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Duarte Station Specific Plan Environmental Impact Report

City of Duarte

Metro

FINAL
ENVIRONMENTAL IMPACT REPORT

DUARTE STATION SPECIFIC PLAN

SCH NO. 2013041032

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1.0 EXECUTIVE SUMMARY

1.1 PROJECT LOCATION

Regionally, the project site is located in the City of Duarte. The City of Duarte is located in the north-central portion of the San Gabriel Valley, approximately 21 miles northeast of the City of Los Angeles in the County of Los Angeles. The City of Duarte is situated at the base of the San Gabriel Mountains and is bordered by the City of Irwindale to the south, the City of Monrovia to the west, the City of Bradbury and the Angeles National Forest to the north, and the City of Azusa to the east; refer to *Exhibit 3-1*, *Regional Vicinity*, in Section 3.0.

Locally, the project site is generally located at the northwest corner of Duarte Road and Highland Avenue. The project site is bounded by Evergreen Street and the Foothill Freeway (Interstate 210) to the north, Highland Avenue to the east, a single-family residential neighborhood to the west, and the Los Angeles County Metropolitan Transportation Authority (Metro)-owned railroad right-of-way (ROW) and Duarte Road to the south; refer to *Exhibit 3-2*, *Local Vicinity*, in Section 3.0.

1.2 PROJECT SUMMARY

DESCRIPTION OF PROJECT

The City-initiated Duarte Station Specific Plan (Specific Plan) is intended to establish the general type, parameters, and character of the development in order to develop an integrated TOD that is also compatible with the surrounding area. The Plan Area's proximity to freeways, major streets, and existing rail infrastructure makes the Duarte Station Specific Plan an ideal location for the integration of mixed uses and transit, along with facilitating economic development in Duarte.

MASTER LAND USE PLAN

The Master Land Use Plan provides flexibility for property owners to respond to market conditions and develop a mixed-use "transit village" that revitalizes the Plan Area through the provision of multiple land uses that complement one another. Land uses consist of residential, office, hotel, commercial/retail, and open space. This mixture of land uses results in the availability of a variety of goods, services, and entertainment for residents, employees, or visitors to the Plan Area. Refer to *Exhibit 3-4*, *Master Land Use Plan*, in Section 3.0.

Land Use Designations

Based upon the Master Land Use Plan, the Specific Plan is establishing the following land use designations (refer to *Table 1-1*, *Master Land Use Plan Designations and Acreages*):

- Mixed Use
- Station Plaza Mixed Use
- High Density Residential
- Recreation/Open Space

Table 1-1
Master Land Use Plan Designations and Acreages

Land Use Designation	Acreage
Mixed Use	12.06
Station Plaza Mixed Use	0.81
High Density Residential	2.55
Recreation/Open Space	0.80
Roads	2.86
TOTAL	**19.08**

DEVELOPMENT SCENARIO

For purposes of the environmental analysis, a development scenario that shows one potential implementation of the Master Land Use Plan has been identified; refer to *Exhibit 3-5*, *Development Scenario* in Section 3.0 and *Table 1-2*, *Development Scenario*. The development program is anticipated to be implemented on development parcels totaling 15.42 acres of developable land, with 2.86 acres of internal project roads and 0.80 acres of open space. The ultimate land use would be determined at the time of site plan submittal for a specific parcel, subject to the development standards and permitted uses outlined in the Specific Plan.

Table 1-2
Development Scenario

Land Use	Residential (DU)	Non-Residential (SF)	Non-Residential (Hotel Rooms)
Retail		12,000	
Office		400,000	
Hotel			250
High Density Residential	475[1]		
Open Space			
Roads			
TOTAL	**475[1]**	**412,000**	**250**
Note: A minimum of 178 units shall be provided on Parcels F and H, as shown on Exhibit 3-5.			

GROWTH OVER EXISTING CONDITIONS

As shown in the *Table 1-3*, *Growth Over Existing Conditions*, the anticipated growth in residential and non-residential uses over year 2013 existing conditions within the Plan Area is:

- Addition of 475 dwelling units
- Addition of 98,045 square feet of non-residential uses (office, retail, hotel)
- Addition of 250 hotel rooms

Table 1-3
Growth Over Existing Conditions

Land Use	Residential (DU)	Non-Residential (SF)	Non-Residential (Hotel Rooms)
Existing			
Warehouse/Industrial		313,955	
Total		***313,955***	
Proposed Specific Plan			
Retail		12,000	
Office		400,000	
Hotel			250
High Density Residential	475		
Total	***475***	***412,000***	***250***
Difference Between Existing and Proposed	**+475**	**+98,045**	**+250**

PERMITS AND APPROVALS

The City of Duarte is the Lead Agency for the project and has discretionary authority over the project which includes, but is not limited to, the following:

- Adoption of a Specific Plan/Zone Change
- Adoption of a General Plan Amendment – Text Changes to the Land Use Element relative to the Gold Line Station Area Development
- CEQA Documentation

1.3 PROJECT OBJECTIVES

The Duarte Station Specific Plan includes the following Goals and Objectives to guide the intent and future development within the Specific PM.

1. GOAL: A MIXTURE OF LAND USES

a. *Objective*: Develop a flexible mixed-use land use pattern that incorporates retail, office, hospitality, and residential opportunities that will effectively complement each other and provide maximum land use efficiency, while providing economic and social benefits to all users.

b. *Objective*: Program retail uses that are neighborhood- and transit-station serving.

2. GOAL: AN ECONOMICALLY FEASIBLE DEVELOPMENT

a. *Objective*: Provide flexible non-residential spaces that can be adjusted to respond to shifts in market demand and allow options throughout various economic cycles and scenarios.

b. *Objective*: Create a range of residential unit types that will be accessible to residents of all income levels.

c. *Objective*: Provide residential opportunities to assist the City of Duarte in meeting their Regional Housing Needs Allocation (RHNA) objectives.

d. *Objective*: Encourage the development of a hotel to create local jobs, support City of Hope lodging needs, provide community meeting space, and increase tax revenues within the community.

3. GOAL: TRADITIONAL PEDESTRIAN-ORIENTED STREET PATTERN

a. *Objective*: Create a "grid-like" block pattern that effectively provides for compact development with reduced road widths to provide connectivity throughout the site.

b. *Objective*: Give precedence to pedestrians while keeping streets narrow to foster multimodal transportation with bicycle, pedestrian, and transit access.

4. GOAL: SUPERIOR URBAN DESIGN

a. *Objective*: Allow for building types that will achieve desired density ranges to establish a critical mass of residents and employees to support the transit station, maximize transit ridership, and support retail spaces and local employment centers.

b. *Objective*: Minimize setbacks to allow buildings to frame and activate the street.

c. *Objective*: Use trees, shrubs and other landscape and hardscape materials along streets to provide shading, screening, and human scale.

d. *Objective*: Promote quality architectural design to establish a consistent contemporary design character that creates an identity in the Duarte Station Specific Plan area.

5. GOAL: OUTDOOR SPACES

a. *Objective*: Provide singular or multiple outdoor spaces, such as an urban green space or public plaza that provides a transition between the station and the surrounding transit village uses in order to provide a public gathering space.

b. *Objective*: Program outdoor space(s) to accommodate the needs of various user groups, such as residents, employees, commuters, and visitors.

6. GOAL: AWARENESS OF SURROUNDING DEVELOPMENT

a. *Objective*: Create a center that provides desired goods and services to surrounding residents, students, and employees within and surrounding the Duarte Station Specific Plan area.

b. *Objective*: Provide specific setbacks, height limitations, upper story step-backs, and landscape requirements to afford adjacent residences privacy and separation from larger buildings.

c. *Objective*: Consider the future needs of the City of Hope as part of land use planning.

7. GOAL: SUSTAINABLE DEVELOPMENT PRACTICES

a. *Objective*: Identify the level of development proposed within the Specific Plan area, and adhere to Levels of Sustainable Development Practices as prescribed in Chapter 19.52 of the City's Development Code.

b. *Objective*: Ensure that construction and demolition waste is disposed of in accordance with all City regulations and standards.

c. *Objective*: Consider building layout, siting, and building design to not preclude alternative energy production on-site.

d. *Objective*: Maximize energy efficiency through local and state standards, indoor environmental quality, energy-efficient lighting, building orientation, shading, and implementation of LEED principles and/or attaining LEED Certification.

e. *Objective*: Reduce heat island effect through site planning and selection of landscape and hardscape materials.

f. *Objective*: Incorporate water-efficient design features such as permeable surfaces, collection devices, biofiltration devices, green rooftops, cisterns, berms and swales, and/or green rooftops.

g. *Objective*: Include climate-adapted landscape within the Specific Plan area.

1.4 SUMMARY OF PROJECT ALTERNATIVES

The analysis focuses on alternatives capable of eliminating significant adverse environmental effects or reducing them to less than significant levels, even if these alternatives would impede, to some degree, the attainment of the proposed project objectives. The alternatives to the proposed project under consideration within this EIR consist of:

- Existing Zoning Alternative
- All Residential Alternative
- Reduced Density Alternative 1
- Reduced Density Alternative 2

A comparison of the proposed project with the alternatives is provided in *Table 1-4*, *Comparison of Proposed Project and Alternatives*.

Table 1-4
Comparison of Proposed Project and Alternatives

Land Use	Proposed Project Development Scenario	Alternative One: Existing Zoning Alternative	Alternative Two: All Residential Alternative	Alternative Three: Reduced Density Alternative 1	Alternative Four: Reduced Density Alternative 2
Retail (SF)	12,000			12,000	12,000
Office (SF)	400,000			295,000	160,000
Hotel (Rooms)	250			150	150
High Density Residential (DU)	475		600	240	150
Warehouse/Industrial (SF)		313,955			
TOTAL	**475 DU 412,000 SF 250 Rooms**	**313,955 SF**	**600 DU**	**240 DU 307,000 SF 150 Rooms**	**150 DU 172,000 SF 150 Rooms**
SF = Square Feet; DU = Dwelling Unit					

ALTERNATIVE ONE: EXISTING ZONING ALTERNATIVE

Pursuant to *CEQA Guidelines* Section 15126.6(e)(2), a No Project Alternative must be analyzed within the EIR. The No Project Alternative should discuss what would be reasonably expected to occur in the foreseeable future if the proposed project were not approved, based on current plans and consistent with available infrastructure and community services. In the context of this EIR, the Existing Zoning Alternative is the No Project Alternative in compliance with *CEQA Guidelines* Section 15126.6(e)(2), and assumes that the proposed Duarte Station Specific Plan would not be implemented.

The project site would remain unaltered and the existing on-site industrial uses would continue to operate as they do currently. In addition, it is assumed that this Alternative would provide 125-250 parking spaces for the Gold Line Station.

ALTERNATIVE TWO: ALL RESIDENTIAL ALTERNATIVE

Alternative Two would include only high density residential at a density of up to 40 dwelling units per acre for a total of 600 dwelling units. It is assumed that this Alternative would have similar acreages for recreation/open space and roads as the proposed project (0.80 and 2.86, respectively), and provide 125-250 parking spaces for the Gold Line Station.

ALTERNATIVE THREE: REDUCED DENSITY ALTERNATIVE 1

Alternative Three would be similar to the proposed project in terms of land use types, but at reduced residential densities and non-residential intensities. It is assumed that this Alternative would have similar acreages for recreation/open space and roads as the proposed project (0.80 and 2.86, respectively), and provide 125-250 parking spaces for the Gold Line Station. Alternative Three includes:

- 12,000 SF of Retail
- 295,000 SF of Office
- 150 Hotel Rooms
- 240 Dwelling Units
- Parking for Gold Line

Building heights would be similar or reduced compared to the proposed project:

- Residential - four to five stories
- Office – six to seven stories
- Hotel – five to six stories

ALTERNATIVE FOUR: REDUCED DENSITY ALTERNATIVE 2

Alternative Four would be similar to the proposed project in terms of land use types, but at reduced residential densities and non-residential intensities. It is assumed that this Alternative would have similar acreages for recreation/open space and roads as the proposed project (0.80 and 2.86, respectively), and provide 125-250 parking spaces for the Gold Line Station. Alternative Four includes:

- 12,000 SF of Retail
- 160,000 SF of Office
- 150 Hotel Rooms
- 150 Dwelling Units
- Parking for Gold Line

Building heights would be reduced compared to the proposed project:

- Residential – three to four stories
- Office – six to seven stories
- Hotel – five to six stories

1.4.1 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA Guidelines Section 15126.6 requires that an EIR must identify an "environmentally superior" alternative and where the No Project Alternative is identified as environmentally superior, the EIR is then required to identify as environmentally superior an alternative from among the others evaluated.

As noted above, the determination of an environmentally superior alternative is based on the consideration of how the alternative fulfills the project objectives and how the alternative either reduces significant, unavoidable impacts or substantially reduces the impacts to the surrounding environment.

ALTERNATIVE ONE: EXISTING ZONING ALTERNATIVE

In comparison to the proposed project, the Existing Zoning Alternative results in fewer impacts relative to aesthetics, traffic, air quality, greenhouse gas emissions, noise, and public services and utilities. Greater impacts would be anticipated for land use, population and housing, and

hydrology, drainage, and water quality. All significant unavoidable impacts related to shade/shadow, traffic, air quality, and noise impacts would be eliminated with this Alternative.

The Existing Zoning would not implement the overarching goals of the proposed project to provide a mixture of land use, an economically feasible development, traditional pedestrian-oriented street pattern, superior urban design, outdoor spaces, awareness of surrounding development, or sustainable development practices. Therefore, none of the project goals and objectives would be met under the Existing Zoning Alternative.

ALTERNATIVE TWO: ALL RESIDENTIAL ALTERNATIVE

In comparison to the proposed project, the All Residential Alternative would result in similar impacts relative to air quality; noise; and hydrology, drainage, and water quality. The All Residential Alternative results in fewer impacts to aesthetics, traffic, greenhouse gas emissions, hazardous materials; and public services and utilities. Greater impacts would be anticipated for land use and population and housing. All significant unavoidable impacts related to shade/shadow impacts would be eliminated with this Alternative, while significant unavoidable impacts related to traffic, air quality, and nose would be reduced.

The All Residential Alternative meets Goals 3, 5, and 7; partially meets Goals 2, 4, and 6, and does not meet Goal 1.

ALTERNATIVE THREE: REDUCED DENSITY ALTERNATIVE 1

In comparison to the proposed project, the Reduced Density Alternative 1 would result in similar impacts relative to land use; aesthetics; population and housing; air quality; noise; hazardous materials; hydrology, drainage, and water quality; and public services and utilities. The Reduced Density Alternative 1 results in fewer impacts to traffic and greenhouse gas emissions. All significant unavoidable impacts related to shade/shadow, traffic, air quality, and noise would be reduced, but not eliminated.

The development anticipated under the Reduced Density Alternative 1 is the same mix of land uses anticipated in the proposed Duarte Station Specific Plan, although with less residential units and non-residential square footage. The Reduced Density Alternative 1 meets Goals 1 through 7.

ALTERNATIVE FOUR: REDUCED DENSITY ALTERNATIVE 2

In comparison to the proposed project, the Reduced Density Alternative 2 would result in similar impacts relative to land use; aesthetics; population and housing; air quality; hazardous materials; and hydrology, drainage, and water quality. The Reduced Density Alternative 2 results in fewer impacts to traffic, greenhouse gas emissions, noise, and public services and utilities. All significant unavoidable impacts related to shade/shadow, air quality, and noise would be reduced, while significant unavoidable impacts related to traffic would be eliminated.
The development anticipated under the Reduced Density Alternative 2 is the same mix of land uses anticipated in the proposed Duarte Station Specific Plan, although with much less residential units and non-residential square footage. The Reduced Density Alternative 2 meets Goals 3 through 7, and generally meets Goals 1 and 2.

ENVIRONMENTALLY SUPERIOR ALTERNATIVE

As noted above, the determination of an environmentally superior alternative is based on the consideration of how the alternative fulfills the project objectives and how the alternative either reduces significant, unavoidable impacts or substantially reduces the impacts to the surrounding environment. In consideration of these factors, Alternative Four: Reduced Density Alternative 2 is selected as the Environmentally Superior Alternative to the proposed project.

Table 1-5, *Comparison of Alternatives*, provides an overview of the alternatives analyzed and a comparison of each alternative's impact in relation to the proposed action.

Table 1-5
Comparison of Alternatives

Impact Area	Alterative One: Existing Zoning Alternative	Alternative Two: All Residential Alternative	Alternative Three: Reduced Density Alternative 1	Alternative Four: Reduced Density Alternative 2
Land Use	○	○	=	=
Aesthetics	◆	◆	=	=
Reduces Significant Unavoidable Impact?	Yes	Yes	Yes	Yes
Eliminates Significant Unavoidable Impact?	Yes	Yes	No	No
Population and Housing	○	○	=	=
Traffic	◆	◆	◆	◆
Reduces Significant Unavoidable Impact?	Yes	Yes	Yes	Yes
Eliminates Significant Unavoidable Impact?	Yes	No	No	No
Air Quality	◆	=	=	=
Reduces Significant Unavoidable Impact?	Yes	Yes	Yes	Yes
Eliminates Significant Unavoidable Impact?	Yes	No	No	No
Greenhouse Gas Emissions	◆	◆	◆	◆
Noise	◆	=	=	◆
Reduces Significant Unavoidable Impact?	Yes	Yes	Yes	Yes
Eliminates Significant Unavoidable Impact?	Yes	No	No	Yes
Hazardous Materials	○	◆	=	=
Hydrology, Drainage, and Water Quality	○	=	=	=
Public Services and Utilities	◆	◆	=	◆

= Indicates an impact that is equal to the proposed project (neither environmentally superior nor inferior).
○ Indicates an impact that is greater than the proposed project (environmentally inferior).
◆ Indicates an impact that is less than the proposed project (environmentally superior).

1.5 SUMMARY OF ENVIRONMENTAL IMPACTS AND MITIGATION MEASURES

Impacts	Mitigation Measures	Level of Significance
Land Use		
Southern California Association of Governments Implementation of the proposed project could conflict with SCAG's 2012 RTP/ SCS Goals and Adopted Growth Forecasts.	No mitigation measures are required.	Less Than Significant Impact.
City of Duarte General Plan Implementation of the proposed project could conflict with a Duarte General Plan Land Use Plan or Policy.	No mitigation measures are required.	Less Than Significant Impact.
City of Duarte Development Code Implementation of the proposed project could conflict with the Duarte Municipal Code Standards and Regulations.	No mitigation measures are required.	Less Than Significant Impact.
Cumulative Impacts Development associated with implementation of the proposed project and other related cumulative projects could conflict with applicable land use plans, policies, or regulations.	No mitigation measures are required.	Less Than Significant Impact.
Aesthetics		
Short-Term Visual Character/Quality Construction activities associated with implementation of the proposed project could result in significant impacts related to temporary degradation of the visual character/quality of the site and its surroundings.	**AES-1** Prior to the issuance of a building permit, each project applicant shall submit a Construction Management Plan for review and approval by the City of Duarte Community Development Director. The Construction Management Plan shall, at a minimum, indicate the equipment and vehicle staging areas, stockpiling of materials, fencing (i.e., temporary fencing with opaque material), and construction haul route(s). Staging areas shall be screened from view from residential properties. Construction worker parking may be located off-site with prior approval by the City; however on-street parking of construction worker vehicles on residential streets shall be prohibited. Vehicles shall be kept clean and free of mud and dust before	Less Than Significant Impact With Mitigation Incorporated.

Impacts	Mitigation Measures	Level of Significance
	leaving the development site. Surrounding streets shall be swept daily and maintained free of dirt and debris.	
Long-Term Visual Character/Quality Implementation of the proposed project could result in significant impacts related to the long-term degradation of the visual character/quality of the site and its surroundings.	No mitigation measures are required for visual character/quality. No mitigation measures are feasible for shade/ shadow.	Significant and Unavoidable Impact for Shade/Shadow Impacts. Less Than Significant Impact for Visual Quality/ Character.
Light and Glare Implementation of the proposed project could create a new source of light and/or glare, which could affect daytime and/or nighttime views in the area.	**AES-2** Construction equipment staging areas shall use appropriate screening (i.e., temporary fencing with opaque material) to buffer views of construction equipment and material, when feasible. Staging locations shall be indicated on Final Development Plans and Grading Plans. **AES-3** All construction-related lighting shall include shielding in order to direct lighting down and away from adjacent hotel and residential uses and consist of the minimal wattage necessary to provide safety at the construction site. A construction safety lighting plan shall be submitted to the City for review concurrent with Grading Permit application. **AES-4** As part of Site Plan and Design Review, site access locations shall be reviewed to ensure that vehicle access locations are not sited in a manner that would result in vehicle headlights directly shining onto residential uses. If siting of vehicle access locations would result in headlights directly shining onto residential uses, the project applicant shall implement screening, consistent with the Duarte Station Specific Plan, to reduce lighting impacts.	Less Than Significant Impact With Mitigation Incorporated.
Cumulative Impacts Development associated with implementation of the proposed project and other related cumulative projects could result in cumulatively considerable aesthetics impacts.	Refer to Mitigation Measure AES-1 through AES-4. No additional mitigation measures are required.	Less Than Significant Impact With Mitigation Incorporated.

