. Any superficial paleontological resources which may have existed at one time on the Project site have likely been previously unearthed by past development activities. Nonetheless, there is a possibility that paleontological resources may exist at deep levels and could be unearthed with implementation of the Project. In the event that paleontological resources are unearthed during Project subsurface activities, all earth-disturbing work within a 100-meter radius (328 feet) must be temporarily suspended or redirected until a paleontologist has evaluated the nature and significance of the find. After the find has been appropriately mitigated, work in the area may resume. With implementation of this standard requirement, which is incorporated as a Project design feature, no impact would occur.

- **Would the project disturb any human remains, including those interred outside of formal cemeteries?**

The Project site and surrounding area are characterized by features typical of the urban landscape and include commercial, industrial, and residential uses. No known burial sites exist within the Project area or surrounding area. Nonetheless, if human remains are encountered during excavation and grading activities, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the remains are determined to be of Native American descent, the

coroner has 24 hours to notify the Native American Heritage Commission (NAHC). The NAHC will then contact the most likely descendant of the deceased Native American, who will then serve as a consultant on how to proceed with the remains (i.e., avoid removal or rebury). With implementation of this standard requirement, which is incorporated as a Project design feature, no impact would occur.

GEOLOGY AND SOILS

- **Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault?**

The Project site is not located within an established Alquist-Priolo Earthquake Fault Zone or designated Fault-Rupture Hazard Zone for surface fault rupture hazards.[3] While the Hollywood Fault is the closest active fault,[4] the nearest Fault-Rupture Hazard Zone for active faults with evidence of surface rupture is for the Raymond Fault, which is located approximately 1 mile southeast of the Project site. Based on the available geologic data, active or potentially active faults with the potential for surface fault rupture are not known to be located directly beneath or projecting toward the Project site.[5] Therefore, the potential for surface rupture as a result of fault plane displacement during the design life of the Project is less than significant.

- **Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving strong seismic ground shaking?**

The Project site could be subject to strong ground shaking in the event of an earthquake originating along one of the faults listed as active or potentially active in the Southern California area. This hazard exists throughout Southern California and could pose a risk to public safety and property by exposing people, property, or infrastructure to potentially adverse effects, including strong seismic ground shaking. Compliance with applicable building codes including the International Building Code (IBC) and California Building Code (CBC) and implementation of the recommendations presented in the soils engineering report prepared for the Project site[6] would minimize structural damage to buildings and ensure safety in the event of a moderate or major earthquake. Therefore, impacts related to strong seismic ground shaking would be less than significant.

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3 City of Glendale, General Plan Safety Element, 2003, Plate P-1.

4 The inferred trace of the Hollywood Fault is located approximately 300 feet south of the Project site.

5 GeoSystems, Inc., Preliminary Soils Engineering Investigation for Proposed Four to Six-Story Mixed-Use Commercial/Residential Building with Three-Level Subterranean Garage, 435 Los Feliz Road, Glendale, California (December 2004), pp.6.

6 GeoSystems, Inc. December 2004.

- **Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving seismic-related ground failure, including liquefaction?**

Liquefaction is a seismic phenomenon in which loose, saturated, fine-grained granular soils behave similarly to a fluid when subjected to high-intensity ground shaking. Liquefaction occurs as a result of three general conditions: (1) shallow groundwater; (2) low-density, fine, clean sandy soils; and (3) high-intensity ground motion. Studies indicate that saturated, loose and medium dense, near-surface cohesionless soils exhibit the highest liquefaction potential, while dry, dense, cohesionless soils and cohesive soils exhibit low to negligible liquefaction potential.

The Project site is not located within a mapped liquefaction hazard zone.[7] The soils that underlie the Project site (sandy silt and silty medium to coarse sand with gravel) are classified as moderately dense to dense and not considered prone to liquefaction. Furthermore, the groundwater level exceeds a depth of 55 feet below the surface and, thus, is not considered shallow.[8] Due to the deep groundwater level and the type of soil underlying the Project site, the potential for liquefaction is very low. Therefore, impacts related to liquefaction would be less than significant.

- **Would the project expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving landslides?**

The topography of the Project site and its immediate built environment is relatively flat and, thus, devoid of any distinctive landforms. There are neither known landslides near the Project site nor is the Project site in the path of any known or potential landslides. Therefore, impacts related to landslides would be less than significant.

- **Would the project result in substantial soil erosion or the loss of topsoil?**

Construction activity associated with Project development may result in wind and water driven erosion of soils due to grading activities if soil is stockpiled or exposed during construction. However, this impact is considered short-term in nature since the site would be covered with pavement and landscaping upon completion of construction activity. Further, as part of the Project, the applicant would be required to adhere to conditions under the National Pollutant Discharge Elimination System (NPDES) Permit set forth by the Regional Water Quality Control Board (RWQCB), and prepare and submit a Storm Water Pollution Prevention Plan (SWPPP) to be administered throughout Project construction. The SWPPP would incorporate Best Management Practices (BMPs) to ensure that potential water quality impacts from water driven erosion during construction would be reduced to less than significant. In addition, the

7 GeoSystems, Inc. December 2004. pp. 7.

8 GeoSystems, Inc. December 2004. pp. 4.

applicant would be required to adhere to SCAQMD Rule 403—Fugitive Dust, which would further reduce the impact related to soil erosion to less than significant.

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

The relatively flat topography of the Project site precludes both stability problems and the potential for lurching, which is earth movement at right angles to a cliff or steep slope during ground shaking. As previously discussed, the potential for hazards such as landslides and liquefaction is considered low. Liquefaction may also cause lateral spreading. For lateral spreading to occur, the liquefiable zone must be continuous, unconstrained laterally, and free to move along gently sloping ground toward an unconfined area. However, if lateral containment is present for those zones, then no significant risk of lateral spreading will be present. Since the liquefaction potential at the Project site is low, earthquake-induced lateral spreading is not considered to be a significant seismic hazard at the site.

Ground surface subsidence generally results from the extraction of fluids or gas from the subsurface that can result in a gradual lowering of the ground level. No regional subsidence as a result of groundwater pumping has been reported in Glendale area.[9] Therefore, the potential for ground collapse and other adverse effects due to subsidence to occur on the Project site is considered low.

In order to minimize damage due to geologic hazards, Project design and construction would comply with applicable building codes including the IBC and CBC, and incorporate the recommendations presented in the soils engineering report prepared for the Project site. Therefore, impacts related to exposure to hazards including landslides, lateral spreading, subsidence, liquefaction and collapse would be less than significant.

- **Would the project be located on expansive soil, as defined in Table 18-1-B of the California Building Code (2001), creating substantial risks to life or property?**

The soils underlying the Project site and surrounding area are considered to have a low expansion potential.[10] Therefore, impacts related to expansive soil would be less than significant.

9 Earth Consultants International, Technical Background Report to the 2003 Safety Element (July 2003), 2-20.

10 GeoSystems, Inc. December 2004. pp.12.

- **Would the project have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?**

Septic tanks would not be used in the Project. The Project would connect to and use the existing sewage conveyance system. Therefore, no impact would occur.

HAZARDS AND HAZARDOUS MATERIALS

- **Would the project create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?**

The Project involves the development of a residential project. Associated uses do not generally involve the routine use, transport, or disposal of significant amounts of hazardous materials; however, on-site support service, such as janitorial services, may involve the use of small amounts of hazardous materials. These materials would be stored on site in small quantities. A variety of state and federal laws govern the generation, treatment, and disposal of hazardous wastes. The Glendale Fire Department and Los Angeles County have the authority to inspect on-site uses and to enforce state and federal laws governing the storage, use, transport, and disposal of hazardous materials and wastes. In addition, Los Angeles County requires that an annual inventory of hazardous materials in use on site, as well as a business emergency plan, be submitted for an annual review, as required by Emergency Planning and Right-to-Know Act (SARA Title III) and Chapter 6.95 of the California Health and Safety Code. These requirements would be mandated according to state and federal law and are incorporated as Project design features. As such, potential impacts are considered to be less than significant.

- **Would the project emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?**

Cerritos Elementary School is located 0.4 mile from the Project site but the Project would not emit hazardous emissions or handle hazardous materials. Therefore, no impact would occur.