Impacts	Mitigation Measures	Level of Significance
Population and Housing		
Population Growth Implementation of the proposed project could induce substantial population growth in the city.	No mitigation measures are required.	Less Than Significant Impact.
Cumulative Impacts Development associated with implementation of the proposed project and other related cumulative projects could induce substantial population and housing growth in the area.	No mitigation measures are required.	Less Than Significant Impact.
Traffic		
Forecast Year 2020 With Project Conditions – City Study Intersections Implementation of the proposed project could cause a significant increase in traffic at local study intersections under forecast year 2020 conditions when compared to the traffic capacity of the street system.	**TRF-1** Village Road/Duarte Road – Install a new traffic signal at the Village Road/Duarte Road intersection. All project applicants within the Duarte Station Specific Plan Area and the City of Hope (Phase 1) shall have a fair-share contribution for signal modification at the Buena Vista Street/Duarte Road intersection. The first development project(s) shall be responsible for the signal modification and will be reimbursed on a fair share basis by the remainder of the developments in the Duarte Station Specific Plan Area and/or the City of Hope (Phase 1). **TRF-2** Buena Vista Street/Duarte Road – Modify the traffic signal by implementing a right-turn overlap phase at the westbound Duarte Road approach. All project applicants within the Duarte Station Specific Plan Area and the City of Hope (Phase 1) shall have a fair-share contribution for signal modification at the Buena Vista Street/Duarte Road intersection. The first development project(s) shall be responsible for the signal modification and will be reimbursed on a fair share basis by the remainder of the developments in the Duarte Station	Significant and Unavoidable Impact for Buena Vista Street/Three Ranch Road and Highland Avenue/Evergreen Street. Less Than Significant Impact for all other study intersections.

Impacts	Mitigation Measures	Level of Significance
	Specific Plan Area and/or the City of Hope (Phase 1). **TRF-3** Buena Vista Street/Three Ranch Road – Install "KEEP CLEAR" or "DO NOT BLOCK" signing and striping in both directions of travel on Buena Vista Street at the Buena Vista Street/Three Ranch Road intersection. The City shall install the signage and striping and will be reimbursed on a fair-share basis by all development within the Duarte Station Specific Plan Area and the City of Hope (Phase 1).	
Forecast Year 2020 With Project Conditions – State-Controlled Intersections Implementation of the proposed project could cause a significant increase in traffic at State-controlled study intersections under forecast year 2020 conditions when compared to the traffic capacity of the street system.	**TRF-4** All project applicants within the Duarte Station Specific Plan Area shall prepare and submit at their time of their development application to the Community Development Department a traffic study that: 1) documents the project-related trips and provides a comparative review with the analysis in this EIR, and 2) uses the Highway Capacity Manual (HCM) intersection analysis methodology to determine whether the individual project increases the average delay per vehicle intersections having an existing unacceptable level of service without project traffic. The thresholds to be used for the delay analysis are: a. Signalized Intersections: The project increases the average delay by more than 5 seconds per vehicle at an intersection having an unacceptable LOS without project traffic. b. All-Way Stop Intersections: The project increases the overall average delay by more than 5 seconds per vehicle at an intersection that has an unacceptable LOS without the project and the intersection also	Less Than Significant Impact With Mitigation Incorporated.

Impacts	Mitigation Measures	Level of Significance
	meets the peak hour volume signal warrant. c. One- and Two-Way Stop Intersections: The project causes the following to occur for the worst-case movement: ▪ The LOS declines to an unacceptable LOS, and ▪ The volume to capacity ratio exceeds 0.75, and ▪ The 95th percentile queue exceeds 75 feet (3 vehicles), or the project causes the worst-case movement's acceptable LOS to decline to an unacceptable LOS and the peak hour volume signal warrant is met, or the project increases the average delay for the worst-case movement by more than 5 seconds per vehicle at an intersection that has an unacceptable LOS without the project and the intersection also meets the peak hour volume signal warrant. The study will need to identify appropriate mitigation and timing, if impacts are identified. The study and mitigation requires review and approval from the City Engineer. Potential improvements to be considered as mitigation include, but are not limited to: ▪ Restrict on-street parking during peak hours ▪ Install "KEEP CLEAR" or "DO NOT BLOCK" signage and striping ▪ Install signalized pedestrian crossing ▪ Install Two-Way Stop ▪ Install Four-Way Stop ▪ Signal timing and coordination ▪ Addition of lanes within existing right-of-way, including restriping ▪ Lengthening of existing turn lanes to accommodate additional vehicles	

Impacts	Mitigation Measures	Level of Significance
	▪ Widening of right-of-way consistent with Circulation Element Diagram CIR-1, Standard Roadway Cross-Sections, and Diagram CIRC-4, Circulation System, requirements.	
Off-Ramp Queuing Implementation of the proposed project could result in a hazardous traffic condition associated with queuing at the state-controlled study intersection off-ramps.	No mitigation measures are required.	Less Than Significant Impact.
Hazardous Traffic Conditions Implementation of the proposed project could result in a hazardous traffic condition associated with neighborhood pass-through traffic.	**TRF-5** When deemed necessary by the City Community Development Director and/or City Engineer, the project applicant(s) shall prepare, implement, and fund a Neighborhood Traffic Management Plan (NTMP), which shall include three components: education, enforcement, and enhancement. The educational component of the NTMP shall provide the community with a means of understanding traffic management tools and processes and also increase public awareness of the impact that traffic will have on the neighborhood. Educational efforts that could be implemented as part of the NTMP include, but are not limited to, the following: ▪ Coordination of neighborhood NTMP meetings ▪ Coordination of a speed watch program ▪ Coordination of the placement of temporary NTMP yard signs with volunteers ▪ Design and distribution of NTMP brochures ▪ Coordination of applicant and/or staff presentations to neighborhood groups The enforcement component of the NTMP entails focusing law enforcement efforts to acknowledge areas of	

Impacts	Mitigation Measures	Level of Significance
	concern. Enforcement efforts that could be implemented as part of the NTMP include, but are not limited to, the following: ▪ Increased enforcement ▪ Real-time speed feedback signs ▪ Signage ("Entering residential neighborhood…") The enhancement component of the NTMP consists of non-physical and physical transportation system improvements. Numerous traffic-calming devices may be selected by a neighborhood for placement on a street. Potential improvements that could be implemented by the applicant and/or City of Duarte as part of the NTMP include, but are not limited to, the following: ▪ Pavement marking/lane narrowing ▪ Temporary speed tables ▪ Neckdowns/bulbouts (extensions of curbs/corner sidewalks at an intersection) ▪ Choker/Chicane (chokers are build-outs added to a road to narrow it, while chicanes are sequences of tight serpentine curves designed to slow roadway traffic) ▪ Turn movement restrictions ▪ Diagonal intersection diverters ▪ Median barrier through intersection ▪ Forced turn island	
Conflict With Policies, Plans, or Programs Implementation of the proposed project could result in a decrease of the performance or safety of public transit, bicycle, or pedestrian facilities as a result of a conflict with adopted policies, plans, or programs.	No mitigation measures are required.	Less Than Significant Impact.

Impacts	Mitigation Measures	Level of Significance
Cumulative Impacts Development associated with implementation of the proposed project and other related cumulative projects could result in cumulatively considerable impacts related to traffic and circulation.	Refer to Mitigation Measures TRF-1 through TRF-3. No additional mitigation measures are required.	Significant and Unavoidable Impact for Buena Vista Street/Three Ranch Road and Highland Avenue/Evergreen Street. All other impacts are Less Than Significant or Less Than Significant With Mitigation Incorporated.
Air Quality		
Short-Term Construction Air Emissions Short-term construction activities associated with implementation of the proposed project could result in air pollutant emission impacts or expose sensitive receptors to substantial pollutant concentrations.	**AQ-1** Prior to issuance of a Grading Permit, the City Engineer and the Chief Building Official shall confirm that the Grading Plan, Building Plans, and specifications stipulate that, in compliance with SCAQMD Rule 403, excessive fugitive dust emissions shall be controlled by regular watering or other dust prevention measures, as specified in the SCAQMD's Rules and Regulations. 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 portions of the construction site shall be watered every three hours during daily construction activities and when dust is observed migrating from the project site to prevent excessive amounts of dust. ▪ Pave or apply water every three hours during daily construction activities or apply non-toxic soil stabilizers on all unpaved access roads, parking areas, and staging areas. More frequent watering shall occur if dust is observed migrating from the site during site disturbance. ▪ Any on-site stockpiles of debris, dirt, or other dusty material shall be enclosed, covered, or watered twice daily, or non-toxic soil binders shall be applied.	Less Than Significant Impact.

Impacts	Mitigation Measures	Level of Significance
	▪ All grading and excavation operations shall be suspended when wind speeds exceed 25 miles per hour. ▪ Disturbed areas shall be replaced with ground cover or paved immediately after construction is completed in the affected area. ▪ Track-out devices such as gravel bed track-out aprons (3 inches deep, 25 feet long, 12 feet wide per lane and edged by rock berm or row of stakes) shall be installed to reduce mud/dirt trackout from unpaved truck exit routes. Alternatively a wheel washer shall be used at truck exit routes. ▪ On-site vehicle speed shall be limited to 15 miles per hour. ▪ 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. ▪ Reroute construction trucks away from congested streets or sensitive receptor areas. **AQ-2** All trucks that are to haul excavated or graded material on-site shall comply with State Vehicle Code Section 23114 (Spilling Loads on Highways), with special attention to Sections 23114(b)(F), (e)(4) as amended, regarding the prevention of such material spilling onto public streets and roads. Prior to the issuance of grading permits, each project applicant shall demonstrate to the City Engineer how the project operations subject to that specification during hauling activities shall comply with the provisions set forth in Sections 23114(b)(F), (e)(4). **AQ-3** The following measures shall be implemented by the contractor to reduce ROG emissions resulting from application of architectural coatings: ▪ Use high-pressure-low-volume (HPLV) paint applicators with a minimum transfer efficiency of at least 50 percent;	

Impacts	Mitigation Measures	Level of Significance
	▪ Use pre-painted construction materials; and ▪ VOC content of architectural coatings shall not exceed 50 grams per liter. **AQ-4** Prior to issuance of any Grading Permit, the City Engineer and the Chief Building Official shall confirm that the Grading Plan, Building Plans, and specifications stipulate that, in compliance with SCAQMD Rule 403, O_3 precursor emissions from construction equipment vehicles shall be controlled by maintaining equipment engines in good condition and in proper tune per manufacturer's specifications, to the satisfaction of the City Engineer. Maintenance records shall be provided to the City. The City Inspector shall be responsible for ensuring that contractors comply with this measure during construction.	
Long-Term Operational Air Emissions Implementation of the proposed project could facilitate the construction of new land uses that could generate dust and equipment emissions.	No feasible mitigation measures are available.	Significant Unavoidable Impact for ROG emissions. Less Than Significant Impact for NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$.
Localized Emissions Development associated with implementation of the proposed project could result in localized emissions impacts or expose sensitive receptors to substantial pollutant concentrations.	No mitigation measures are required.	Less Than Significant Impact.
Air Quality Plan Implementation of the proposed project could conflict with or obstruct implementation of the applicable Air Quality Plan.	Refer to Mitigation Measures AQ-1 through AQ-4. No additional mitigation measures are available.	Significant Unavoidable Impact for Plan Consistency – ROG Emissions. Less Than Significant Impact for Plan Consistency for All Other Pollutant Criterion Emissions.
Odor Impacts Construction and operation associated with implementation of the proposed project could create objectional odors affecting a substantial number of people.	No mitigation measures are required.	Less Than Significant Impact.

Impacts	Mitigation Measures	Level of Significance
Cumulative Impacts: Short-Term Construction Air Emissions Short-term construction activities associated with implementation of the proposed project and other related cumulative projects could result in air pollutant emission impacts or expose sensitive receptors to substantial pollutant concentrations.	Refer to Mitigation Measures AQ-1 through AQ-4. No additional mitigation measures are required.	Less Than Significant Impact With Mitigation Incorporated.
Cumulative Impacts: Long-Term Operational Air Emissions Implementation of the proposed project and other related cumulative projects could result in significant impacts pertaining to operational air emissions.	No feasible mitigation measures are available.	Significant Unavoidable Impact for ROG emissions. Less Than Significant Impact for NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$.
Greenhouse Gas Emissions		
Greenhouse Gas Emissions Greenhouse gas emissions generated by development associated with implementation of the proposed project could have a significant impact on global climate change.	No mitigation measures are required.	Less Than Significant Impact.
Consistency With Applicable GHG Plans, Policies, or Regulations Implementation of the proposed project could conflict with an applicable greenhouse gas reduction plan, policy, or regulation.	No mitigation measures are required.	Less Than Significant Impact.
Cumulative Impact Greenhouse gas emissions generated by implementation of the proposed project and other related cumulative projects could have a significant impact on global climate change.	No mitigation measures are required.	Less Than Significant Impact.
Noise		
Short-Term Construction Noise Impacts Grading and construction associated with implementation of the proposed project could result in significant temporary noise impacts to nearby noise sensitive receivers.	**N-1** Individual project applicants shall prepare a construction noise management plan that identifies measures to be taken to minimize construction noise on surrounding sensitive receptors (e.g., residential uses and schools) and includes specific noise management measures to be	Significant Unavoidable Impact.

Impacts	Mitigation Measures	Level of Significance
	included into project plans and specifications subject to review and approval by the City. These measures shall include, but not be limited to the following: ▪ All construction equipment shall be equipped with mufflers and sound control devices (e.g., intake silencers and noise shrouds) no less effective than those provided on the original equipment and no equipment shall have an un-muffled exhaust. ▪ The City shall require that the contractor maintain and tune-up all construction equipment to minimize noise emissions. ▪ Stationary equipment shall be placed so as to maintain the greatest possible distance to the sensitive receptors. ▪ All equipment servicing shall be performed so as to maintain the greatest possible distance to the sensitive receptors. ▪ Impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electronically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used where feasible, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever feasible. ▪ Each project applicant shall provide, to the satisfaction of the City of Duarte Planning Department, a qualified "Noise Disturbance Coordinator." The Disturbance Coordinator shall be responsible for responding to any local complaints about	

Impacts	Mitigation Measures	Level of Significance
	construction noise. When a complaint is received, the Disturbance Coordinator shall notify the City within 24 hours of the complaint and determine the cause of the noise complaint (e.g., starting too early, malfunctioning muffler, etc.) and shall implement reasonable measures to resolve the compliant, as deemed acceptable by the Duarte Planning Department. Notices shall be sent to residential units immediately surrounding the construction site. The notices that are sent and the signs posted at the construction site shall include the contact name and the telephone number for the Noise Disturbance Coordinator. ▪ Select demolition methods to minimize vibration, where possible (e.g., sawing masonry into sections rather than demolishing it by pavement breakers). ▪ Construction activities shall not take place outside of the allowable hours specified by the City's Municipal Code Section 9.68.120 (7:00 a.m. and 10:00 p.m.).	
Vibration Impacts Implementation of the proposed project could result in significant vibration impacts to nearby sensitive receptors.	No mitigation measures are required.	Less Than Significant Impact.
Long-Term Mobile Noise Impacts Traffic generated by the proposed project could significantly contribute to existing traffic noise in the area or exceed the city's established standards.	No mitigation measures are required.	Less Than Significant Impact.
Long-Term Stationary Noise Impacts Implementation of the proposed project could result in a significant increase in long-term stationary ambient noise levels.	**N-2** Prior to issuance of building permits, a noise assessment shall be prepared for the hotel and commercial uses to ensure that commercial property loading docks and outdoor mechanical equipment would not exceed the City's noise limits identified in Municipal Code Section 9.68.050. The noise assessment shall identify any noise control measures necessary to comply with the Municipal Code	Less Than Significant With Mitigation Incorporated.

Impacts	Mitigation Measures	Level of Significance
	Noise Regulations. Individual project applicants shall implement all noise control measures identified in the assessment. **N-3** Prior to site plan approval, the Community Development Director shall confirm that all applicable building plans and specifications include a closed design (i.e., a solid wall) for the walls of parking structures that are within 150 feet of residences, including the western side of the parking structure that faces Denning Avenue. The closed design is only required for walls that face residences. **N-4** Prior to the issuance of building permits, any residential development located within 200 feet of the Gold Line railway corridor shall have a Focused Acoustical Analysis prepared to analyze noise from train pass-bys and develop measures, if required, to ensure that the City's exterior land use compatibility standards of 65 dBA for multi-family residential (refer to Duarte General Plan Table N-1) and 45 dBA for residential interiors are achieved. **N-5** Prior to the issuance of building permits, any residential or hotel development located within 400 feet of the I-210 freeway corridor shall have a Focused Acoustical Analysis prepared to fully analyze acoustical impacts and develop measures, if required, to ensure that the City's exterior land use compatibility standards of 65 dBA for multi-family residential (refer to Duarte General Plan Table N-1) and 45 dBA for residential interiors are achieved.	
Cumulative Impact: Short-Term Construction Noise Impacts Development associated with implementation of the proposed project and other related cumulative projects could result in significant short-term noise impacts to nearby noise sensitive receivers.	Refer to Mitigation Measure N-1. No additional mitigation measures are required.	Less Than Significant Impact With Mitigation Incorporated.

Impacts	Mitigation Measures	Level of Significance
Cumulative Impact: Long-Term Cumulative Noise Impacts Development associated with implementation of the proposed project and other related cumulative projects could result in cumulatively considerable long-term noise impacts.	No mitigation measures are required.	Less Than Significant Impact.
Hazards and Hazardous Materials		
Construction-Related Accidental Release of Hazardous Materials Short-term construction activities associated with implementation of the proposed project could create a significant hazard to the public or environment through accident conditions involving the release of hazardous materials.	**HAZ-1** Prior to demolition activities, an asbestos survey shall be conducted by an Asbestos Hazard Emergency Response Act (AHERA) and Cal OSHA certified building inspector to determine the presence or absence of asbestos containing-materials (ACMs). If ACMs are located, abatement of asbestos shall be completed before any activities that would disturb ACMs or create an airborne asbestos hazard. Asbestos removal shall be performed by a State certified asbestos containment contractor in accordance with the South Coast Air Quality Management District (SCAQMD) Rule 1403. **HAZ-2** If paint is separated from building materials, chemically or physically, during demolition of the structures, the paint waste shall be evaluated independently from the building material by a qualified Environmental Professional. If lead-based paint is found, abatement shall be completed by a qualified Lead Specialist before any activities that would create lead dust or fume hazard. Lead-based paint removal and disposal shall be performed in accordance with California Code of Regulation Title 8, Section 1532.1, which specifies exposure limits, exposure monitoring and respiratory protection, and mandates good worker practices by workers exposed to lead. Contractors performing lead-based paint removal shall provide evidence of abatement activities to the City's Building Department.	Less Than Significant With Mitigation Incorporated.