- **For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project site?**

The Project site is neither located within an airport land use plan nor is it located within 2 miles of a public airport or public use airport. The closest public airport or public use airport to the Project site is the Burbank-Glendale-Pasadena Airport located approximately 6 miles to the northwest. Therefore, no impact would occur.

- **For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project site?**

The Project site is not within the vicinity of a private airstrip. Therefore, no impact would occur.

- **Would the project impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?**

According to the City of Glendale General Plan Safety Element, San Fernando Road, which is one block east of the Project, is a County evacuation route, and Brand Boulevard, which is four blocks east of the Project site, is a City disaster response route. These routes are the main thoroughfares to be used by emergency response services during an emergency and, if the situation warrants, the evacuation of an area. Implementation of the Project would neither result in a reduction of the number of lanes along these roadways in the Project area nor result in the placement of an impediment to the flow of traffic such as medians. In the event of an emergency, all lanes would be opened to allow for traffic flow to move in one direction and traffic would be controlled by the appropriate agencies, such as the City of Glendale Police Department. During Project construction, the construction contractor shall notify the City of Glendale Police and Fire Departments of any construction activities (such as movement of equipment and temporary lane closures) that could impede movement along San Fernando Road or Brand Boulevard to allow for these first emergency response teams to re-route traffic to an alternative route, if needed. Implementation of this requirement will be incorporated as a Project design feature. Therefore, no impact would occur.

- **Would the project expose people or structures to a significant risk of loss, injury, or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?**

The Project site and surrounding area are characterized by features typical of the urban landscape. The Project site is not contained within a fire hazard area as identified in the City of Glendale General Plan Safety Element. Additionally, landscaping plans do not include plantings of flammable brush, grass, or trees on or adjacent to the site. Consequently, implementation of the Project would not result in the exposure of people or structures to hazards associated with wildland fires, and no impact would occur.

HYDROLOGY AND WATER QUALITY

- **Would the project violate any water quality standards or waste discharge requirements?**
- **Would the project otherwise substantially degrade water quality?**

Grading activities associated with construction will temporarily increase the amount of suspended solids from surface flows derived from the Project site during a concurrent storm event due to sheet erosion of exposed soil. In addition, during excavation and grading, contaminated soils may be exposed and/or disturbed; this could impact surface water quality through contact during storm events. Contamination material that may come in contact with surface water could include lead, polychlorinated biphenyls, and petroleum hydrocarbons. The applicant is required to satisfy all applicable requirements of the NPDES Program and Chapter 13.29, Storm Water and Urban Runoff Pollution Prevention Control and Standard Urban Storm Water Mitigation Plan (SUSMP) of the Glendale Municipal Code, at the time of Project construction to the satisfaction of the City of Glendale Public Works Department. These requirements include preparation of a SWPPP containing structural treatment and source control measures appropriate and applicable to the Project. The SWPPP will incorporate BMPs by requiring controls of pollutant discharges that utilize best available technology economically achievable (BAT) and best conventional pollutant control technology (BCT) to reduce pollutants. Examples of BAT/BCT that may be implemented during site grading and construction could include straw hay bales, straw bale inlet filters, filter barriers, and silt fences. Preparation of the SWPPP is incorporated as a Project design feature. Implementation of BMPs would ensure that Los Angeles RWQCB water quality standards are met during Project construction activities. Therefore, no impact during construction would occur.

Following buildout of the Project site, the Project would increase the intensity of activities on the site and would likely result in an increase in pollutant sources. Common concerns include the potential deposition of pollutants generated by motor vehicle use on Project roadways and parking areas, and the maintenance and operation of landscaped areas. Stormwater quality is generally affected by the length of time since the last rainfall, rainfall intensity, urban uses of the area, and quantity of transported sediment. Typical urban water quality pollutants usually result from motor vehicle operations, oil and grease residues, fertilizer/pesticide uses, human/animal littering, careless material storage and handling, and poor property management. The majority of pollutant loads are usually washed away during the first flush of the storm occurring after the dry-season period.

These pollutants have the potential to degrade water quality. However, the quality of runoff from the Project site would be subject to Section 402(p) of the CWA under the NPDES program. Under the NPDES Municipal Permit No. CAS004001, development projects have responsibilities to ensure that their pollutant loads do not exceed total maximum daily loads for downstream receiving waters.

Development projects are required by the Glendale Municipal Code to submit and then implement a SUSMP containing design features and BMPs appropriate and applicable to the Project. The purpose of the SUSMP is to reduce post-construction pollutants in stormwater discharges. One of the requirements of the SUSMP is that the Project retain on-site water runoff from the first 0.75 inches of a 24-hour rain event. Prior to issuance of any grading or building permits, the City must approve the SUSMP. Preparation of the SUSMP is incorporated as a Project design feature. Potential water quality impacts of the Project would be less than significant through the preparation of the SUSMP and implementation of the BMPs as specified in the NPDES Permit. Therefore, impacts related to water quality and stormwater discharge would be less than significant.

- **Would the project substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (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)?**

Currently, the City utilizes water from Glendale Water and Power (GWP), which relies on some local groundwater supplies. Consequently, implementation of the Project would result in additional development that could indirectly require an increased use of groundwater through the provision of potable water by GWP. Groundwater to be consumed within Glendale would be utilized according to current plans and projections for GWP groundwater supplies. As a result, Project implementation would not substantially deplete groundwater supplies. In addition, the groundwater basins are governed by City of Los Angeles v. City of San Fernando, et al., and the Basin Watermaster is vested with the responsibility to monitor and account for any groundwater extraction within the vicinity of the Project with sustainability as a goal. Further, the Project would not extract groundwater on an operational basis.

The Project site is currently developed with 100 percent impervious surfaces and, therefore, does not serve as a primary area of groundwater recharge within the San Fernando or Verdugo Basins, which are both located within the City of Glendale. In addition, impervious surfaces would remain with implementation of the Project. Consequently, impacts related to groundwater extraction and recharge is considered less than significant.

- **Would the project substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of stream or river, in a manner which would result in substantial erosion or siltation on or off site?**

- **Would the project 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?**

- **Would the project create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?**

The Project site is served by an existing storm water collection and conveyance system. Since the Project site is currently developed with 100 percent impervious surfaces, the quantity of runoff would not change substantially with Project development. As part of the SUSMP, the Project would be required to retain the first 0.75 inches of rainfall during a 24-hour rain event. All subsequent runoff would continue to be conveyed via streets and gutters to storm drain locations around the Project site. As a result, the Project would not require any substantial changes to the existing drainage pattern of the site or the area, nor would it affect the capacity of the existing storm drain system. Furthermore, as discussed above, the SWPPP would incorporate BMPs by requiring controls of pollutant discharges that utilize BAT and BCT to reduce pollutants. In addition, in accordance with Chapter 13.42, Storm Water and Urban Runoff Pollution Prevention Control and Standard Urban Storm Water Mitigation Plan of the Glendale Municipal Code, a SUSMP containing design features and BMPs to reduce post-construction pollutants in storm water discharges would be submitted and implemented as part of the Project. Consequently, impacts are considered to be less than significant.

- **Would the project 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?**

- **Would the project place within a 100-year flood hazard area structures which would impede or redirect flood flows?**

According to Federal Emergency Management Agency flood hazard maps, the Project site is not located within a 100-year flood zone; therefore, the Project would not place housing within a 100-year flood hazard area or result in structures being constructed that would impede or redirect flood flows.[11] The Project would not be subject to flooding, and, therefore, no impact would occur.

11 City of Glendale, General Plan Safety Element, (2003), p. 3-7.

- **Would the project 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?**

There are seven dams located within the City of Glendale.[12] The nearest dam to the Project site is the Diederich Reservoir, located approximately 3 miles north of the Project site. According to the City of Glendale General Plan Safety Element, the Project is not located within the inundation zone of this dam or other dams located within the City or elsewhere.[13] Accordingly, the risk associated with flooding resulting from dam failure is considered less than significant.

- **Would the project be subject to inundation by seiche, tsunami, or mudflow?**

The Project site is not within a coastal area. Therefore, tsunamis (seismic sea waves) are not considered a significant hazard at the site. In addition, the site is not located downslope of any large bodies of water that could adversely affect the site in the event of earthquake-induced seiches, which are wave oscillations in an enclosed or semi-enclosed body of water. Therefore, no impact related to inundation by seiche, tsunami, or mudflow would result from implementation of the Project.