Impacts	Mitigation Measures	Level of Significance
	HAZ-3 An environmental professional with Phase II/site characterization experience shall conduct an inspection of existing on-site structures before building renovation/demolition activities. The inspection shall determine whether or not testing is required to confirm the presence or absence of hazardous substances in building materials (i.e., sinks, drains, piping, flooring, walls, ceiling tiles, etc.). Should testing be required and results determine that hazardous substances are present in on-site building materials, the Phase II/site characterization specialist shall determine appropriate prevention/ remediation measures that are required and/or the methods for proper disposal of hazardous waste at an approved landfill facility, if required. **HAZ-4** As applicable, each project applicant shall obtain appropriate permits from the Los Angeles County Fire Department Health Hazard Management Division (HHMD), before removing any existing USTs, per the Underground Storage Tank Program. The applicant shall conduct soil/groundwater testing, as requested by the HHMD. Should contamination be present above regulatory thresholds, then the applicant shall remediate appropriately, as required by the HHMD. Should the HHMD refer the case to any other regulatory agency (e.g., the Department of Toxic Substances Control, or Regional Water Quality Control Board, etc), then the project applicant shall comply with that said agency as well. **HAZ-5** Prior to issuance of a grading permit, soil sampling shall occur within the portions of the project site that have historically been utilized for agricultural purposes and may contain pesticide residues in the soil, as determined by a qualified Phase II/site characterization specialist. The sampling shall determine if pesticide concentrations exceed established regulatory requirements and shall identify further	

Impacts	Mitigation Measures	Level of Significance
	site characterization and remedial activities, if necessary. Should further site characterization/remedial activities be required, these activities shall be conducted per the applicable regulatory agency requirements, as directed by the Los Angeles County Fire Department Health Hazard Management Division (HHMD). **HAZ-6** Prior to issuance of a grading permit, an environmental consultant with Phase II/site characterization experience shall conduct sampling in order to confirm whether or not contaminated soil/groundwater underlies the project site. Should contamination above established regulatory levels be identified, the environmental consultant shall recommend remedial activities appropriate for the proposed future development at the site, in consultation with the Los Angeles County Fire Department Health Hazard Management Division (HHMD) and/or other applicable agencies. **HAZ-7** Prior to issuance of a grading permit, a Phase II/site characterization specialist shall conduct appropriate sampling along the southern boundary of the project site (Parcel 1) in order to determine whether or not contaminated soil is present. Should contaminated soil be present, the Phase II/site characterization specialist shall recommend appropriate remediation/safety measures in order to ensure worker safety during construction and public health during proposed project operations. **HAZ-8** Prior to issuance of a grading permit, the project applicant shall submit a Worker Safety Plan for site disturbance/construction activities, in consultation with California Division of Occupational Safety and Health (Cal/OSHA) and Los Angeles County Fire Department Health Hazard Management Division (HHMD). The Worker Safety Plan shall include safety precautions (e.g., personal protective	

Impacts	Mitigation Measures	Level of Significance
	equipment or other precautions to be taken to minimize exposure to hazardous materials) to be taken by personnel when encountering potential hazardous materials, including potential contaminated groundwater. **HAZ-9** If unknown wastes or suspect materials are discovered during construction by the contractor that are believed to involve hazardous waste or materials, the contractor shall comply with the following: ▪ Immediately cease work in the vicinity of the suspected contaminant, and remove workers and the public from the area; ▪ Notify the City Engineer of the City of Duarte; ▪ Secure the area as directed by the City Engineer; and ▪ Notify the Los Angeles County Fire Department Health Hazard Management Division's (HHMD) Hazardous Waste/Materials Coordinator (or other appropriate agency specified by the City Engineer). The Hazardous Waste/Materials Coordinator shall advise the responsible party of further actions that shall be taken, if required.	
Operational-Related Impacts Implementation of the proposed project could create a significant hazard during use operations to the public or environment through the handling, storage, and/or use of hazardous materials, as well as accident conditions involving the release of hazardous materials.	**HAZ-10** Prior to issuance of building permits, vapor intrusion investigations shall be conducted by a qualified Environmental Professional, in consultation with the Los Angeles County Fire Department Health Hazard Management Division (HHMD). Should the Environmental Professional determine that proposed buildings could be impacted by vapor intrusion, the Environmental Professional, in consultation with the HHMD and/or other applicable regulatory agencies, shall recommend specific design measures to be incorporated into the buildings' design that would reduce these indoor air quality concentrations to below regulatory thresholds.	Less Than Significant With Mitigation Incorporated.

Impacts	Mitigation Measures	Level of Significance
Hazardous Materials Sites Development associated with implementation of the proposed project site could be located on a hazardous materials site per Government Code Section 65962.5 and could create a significant hazard to the public or the environment.	No mitigation measures are required.	No Impact.
Cumulative Impacts Development associated with implementation of the proposed project and other related cumulative projects could increase the exposure of hazardous substances to the public or the environment.	Refer to Mitigation Measures HAZ-4, HAZ-6, and HAZ-10. No additional mitigation measures are required.	Less Than Significant With Mitigation Incorporated.
Hydrology, Drainage, and Water Quality		
Water Quality – Short-Term Impacts Grading, excavation, and construction activities associated with implementation of the proposed project could significantly impact water quality.	**HYD-1** Prior to issuance of any grading or building permit, each project applicant shall enroll electronically through the SMARTS program to comply with the State of California General Construction Permit. Proof of enrollment must be submitted to the City of Duarte before issuance of grading or building permits. Also, a Stormwater Pollution Prevention Plan (SWPPP) or functional equivalent required at that time shall be reviewed and approved by the Public Works Manager and the City Engineer for water quality construction activities on-site. A copy of the SWPPP or functional equivalent required at that time shall be available and implemented at the construction site at all times. The SWPPP or functional equivalent required at that time shall outline the source control and/or treatment control Best Management Practices to avoid or mitigate runoff pollutants at the construction site to the "maximum extent practicable."	Less Than Significant Impact With Mitigation Incorporated.
Long-Term Operational Impacts Implementation of the proposed project could result in significant impacts related to increased run-off amounts and degraded water quality.	**HYD-2** Concurrent with Site Plan Review or issuance of a grading permit, whichever comes first, a hydrology review shall be conducted by a Registered Civil Engineer for each	Less Than Significant Impact With Mitigation Incorporated.

Impacts	Mitigation Measures	Level of Significance
	development phase to ensure that runoff values for each phase remain at or below the runoff values shown in Table 5.9-2, and in compliance with current State law or other applicable statutes. **HYD-3** Prior to the issuance of grading permit, each project applicant shall prepare a plan (i.e., Standard Urban Storm Water Management Plan [SUSMP] or functional equivalent document per current State law or other applicable statutes) in accordance with the guidance to be developed by the NPDES Permit permittees, that includes Low Impact Development and other post-construction Best Management Practices to reduce pollutant loading. The plan shall be reviewed and approved by the Duarte Public Works Manager and City Engineer. The applicant shall be responsible for implement the measures identified in the SUSMP or functional equivalent document.	
Groundwater Implementation of the proposed project could result in the depletion of groundwater supplies or interference with groundwater recharge.	No mitigation measures are required.	Less Than Significant Impact.
Cumulative Impacts Implementation of the proposed project along with other related cumulative projects could result in cumulatively considerable impacts related to increased runoff and degraded water quality.	Refer to Mitigation Measures HYD-1 and HYD-3. No additional mitigation measures are required.	Less Than Significant Impact.
Fire Protection		
Fire Services Implementation of the proposed project could result in impacts to fire services.	**FP-1** Adequate access to all buildings on the project site shall be provided and properly maintained for emergency vehicles during the building construction process to the satisfaction of the Los Angeles County Fire Department.	Less Than Significant Impact With Mitigation Incorporated.

Impacts	Mitigation Measures	Level of Significance
	FP-2 Adequate water availability shall be provided to service construction activities. **FP-3** Prior to issuance of building permits, a will-serve letter from the California American Water Company shall be obtained by the project applicant, which states that the Water Company can adequately meet water flow requirements. **FP-4** The Los Angeles County Fire Department shall review and comment on each individual site plan submitted, prior to approval by the City of Duarte. Any conditions required by the Los Angeles County Fire Department shall be complied with by the project applicant. **FP5** Prior to the issuance of building permits, the project applicant shall provide verification that the project complies with all fire prevention provisions required by the Los Angeles County Fire Department. **FS-6** All new structures shall have automatic fire sprinkler systems. **FS-7** A supervised fire alarm system that meets requirements of the California Fire Code shall be placed in an accessible location with an annunciator. **FS-8** Access to and around structures shall meet Los Angeles County Fire Department and California Fire Code requirements. **FS-9** A water supply system shall be in place to supply fire hydrants and automatic fire sprinkler systems. **FS-10** All traffic signals on public access ways shall include the installation of optical preemption devices. **FS-11** All electric gates within the project shall install emergency opening devices approved by the Los Angeles County Fire Department.	

Impacts	Mitigation Measures	Level of Significance
Cumulative Impacts Development associated with implementation of the proposed project and other related cumulative projects could result in cumulatively considerable impacts to fire services.	Refer to Mitigation Measures FP-1 through FP-12. No additional mitigation measures are required.	Less Than Significant Impact With Mitigation Incorporated.
Police Protection		
Police Services Implementation of the proposed project could result in impacts to police services.	No mitigation measures are required.	Less Than Significant Impact.
Cumulative Impacts Development associated with implementation of the proposed project and other related cumulative projects could result in cumulatively considerable impacts to police services.	No mitigation measures are required.	Less Than Significant Impact.
Schools		
Schools Implementation of the proposed project could result in impacts to existing school facilities within the Duarte Unified School District.	**SCH-1** Individual project applicants shall pay all applicable Development Impact Fees to the Duarte Unified School District prior to issuance of building permits. Proof of fee payment shall be provided to the City of Duarte.	Less Than Significant Impact With Mitigation Incorporated.
Cumulative Impacts Development associated with implementation of the proposed project and other related cumulative projects could result in cumulatively considerable impacts to school facilities within the Duarte Unified School District.	Refer to Mitigation Measure SCH-1. No additional mitigation measures are required.	Less Than Significant Impact With Mitigation Incorporated.
Parks		
Parks and Recreation Facilities Implementation of the proposed project could increase the use of existing parks and recreational facilities creating the potential for physical deterioration of facilities.	No mitigation measures are required.	Less Than Significant Impact.
Cumulative Impacts Development associated with implementation of the proposed project and other related cumulative projects could result in cumulatively	No mitigation measures are required.	Less Than Significant Impact.

Impacts	Mitigation Measures	Level of Significance
considerable impacts to parks and recreation facilities in the City.		
Water		
Water Demand and Facilities Implementation of the proposed project could require or result in the construction of new water facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.	**WAT-1** Prior to approval of building permits, individual project applicants shall conduct hydraulic analysis in coordination with California American Water to determine water system requirements to serve the proposed development. The project applicant shall implement the improvements in accordance with California American Water requirements prior to issuance of building permits and complete all necessary improvements prior to final inspection. **WAT-2** Prior to approval of building permits, individual project applicants shall submit site plans to the Los Angeles County Fire Department in order to obtain fire flow and storage volume requirements for the proposed development. The project applicant shall submit the fire flow and storage volume requirements to California American Water to determine if adequate fire flow and storage capacity exists to serve the proposed development. If fire flow and storage capacity is found to be inadequate, the project applicant shall design and bond for necessary improvements prior to the issuance of building permits and complete all necessary improvements prior to final inspection.	Less Than Significant Impact With Mitigation Incorporated.
Water Supplies Implementation of the proposed project could create demand for water that exceeds available water supplies from existing entitlements and resources.	No mitigation measures are required.	Less Than Significant Impact.
Cumulative Impacts Development associated with the proposed project and other related cumulative projects could result in cumulatively considerable impacts to water supplies and facilities.	Refer to Mitigation Measures WAT-1 and WAT-2. No additional mitigation measures are required.	Less Than Significant Impact With Mitigation Incorporated.

Impacts	Mitigation Measures	Level of Significance
Wastewater		
Wastewater Conveyance and Treatment Facilities Implementation of the proposed project could generate wastewater that exceeds the capacity of conveyance and treatment facilities serving the project area.	**WW-1** Each development project shall conduct a sewer flow monitoring study and submit to the City Engineer for review and approval prior to approval of building permits. The study shall review flows at selected off-site manholes, both upstream and downstream of the point of connection, to determine the capacity of the local and regional system to accept project-related flows. The project applicant shall be responsible to implement the recommendations in the study to ensure that off-site systems operate in accordance with the Los Angeles County Department of Public Works and County Sanitation Districts of Los Angeles County standards. **WW-2** Each development project shall design and construct on-site and off-site sewer lines in compliance with the Los Angeles County Public Works Department and County Sanitation Districts of Los Angeles County standards.	Less Than Significant Impact With Mitigation Incorporated.
Cumulative Impacts Development associated with implementation of the proposed project and other related cumulative projects could result in cumulatively considerable impacts to wastewater conveyance and treatment facilities.	No mitigation measures are required.	Less Than Significant Impact.
Solid Waste		
Solid Waste Implementation of the proposed project would generate solid waste that could incrementally decrease the capacity and lifespan of landfills.	No mitigation measures are required.	Less Than Significant Impact.
Cumulative Impacts Development associated with implementation of the proposed project and other related cumulative development could result in cumulatively considerable impacts related to solid waste disposal services and landfill capacity.	No mitigation measures are required.	Less Than Significant Impact.

Impacts	Mitigation Measures	Level of Significance
Electricity and Natural Gas		
Electricity Implementation of the proposed project could increase the demand for electrical service or could require the expansion of existing facilities.	No mitigation measures are required.	Less Than Significant Impact.
Natural Gas Implementation of the proposed project could increase the demand for natural gas or could require the expansion of existing facilities.	No mitigation measures are required.	Less Than Significant Impact.
Cumulative Impacts Implementation of the proposed project and other related cumulative projects could result in cumulatively considerable impacts related to electrical and/or natural gas services and facilities.	No mitigation measures are required.	Less Than Significant Impact.

SECTION 2.0
Introduction and Purpose

2.0 INTRODUCTION AND PURPOSE

2.1 PURPOSE

The City of Duarte (City) is the lead agency under the *California Environmental Quality Act* (*CEQA*), and has determined that an Environmental Impact Report (EIR) is required for the Duarte Station Specific Plan (State Clearinghouse No. 2013041032). This EIR has been prepared in conformance with *CEQA* (*California Public Resources Code* [*PRC*] Section 21000 et seq.); *CEQA Guidelines* (*California Code of Regulations* [*CCR*], *Title 14*, Section 15000 et seq.); and the rules, regulations, and procedures for implementation of CEQA, as adopted by the City of Duarte. The principal *CEQA Guidelines* sections governing content of this document are Section 15378 (Definition of a Project), Sections 15120 through 15132 (Contents of Environmental Impact Reports), and Section 15168 (Program EIR).

DEFINITION OF A PROJECT UNDER CEQA

CEQA Section 20165 and CEQA Guidelines Sections 15378(a), (c) and (d) provide the definition of a project under CEQA:

> *(a) "Project" means an activity which may cause a direct physical change in the environment, or a reasonable foreseeable indirect physical change in the environment, and which is any of the following:*
>
> *(1) An activity directly undertaken by any public agency including but not limited to public works construction and related activities clearing or grading of land, improvements to existing public structures, enactment and amendment of zoning ordinances, and the adoption and amendment of local General Plans or elements thereof pursuant to Government Code Sections 65100-65700.*
>
> *(2) An activity undertaken by a person, which is supported, in whole or in part, through contracts, grants, subsidies, loans, or other forms of assistance from one or more public agencies.*
>
> *(c) An activity that involves the issuance to a person of a lease, permit, license, certificate, or other entitlement for use by one or more public agencies.*
>
> *(c) The term "project" refers to the activity which is being approved and which may be subject to discretionary approvals by governmental agencies. The term "project" does not mean each separate governmental approval.*
>
> *(d) Where the Lead Agency could describe the project as either the adoption of a particular regulation under subdivision (a)(1) or as a development proposal which will be subject to several governmental approvals under subdivision (a)(2) or (a)(3), the Lead Agency shall describe the project as the development proposal for the purpose of environmental analysis. This approach will implement the Lead Agency principle as described in Article 4.*

In considering whether an activity is a "project," an agency must look at all the parts, components, and phases of the activity.

The City of Duarte has determined that the proposed Duarte Station Specific Plan is a project as defined by *CEQA* Section 20165 and CEQA Guidelines Sections 15378(a), (c) and (d). In addition, the City of Duarte has determined that the proposed project is subject to *CEQA* and prepared an EIR.

PURPOSE OF EIR

The purpose of this EIR is to review the existing conditions, analyze potential environmental impacts, and identify feasible mitigation measures to avoid or lessen potentially significant effects of the proposed Duarte Station Specific Plan (proposed project, proposed Specific Plan), generally located at the northwest corner of Duarte Road and Highland Avenue. The project site is bounded by Evergreen Street and the Foothill Freeway (Interstate 210) to the north, Highland Avenue to the east, a single-family residential neighborhood to the west, and the Los Angeles Metropolitan Transportation Authority (Metro)-owned railroad right-of-way and Duarte Road to the south, in the City of Duarte. For more detailed information regarding the proposed project, refer to Section 3.0, Project Description.

PROGRAM EIR

This EIR has been prepared as a Program EIR in accordance with *CEQA Guidelines* Section 15168, which states the following:

(a) General. A Program EIR is an EIR, which may be prepared on a series of actions that can be characterized as one large project and are related either:

(1) Geographically,
(2) As logical parts in the chain of contemplated actions,
(3) In connection with issuance of rules, regulations, plans, or other general criteria to govern the conduct of a continuing program, or
(4) As individual activities carried out under the same authorizing statutory or regulatory authority and having generally similar environmental effects which can be mitigated in similar ways.

(b) Advantages. Use of a Program EIR can provide the following advantages. The Program EIR can:

(1) Provide an occasion for a more exhaustive consideration of effects and alternatives than would be practical in an EIR on an individual action,
(2) Ensure consideration of cumulative impacts that might be slighted in a case-by-case analysis,
(3) Avoid duplicative reconsideration of basic policy considerations,
(4) Allow the Lead Agency to consider broad policy alternatives and program-wide mitigation measures at an early time when the agency has greater flexibility to deal with basic problems or cumulative impacts, and
(5) Allow reduction in paperwork.

(c) Use with Later Activities. Subsequent activities in the program must be examined in the light of the Program EIR to determine whether an additional environmental document must be prepared.

(1) *If a later activity would have effects that were not examined in the program EIR, a new Initial Study would need to be prepared leading to either an EIR or a Negative Declaration.*
(2) *If the agency finds that pursuant to Section 15162, no new effects could occur or no new mitigation measures would be required, the agency can approve the activity as being within the scope of the project covered by the program EIR, and no new environmental document would be required.*
(3) *An agency shall incorporate feasible mitigation measures and alternatives developed in the program EIR into subsequent actions in the program.*
(4) *Where the subsequent activities involve site-specific operations, the agency should use a written checklist or similar device to document the evaluation of the site and the activity to determine whether the environmental effects of the operation were covered in the program EIR.*
(5) *A program EIR will be most helpful in dealing with subsequent activities if it deals with the effects of the program as specifically and comprehensively as possible. With a good and detailed analysis of the program, many subsequent activities could be found to be within the scope of the project described in the program EIR, and no further environmental documents would be required.*

CEQA Guidelines Section 15168 describes the proper process for Program EIRs, as follows (emphasis added):

> *Use of the Program EIR also enables the Lead Agency to characterize the overall program as the project being approved at that time. Following this approach when individual activities within the program are proposed, the agency would be required to examine the individual activities within the program to determine whether their effects were fully analyzed in the Program EIR. If the activities would have no effects beyond those analyzed in the Program EIR, the agency could assert that the activities are merely part of the program, which had been approved earlier, and no further CEQA compliance would be required. This approach offers many possibilities for agencies to reduce their costs of CEQA compliance and still achieve high levels of environmental protection.*

In accordance with *CEQA Guidelines* Section 15121, the main purposes of this EIR are to:

- Provide decision-makers and the public with specific information regarding the environmental effects associated with the proposed project;
- Identify ways to minimize the significant effects of the project; and
- Describe reasonable alternatives to the project.

Mitigation measures are provided that may be adopted as conditions of approval to avoid or minimize the significance of impacts resulting from the project. In addition, this EIR is the primary reference document in the formulation and implementation of a mitigation monitoring program for the proposed project.

The City of Duarte (which has the principal responsibility of processing and approving the project) and other public (i.e., responsible and trustee) agencies that may use this EIR in the decision-making or permit process will consider the information in this EIR, along with other information that may be presented during the CEQA process. Environmental impacts are not

always able to be mitigated to a level considered less than significant; in those cases, impacts are considered significant unavoidable impacts. In accordance with *CEQA Guidelines* Section 15093(b), if a public agency approves a project that has significant impacts that are not substantially mitigated (i.e., significant unavoidable impacts), the agency shall state in writing the specific reasons for approving the project, based on the Final EIR and any other information in the public record for the project. This is termed per *CEQA Guidelines* Section 15093, a "statement of overriding considerations."

This document analyzes the environmental effects of the project to the degree of specificity appropriate to the current proposed actions, as required by *CEQA Guidelines* Section 15146. The analysis considers the activities associated with the project to determine the short-term and long-term effects associated with its implementation. This EIR discusses both the direct and indirect impacts of this project, as well as the cumulative impacts associated with other past, present, and reasonably foreseeable future projects.

2.2 COMPLIANCE WITH CEQA

2.2.1 EIR SCOPING PROCESS

In compliance with *CEQA* and the *CEQA Guidelines*, the City of Duarte has provided opportunities for various agencies and the public to participate in the environmental review process. During preparation of the Draft EIR, efforts were made to contact various Federal, State, regional, and local government agencies and other interested parties to solicit comments on the proposed project. This included the distribution of a Notice of Preparation (NOP) to various responsible agencies, trustee agencies, and interested parties, in addition to a public scoping meeting held on Monday, April 22, 2013 at the Duarte Community Center located at 1600 Huntington Drive in Duarte. The meeting was held with the specific intent of affording interested individuals, groups, and public agencies a forum in which to provide input pertaining to the environmental effects of the proposed project in an effort to assist in further refining the intended scope and focus of the EIR, as described in the NOP.

Pursuant to *CEQA Guidelines* Section 15082, the City of Duarte circulated an NOP directly to public agencies (including the Office of Planning and Research's State Clearinghouse), special districts, and members of the public who had requested such notice. The NOP and Initial Study were distributed on April 11, 2013, with the 30-day public review period concluding on May 13, 2013.