LAND USE AND PLANNING

- **Would the project conflict with any applicable habitat conservation plan or natural community conservation plan?**

The Project site and surrounding area have been developed and heavily affected by past activities. The Project site and immediate area are not located in an adopted habitat conservation plan or natural community conservation plan area. Consequently, implementation of the Project would not conflict with the provisions of any adopted conservation plan, and no impact would occur.

MINERAL RESOURCES

- **Would the project result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?**

- **Would the project result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?**

The Project site and surrounding area are characterized by features typical of the urban landscape and include commercial, industrial, and residential uses. The State Geologist has mapped the Glendale area for aggregate resources. According to Map 4-28 of the City of Glendale General Plan Open Space and

12 City of Glendale, 2003. p. 3-7.

13 City of Glendale, 2003. Plate P-2.

Conservation Element, the Project site is located within a Mineral Resource Zone (MRZ)-1. MRZ-1 is defined as an area where adequate information indicates that no significant mineral deposits are present or where it is judged that little likelihood exists for their presence. As a result, no impact would occur.

NOISE

- **For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project expose people residing or working in the project site to excessive noise levels?**

The Project site is neither located within an airport land use plan nor is it located within 2 miles of a public airport or public use airport. The closest public airport or public use airport to the Project site is the Burbank-Glendale-Pasadena Airport located about 6 miles to the northwest. Consequently, no impacts associated with excessive airport noise levels would result.

- **For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project site to excessive noise levels?**

The Project site is not within the vicinity of a private airstrip. Consequently, no impacts associated with noise would result for employees or patrons of the Project.

POPULATION AND HOUSING

- **Would the project displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?**

- **Would the project displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?**

No residential dwelling units currently exist on the Project site. Therefore, no housing or residential populations would be displaced by development of the Project, and the construction of replacement housing elsewhere would not be necessary. No impact would occur.

PUBLIC SERVICES

- **Would the project result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for other public facilities?**

Implementation of the Project would increase the demand for library services due to the introduction of 525 residents associated with the new households anticipated by the Project. The Community Facilities Element of the General Plan indicates that cities the size of Glendale should generally maintain a volume-to-resident ratio of 1.75 books per resident. Based on the current population estimate for the City of Glendale of 192,654 residents, the City presently requires about 337,145 volumes to meet this standard. With a total collection of approximately 713,000 volumes, the City's library facilities presently exceed this standard. In 2007, the City adopted an ordinance and resolution related to the establishment of development impact fees on new development in order to provide new park and library facilities (Ordinance No. 5575 and Resolution No. 07-164). The fees apply to residential projects within the City, and are supported by the City's Public Facilities Fee Study (June 2007) and related staff reports (available for public review and inspection at the City's Planning Department, and incorporated by this reference). Payment of this impact fee is imposed as a condition of the issuance of a permit for a development project. If the proposed Project is approved, this development impact fee will be imposed as a condition of approval. The addition of approximately 525 residents to the current estimated population of 192,654 residents would result in a volume-to-resident ratio of 3.7 books per resident, which exceeds the standard of 1.75 books per resident. Therefore, the impact of the Project on library services is considered less than significant.

TRAFFIC

- **Would the project result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?**

The Project site is not located in the vicinity of an airport. Consequently, the Project would not result in a change in air traffic patterns that would result in safety risks. No impact would occur.

UTILITIES AND SERVICE SYSTEMS

- **Would the project exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?**

Under Section 401 of the CWA, the RWQCB issues NPDES permits to regulate waste discharged to "waters of the nation," which includes reservoirs, lakes, and their tributary waters. Waste discharges

include discharges of storm water and construction Project discharges. A construction project resulting in the disturbance of more than 1 acre requires a NPDES Permit. Construction projects are also required to prepare a SWPPP. In addition, the Project would be required to submit an SUSMP to mitigate urban storm water runoff. Prior to the issuance of building permits, the Project applicant would be required to satisfy the requirements related to the payment of fees and/or the provisions of adequate wastewater facilities. The Project would comply with the waste discharge prohibitions and water quality objectives established by the Los Angeles RWCQB. Therefore, no impact would occur.

- **Would the project require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

The Project site is currently improved with storm drainage facilities which collect storm runoff generated on the Project site. Since the Project site is currently developed with 100 percent impervious surfaces, the quantity of runoff would not change substantially with Project development. The Project would retain the first 0.75 inches of a 24-hour rainfall event on site and then would convey the remaining on-site runoff to the existing drainage system and therefore new drainage facilities are not anticipated to be needed. As a result, the Project would not require any substantial changes to the existing drainage pattern of the site or the area, nor would it affect the capacity of the existing storm drain system. Furthermore, as discussed above, the SWPPP would incorporate BMPs by requiring controls of pollutant discharges that utilize BAT and BCT to reduce pollutants. In addition, in accordance with Chapter 13.42, Storm Water and Urban Runoff Pollution Prevention Control and Standard Urban Storm Water Mitigation Plan of the Glendale Municipal Code, a SUSMP containing design features and BMPs to reduce post-construction pollutants in storm water discharges would be submitted and implemented. Consequently, impacts are considered to be less than significant.

- **Would the project require or result in the construction of new water treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?**

No new sources of water supply, such as groundwater, are required to meet the Project's water demand. Water serving the Project would be treated by existing extraction and treatment facilities, and no new facilities, or expansion of existing facilities, would be required. Therefore, no impact would occur.

7.0 OTHER CEQA SECTIONS

This section considers and discusses other topics identified in the State *CEQA Guidelines* including the potential for the Project to induce growth, and the identification of irreversible impacts.

7.1 GROWTH INDUCING IMPACTS

Section 15126.2(d) of the California Environmental Quality Act (CEQA) Guidelines, as amended, requires the discussion of the ways in which a project could directly or indirectly foster economic growth, population growth, or the construction of additional housing in the surrounding environment. This discussion should also include projects that would remove obstacles to population growth. It should include the characteristics of a project, which may encourage and/or facilitate other activities that could significantly affect the environment, either individually or cumulatively. CEQA emphasizes that growth in an area should not be considered beneficial, detrimental, or of little significance. The purpose of this section is to evaluate the growth-inducing potential and impact of this Project.

In general terms, a project may foster spatial, economic or population growth in a geographic area if it meets any one of the criteria that are identified below:

- Removal of an impediment to growth (e.g., the establishment of an essential public service or the provision of new access to an area).
- Economic expansion or growth (e.g., construction of additional housing, changes in revenue base, employment expansion, etc.).
- Establishment of a precedent-setting action (e.g., an innovation, a change in zoning or general plan designation).
- Development or encroachment in an isolated or adjacent area of open space (being distinct from an "infill" type of project).

Should a project meet any one of these criteria, it can be considered growth inducing. An evaluation of this Project compared against these growth-inducing criteria is provided below.

Removal of an Impediment to Growth

Growth in an area may result from the removal of physical impediments or restrictions to growth, as well as the removal of planning impediments resulting from land use plans and policies. In this context, physical growth impediments may include nonexistent or inadequate access to an area or the lack of essential public services (e.g., water service), while planning impediments may include restrictive zoning and/or general plan designations.

The surrounding area contains established land uses and has supporting infrastructure. Construction of the proposed uses would require the modification and/or improvement of existing infrastructure in order to support the increased land use intensity associated with the Project. Such modifications and

improvements to infrastructure are discussed in further detail below. Given the urban nature of the site and surroundings, and the existence of established infrastructure, no growth-inducing impacts would result from Project development.

An established transportation network exists in the surrounding area that offers local and regional access to the Project site. Access to the residential parking on the Project site would be provided via one driveway, located along Fernando Court at the northwest corner of the site. In addition, the property frontages on Fernando Court and Gardena Avenue, respectively, would be dedicated as City right-of-way as part of the Project.

Sidewalks along the frontages of the Project site would be replaced to improve pedestrian access to the Project site. Pedestrian access is proposed via a sidewalk along West Los Feliz Road with an individual entrance to the main lobby located on the first floor near the intersection of West Los Feliz Road and Gardena Avenue. All improvements would be designed to serve the Project and would not induce growth within the area.

The water and energy (electricity and natural gas) infrastructure required to support the Project would be available to the Project site from surrounding streets. Existing water lines serving the Project site include a 4-inch and a 12-inch water main in Fernando Court, and a 6-to 8-inch water main in Gardena Avenue. No new water mains other than those required to serve the Project site would be constructed. As such, the development of on-site water infrastructure to serve the Project would not induce growth within the area.