The purpose of the NOP was to formally announce the preparation of a Draft EIR for the proposed project, and as the Lead Agency, the City solicited input regarding the scope and content of the environmental information to be included in the EIR. The NOP and Initial Study provided preliminary information regarding the anticipated range of impacts to be analyzed within the EIR. The NOP is provided as Appendix A, Initial Study and Notice of Preparation, of this EIR, and NOP comments are provided as Appendix B, Notice of Preparation Comments.

The City of Duarte received a total of nine comment letters from State, regional, and local public agencies and the public:

- State of California, Public Utilities Commission
- State of California, Native American Heritage Commission

- State of California, Department of Transportation
- Los Angeles County Metropolitan Transportation Authority
- South Coast Air Quality Management District
- County of Los Angeles Fire Department
- County Sanitation Districts of Los Angeles County
- County of Los Angeles Department of Public Works
- Pierce Law Firm

The following environmental concerns were raised in response to the NOP (the numerical reference in parenthesis is the EIR section in which the analysis is provided) or the public scoping meeting. The NOP comments are contained in Appendix B. The topics raised during the NOP and scoping meeting process include the following issues.

The NOP comments included, but were not limited to, the following issues of controversy/issues to be resolved:

WRITTEN RESPONSES TO NOTICE OF PREPARATION

State of California, Public Utilities Commission

- Requested language be included in Specific Plan so that future development adjacent to the railroad right-of-way (ROW) is planned with the safety of the rail corridor in mind, including pedestrian circulation patterns or destinations and compliance with Americans with Disabilities Act.

- Consider application of mitigation measures if applicable related to improvements to existing at-grade crossings due to increase in traffic volumes, or fencing or other appropriate barriers to limit the access of trespassers onto the railroad ROW.

State of California, Native American Heritage Commission

- Recommends contacting the appropriate Information Center for a records search.

State of California, Department of Transportation

- Reference Caltrans' traffic study guide when preparing the traffic analysis.

- Traffic study should include a queue analysis of the W/B I-210 freeway off-ramp to Buena Vista Street using the Highway Capacity Manual (HCM) methodology.

- Analysis of existing, project-related, and cumulative project traffic in the affected area, including freeways, interchanges, and High Occupancy Vehicle (HOV) facilities.

- Model project travel consistently with other regional and local modeling forecasts.

- Analyze ADT, AM and PM peak-hour volumes for both existing and future conditions.

- Discussion of mitigation measures.

- Fair share contribution towards pre-established or future improvements on the State Highway systems is considered acceptable mitigation (refer to Appendix B of the traffic study guide).

Los Angeles County Metropolitan Transportation Authority (LACMTA or Metro)

- The Metro Gold Line Light Rail will operate weekday peak service as often as every five minutes in both directions. Trains may operate 24 hours a day, seven days a week.

- Consider the proximity of residential units and other sensitive land uses near the Metro Gold Line and Duarte Station as the expectation is that the Metro Gold Line will run on standard ballasted tracks, which will produce noise, vibration, and visual impacts.

- The EIR should disclose that the Metro Gold Line and associated facilities are an approved project with known, approved, and addressed impacts, including but not limited to noise, and vibration. In addition, the EIR should disclose the 125-space surface parking facility at the southwest corner of Business Center Drive and Highland Avenue.

- Development applicants should review and convey a Noise Easement to LACMTA for proposed development.

- The City and/or project applicants should notify LACMTA of any changes to the construction/building plans that may impact the current and projected use of the railroad ROW.

- LACMTA encourages the incorporation of transit-oriented, pedestrian-oriented parking strategies such as the reduction or removal of minimum parking requirements or shared parking opportunities.

- LACMTA encourages an analysis of non-motorized transportation modes and consideration of improved non-motorized access to the station including pedestrian connections and bike lanes/path.

- Traffic analysis should include CMP analysis, if the criteria is met.

South Coast Air Quality Management District

- Identify any potential adverse air quality impacts that could occur from all phases of the project and all air pollutant sources related to the project.

County of Los Angeles Fire Department

FORESTRY DIVISION

- Analyze potential impacts if project site is within Very High Fire Hazard Severity Zone or Fire Zone 4.

HEALTH HAZARDOUS MATERIALS DIVISION

- Recommends preparation of a Phase I study to discuss historical and current uses on the site and if there is the use or storage of hazardous materials.

County Sanitation Districts of Los Angeles County

- To estimate the volume of wastewater generated by a project, use Table 1, Loading for Each Class of Land Use on the Districts' website site, under Wastewater & Sewer Systems, Will Serve Program.

- The County Sanitation Districts require connection fees for connecting to the sewer system or increasing the quantity of wastewater.

- The design capacities of the County Sanitation Districts wastewater treatment facilities are based on regional growth forecasts by the Southern California Association of Governments (SCAG). The available capacity of the treatment facilities is limited to levels associated with the approved growth identified by SCAG.

County of Los Angeles Department of Public Works

HYDROLOGY AND WATER QUALITY

- The EIR should include a Hydrology Study/Water Quality Management Plan.

- Connections to existing Los Angeles County Flood Control District drains/facilities that are intended to be transferred to the Flood Control District require a connection/construction permit prior to construction.

UTILITIES AND SERVICE SYSTEMS

- Discuss the collection and disposal of additional wastewater generated by the proposed project, and the impacts on available capacity in existing local sewer lines for both peak-dry and wet-weather flows.

- Sewer construction must comply with Public Works' sewer design and construction standards prior to acceptance in the District.

Pierce Law Firm

- Clarification on CEQA definition of a project.

- Cumulative impacts associated with City of Hope's expansion plans.

- Requests inclusion of alternative if residential, hotel, and commercial uses are not supported by market forces.

WRITTEN OR VERBAL COMMENTS FROM SCOPING MEETING

- None.

2.2.2 PUBLIC REVIEW OF DRAFT EIR

The Draft EIR is subject to a 45-day review period by responsible and trustee agencies, the public and any interested parties. *CEQA Guidelines* Section 15087 lists optional procedures for noticing, including publication in a newspaper, posting on-site, or mailing to owners of a property or properties contiguous to the site. In accordance with the provisions of *CEQA Guidelines* Sections 15085(a) and 15087(a)(1), the City of Duarte, serving as the Lead Agency shall (1) publish a Notice of Availability (NOA) of a Draft EIR; and (2) prepare and transmit a Notice of Completion (NOC) to the State Clearinghouse. Proof of publication is available at the offices of the Lead Agency. Further, an electronic copy of the Draft EIR is available for review on the City's official website (www.accessduarte.com), and hard copies of the Draft EIR are available for review at the City of Duarte (located at 1600 Huntington Drive, Duarte, CA 91010).

Any public agency or members of the public desiring to comment on the Draft EIR must submit their comments in writing to the lead agency indicated on the document's NOC/NOA prior to the end of the public review period. The Lead Agency will evaluate and prepare responses to all relevant written comments received from both citizens and public agencies during the public review period.

2.2.3 FINAL EIR

The Final EIR will consist of the Draft EIR, revisions to the Draft EIR (if any), responses to all written comments, and the mitigation monitoring and reporting program. At least ten days prior to the certification hearing, responses to the comments made by public agencies on the Draft EIR will be provided to the commenting agencies.

2.3 FORMAT OF THE EIR

The Draft EIR is organized into the following 10 sections and appendices:

- Section 1.0, Executive Summary, provides a brief project description and summary of the environmental impacts and mitigation measures.
- Section 2.0, Introduction and Purpose, provides CEQA compliance information.
- Section 3.0, Project Description, provides a detailed project description indicating project location, background, and history; project characteristics, phasing, and objectives; as well as associated discretionary actions required.
- Section 4.0, Basis for the Cumulative Analysis, describes the approach and methodology for the cumulative analysis.
- Section 5.0, Environmental Analysis, contains a detailed environmental analysis of the existing conditions, potential project impacts, recommended mitigation measures, and possible unavoidable adverse impacts for a number of environmental topic areas.
- Section 6.0, Alternatives to the Proposed Action, describes a reasonable range of alternatives to the project or to the location of the project that could avoid or substantially

lessen the significant impact of the project and still feasibly attain the basic project objectives.

- Section 7.0, Other CEQA Considerations, discusses growth-inducing impacts associated with the proposed project; significant environmental changes that would be involved with the proposed project, should it be implemented; significant irreversible environmental changes that would be involved with the proposed project, should it be implemented; and energy efficiency pursuant to CEQA Guidelines Appendix F.

- Section 8.0, Effects Found Not to be Significant, provides an explanation of potential impacts that have been determined not to be significant.

- Section 9.0, Significant Environmental Effects Which Cannot Be Avoided if the Proposed Action Is Implemented, describes those impacts that remain significant and unavoidable following mitigation.

- Section 10.0, References, identifies the Lead Agency and preparers of the EIR, as well as organizations and individuals consulted.

The following Appendices contain the technical documentation for the Draft EIR:

A: Initial Study/Notice of Preparation
B: Notice of Preparation Comments
C: Public Service and Utility Correspondence
D: Traffic Impact Analysis
E: Air Quality/Greenhouse Gas Emissions Data
F: Noise Data
G: Hazardous Materials Documentation
H. Hydrology and Water Quality

2.4 RESPONSIBLE AND TRUSTEE AGENCIES

Certain projects or actions undertaken by a Lead Agency require subsequent oversight, approvals, or permits from other public agencies in order to be implemented. Such other agencies are referred to as Responsible Agencies and Trustee Agencies. Pursuant to Sections *CEQA Guidelines* 15381 and 15386, Responsible Agencies and Trustee Agencies are respectively defined as follows:

"Responsible Agency" means a public agency, which proposes to carry out or approve a project, for which [a] Lead Agency is preparing or has prepared an EIR or Negative Declaration. For the purposes of *CEQA*, the term "responsible agency" includes all public agencies other than the Lead Agency, which have discretionary approval power over the project. (*CEQA Guidelines* Section 15381)

"Trustee Agency" means a state agency having jurisdiction by law over natural resources affected by a project, which are held in trust for the people of the State of California. Trustee Agencies include; The California Department of Fish and Wildlife, The State Lands Commission; The State Department of Parks and Recreation and The University of California with regard to sites within the Natural Land and Water Reserves System. (Section 15386)

Responsible and Trustee Agencies and other entities that may use this EIR in their decision-making process or for informational purposes include, but may not be limited to, the following:

- California Department of Toxic Substances Control
- California Department of Transportation
- City of Irwindale
- City of Monrovia
- City of Azusa
- City of Bradbury
- County of Los Angeles
- Duarte Unified School District
- Los Angeles County Fire Department
- Los Angeles County Sheriff's Department
- County Sanitation Districts of Los Angeles County
- Los Angeles County Metropolitan Transportation Authority
- South Coast Air Quality Management District
- Southern California Association of Governments
- State Water Resources Control Board
- California Public Utilities Commission
- United States Army Corps of Engineers

2.5 INCORPORATION BY REFERENCE

Pertinent documents relating to this EIR have been cited in accordance with *CEQA Guidelines* Section 15150, which encourages incorporation by reference as a means of reducing redundancy and length of environmental reports. The following documents are hereby incorporated by reference into this EIR. Information contained within these documents has been utilized for each section of this EIR. These documents are available for review at the City of Duarte Community Development Department, located at 1600 Community Drive, Duarte, California 91010.

- *City of Duarte Comprehensive General Plan 2005-2020* (*General Plan*), August 14, 2007. The Duarte General Plan assesses and plans future uses for all property within the planning area. The General Plan establishes what the residents and businesses of Duarte want to preserve and achieve. The General Plan includes the following elements:

  - Safety;
  - Open Space and Conservation;
  - Noise;
  - Land Use;
  - Housing[1];
  - Historic Preservation;
  - Economic Development; and
  - Circulation.

[1] The City of Duarte 2008-2014 Housing Element was adopted on April 12, 2011.

- *Duarte General Plan Update EIR* (*General Plan EIR*), August 2007. The General Plan EIR analyzed potential environmental impacts associated with buildout of the City in accordance with the General Plan. The General Plan EIR assumes growth in residential, retail, office, and research and development uses over 2005/2006 conditions, as follows:

  - 726 residential dwelling units;
  - 248,744 square feet of retail uses;
  - 50,000 square feet of office uses; and
  - 360,000 square feet of research and development uses.

  The General Plan EIR concluded that the following impacts could not be feasibly mitigated and would result in a significant unavoidable impact associated with implementation of the General Plan Update:

  Air Quality
  - Mobile and Stationary Source Emissions (Reactive Organic Gases)
  - Short-Term Cumulative Impacts
  - General Plan Buildout Cumulative Impacts

  The City Council adopted a Statement of Overriding Considerations for these impacts on August 14, 2007. Both the Statement of Overriding Considerations and the Statement of Facts and Findings are referenced in Resolution No. 07-22.

- *City of Duarte Municipal Code* (current through Ordinance 838, passed July 31, 2012) (*Municipal Code*). The Municipal Code consists of regulatory, penal, and administrative ordinances of the City. It is the method the City uses to implement control of land uses, in accordance with General Plan goals and policies. The Development Code (Title 19 of the Municipal Code) identifies land uses permitted and prohibited according to the zoning category of particular parcels and establishes the development standards and regulations for each zone. The Building Laws (Title 16 of the Municipal Code) specify rules and regulations for construction, alteration, and building for uses of human habitation.

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SECTION 3.0
Project Description

3.0 PROJECT DESCRIPTION

3.1 PROJECT LOCATION

Regionally, the project site is located in the City of Duarte. The City of Duarte is located in the north-central portion of the San Gabriel Valley, approximately 21 miles northeast of the City of Los Angeles in the County of Los Angeles. The City of Duarte is situated at the base of the San Gabriel Mountains and is bordered by the City of Irwindale to the south, the City of Monrovia to the west, the City of Bradbury and the Angeles National Forest to the north, and the City of Azusa to the east; refer to *Exhibit 3-1*, *Regional Vicinity*.

Locally, the project site is generally located at the northwest corner of Duarte Road and Highland Avenue. The project site is bounded by Evergreen Street and the Foothill Freeway (Interstate 210) to the north, Highland Avenue to the east, a single-family residential neighborhood to the west, and the Los Angeles County Metropolitan Transportation Authority (Metro)-owned railroad right-of-way (ROW) and Duarte Road to the south; refer to *Exhibit 3-2*, *Local Vicinity*.

3.2 ENVIRONMENTAL SETTING

EXISTING LAND USES

The approximately 19.08-acre site is comprised of three parcels under separate ownerships (refer to *Exhibit 3-3*, *Specific Plan Area*). The parcels are developed with a mix of industrial uses totaling approximately 313,955 square feet. Each parcel is developed with a single building.

Parcel 1, which abuts the future station location is approximately 6.60 acres in size and includes a 128,466 square foot warehousing building occupied by multiple tenants.

Parcel 2, located in the center of the Plan Area, is approximately 9.16 acres in size and includes a 114,599-square foot industrial building currently occupied by Woodward-Duarte (formerly GE Aviation).

Parcel 3, located in the northern portion of the Plan Area, is approximately 3.32 acres in size and includes a 70,890 square foot warehouse building occupied by multiple tenants.

SURROUNDING LAND USES

The project site is surrounded by the following uses:

- *North:* Evergreen Street and the Foothill Freeway (Interstate 210) are located to the north of the northernmost portion of the site. Single-family residential uses are located to the north across Business Center Drive.

- *West:* An approximate 204-unit single-family residential neighborhood south of Evergreen Street, west of Buena Vista Street, and north of Duarte Road is located to the west of the project site.

NOT TO SCALE

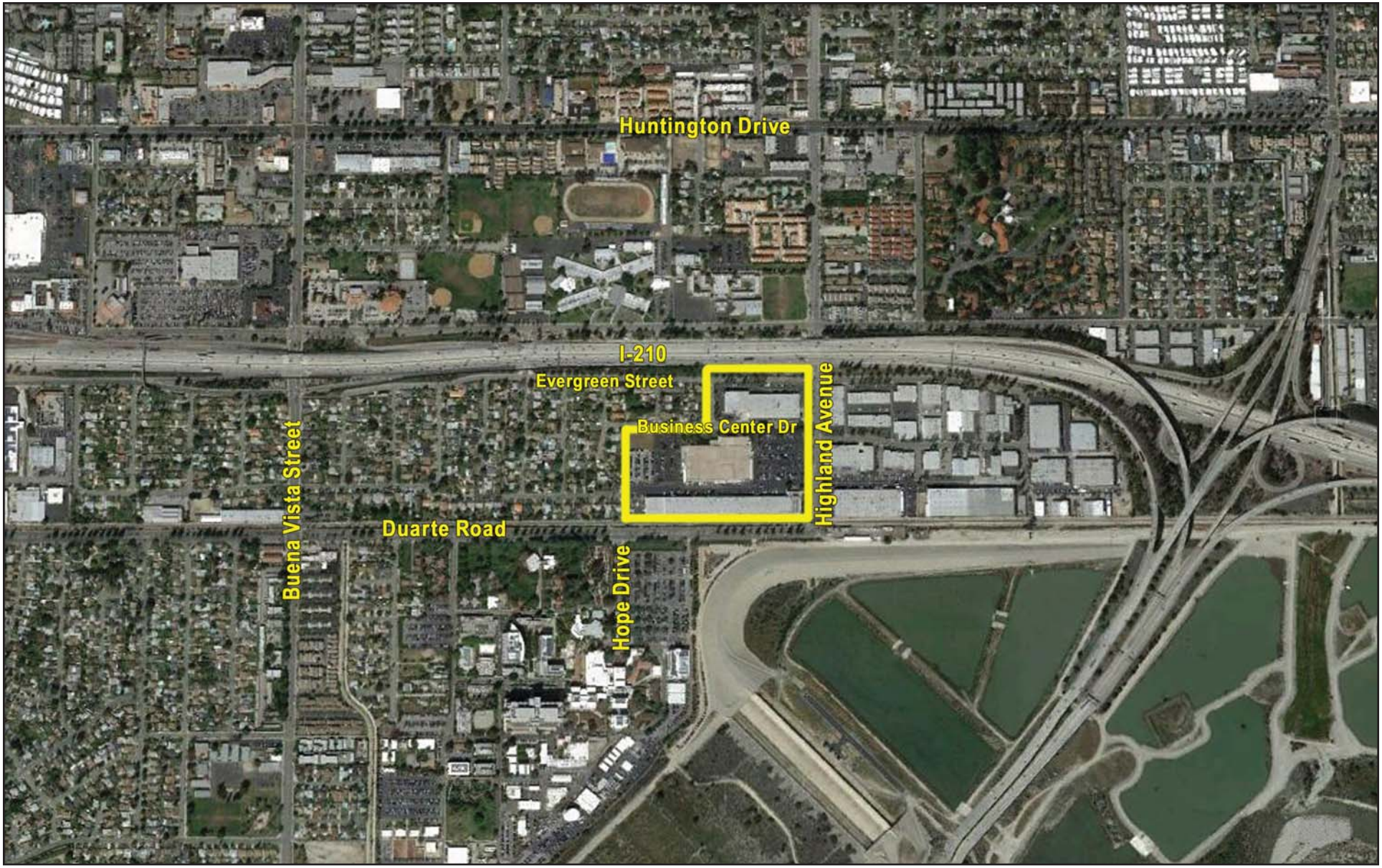
RBF CONSULTING
A Baker Company

09/13 • JN 10-108568 (130318)

DUARTE STATION SPECIFIC PLAN
ENVIRONMENTAL IMPACT REPORT

Regional Vicinity

Exhibit 3-1



Source: Google Maps, 2013.
- Project Site

NOT TO SCALE

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DUARTE STATION SPECIFIC PLAN
ENVIRONMENTAL IMPACT REPORT

Local Vicinity

Exhibit 3-2

SITE SUMMARY :

PARCEL 1:	+/- 6.60 AC
PARCEL 2:	+/- 9.16 AC
PARCEL 3:	+/- 3.32 AC
	+/- 19.08 AC

Source: Dahlin Group, May 2013.

NOT TO SCALE

RBF CONSULTING A Baker Company

09/13 • JN 10-108568 (130318)

DUARTE STATION SPECIFIC PLAN
ENVIRONMENTAL IMPACT REPORT

Specific Plan Area

Exhibit 3-3

- *South:* The Los Angeles County Metropolitan Transportation Authority (Metro)-owned railroad ROW is directly adjacent to the project site. The City of Hope campus and the Santa Fe Dam Recreational Area, owned by the U.S. Army Corps of Engineers (USACE) and operated by Los Angeles County Department of Parks and Recreation, are located to the south of the project site across Duarte Road.

- *East:* The Duarte/Lewis Business Center occupies approximately 40 acres and is located to the east across Highland Avenue, south of the Interstate 210 and west of the San Gabriel Freeway (Interstate 605).