Electricity and natural gas transmission infrastructure presently exists on, and in the vicinity of, the Project site. Development of the Project would necessitate the construction of an on-site distribution system to convey this energy to uses on the site. This system would be designed to accommodate the uses proposed within the Project, and would not extend beyond the requirements or boundary of the Project. The on-site service lines would be sized to meet the demands of the Project. No growth-inducing impacts, due to the extension of electrical or natural gas service lines, would occur with the development of the Project.

Concerning sewer infrastructure, an existing wastewater collection system serves the Project site and consists of 8-inch lines in West Los Feliz Road, Fernando Court and along the western Project boundary. City of Glendale policy requires upgrades to sewer lines serving new development as needed to accommodate increases in the volume of wastewater discharged to the collection system.

In summary, the design and construction of roadway, water, sewer, electrical, and natural gas infrastructure needed to accommodate the Project would not induce growth within undeveloped areas surrounding the Project area.

Economic Growth

The second criterion by which growth inducement can be measured involves economic considerations. In the short term, the Project would provide for short-term construction employment opportunities. It is anticipated that construction employees would commute from elsewhere in the region, rather than relocate to the City of Glendale for a temporary assignment.

Long-term growth, should it occur, would be primarily in the form of an economic response to the new residents that would occupy the site. The increase of 525 new residents associated with the Project may result in a slight corresponding increase in demand for City goods and services. However, given the relatively small size of the Project in relation to City population, the economic contribution of this Project alone would not be considered growth inducing.

Precedent-setting Action

Changes from a project that could be precedent setting include (among others) approval of parking exceptions, Conditional Use Permit (CUP), Subdivision, and Variances that could have implications for other properties or that could make it easier for other properties to develop.

The Project site is currently designated as "Mixed Use" on the general plan land use map and zoned as Industrial/Commercial-Residential Mixed Use (IMU-R) by the Municipal Code. The Mixed Use designation permits a mix of commercial and residential uses as well as exclusively commercial, industrial, or residential land uses. Pursuant to Glendale Municipal Code Section 30.42, approval of a separate CUP is required by the City Council for the provision to develop residential land uses within the zoning designation Industrial/Commercial-Residential Mixed Use (IMU-R). Therefore, the residential uses as proposed are permitted under the existing general plan and but not under the existing zoning designations. Strictly from the issuance of a CUP, the Project could be defined as precedent-setting and thus growth inducing.

Development can be considered growth inducing when it requires the extension of urban infrastructure into isolated localities, which are presently devoid of such facilities. The Project site is situated in an area that is surrounded to the north, east, south, and west by urban areas that contain established infrastructure. Land uses surrounding the Project site include manufacturing uses to the north, commercial uses, and a veterinary clinic to the east, commercial and retail uses to the south, and the

Union Pacific Railroad right-of-way to the west. Consequently, the Project would not induce growth under this criterion because it would not result in the urbanization of land in an isolated location.

It must be emphasized that the State *CEQA Guidelines* require an EIR to "discuss the ways" a project could be growth inducing and "discuss the characteristics of some projects that may encourage…activities that could significantly affect the environment." However, the State *CEQA Guidelines* do not require an EIR to predict or speculate where such growth would occur, in what form it would occur, or when it would occur. Attempting to determine the environmental impacts created by growth that might be induced by the Project is speculative because the size, type, and location of specific future projects that may be induced by this Project are unknown at the present time. Therefore, such impacts are too speculative to evaluate (see State *CEQA Guidelines* Section 15145). To the extent that specific projects are known (as discussed in **Section 4.0, Environmental Impact Analysis**, of this EIR), those projects have already been or would be subjected to their own environmental analysis. Additionally, due to the variables that must be considered when examining the mechanics of urban growth (e.g., market forces, demographic trends, etc.), it would be speculative to state conclusively that implementation of the Project alone would induce growth in the surrounding area. Further analysis of impacts associated with growth in the Glendale area, and corresponding cumulative impact assessment methodology, can be found in the cumulative analyses for each individual topic addressed in **Section 4.0**.