3.3 EXISTING GENERAL PLAN AND ZONING DESIGNATIONS

The Duarte General Plan designates the project site as Gold Line Station Area Development Specific Plan. The Final Zoning Map designates the project site as M, Manufacturing.

The following text from the *General Plan* Land Use Element describes the intent of the Gold Line Station Area Development Specific Plan.

> *"The Metro Gold Line will eventually provide alternate mobility to residents and businesses in the San Gabriel Valley from Montclair to downtown Los Angeles. This light rail system currently runs from South Pasadena to Downtown Los Angeles with thirteen stations now open. The next phase of the system, known as Planned Segment 1, will continue from South Pasadena 11.4 miles to Azusa with six additional stations including one in Duarte. Five additional stations are planned in Planned Segment 2 from Azusa, 12.5 miles to Montclair. With congestion expected to double within thirty years, transit oriented development around the Gold Line stations will provide relief from current and future gridlock. While timing of the Duarte segment is not certain, it is anticipated this segment will be operating by 2010 at the earliest.*
>
> *The Duarte Gold Line station will be located north of Duarte Road and about 400 feet west of Highland Avenue within the vicinity of City of Hope. The area to the north of the station includes about twenty acres of industrial buildings. For purposes of this Land Use Element, it is anticipated this area should be designated a specific plan area. This specific plan should provide for a mixed use transit oriented development. For planning purposes a maximum of 100,000 sq. ft. of retail and office could be accommodated within this area. In addition up to 120 multiple family residential units could be built within this area. Gold Line ridership estimates could eventually require up to 500 parking spaces in close proximity to the Duarte station. The concept is to work with existing property owners and businesses to formulate a specific plan that provides for the before mentioned uses, densities and intensities as well as development standards for a true transit oriented development.*
>
> *The Gold Line Station Area Development Specific Plan is a new land use designation for the 2005 – 2020 General Plan. As with the City Center area, this area is intended to create a unique area oriented towards the future Gold Line station in Duarte. This flexible mixed use area will be located north of the Gold Line station in what is now part of the industrial park west of Highland Avenue.*

This mixed use area will also use a specific plan as an implementation tool to achieve the desired objective. The desired objective is to reduce vehicle miles traveled, provide transportation options for existing and future workforce and residents around the Gold Line station, provide location efficiency, expanded mobility, and provide public/private financial return and value recaptured. The specific plan to implement this objective must provide flexibility in providing vertical and/or horizontal mixed high density residential, commercial uses, office, R&D and industrial uses. As with the City Center plan the Gold Line station Specific Plan which will be the implementation tool for this area must also provide unique parking standards, sufficient residential densities, housing types and appropriate pedestrian friendly design to encourage usage of the Gold Line as a primary mode of travel. Because the timing of the Gold Line station opening is unknown, this Specific Plan must provide even more flexibility for future needs."

Development Code Section 19.16.110 describes the M Light Industrial Zone District (M zone) as a zone that provides areas for relatively low-intensity industrial activities that do not involve substantial truck traffic or outdoor fabrication or assembly, do not produce noticeable odors, and do not involve operations normally considered hazardous within an urban environment.

GENERAL PLAN LAND USE ELEMENT

Land Use Element Table LU-4 includes the planned land use and/or development densities/intensities for the "Gold Line Station" Specific Plan Areas. As indicated on Table LU-4, the General Plan projected 120 dwelling units and 100,000 square feet of non-residential use. These projections are additive to existing on-site uses.

GENERAL PLAN HOUSING ELEMENT

The 2008-2014 Housing Element identifies the Gold Line Station Development Area Specific Plan as a site for rezoning to accommodate 120 multi-family units. The Housing Element (2012 Amendment) states that a minimum of 80 to 100 units be a part of Phase 1 of the Gold Line Station Development Area Specific Plan and suggested that Phase 1 would be the 6.6 acre portion of the site, noted as Parcel 1 of *Exhibit 3-3*. The Housing Element was not intended to place a maximum number of units that would be developed in either Parcel 1 or the balance of the planning area, but to address a minimum number that would allow the City to meet its regional housing needs.

3.4 PROJECT OBJECTIVES

The Duarte Station Specific Plan includes the following Goals and Objectives to guide the intent and future development within the Specific Plan Area.

1. GOAL: A MIXTURE OF LAND USES

a. *Objective*: Develop a flexible mixed-use land use pattern that incorporates retail, office, hospitality, and residential opportunities that will effectively complement each other and provide maximum land use efficiency, while providing economic and social benefits to all users.

b. *Objective*: Program retail uses that are neighborhood- and transit-station serving.

2. GOAL: AN ECONOMICALLY FEASIBLE DEVELOPMENT

a. *Objective*: Provide flexible non-residential spaces that can be adjusted to respond to shifts in market demand and allow options throughout various economic cycles and scenarios.

b. *Objective*: Create a range of residential unit types that will be accessible to residents of all income levels.

c. *Objective*: Provide residential opportunities to assist the City of Duarte in meeting their Regional Housing Needs Allocation (RHNA) objectives.

d. *Objective*: Encourage the development of a hotel to create local jobs, support City of Hope lodging needs, provide community meeting space, and increase tax revenues within the community.

3. GOAL: TRADITIONAL PEDESTRIAN-ORIENTED STREET PATTERN

a. *Objective*: Create a "grid-like" block pattern that effectively provides for compact development with reduced road widths to provide connectivity throughout the site.

b. *Objective*: Give precedence to pedestrians while keeping streets narrow to foster multimodal transportation with bicycle, pedestrian, and transit access.

4. GOAL: SUPERIOR URBAN DESIGN

a. *Objective*: Allow for building types that will achieve desired density ranges to establish a critical mass of residents and employees to support the transit station, maximize transit ridership, and support retail spaces and local employment centers.

b. *Objective*: Minimize setbacks to allow buildings to frame and activate the street.

c. *Objective*: Use trees, shrubs and other landscape and hardscape materials along streets to provide shading, screening, and human scale.

d. *Objective*: Promote quality architectural design to establish a consistent contemporary design character that creates an identity in the Duarte Station Specific Plan area.

5. GOAL: OUTDOOR SPACES

a. *Objective*: Provide singular or multiple outdoor spaces, such as an urban green space or public plaza that provides a transition between the station and the surrounding transit village uses in order to provide a public gathering space.

b. *Objective*: Program outdoor space(s) to accommodate the needs of various user groups, such as residents, employees, commuters, and visitors.

6. GOAL: AWARENESS OF SURROUNDING DEVELOPMENT

a. *Objective*: Create a center that provides desired goods and services to surrounding residents, students, and employees within and surrounding the Duarte Station Specific Plan area.

b. *Objective*: Provide specific setbacks, height limitations, upper story step-backs, and landscape requirements to afford adjacent residences privacy and separation from larger buildings.

c. *Objective*: Consider the future needs of the City of Hope as part of land use planning.

7. GOAL: SUSTAINABLE DEVELOPMENT PRACTICES

a. *Objective*: Identify the level of development proposed within the Specific Plan area, and adhere to Levels of Sustainable Development Practices as prescribed in Chapter 19.52 of the City's Development Code.

b. *Objective*: Ensure that construction and demolition waste is disposed of in accordance with all City regulations and standards.

c. *Objective*: Consider building layout, siting, and building design to not preclude alternative energy production on-site.

d. *Objective*: Maximize energy efficiency through local and state standards, indoor environmental quality, energy-efficient lighting, building orientation, shading, and implementation of LEED principles and/or attaining LEED Certification.

e. *Objective*: Reduce heat island effect through site planning and selection of landscape and hardscape materials.

f. *Objective*: Incorporate water-efficient design features such as permeable surfaces, collection devices, biofiltration devices, green rooftops, cisterns, berms and swales, and/or green rooftops.

g. *Objective*: Include climate-adapted landscape within the Specific Plan area.

3.5 PROJECT CHARACTERISTICS

BACKGROUND

Beginning in 2005, the Metro Gold Line Foothill Extension Construction Authority (Authority) began working with the City of Duarte (City) to review the preliminary construction plans for the Light Rail Transit (LRT). At that time, the Authority introduced the idea of Transit Oriented Development (TOD) to cities along the LRT corridor and the benefits it may present to communities. The idea of TOD resonated with the City Council, and as such, the City began to contemplate the integration of TOD into the City's land use documents. In August 2007, the City Council adopted a comprehensively updated General Plan that included the re-designation of approximately 19 acres of industrial land uses near the future Gold Line Station the Gold Line

Station Area Development Specific Plan designation. In 2007 and 2008, the City also participated in a Caltrans Community Based Transportation Grant. The grant was sponsored by the San Gabriel Valley Council of Governments, and produced a TOD visioning study for the project site based upon significant public outreach, a joint City Council and Planning Commission workshop with over 150 residents in attendance, and a summary presentation before the City Council in April 2008. All of these efforts have served as a catalyst for both the City Council and the community to realize a TOD development at the project site.

Since 2008, the City has entertained multiple development teams that have shown interest in initiating a TOD development at the project site; however, none have moved forward.

The Duarte City Council is committed to the realization of the Duarte Gold Line Station Area Development, and as such, supported City Staff submittal of a Metro Transit Oriented Development (TOD) Planning Grant. The City was awarded the grant and has lead the efforts in preparation of a Gold Line Station Area Development Specific Plan.

DESCRIPTION OF PROJECT

The City-initiated Duarte Station Specific Plan (Specific Plan) is intended to establish the general type, parameters, and character of the development in order to develop an integrated TOD that is also compatible with the surrounding area. The Plan Area's proximity to freeways, major streets, and existing rail infrastructure makes the Duarte Station Specific Plan an ideal location for the integration of mixed uses and transit, along with facilitating economic development in Duarte.

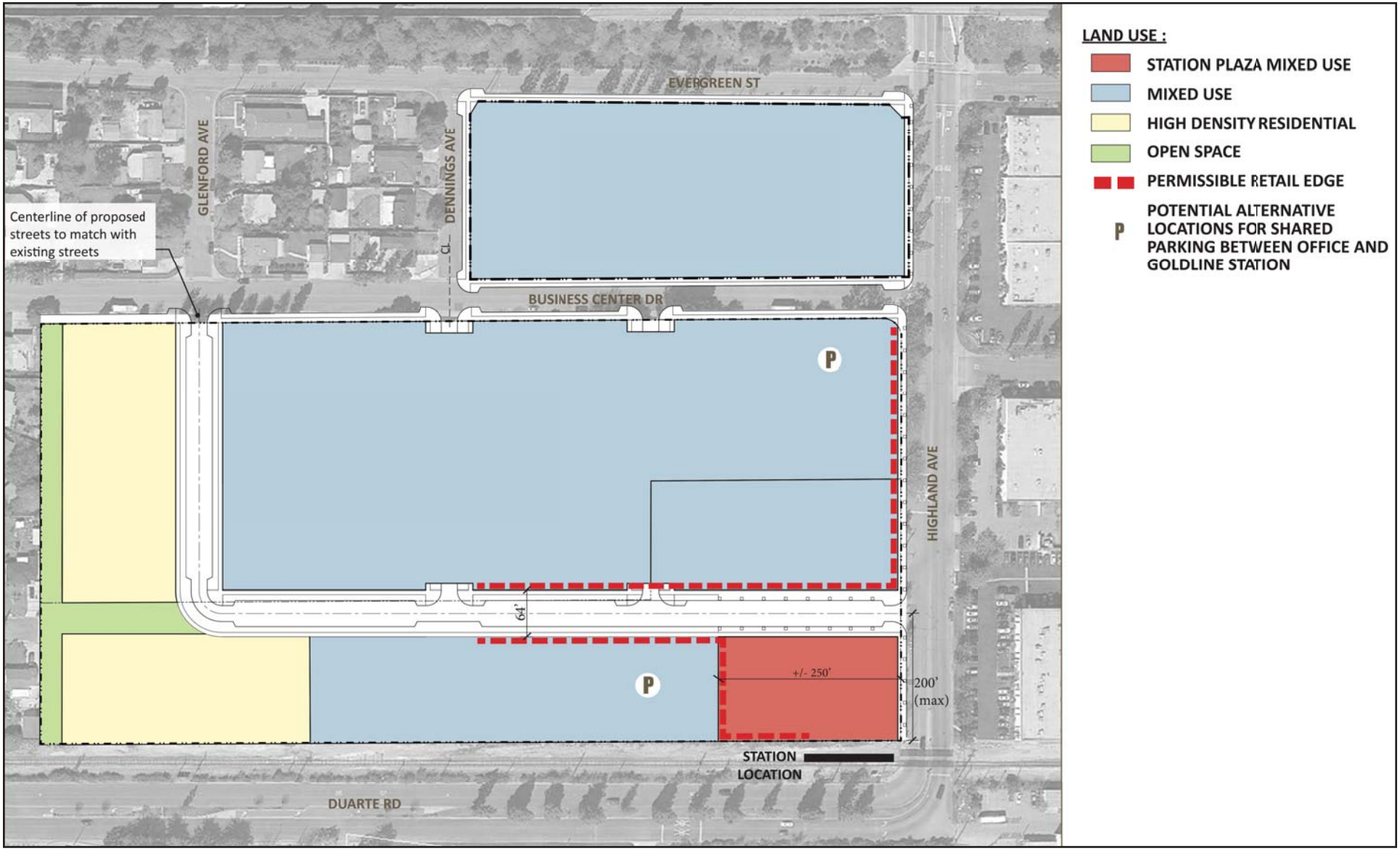
MASTER LAND USE PLAN

The Master Land Use Plan provides flexibility for property owners to respond to market conditions and develop a mixed-use "transit village" that revitalizes the Plan Area through the provision of multiple land uses that complement one another. Land uses consist of residential, office, hotel, commercial/retail, and open space. This mixture of land uses results in the availability of a variety of goods, services, and entertainment for residents, employees, or visitors to the Plan Area. Refer to *Exhibit 3-4*, *Master Land Use Plan*.

Land Use Designations

Based upon the Master Land Use Plan, the Specific Plan is establishing the following land use designations (refer to *Table 3-1*, *Master Land Use Plan Designations and Acreages*):

- Mixed Use
- Station Plaza Mixed Use
- High Density Residential
- Recreation/Open Space



Source: Dahlin Group, April 5, 2013.

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DUARTE STATION SPECIFIC PLAN
ENVIRONMENTAL IMPACT REPORT

Master Land Use Plan

Exhibit 3-4

Table 3-1
Master Land Use Plan Designations and Acreages

Land Use Designation	Acreage
Mixed Use	12.06
Station Plaza Mixed Use	0.81
High Density Residential	2.55
Recreation/Open Space	0.80
Roads	2.86
TOTAL	**19.08**

MIXED USE

The Mixed Use designation includes two categories of mixed use: General Mixed Use, and Station Plaza Mixed Use.

The General Mixed Use (MU) designation is intended to provide flexibility within the Plan to adapt to changing market conditions, and incorporates a mixed use approach that allows for a full range of high density residential, office, hotel, and commercial uses.

The Station Plaza Mixed Use (SP) designation is intended to provide for an integrated mix of uses in the area immediately surrounding the Gold Line Station. While the primary use in this classification is envisioned to be small-scale, local serving retail, some other commercial uses may be accommodated on upper floors provided they meet the development standards and guidelines.

HIGH DENSITY RESIDENTIAL

The High Density Residential (HDR) designation is intended to create a compact residential neighborhood within walking distance of the Gold Line Station. Residential densities are permitted between a minimum of 40 and a maximum of 70 units per acre for individual parcels. A range of for-sale or rental housing types may be included in a development project, provided the total project meets the density standards.

RECREATION/OPEN SPACES

The Recreation/Open Space (OS/REC) designation provides for up to 0.80 acres of passive open space in the form of a greenbelt, which serves as a buffer between the high density residential area in the Plan Area and the existing single-family residential to the west of the project site. The eastern-most extension of the green space may be narrowed or broken up into smaller open spaces throughout the Plan Area.

In addition, a public plaza is planned near the Station and is intended to be a public gathering place and focal point along Highland Avenue that would include landscaping, hardscape features, and public amenities.

GOLD LINE PARKING

METRO will provide a surface parking lot with a minimum of 125 spaces at the southwest of Highland Avenue and Business Center Drive in the early phases of the Specific Plan, increasing to 250 by 2025. This parking is intended solely for users of the Gold Line. Ultimately, this parking is planned to be accommodated within a structure or incorporated within a mixed use building as a parking requirement on any future use.

DEVELOPMENT SCENARIO

For purposes of the environmental analysis, a development scenario that shows one potential implementation of the Master Land Use Plan has been identified; refer to *Exhibit 3-5*, *Development Scenario* and *Table 3-2*, *Development Scenario*. The development program is anticipated to be implemented on development parcels totaling 15.42 acres of developable land, with 2.86 acres of internal project roads and 0.80 acres of open space. The ultimate land use would be determined at the time of site plan submittal for a specific parcel, subject to the development standards and permitted uses outlined in the Specific Plan.

Table 3-2
Development Scenario

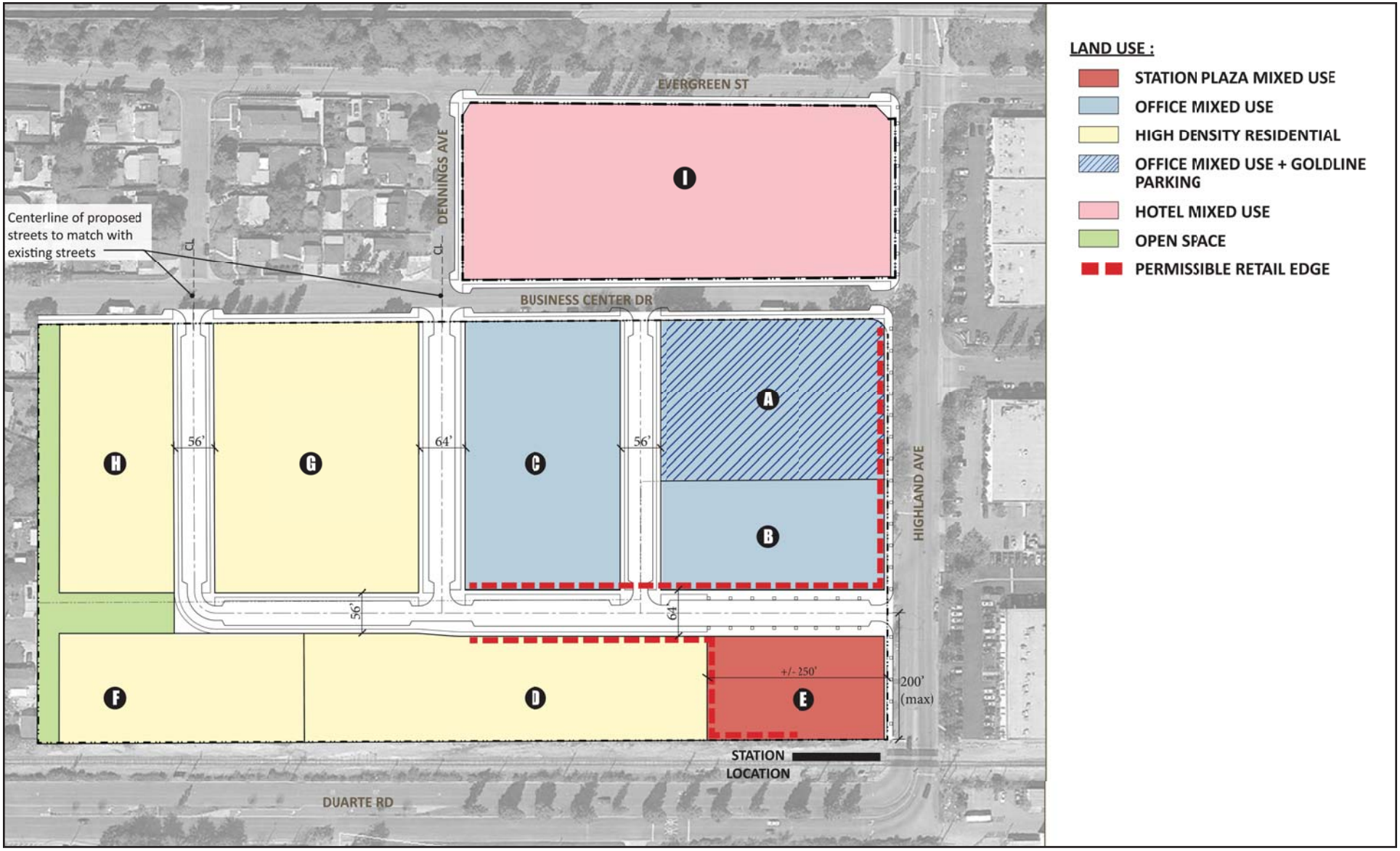
Land Use	Residential (DU)	Non-Residential (SF)	Non-Residential (Hotel Rooms)
Retail		12,000	
Office		400,000	
Hotel			250
High Density Residential	475[1]		
Open Space			
Roads			
TOTAL	**475[1]**	**412,000**	**250**

Note: A minimum of 178 units shall be provided on Parcels F and H, as shown on Exhibit 3-5.

GROWTH OVER EXISTING CONDITIONS

As shown in the *Table 3-3*, *Growth Over Existing Conditions*, the anticipated growth in residential and non-residential uses over year 2013 existing conditions within the Plan Area is:

- Addition of 475 dwelling units
- Addition of 98,045 square feet of non-residential uses (office, retail, hotel)
- Addition of 250 hotel rooms



Source: Dahlin Group, April 5, 2013.

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DUARTE STATION SPECIFIC PLAN
ENVIRONMENTAL IMPACT REPORT

Development Scenario

Exhibit 3-5

Table 3-3
Growth Over Existing Conditions

Land Use	Residential (DU)	Non-Residential (SF)	Non-Residential (Hotel Rooms)
Existing			
Warehouse/Industrial		313,955	
Total		***313,955***	
Proposed Specific Plan			
Retail		12,000	
Office		400,000	
Hotel			250
High Density Residential	475		
Total	***475***	***412,000***	***250***
Difference Between Existing and Proposed	**+475**	**+98,045**	**+250**

3.6 PROJECT PHASING

It is anticipated that the proposed Duarte Station Specific Plan project would occur over multiple years based upon market conditions.

3.7 PERMITS AND APPROVALS

The City of Duarte is the Lead Agency for the project and has discretionary authority over the project which includes, but is not limited to, the following:

- Adoption of a Specific Plan/Zone Change
- Adoption of a General Plan Amendment – Text Changes to the Land Use Element relative to the Gold Line Station Area Development
- CEQA Documentation

SECTION 4.0
Basis of Cumulative Analysis

4.0 BASIS OF CUMULATIVE ANALYSIS

4.1 INTRODUCTION

CEQA Guidelines Section 15355 provides the following definition of cumulative impacts:

> *"Cumulative impacts" refer to two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts.*

Pursuant to *CEQA Guidelines* Section 15130(a), cumulative impacts of a project shall be discussed when they are "cumulatively considerable," as defined in *CEQA Guidelines* Section 15065(a)(3). Section 5.0, Environmental Analysis, of this EIR assesses cumulative impacts for each applicable environmental issue, and does so to a degree that reflects each impact's severity and likelihood of occurrence.

As indicated above, a cumulative impact involves two or more individual effects. Per *CEQA Guidelines* Section 15130(b), the discussion of cumulative impacts shall be guided by the standards of practicality and reasonableness, and should include the following elements:

1. *Either:*

   A. *A list of past, present and probable future projects producing related or cumulative impacts, including, if necessary, those projects outside the control of the Agency, or*

   B. *A summary of projections contained in an adopted local, regional or statewide plan, or related planning document, that describes or evaluates conditions contributing to the cumulative effect. Such plans may include: a general plan, regional transportation plan, or plans for the reduction of greenhouse gas emissions. A summary of projections may also be contained in an adopted or certified prior environmental document for such a plan. Such projects may be supplemented with additional information such as a regional modeling program. Any such document shall be referenced and made available to the public at a location specified by the lead agency.*

2. *When utilizing a list, as suggested in paragraph (1) of subdivision (b), factors to consider when determining whether to include a related project should include the nature of each environmental resource being examined, the location of the project and its type. Location may be important, for example, when water quality impacts are at issue since projects outside the watershed would probably not contribute to a cumulative effect. Project type may be important, for example, when the impact is specialized, such as a particular air pollutant or mode of traffic.*

3. *Lead agencies should define the geographic scope of the area affected by the cumulative effect and provide a reasonable explanation for the geographic limitation used.*

4. *A summary of the expected environmental effects to be produced by those projects with specific reference to additional information stating where that information is available; and*

5. *A reasonable analysis of the cumulative impacts of the relevant projects, including examination of reasonable, feasible options for mitigating or avoiding the project's contribution to any significant cumulative effects.*

4.2 CUMULATIVE ANALYSIS IN THIS EIR

Table 4-1, *Cumulative Projects List*, identifies the related projects and other possible development in the area determined as having the potential to interact with the proposed project to the extent that a significant cumulative effect may occur. This list of projects was determined based on the scope of the proposed project as well as the anticipated area in which the project could contribute to an incremental increase in cumulatively considerable impacts (as discussed throughout Section 5.0). The implementation of each project represented in *Table 4-1* was determined to be reasonably foreseeable by the City.

Table 4-1
Cumulative Projects

Project	Use	Location	Square Feet (SF)						Hotel Rooms	Dwelling Units (DU)	Hospital Beds
			Commercial	Office	Medical Office Building	Research & Development	Industrial	Other			
Duarte											
Metro Gold Line Duarte Station Parking Facility	Parking	Southwest corner of Business Center Drive & Highland Avenue						125 parking spaces			
Rose Gardens at Santa Teresita (Duarte & Monrovia)	Health Care: Assisted & Independent Living, Congregate Care	800 Block, Buena Vista Street	7,505	200							191
Andres Duarte Terrace - Phase II	Senior Affordable Housing	Southeast corner of Huntington Drive/Pops Road (1700 Block, Huntington Drive)								43	
Huntington Courts – Phase III	Single-Family Residential (Attached & Detached)	2400 Block, Huntington Drive								16	
Huntington Courts – Phase II	Single-Family Residential (Attached & Detached)	2400 Block, Huntington Drive								14	
Magellan Self-Storage	Self-Storage	1727 Buena Vista	112,028								
Huntington/ Buena Vista	Retail, Restaurants	Northwest corner of Huntington Drive/ Buena Vista Street (1263 Huntington Drive)	3,500								

Table 4-1 [continued]
Cumulative Projects

Project	Use	Location	Square Feet (SF)						Hotel Rooms	Dwelling Units (DU)	Hospital Beds
			Commercial	Office	Medical Office Building	Research & Development	Industrial	Other			
Town Center Specific Plan	Multi-Family Residential	Northeast & Southeast corners of Huntington Drive/ Buena Vista Street	60,000	50,000						200	
City of Hope (Duarte & Irwindale) – Phase 1	Hospital Medical Residential Commercial	1500 East Duarte Road		30,881	196,984	28,306					
Monrovia											
Station Square Transit Village (Phase 1)	Transit Station	Northwest corner of Myrtle Avenue/ Duarte Road	12,575	300,000					200	800	
5th and Huntington	Multi-Family Apartment, Commercial	1110 and 1112 South 5th Avenue	1,340							154	
South Magnolia Avenue	Single-Family Detached	1323 South Magnolia Avenue								21	
	Multi-Family Apartment	138 East Olive Avenue								18	
Huntington Oaks Shopping Center	Commercial – Fast Food Restaurants	600 West Huntington Drive	10,000								
Car Wash	Commercial	935 East Huntington Drive	3,600								

Table 4-1 [continued]
Cumulative Projects

Project	Use	Location	Square Feet (SF)						Hotel Rooms	Dwelling Units (DU)	Hospital Beds
			Commercial	Office	Medical Office Building	Research & Development	Industrial	Other			
Irwindale											
KARE Youth League/Santa Fe Dam Sports Park	Recreation	Northeast corner of Arrow Highway and I-605						14-Acre Youth Sport Park: 5 baseball fields, 3 football/soccer fields, 5 basketball courts; and office/clubroom facility.			
Azusa											
Mixed Use Project	Multi-Family Residential, Commercial	NE Corner of Dalton Avenue & Foothill Boulevard	8,000							73	
Residential Project	Multi-Family Townhomes	9th Street & Alameda Avenue								14	
Metro Gold Line Station & Parking Structure	Parking	Santa Fe Avenue & Alameda Avenue						550 parking spaces			
Industrial Business Park	Industrial	1001 N. Todd					414,100				
TOTAL			**218,548**	**381,081**	**196,984**	**28,306**	**414,100**	**14 AC recreation, 675 parking spaces**	**200**	**1,352**	**191**

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SECTION 5.0
Environmental Analysis

5.0 ENVIRONMENTAL ANALYSIS

The next subsections of the EIR contain a detailed environmental analysis of the existing conditions, project impacts (including direct and indirect, short-term and long-term, and cumulative), recommended mitigation measures, and unavoidable adverse impacts. This EIR analyzes those environmental issue areas as stated in the Notice of Preparation and Initial Study (Appendix A, Initial Study/Notice of Preparation) where potentially significant impacts have the potential to occur.

The EIR will examine the following environmental factors:

5.1 Land Use
5.2 Aesthetics
5.3 Population and Housing
5.4 Traffic
5.5 Air Quality
5.6 Greenhouse Gas Emissions
5.7 Noise
5.8 Hazards and Hazardous Materials
5.9 Hydrology, Drainage, and Water Quality
5.10 Fire Protection
5.11 Police Protection
5.12 Schools
5.13 Parks
5.14 Water
5.15 Wastewater
5.16 Solid Waste
5.17 Electricity and Natural Gas

Each environmental issue is addressed in a separate section of the EIR, and is organized into five sections, as follows:

- Regulatory Setting
- Environmental Setting
- Significance Threshold Criteria
- Project Impacts and Mitigation Measures
- Cumulative Impacts and Mitigation Measures
- Significant Unavoidable Impacts
- Sources Cited

“Regulatory Setting” describes existing regulations applicable to the project.

“Environmental Setting” describes the physical conditions that exist at this time and that may influence or affect the issue under investigation.

“Significance Threshold Criteria” provides the thresholds that are the basis of conclusions of significance, which are primarily the criteria in the *CEQA Guidelines* Appendix G, Environmental Checklist.

Major sources used in crafting criteria include the *CEQA Guidelines*; local, state, federal, or other standards applicable to an impact category; and officially established significance thresholds. "…*An ironclad definition of significant effect is not always possible because the significance of an activity may vary with the setting."* (*CEQA Guidelines* Section 15064[b]). Principally, *"…a substantial, or potentially substantial, adverse change in any of the physical conditions within the area affected by the project, including land, air, water, minerals, flora, fauna, ambient noise, and objects of historic and aesthetic significance"* constitutes a significant impact (*CEQA Guidelines* Section 15382).

"Project Impacts and Mitigation Measures"

- Project impacts are the potential environmental changes to the existing physical conditions that may occur if the proposed project is implemented.

  Evidence, based on factual and scientific data, is presented to show the cause and effect relationship between the proposed project and the potential changes in the environment. The exact magnitude, duration, extent, frequency, range, or other parameters of a potential impact are ascertained, to the extent possible, to determine whether impacts may be significant; all of the potential direct and reasonably foreseeable indirect effects are considered.

- Mitigation measures are those project-specific measures that would be required of the project to avoid a significant adverse impact; to minimize a significant adverse impact; to rectify a significant adverse impact by restoration; to reduce or eliminate a significant adverse impact over time by preservation and maintenance operations; or to compensate for the impact by replacing or providing substitute resources or environment.

- The "Level of Significance" identifies the impacts that will remain after the application of mitigation measures, if applicable, and whether the remaining impacts are or are not considered significant. When these impacts, even with the inclusion of mitigation measures, cannot be mitigated to a level considered less than significant, they are identified as "unavoidable significant impacts."

"Cumulative Impacts and Mitigation Measures" describes potential environmental changes to the existing physical conditions that may occur with the proposed project together with all other reasonably foreseeable, planned, and approved future projects, as listed in *Table 4-1*.

"Significant Unavoidable Impacts" describes impacts that would be significant, but cannot be feasibly mitigated to less than significant, so would be unavoidable. To approve a project with unavoidable significant impacts, the lead agency must adopt a Statement of Overriding Considerations. In adopting such a statement, the lead agency is required to balance the benefits of a project against its unavoidable environmental impacts in determining whether to approve the project. If the benefits of a project are found to outweigh the unavoidable adverse environmental effects, the adverse effects may be considered "acceptable" and the project approved (*CEQA Guidelines* Section 15093[a]).

"Sources Cited" identifies the sources utilized in the section.

5.1 LAND USE

The purpose of this section is to identify the existing land conditions and evaluate consistency with relevant planning policies. This section identifies on-site and surrounding land use conditions and land use policy requirements set forth by the City of Duarte or other agencies. Information in this section is based upon the *Duarte General Plan* and the *Duarte Development Code*.

5.1.1 REGULATORY SETTING

REGIONAL PLANS AND POLICIES

Regional plans/policies created by planning agencies such as the Southern California Association of Governments (SCAG) and the South Coast Air Quality Management District (SCAQMD) influence land use planning in the City of Duarte.

Southern California Association of Governments

SCAG functions as the Metropolitan Planning Organization (MPO) for six counties: Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. The region encompasses a population exceeding 19 million persons in an area of more than 38,000 square miles. As the designated MPO, SCAG is mandated by the Federal government to research and draw up plans for transportation, growth management, hazardous waste management, and air quality. Additional mandates exist at the State level. SCAG is responsible for the maintenance of a continuous, comprehensive, and coordinated planning process. SCAG is also responsible for the development of demographic projections, as well as integrated land use, housing, employment, transportation programs, measures, and strategies for portions of the SCAQMD's *2012 Air Quality Management Plan for the South Coast Air Basin* (*2012 AQMP*).

The City of Duarte is a member agency of the San Gabriel Valley Association of Governments (SGVCOG), one of 14 Subregional Organizations that make up SCAG. The SGVCOG is a joint powers authority of 31 cities (inclusive of Duarte), the three Supervisorial Districts representing the unincorporated areas in the San Gabriel Valley, and the Valley's three water agencies (San Gabriel Valley Municipal Water District, Three Valleys Municipal Water District, and Upper San Gabriel Valley Water District).

Regional Comprehensive Plan

The *2008 Regional Comprehensive Plan: Helping Communities Achieve a Sustainable Future* (*RCP*) was prepared in response to SCAG's Regional Council directive in the 2002 Strategic Plan to develop a holistic, strategic plan for defining and solving the region's inter-related housing, traffic, water, air quality, and other regional challenges. The *RCP* serves as an advisory document to local agencies in the southern California region for their information and voluntary use for preparing local plans and handling local issues of regional significance. The *RCP* is a collaborative effort that addresses the region's challenges and sets a path forward in two key ways: 1) it ties together SCAG's role in transportation, land use, and air quality planning and demonstrates why further action is needed; and 2) it recommends key roles and responsibilities for public and private sector stakeholders and invites them to implement reasonable policies that are within their control.

Compass Blueprint Growth Visioning Program

In 2001, SCAG started a regional visioning process (i.e., Southern California Compass) to develop a strategy for regional growth that would accommodate growth while providing for livability, mobility, prosperity, and sustainability. The Compass Blueprint Growth Vision is a response, supported by a regional consensus, to the land use and transportation challenges facing southern California now and in the coming years. The Growth Vision is driven by four key principles:

- *Mobility*. Getting where we want to go;
- *Livability*. Creating positive communities;
- *Prosperity*. Long-term health for the region; and
- *Sustainability*. Promoting efficient use of natural resources.

To realize these principles on the ground, the Growth Vision encourages:

- Focusing growth in existing and emerging centers and along major transportation corridors;
- Creating significant areas of mixed-use development and walkable communities;
- Targeting growth around existing and planned transit stations; and
- Preserving existing open space and stable residential areas.

The *Growth Vision Report* (*GVR*) presents the comprehensive Growth Vision for the six-county SCAG region as well as the achievements of the Compass process. The *GVR* details the evolution of the vision and concludes with a series of implementation steps, including tools for each guiding principle and overarching implementation strategies that will guide southern California toward its envisioned future.

The Compass Blueprint 2 Percent Strategy is a guideline for how and where the Growth Vision can be implemented. The 2 Percent Strategy calls for modest changes to current land use and transportation trends on only 2.0 percent of the land area of the region - the "2% Strategy Opportunity Areas." Investing planning efforts and resources according to the 2 Percent Strategy is anticipated to yield the greatest progress toward improving measures of mobility, livability, prosperity, and sustainability for local neighborhoods and their residents. The 2% Strategy Opportunity Areas are made up of the following:

- *Metro Centers*. Local areas of regional significance that are currently, or are projected to be, major employment and residential centers, attracting large numbers of work commuters and well-accessible by both highway and transit.

- *City Centers*. Local areas of sub-regional significance that are currently, or are projected to be, employment and residential centers, providing regional benefits as their share of jobs and housing units increase.

- *Rail Transit Stops*. Areas that have an existing or planned light rail, subway, commuter rail, Amtrak and/or Maglev station stop.

- *Airports, Ports, and Industrial Centers*. Areas that have an existing or planned airport, sea port, inland port, international border crossing or major regional industrial center that are significant in the region's economy.

- *Priority Residential In-Fill Areas*. Areas that have the potential to absorb a fair share of projected regional residential growth and to provide regional and subregional transportation benefits.

- *Compass Blueprint Priority Communities (or Compass Principles Priority Areas)*. These cities are not within the boundaries of the mapped 2% Strategy Opportunity Areas, but are encouraged to take local actions consistent with the Compass Blueprint principles and are eligible to receive Compass Blueprint planning services.

According to the San Gabriel Valley Association of Governments Opportunity Area Map, the project site is located within a 2% Strategy Opportunity Area.[1]

2012-2035 Regional Transportation Plan/ Sustainable Communities Strategy: Towards A Sustainable Future

The *Regional Transportation Plan* (*RTP*) is developed, maintained, and updated by SCAG, southern California's MPO. On April 4, 2012, SCAG's Regional Council adopted the *2012-2035 Regional Transportation Plan/Sustainable Communities Strategy: Towards a Sustainable Future (2012-2035 RTP/SCS)* with the primary goal of increasing mobility for the region's residents and visitors, while also emphasizing sustainability and integrated planning. The vision of the *RTP/SCS* encompasses three principles that collectively work as the key to the region's future: mobility; economy; and sustainability. The *2012–2035 RTP/SCS* includes a strong commitment to reduce emissions from transportation sources to comply with Senate Bill 375, improve public health, and meet the National Ambient Air Quality Standards as set forth by the Federal Clean Air Act. As such, the *2012–2035 RTP/SCS* contains a regional commitment for the broad deployment of zero- and near-zero emission transportation technologies. The *2012-2035 RTP/SCS* also contains a host of improvements to the region's multimodal transportation system and a financial plan that identifies how much money is available to support the region's transportation investments.

Within the RTP, the SCS demonstrates the region's ability to attain and exceed the GHG emission-reduction targets set forth by the California Air Resources Board (CARB). The SCS outlines a plan for integrating the transportation network and related strategies with an overall land use pattern that responds to projected growth, housing needs, changing demographics, and transportation demands. The SCS focuses the majority of new housing and job growth in high-quality transit areas and other opportunity areas in existing main streets, downtowns, and commercial corridors, resulting in an improved jobs-housing balance and more opportunity for transit-oriented development. This overall land use development pattern supports and complements the proposed transportation network.

INTERGOVERNMENTAL REVIEW

SCAG's Intergovernmental Review (IGR) Section is responsible for performing consistency review of regionally significant local plans, projects, and programs with SCAG's adopted regional plans. The criteria for projects of regional significance are outlined in *CEQA Guidelines* Sections 15125 and 15206, and include projects that directly relate to the policies and strategies contained in the *RCP* and the *RTP*. There are two sets of minimum criteria for classification of

[1] Southern California Association of Governments, *Compass Blueprint Opportunity Areas Maps, San Gabriel Valley*, http://www.compassblueprint.org/opportunityareas, accessed May 15, 2013.

projects as regionally significant: Criteria 1 through 12 are recommended for use by *CEQA Guidelines* Section 15206; Criteria 13 through 22 reflect SCAG's mandates and regionally significant projects that directly relate to policies and strategies contained in the.

A proposed plan, project, or program is directed to demonstrate how it is consistent with the 2012–2035 RTP/SCS, which is established through consistency with *2012–2035 RTP/SCS* Goals and Adopted Growth Forecasts. SCAG encourages the use of the SCAG List of Mitigation Measures extracted from the *2012–2035 RTP/SCS Program Environmental Impact Report* to aid with demonstrating consistency with regional plans and policies.

South Coast Air Quality Management Plan

The South Coast Air Quality Management District (SCAQMD) is one of 35 air quality management districts that periodically prepare an update to the Air Quality Management Plan (AQMP) to meet the federal requirements and/or to incorporate the latest technical planning information. The most current Plan, the *Final 2012 AQMP (2012 AQMP)*, was adopted by the AQMD Governing Board on December 7, 2012. Upon its adoption, the *2012 AQMP* became the legally enforceable plan for meeting the federal 24-hour $PM_{2.5}$ (fine particulate) standard by 2014.

The *2012 AQMP* incorporates the latest scientific and technological information and planning assumptions, including the 2012–2035 RTP/SCS and updated emission inventory methodologies for various source categories. The *2012 AQMP* includes new and changing federal requirements, implementation of new technology measures, and the continued development of economically sound, flexible compliance approaches. The AQMP is intended to maintain focus on the air quality impacts of major projects related to goods movement, land use, energy efficiency and other key areas of growth. The AQMP's key elements include enhancements to existing programs to meet the 24-hour $PM_{2.5}$ federal health standard and a proposed plan of action to reduce ground-level ozone. The AQMP also proposes measures to meet the commitment in AQMD's previous 8-hour federal ozone plan.