7.2 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES

Section 15126.2(c) of the State *CEQA Guidelines* states that use of nonrenewable resources during the initial and continued phases of a project may be irreversible if a large commitment of these resources makes their removal, indirect removal, or non-use thereafter unlikely. This section of the environmental impact report (EIR) evaluates whether the Project would result in the irretrievable commitment of resources, or would cause irreversible changes in the environment. Also, in accordance with Section 15126.2 of the State *CEQA Guidelines*, this section identifies any irreversible damage that could result from environmental accidents associated with the Project.

Irreversible Commitment of Resources

Implementation of the Project would include the development of a six-story residential building which would provide 228 apartment units and a five-story parking structure with 330 parking spaces, as well as on-site amenities such as fitness center, club room, mail room, roof top observation deck, resident lobby, resort style pool & spa located in the private community courtyard, community restroom, courtyard resident bar and grill and landscaped grounds. The construction and operation of the Project would contribute to the incremental depletion of resources, including renewable and non-renewable resources. Resources, such as lumber and other forest products, are generally considered renewable resources. Such resources would be replenished over the lifetime of the Project. For example, lumber supplies are increased as seedlings mature into trees. As such, the development of the Project would not result in the irreversible commitment of renewable resources. Nevertheless, there would be an incremental increase in the demand for these resources over the life of the Project.

Non-renewable resources, such as natural gas, petroleum products, asphalt, petrochemical construction materials, steel, copper, and other metals, and sand and gravel are considered to be commodities that are available in a finite supply. The processes that created these resources occur over a long period of time. Therefore, the replacement of these resources would not occur over the life of the Project. To varying degrees, the aforementioned materials are all readily available and some materials, such as asphalt or sand, and gravel, are abundant. Other commodities, such as metals, natural gas, and petroleum products, are also readily available, but they are finite in supply, given the length of time required by the natural process to create them.

The demand for all such resources is expected to increase regardless of whether or not the Project is developed. The State Department of Finance indicates that the population of Southern California will increase 62 percent over the 30-year period between 1990 and 2020. These increases in population would directly result in the need for more retail, commercial and residential facilities in order to provide

the needed services associated with this growth. If not consumed by this Project, these resources would likely be committed to other projects in the region intended to meet this anticipated growth. Furthermore, the investment of resources in the Project would be typical of the level of investment normally required for a residential use of this scale. Mitigation measures have been included in this EIR to reduce and minimize Project and cumulative impacts.

Irreversible Environmental Changes

Irreversible long-term environmental changes associated with the Project would include a change in the visual character of the site as a result of the conversion of the Project site to new residential use. Additional irreversible environmental changes would include the increase in local and regional vehicular traffic, and the resultant increase in air pollutants and noise emissions generated by this traffic, among other impacts. Design features have been incorporated into the development proposal and mitigation measures are proposed in this EIR that would minimize the effects of the environmental changes associated with the development of the Project to the maximum degree feasible. In addition, the Project site is an urban site already and the implementation of the Project would improve this location of the City. Even with this being the case, the Project would result in short-term noise impacts during construction; long-term on-site noise impacts due to vehicle and railroad operations; long-term off-site noise impacts due to increased vehicle trips; long-term impacts due to the loss of on-street parking spaces; long-term impacts to the intersection of San Fernando Road and West Los Feliz Road; long-term and cumulative impacts to recreation facilities; and cumulative impacts to fire, police, and solid waste.

Potential Environmental Damage from Accidents

The Project proposes no uniquely hazardous uses, and its operation would not be expected to cause environmental accidents that would affect other areas. The Project site is located within a seismically active region and would be exposed to ground shaking during a seismic event. Conformance with the regulatory provisions of the City of Glendale, the California Building Code (CBC), and all other applicable building codes pertaining to construction standards would minimize, to the extent feasible, damage and injuries in the event of such an occurrence. Because development of the Project would require the removal of all the existing building foundations and paved parking areas located on the Project site, these materials could cause health and safety problems to on-site construction workers and the community. Mitigation Measures 4.3-1 through 4.3-3 included in this EIR would be implemented as part of the Project. The inclusion of these features would reduce potential impacts to a less than significant level.

8.0 ORGANIZATIONS AND PERSONS CONSULTED

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