CITY OF DUARTE PLANS AND POLICIES

Duarte General Plan

The City adopted the *City of Duarte Comprehensive General Plan 2005 – 2020* (*General Plan*) in August 2007. The *General Plan* consists of broad goals, policies, and programs that reflect the values and visions of the community. The *General Plan* contains the following mandatory and optional elements:

- Safety;
- Open Space and Conservation;
- Noise;
- Land Use;
- Housing;
- Historic Preservation;
- Economic Development; and
- Circulation.

The relevant portions of the Land Use Element, which has the broadest scope of all the General Plan elements, are discussed below. Additionally, the proposed project would involve new housing and circulation improvements. Therefore, relevant portions of the Housing and Circulation Elements are also discussed.

The General Plan policies relevant to the proposed project are outlined in *Table 5.1-2*, *General Plan Consistency Analysis*.

LAND USE ELEMENT

The Land Use Element is intended to direct growth and development in the City through goals, objectives, and policies, as well as the Land Use Plan. This Element uses text and maps to designated future use/reuse of the City's land. The overall approach of the Land Use Element is to maintain the small town atmosphere while providing a healthy local economy so that residents and businesses of Duarte can continue to maintain a high level of City services.

Land Use Diagram and Designations

The Land Use Element identifies and describes the City's various land use designations and establishes the maximum density or intensity allowed for each use. The Land Use Diagram illustrates the City's vision for the development, redevelopment, and preservation of public and private properties within Duarte. The Land Use Diagram designates the distribution and general location of land to be used for housing, business, public facilities, open space, and institutional uses. According to the *General Plan* Land Use Diagram, the project site is designated Gold Line Station Area Development Specific Plan. The Specific Plan land use designation provides for the mixture of both high density housing and other uses. The project site is identified as Gold Line Station Area Development under the Specific Plan designation and is described in the General Plan as follows:

> *The Metro Gold Line will eventually provide alternate mobility to residents and businesses in the San Gabriel Valley from Montclair to downtown Los Angeles. This light rail system currently runs from South Pasadena to Downtown Los Angeles with thirteen stations now open. The next phase of the system, known as Planned Segment 1, will continue from South Pasadena 11.4 miles to Azusa with six additional stations including one in Duarte. Five additional stations are planned in Planned Segment 2 from Azusa, 12.5 miles to Montclair. With congestion expected to double within thirty years, transit oriented development around the Gold Line stations will provide relief from current and future gridlock. While timing of the Duarte segment is not certain, it is anticipated this segment will be operating by 2010 at the earliest.*
>
> *The Duarte Gold Line station will be located north of Duarte Road and about 400 feet west of Highland Avenue within the vicinity of City of Hope. The area to the north of the station includes about twenty acres of industrial buildings. For purposes of this Land Use Element, it is anticipated this area should be designated a specific plan area. This specific plan should provide for a mixed use transit oriented development. For planning purposes a maximum of 100,000 sq. ft. of retail and office could be accommodated within this area. In addition up to 120 multiple family residential units could be built within this area. Gold Line ridership estimates could eventually require up to 500 parking spaces in close proximity to the Duarte station. The concept is to work with existing property owners and businesses to formulate a specific plan that provides for*

the before mentioned uses, densities and intensities as well as development standards for a true transit oriented development.

The Gold Line Station Area Development Specific Plan is a new land use designation for the 2005 – 2020 General Plan. As with the City Center area, this area is intended to create a unique area oriented towards the future Gold Line station in Duarte. This flexible mixed use area will be located north of the Gold Line station in what is now part of the industrial park west of Highland Avenue. This mixed use area will also use a specific plan as an implementation tool to achieve the desired objective. The desired objective is to reduce vehicle miles traveled, provide transportation options for existing and future workforce and residents around the Gold Line station, provide location efficiency, expanded mobility, and provide public/private financial return and value recaptured. The specific plan to implement this objective must provide flexibility in providing vertical and/or horizontal mixed high density residential, commercial uses, office, R&D and industrial uses. As with the City Center plan, the Gold Line station Specific Plan which will be the implementation tool for this area must also provide unique parking standards, sufficient residential densities, housing types and appropriate pedestrian friendly design to encourage usage of the Gold Line as a primary mode of travel. Because the timing of the Gold Line station opening is unknown, this Specific Plan must provide even more flexibility for future needs.

Land Use Element Table LU-4, Density, Population Estimates, and Intensity Potentials, includes the planned land use and/or development densities/intensities for the Gold Line Station Area Development (the project site). As indicated in Table LU-4, the *General Plan* projected the following:

- 120 new dwelling units; and
- 100,000 square feet of additional non-residential uses.

HOUSING ELEMENT

The Housing Element provides an inventory of land adequately zoned or planned to be zoned for housing, certainty in permit processing procedures, and a commitment to assist in housing development through regulatory concessions and incentives. The Housing Element also provides a powerful tool to address the special housing needs of people within the community including the homeless, farmworkers, and persons with disabilities. The Housing Element process ensures local governments promote a variety of housing types including multifamily rental units, manufactured housing, transitional and other types of supportive housing.

The *2008-2014 Housing* Element identifies the Gold Line Station Development Area Specific Plan as a site for rezoning to accommodate 120 multi-family units. The Housing Element (2012 Amendment) states that a minimum of 80 to 100 units be a part of Phase 1 of the Gold Line Station Development Area Specific Plan and suggested that Phase 1 would be the 6.6 acre portion of the site, noted as Parcel 1 of *Exhibit 3-3*. The Housing Element was not intended to place a maximum number of units that would be developed in either Area 1 or the balance of the planning area, but to address a minimum number that would allow the City to meet its regional housing needs.

CIRCULATION ELEMENT

The Circulation Element establishes a program that is intended to provide a balanced transportation/circulation system that will support the anticipated growth in local and regional land uses. The Circulation Element outlines the goals, objectives, and policies for meeting Duarte's existing and future transportation needs and describes the future circulation system needed to support the Land Use Element.

Duarte is served by a network of roadways which is essentially comprised of a grid system of north/south and east/west roads. *Exhibit 5.4-1*, *Study Intersections*, illustrates the existing street network in the project's vicinity and indicates the following roadways provide local access to the project site: Duarte Road (forms the site's southern boundary); Highland Avenue (forms the site's eastern boundary); Evergreen Street (forms the eastern portion of the site's northern boundary); and Business Center Drive (forms the western portion of the site's northern boundary).

Circulation System 2020 Master Plan

Circulation Element Diagram CIRC-4, Circulation System 2020 Master Plan, illustrates the City's Master Plan of Streets (2020 Master Plan). The 2020 Master Plan designates the preferred number of traffic lanes (roadway classification) to support buildout of the Land Use Element. According to the Master Plan, Duarte Road and Highland Avenue are identified as Minor Arterials, Evergreen Street is identified as a Collector, and Business Center Drive is identified as a Local Street.

A Minor Arterial is an arterial roadway that has less of a regional significance than Other Principal Arterial roadways. It accommodates sub-regional and intercity travel and generally has four to six through travel lanes with a raised median and/or a center left-turn lane. Minor Arterials accommodate through traffic while also providing direct access to adjacent properties and intersecting streets. The right-of-way widths for Minor Arterial roadways in Duarte range from 80 to 100 feet, while the pavement widths range from 60 to 80 feet.

A Collector is a street that is intended to serve as an intermediate route to accommodate travel between local streets and arterial roadways and to provide access to the abutting properties. Collector streets generally have two travel lanes, although four lanes may be provided at certain locations. The right-of-way width for collector streets in Duarte is typically 60 feet, while the pavement widths range from 35 to 52 feet.

A Local Street is a low-speed street that is primarily intended to provide direct access to the abutting properties. Local streets generally have two travel lanes with parking along both sides of the street. The right-of-way widths for local streets in Duarte range from 50 to 60 feet, while the pavement widths range from 32 to 40 feet.

Circulation Element Figure CIRC-1, Standard Roadway Cross-Sections, illustrates the standard cross sections for each roadway classification. The Circulation Element recommends that the roadway cross-sections be standardized for each roadway classification.

- *Transit System.* Circulation Element Diagram CIRC-3, Transit System Route, identifies the fixed-route bus transit system within the City. The Commuter Line and Green Line

operate in the vicinity of the project site with stops along Evergreen Street and Duarte Road. Refer to Section 5.4, Traffic, for discussion regarding transit facilities.

- *Bike Trails.* There are no bicycle facilities located in the vicinity of the project site. Circulation Element Diagram CIRC-2, Duarte Bike Trails, illustrates the bike trails within the City. Refer to Section 5.4, Traffic, for discussion regarding bicycle facilities.

Duarte Municipal Code

The *Duarte Municipal Code* is the method the City uses to implement control of land uses, in accordance with General Plan goals and policies.

MUNICIPAL CODE TITLE 19,
DEVELOPMENT CODE OF THE CITY OF DUARTE, CALIFORNIA

Municipal Code Title 19, *Development Code* identifies land uses permitted and prohibited according to the zoning category of particular parcels and establishes the development standards and regulations for each zone. The location and boundaries of the various zones are delineated on the City's Zoning Map. According to the Final Zoning Map, the project site is zoned M, Industrial.

Development Code Chapter 19.16, Industrial Zone (M)

The City has established a single industrial zone to implement General Plan policies regarding the accommodation of manufacturing, research and development, and similar uses that produce goods for businesses and consumers, and that are involved in medical and similar research activities. Allowed uses in the industrial zones consist of those that have minimal impact on surrounding uses. Uses and permit requirements are outlined in *Development Code* Section 19.16.020.

Development Code Chapter 19.22, Specific Plan Zones (SP)

The Specific Plan (SP) zone is established to implement *Government Code* Sections 65450 through 65457. As provided for in the *Government Code*, a specific plan is designed to provide for flexibility, innovative use of land resources and development, a variety of housing and other development types, and an effective and safe method of pedestrian and vehicular circulation. A specific plan may be adopted for any property or group of properties meeting the criteria set forth in this Chapter and Chapter 19.150, Specific Plans.

5.1.2 ENVIRONMENTAL SETTING

ON-SITE LAND USES

The approximately 19.08-acre site is comprised of three parcels under separate ownerships; refer to *Exhibit 3-3*, *Specific Plan Area*. The parcels are developed with a mix of industrial uses totaling approximately 313,955 square feet. Each parcel is developed with a single building, as described below:

- Parcel 1, which abuts the future station location is approximately 6.60 acres in size and includes a 128,466 square foot warehousing building occupied by multiple tenants.

- Parcel 2, located in the center of the Plan Area, is approximately 9.16 acres in size and includes a 114,599-square foot industrial building currently occupied by Woodward-Duarte (formerly GE Aviation).

- Parcel 3, located in the northern portion of the Plan Area, is approximately 3.32 acres in size and includes a 70,890 square foot warehouse building occupied by multiple tenants.

SURROUNDING LAND USES

The project site is surrounded by the following uses:

- *North:* Evergreen Street and the Foothill Freeway (Interstate 210) are located to the north of the northernmost portion of the site. Single-family residential uses are located to the north across Business Center Drive.

- *West:* An approximately 204-unit single-family residential neighborhood south of Evergreen Street, east of Buena Vista Street, and north of East Duarte Road is located to the west of the project site.

- *South:* The Los Angeles County Metropolitan Transportation Authority (Metro)-owned railroad right-of-way is directly adjacent to the project site. The City of Hope campus and the Santa Fe Dam Recreational Area, owned by the U.S. Army Corps of Engineers (USACE) and operated by Los Angeles County Department of Parks and Recreation, are located to the south of the project site across East Duarte Road.

- *East:* The Duarte/Lewis Business Center occupies approximately 40 acres and is located to the east across Highland Avenue, south of the Interstate 210 and west of the San Gabriel Freeway (Interstate 605).

5.1.3 SIGNIFICANCE THRESHOLD CRITERIA

The issues presented in the Initial Study Environmental Checklist (*CEQA Guidelines* Appendix G) have been utilized as thresholds of significance in this Section. Accordingly, a project may create a significant environmental impact if it causes one or more of the following to occur:

- Physically divide an established community (refer to Section 8.0, Effects Found Not To Be Significant);

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

- Conflict with any applicable habitat conservation plan or natural community conservation plans (refer to Section 8.0, Effects Found Not To Be Significant).

For the purposes of this impact analysis, a significant impact would occur if project implementation would result in inconsistencies or conflicts with the General Plan's adopted Goals and Policies and/or the Zoning Code's applicable rules and regulations, as well as the specified regional plans. Based on these standards, the project's effects have been categorized

as either a "less than significant impact" or "potentially significant impact." Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a significant and unavoidable impact.

5.1.4 PROJECT IMPACTS AND MITIGATION MEASURES

OVERVIEW OF THE DUARTE STATION SPECIFIC PLAN (PROPOSED PROJECT)

The Duarte Station Specific Plan has been prepared to establish the planning concept, regulations, and administrative procedures necessary to achieve compatible, orderly, and efficient development of the 19.08-acre project site.

Per *Government Code* Section 65451, Specific Plans are permitted to regulate development including permitted uses, density, design, building size, and placement. Specific Plans also govern the type and extent of open space, landscaping, roadways, and the provision of infrastructure and utilities. Since the development guidelines established in a Specific Plan focus on the unique needs of a specific area, Specific Plans allow for greater flexibility than is possible with conventional zoning.

The proposed Specific Plan articulates the vision to make the Duarte Gold Line Station Area a vibrant, mixed-use transit village that has a focus on residential uses, retail, and urban green space. The Gold Line Station on the project's southern edge will act as the gateway to the neighborhood with special attention paid to the public realm in the immediate vicinity by creating a park/public plaza bordered by local serving retail uses, so that the station area may also serve as a local gathering place. A strong emphasis will be placed on walkability through a pleasant sidewalk environment where buildings frame the street.

The overall purpose and intent of the Specific Plan is to create a policy and zoning document that will establish a planning and regulatory framework designed for the future development and buildout of the property located within the Specific Plan Area. An overview of the various sections of the Specific Plan are provided below.

Section 1 – Introduction. This section provides background information about the Specific Plan. Since the Specific Plan will be used by a variety of users (such as property owners, City staff, business owners, residents, and elected and appointed officials), a brief background of the Specific Plan Area and project setting are included. This section provides a very brief description of the history, purpose, and function of the specific plan; it educates the reader on the information contained within the Specific Plan Document in the sections that follow.

Section 2 – Development Plan. Section 2 identifies the fundamental components of the Specific Plan. The detailed land use program is presented through tables and a master land use plan graphic (refer to *Exhibit 3-4*, *Master Land Use Plan*). The development concept for the Duarte Station Specific Plan provides flexibility for all property owners to respond to market conditions and develop a mixed use "transit village" that revitalizes the Specific Plan Area through the provision of multiple land uses that are complementary to one another. Land uses consist of residential, office, hospitality, and commercial/retail spaces. The mixture of land uses results in the availability of a variety of goods, services, and amenities for residents, employees, or visitors to the Specific Plan Area.

Exhibit 3-5, *Development Scenario*, shows one potential development scenario within the framework of the Master Land Use Plan. For the purpose of this EIR, this scenario was used to determine the development potential to analyze. Development may be permitted in any location within the Specific Plan if requirements outlined in the Development Regulations and Design Guidelines in Sections 5 and 6 are met.

Section 3 – Infrastructure and Services Plan. The Infrastructure and services plan discusses existing conditions and proposed improvements to local circulation, parking, sewer, water, and storm drain systems that would serve the Specific Plan Area at full buildout. Improvements proposed are triggered by the Master Development Plan discussed in Section 2. Public and private utility providers are also identified here.

Section 4 – Land Use and Development Regulations. This section provides development standards for proposed development in the Specific Plan Area. These regulations are going to be included through a hybrid approach that integrates features of a conventional zoning code and a form-based code. Form-based codes regulate land uses based on form and function and are based on a "human-use" scale. This section contains development standards for architecture and building placement, streets and alleys, civic and public places, and landscaped or hardscape areas. The Development Regulations complement the Design Guidelines to ensure that quality development occurs in suitable places and spaces.

Section 5 – Design Guidelines. This section provides design guidance for architectural, landscape, signage, lighting, and community artwork features within the Specific Plan Area. The purpose of the Design Guidelines is to identify and establish visual themes that are aesthetically pleasing and will result in a cohesiveness to create a "sense of place" for persons that live, work, or congregate within a transit-oriented development Specific Plan Area.

Section 6 – Implementation and Administration. The intent of this section is to provide methods for eventual construction and buildout of the Specific Plan. Implementation techniques, tools, and incentives including efficient entitlement processing standards, phasing, cost estimates, and public and private funding and financing mechanisms are also addressed.

Section 7 – Appendices. This section includes the General Plan consistency analysis as well as other supporting information.

California Government Code (Title 7, Division 1, Chapter 3, Article 8, Sections 65450 through 65457) provides the authority to adopt a Specific Plan by ordinance (as a regulatory plan) or resolution (a policy driven plan). The Specific Plan will be both a regulatory and policy document adopted by the Ordinance.

As a regulatory plan, the Specific Plan will establish the zoning for the land within the Specific Plan Area. Development plans, site plans, tentative tract maps, and/or parcel maps must be consistent with the Specific Plan and the General Plan. Upon approval of the Duarte Station Specific Plan, which will also be the zoning for the site, future development will be subject to the development standards and development parameters governed by the Specific Plan. In the event the Duarte Station Specific Plan is silent as to a development standard or procedure, the provisions of the City's *Development Code* shall control.

SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS

■ **IMPLEMENTATION OF THE PROPOSED PROJECT COULD CONFLICT WITH SCAG'S 2012 RTP/SCS GOALS AND ADOPTED GROWTH FORECASTS.**

Impact Analysis: SCAG's IGR Section is responsible for performing a consistency review of local plans, projects, and programs with regional plans. According to SCAG's criteria for classification of projects as regionally significant, the following criteria are relevant to the project:

- *Criteria 1:* A proposed local general plan, element, or amendment thereof for which an EIR was prepared.

- *Criteria 4:* A proposed commercial office building employing more than 1,000 persons or encompassing more than 250,000 square feet of floor space.

Because the proposed project satisfies Criteria 1 and 4 above, it is considered regionally significant and must demonstrate its consistency with the *2012-2035 RTP/SCS*, which is established through consistency with *2012-2035 RTP/SCS* Goals and Adopted Growth Forecasts. *Table 5.1-1*, *SCAG Consistency Analysis*, provides an analysis of the proposed project's consistency with the *2012-2035 RTP/SCS* Goals and Adopted Growth Forecasts. As concluded in *Table 5.1-1*, the project is consistent with the *2012-2035 RTP/SCS* Goals and growth forecasts, resulting in a less than significant impact in this regard.

Table 5.1-1
SCAG Consistency Analysis

Goal #	Goal	Determination of Consistency
Regional Transportation Plan/Sustainable Communities Strategy: Goals[1]		
RTP/SCS G1	Align the plan investments and policies with improving regional economic development and competitiveness.	Consistent: The proposed project would potentially provide a net increase of 1,640 jobs in the City, thereby improving regional economic development.
RTP/SCS G2	Maximize mobility and accessibility for all people and goods in the region.	Consistent: The project site is located immediately adjacent to the Duarte Gold Line Station, currently under construction. Additionally, the I-210 and I-605 Freeways are located to the north and east, respectively. The Plan Area's proximity to the Gold Line and freeways would maximize mobility for the proposed project's future residents, employees, patrons, and visitors.
RTP/SCS G3	Ensure travel safety and reliability for all people and goods in the region.	Consistent: The proposed Circulation Plan includes a private roadway network through the Specific Plan Area to support potential future development within the area. Existing roadways surrounding the site would remain unchanged. Future traffic signals would be provided on Highland Avenue and Duarte Road as mitigation for the Gold Line. As indicated in Section 5.4, Traffic, improvements would be required including a traffic signal at the Village Road/Duarte Road intersection, modification of the traffic signal at Buena Vista Street/Duarte Road and signage and striping at Buena Vista Street/Three Ranch Road to reduce potential impacts. Although significant unavoidable impacts would remain at the Buena Vista Street/Three Ranch Road and Highland Avenue/Evergreen Street intersections, neither of the intersections satisfies a traffic signal warrant. Improvements have been identified to reduce potential impacts to the extent feasible.

Table 5.1-1 [continued]
SCAG Consistency Analysis

Goal #	Goal	Determination of Consistency
RTP/SCS G4	Preserve and ensure a sustainable regional transportation system.	Consistent: Section 5.4, Traffic, includes an analysis of the proposed project's impacts to the study area intersections, including State-controlled intersections, which form part of the regional transportation system. The analysis has concluded that impacts to state-controlled intersections would be less than significant. In order to ensure freeway on- and off-ramp impacts associated with the proposed project remain consistent with the Draft EIR analysis, mitigation would be implemented requiring future development to prepare and submit a traffic study to verify the Draft EIR conclusions and identify appropriate mitigation if impacts are identified.
RTP/SCS G5	Maximize the productivity of our transportation system.	Consistent: Refer to Responses to Goals RTP/SCS G2 and G3.
RTP/SCS G6	Protect the environment and health for our residents by improving air quality and encouraging active transportation (non-motorized transportation, such as bicycling and walking).	Consistent. The project site is located adjacent to the Duarte Gold Line Station, which would provide increased opportunities for alternative modes of transportation, including walking and bicycling. Future development would be required to comply Duarte Municipal Code Section 19.38.220 (Bicycle parking requirements), which establish bicycle parking requirements based on land use. Amenities would be provided for cyclists within the project area. Additionally, the private roadway network within the Specific Plan Area would include sidewalks and future development would be designed for comfortable pedestrian circulation and access.
RTP/SCS G7	Actively encourage and create incentives for energy efficiency, where possible.	Consistent. Future development within the Specific Plan Area would be required to comply with Duarte Municipal Code Chapter 19.52 (Sustainable Development Practices), which includes standards that promote increased energy efficiency.
RTP/SCS G8	Encourage land use and growth patterns that facilitate transit and non-motorized transportation.	Consistent: Refer to Responses to Goals RTP/SCS G2 and G6.
RTP/SCS G9	Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.	Not Applicable: The security of the regional transportation system is beyond the control of the proposed project.
Regional Transportation Plan/Sustainable Communities Strategy: Adopted Growth Forecasts For Duarte[2]		
Adopted Growth Forecasts: 2035 Population: 23,400 Households: 7,900 Employment: 7,300	The project's buildout horizon year is 2035.	Consistent: As indicated in *Table 6-1, Project Compared to SCAG Growth Forecasts*, project implementation would result in approximately 7,505 households, with a population of approximately 22,984 persons in the City in 2035, and approximately 8,094 jobs. The proposed project could potentially cause SCAG's 2035 employment forecasts for the City to be exceeded by approximately 10 percent. However, the potential employment opportunities anticipated with implementation of the proposed project would improve the City's overall jobs/housing balance and provide employment opportunities for Duarte residents. As concluded in Section 7.1, Growth-Inducing Impacts, the project's potential population growth is considered less than significant. Additionally, project implementation would not cause SCAG's housing forecasts for the City to be exceeded. The proposed project would be consistent with SCAG's growth forecasts for the City.

Notes:
1. Southern California Association of Governments Website, *2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS): Towards a Sustainable Future*, http://rtpscs.scag.ca.gov/Pages/default.aspx, Accessed May 16, 2013.
2. Southern California Association of Governments Website, *Adopted 2012 RTP Growth Forecast*, http://www.scag.ca.gov/forecast/index.htm, Accessed May 16, 2013.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

CITY OF DUARTE GENERAL PLAN

■ **IMPLEMENTATION OF THE PROPOSED PROJECT COULD CONFLICT WITH A DUARTE GENERAL PLAN LAND USE PLAN OR POLICY.**

Impact Analysis: The project requests approval of the Duarte Station Specific Plan (Specific Plan). The Specific Plan is intended to establish the general type, parameters, and character of the development in order to develop an integrated Transit Oriented Development (TOD) that is also compatible with the surrounding area.

Master Land Use Plan

The Specific Plan would establish a Master Land Use Plan for development of the Plan Area. The Master Land Use Plan provides flexibility for property owners to respond to market conditions and develop a mixed-use "transit village" that revitalizes the Specific Plan Area through the provision of multiple land uses that complement one another. Land uses would consist of residential, office, hotel, commercial/retail, and open space. *Table 3-1*, *Master Land Use Plan Designations and Acreages* identifies the land use designations and associated acreages established by the Specific Plan.

Since the Specific Plan does not provide a specific site plan, a Development Scenario that allows for one potential implementation of the Master Land Use Plan has been identified; refer to *Exhibit 3-5*, *Development Scenario*. The ultimate land use would be determined at the time of site plan submittal for a specific parcel, subject to the development standards and permitted uses outlined in the Specific Plan, as well as the specified Density/FAR.

Table 3-3, *Growth Over Existing Conditions*, outlines the land uses in the Specific Plan Area under existing and proposed conditions, and the difference between the two conditions. As indicated in *Table 3-3*, the Specific Plan Area is currently developed with warehouse/industrial uses totaling 313,955 square feet. The proposed Development Scenario would allow up to 475 new residential dwelling units, a 250-room hotel, and an additional 98,045 square feet of retail/office uses.

Land Use Plan and Designations

Per California State Law, the proposed Specific Plan must be consistent with the *Duarte General Plan*. The *General Plan* Land Use Diagram currently designates the project site as the Gold Line Station Area Development Specific Plan. The proposed project would amend the designation to Duarte Station Specific Plan. A General Plan Amendment would involve text changes to the Land Use Element relative to the Duarte Station Specific Plan. Thus, the proposed Specific Plan would be consistent with the *General Plan*.

General Plan Policies

Table 5.1-2, *General Plan Policy Consistency Analysis*, provides an analysis of the proposed project's consistency with the relevant *General Plan* policies. As demonstrated in *Table 5.1-2*, the proposed Specific Plan is determined to be consistent with the relevant General Plan Policies. All future development plans or agreements, tentative tract or parcel maps, and any other development approvals would be subject to compliance with the Specific Plan. Compliance with the Specific Plan would be verified on a project-by-project basis, through the development review process articulated in Section 6.0 of the Plan. Because all future actions and projects must comply with the Specific Plan, which complies with the General Plan, they would inherently comply with the General Plan.

Table 5.1-2
General Plan Policy Consistency Analysis

Policy #	Policy	Determination of Consistency
Land Use Element[1]		
LU 1.1.2	Encourage the development of a mix of housing types and densities to ensure a variety of housing to accommodate a range of tastes and incomes.	Consistent. The Specific Plan allows for mixed-use residential and high-density residential uses in proximity to the Gold Line Station. It is anticipated that future residential development would provide housing at a variety of income levels, including providing opportunities for affordable housing.
LU 2.1.1	New infill residential development should be compatible in design, bulk, and height with existing nearby residential development as referenced in Duarte's Architectural Design Guidelines.	Consistent. The Specific Plan allows for the development of higher-density residential uses adjacent to existing single-family uses to the west. However, the Specific Plan would include 0.80 acres of passive open space/greenbelt, which would provide a buffer between the existing and proposed uses. Additionally, the Specific Plan includes Development Standards, which provides specific height limits and step-back conditions for proposed development adjacent to the existing single-family residential neighborhood.
LU 2.1.7	Make every effort to ensure that industry and residences, where located in close proximity, will be compatible neighbors with non-industrial uses located nearby, and with neighboring cities as well.	Consistent. The Duarte/Lewis Business Center is located to the east of the Specific Plan Area across Highland Avenue. The Master Land Use Plan identifies Mixed Use and Station Plaza Mixed Use land uses adjacent to Highland Avenue, which would be compatible with adjacent uses. Further, the Specific Plan Development Standards identifies building setbacks and height limits adjacent to Highland Avenue to provide adequate buffering and distance.
LU 3.1.4	Create a flexible mixed use Transit Oriented Development Specific Plan for the current non-residential area north of the Gold Line Station.	Consistent. The Duarte Station Specific Plan allows for a flexible mix of uses that incorporates retail, office, hospitality, and residential development, as well as open space north of and adjacent to the Gold Line Station, currently under construction.
LU 3.1.6	Promote the use of mixed land use techniques and construction methods to provide more housing and minimize housing costs without compromising basic health, safety and aesthetic qualities.	Consistent. The Duarte Station Specific Plan encourages mixed-use development, including high-density residential uses, as well as hotel, office, and retail uses. It is anticipated that future residential development would provide housing at a variety of income levels, including providing opportunities for affordable housing.

Table 5.1-2 [continued]
General Plan Policy Consistency Analysis

Policy #	Policy	Determination of Consistency
Housing Element[2]		
5.1.1	Provide adequate sites to facilitate the development of a range of residential development types in Duarte which fulfill regional housing needs, including low density single-family uses, moderate density townhomes, and higher density apartments and condominiums.	Consistent. The Duarte Station Specific Plan provides the opportunity for high-density residential development, including opportunity for 80-100 multi-family units consistent with the City's affordable housing requirements.
5.1.3	Rezone the Gold Line and City Center areas consistent with the General Plan to provide for new housing for a variety of income levels including affordable units.	Consistent. Adoption of the Duarte Station Specific Plan would rezone the project site to Specific Plan and would allow for high-density residential development, including affordable units.
Circulation Element[1]		
Circ 1.1.4	Evaluate the traffic impacts of new development and require developers to employ appropriate mitigation measures to reduce traffic or improve roadway and traffic conditions.	Consistent. A Traffic Impact Study has been prepared for the proposed project. As indicated in Section 5.4, Traffic, , implementation of the proposed project would result in traffic impacts at City intersections. Improvements have been identified to reduce potential impacts. However, significant unavoidable impacts would remain at the Buena Vista Street/Three Ranch Road and Highland Avenue/Evergreen Street intersection. Neither of the intersections satisfies a traffic signal warrant. Therefore, improvements have been identified to reduce the impact to the extent feasible.
Circ 1.1.6	Pursue and provide adequate right-of-way to accommodate future circulation system improvements.	Consistent. The Duarte Station Specific Plan identifies a private roadway network to support future development.
Circ 3.1.4	Ensure that new developments incorporate both local and regional transit measures into the project design that promote the use of alternate modes of transportation.	Consistent. The proposed project promotes a transit oriented development in proximity to the Duarte Gold Line Station, currently under construction. The proposed mix of uses and development standards would promote the use of the Gold Line, as well as other alternate modes of transportation, such as bicycling and walking.

Source:
1. *City of Duarte Comprehensive General Plan 2005-2020*, August 14, 2007.
2. *City of Duarte 2008-2014 Housing Element*, April 2011.

Overall, as concluded in the discussions presented above, the proposed project would not conflict with the *Duarte General Plan*, therefore, a less than significant impact would occur in this regard.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

CITY OF DUARTE DEVELOPMENT CODE

■ **IMPLEMENTATION OF THE PROPOSED PROJECT COULD CONFLICT WITH THE DUARTE MUNICIPAL CODE STANDARDS AND REGULATIONS.**

Impact Analysis: In order to ensure consistency between the Duarte Station Specific Plan and the *Duarte Development Code*, the *Development Code* would be revised alongside the adoption of the Specific Plan. More specifically, the proposed Zone Change would establish the boundaries and replace the project site's existing M-Manufacturing Zoning District with the Duarte Station Specific Plan. The Duarte Station Specific Plan would need to be adopted by the City of Duarte by ordinance. Upon adoption, the Specific Plan would function as the Zoning Code for the Specific Plan Area. The Specific Plan Master Land Use Plan would serve as the Zoning Map for the Specific Plan Area. Buildout of the Specific Plan Area could not exceed the specified density or floor area ratio. All future development proposals within the Specific Plan Area would be subject to compliance with the Specific Plan, which would regulate and restrict the uses of lands and buildings, height and bulk of buildings, yards and other open spaces, and density/intensity of development. Individual development projects would be subject to the development standards and design guidelines, and would be subject to the development review process articulated in Section 6.0 of the Plan. Because all future actions and projects must comply with the Specific Plan, which would comply with the *Development Code* upon approval of the Zone Change, they would inherently comply with the *Development Code*. Thus, the proposed project would not conflict with the *Duarte Development Code* and a less than significant impact would occur in this regard.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.1.5 CUMULATIVE IMPACTS AND MITIGATION MEASURES

■ **DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT AND OTHER RELATED CUMULATIVE PROJECTS COULD CONFLICT WITH APPLICABLE LAND USE PLANS, POLICIES, OR REGULATIONS.**

Impact Analysis: As indicated in *Table 4-1*, *Cumulative Projects*, the related projects and other possible development would occur within the cities of Duarte, Monrovia, Irwindale, and Azusa. Based on the projects identified in *Table 4-1*, cumulative development would result in a variety of new residential and non-residential uses. Development of the Plan Area, combined with other development, would not result in any cumulative land use impacts as other projects are implemented within the City of Duarte and other cities. Projects would be evaluated on a project-by-project basis and subject to the land use requirements of their respective jurisdictions.

Each project would undergo a similar plan review process as the proposed project, in order to determine potential land use planning policy and regulation conflicts. Each cumulative project would be analyzed independent of other projects, within the context of their respective land use and regulatory setting. As part of the review process, each project would be required to demonstrate compliance with the provisions of the applicable land use designation(s) and zoning district(s). It is assumed that cumulative development would progress in accordance

with the General Plan and Municipal Code of the respective jurisdictions. Each project would be analyzed in order to ensure that the goals, objectives, and policies of the respective General Plan, and regulations and guidelines of the respective Municipal Code are consistently upheld. Further, as concluded above, the proposed Duarte Station Specific Plan would be consistent with the *Duarte General Plan* and *Development Code*. Thus, project implementation would not result in cumulatively significant land use impacts.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.1.6 SIGNIFICANT UNAVOIDABLE IMPACTS

Implementation of the proposed project would result in less than significant project and cumulative impacts related to land use and planning. As such, no significant unavoidable impacts would result from implementation of the Duarte Station Specific Plan.

5.1.7 SOURCES CITED

City of Duarte, *City of Duarte Comprehensive General Plan 2005-2020*, August 14, 2007.

City of Duarte, *City of Duarte 2008-2014 Housing Element*, April 2011.

City of Duarte, *City of Duarte Municipal Code*, current through Ordinance 838, passed July 31, 2012.

Southern California Association of Governments, *2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS): Towards a Sustainable Future*, http://rtpscs.scag.ca.gov/Pages/default.aspx, accessed May 16, 2013.

Southern California Association of Governments, *Adopted 2012 RTP Growth Forecast*, http://www.scag.ca.gov/forecast/index.htm, accessed May 16, 2013.

Southern California Association of Governments, Compass *Blueprint Opportunity Areas Maps, San Gabriel Valley*, http://www.compassblueprint.org/opportunityareas, accessed May 15, 2013.

5.2 AESTHETICS

This section describes the existing visual environment in and around the project area and analyzes potential impacts to the aesthetic character/quality of the area with implementation of the proposed Specific Plan. Consideration of public scenic vistas and views, impacts to scenic resources, and the creation of new sources of light and glare are also analyzed in this section. The analysis is based on information from the proposed Duarte Station Specific Plan and a site visit conducted by RBF Consulting in September 2012.

5.2.1 REGULATORY SETTING

STATE

California Scenic Highway Program

The California Scenic Highway Program was created in 1963 to preserve and protect highway corridors located in areas of outstanding natural beauty from changes that would diminish the aesthetic value of the adjacent lands. The California Department of Transportation (Caltrans) designates highways based on how much of the landscape can be seen by travelers, the scenic quality of the landscape, and the extent to which views are compromised by development.

LOCAL

Duarte General Plan

The *City of Duarte Comprehensive General Plan 2005 – 2020* (*General Plan*) contains goals and policies that guide growth and development within the City. City policies pertaining to visual character are contained in the Land Use and Open Space and Conservation Elements of the *General Plan*. The goals, objectives and policies, which pertain to the project, include the following:

Land Use Goal 2: Develop compatible and harmonious land uses by providing a mix of uses consistent with projected future social, environmental and economic conditions.

Objective 2.1: Assure that future development complements surrounding areas.

Policies:

LU 2.1.1 New infill residential development should be compatible in design, bulk, and height with existing nearby residential development as referenced in Duarte's Architectural Design Guidelines.

LU 2.1.7 Make every effort to ensure that industry and residences, where located in close proximity, will be compatible neighbors with non-industrial uses located nearby, and with neighboring cities as well.

LU 3.1.4 Create a flexible mixed use Transit Oriented Development Specific Plan for the current non-residential area north of the Gold Line Station.

LU 3.1.6 Promote the use of mixed land use techniques and construction methods to provide more housing and minimize housing costs without compromising basic health, safety and aesthetic qualities.

Conservation Goal 3: To protect Duarte's environment through proper consideration of the environmental implications of new development in the city.

Objective 3.1: Keep current on environmental legislation to protect Duarte's environment.

Policies:

Con 3.1.3 Minimize the aesthetic impacts of signs through the strict enforcement of the Municipal Sign Ordinance.

Duarte Municipal Code

Duarte Municipal Code Title 19, *Development Code of the City of Duarte*, promotes the orderly development of the City and is the primary tool used by the City to carry out the goals, objectives, and policies of the General Plan.

Chapter 19.22, Site Plan and Design Review, establishes the appropriate review of development projects in order to ensure that site and structural development:

- Promotes the orderly development of the City in compliance with the goals, objectives, and policies of the General Plan, any applicable specific plan, and the standards specified in the Development Code;
- Respects the physical and environmental characteristics of the site;
- Ensures safe and convenient access and circulation for pedestrians and vehicles;
- Exemplifies high-quality design practices;
- Encourages the maintenance of a distinct neighborhood and/or community identity; and
- Minimizes or eliminates negative or undesirable visual impacts.

Site plan and design review consider compatibility; architectural design and detail; and landscape, lighting, parking, signs, and other design details.

Chapter 19.50, Performance Standards, establishes performance standards applicable to all zones. Section 19.50.070, Outdoor Lighting, establishes lighting standards that are intended to be energy efficient and balance safety and security needs for lighting with efforts to ensure that light trespass (spill light), light pollution, and glare have a negligible impact on surrounding properties, particularly residential uses.

5.2.2 ENVIRONMENTAL SETTING

SCENIC VIEWS AND VISTAS

The City of Duarte is located within the eastern portion of the San Gabriel Valley. The City is situated at the base of the San Gabriel Mountains. Approximately 53 percent of Duarte's incorporated land area is undeveloped and within or adjacent to the Angeles National Forest along the west slope of the San Gabriel Mountains.[1] However, there are no *General Plan* designated scenic views or vistas within the City.

The project site and surrounding area are currently developed and located within the southern portion of the City. The topography of the project area is relatively flat. Evergreen Street and the Foothill Freeway (Interstate 210) are located to the north of the most northern portion of the site. Single-family residential uses are located to the north across Business Center Drive. A single-family residential neighborhood is located to the east of the project site. The Los Angeles County Metropolitan Transportation Authority (Metro)-owned railroad right-of-way is directly adjacent to the project site on the south. The City of Hope campus and the Santa Fe Dam Recreational Area are located to the south of the project site across East Duarte Road. Highland Avenue forms the project site's eastern boundary. The Duarte/Lewis Business Center is located to the east across Highland Avenue, south of the Foothill Freeway and west of the San Gabriel Freeway (Interstate 605).

There are no unique or unusual features in the project area that comprise a dominant portion of a viewshed. Long-range views to the north of the San Gabriel Mountains are available from the project site and surrounding area. These mountains are scenic resources, since they involve undisturbed natural areas and offer distant vistas of mountain backdrops from portions of Duarte. However, views of the mountains from the project site and surrounding area are interrupted by existing development within the area, including the Foothill Freeway, which is elevated.

STATE SCENIC HIGHWAYS

The State Scenic Highway System includes a list of highways that are either currently designated as scenic highways by the State or are eligible for that designation. The California Department of Transportation (Caltrans) does not identify designated scenic highways (or eligible scenic highways) within the City or in its immediate vicinity.[2] Therefore, the project site is not located in the viewshed of a State scenic highway.

VISUAL CHARACTER/QUALITY

The proposed Specific Plan Area encompasses approximately 19 acres bounded by Duarte Road to the south, Evergreen Street and the Foothill Freeway to the north, Highland Avenue to the east, and residential uses to the west. The existing Metro railroad right-of-way runs parallel to the north side of Duarte Road. The project site is comprised of three parcels each developed with a single structure and associated surface parking; refer to *Exhibit 3-3*, *Specific Plan Area*.

[1] Duarte Comprehensive General Plan 2005-2020, August 2007.
[2] State of California Department of Transportation, *California Scenic Highway Mapping System*, http://www.dot.ca.gov/hq/LandArch/scenic_highways/, accessed May 23, 2013.

Parcel 1, located adjacent to Duarte Road, is developed with the Highland Industrial Center, a single-story warehouse building. Several industrial uses occupy the building. Surface parking is located north and west of the building. Landscaping (grass and mature trees) is located along the eastern and western edges of the property. Sporadic landscaping is provided to the south. A chain-link fence separates the project site from the rail corridor. A block wall separates the site from the residences located to the west.

Parcel 2, located south of Business Center Drive, is developed with a two-story office building and attached single-story manufacturing building occupied by Woodward-Duarte (formerly GE Aviation), Surface parking is located on the east and west sides of the building. A portion of the parking to the west of the building contains a gravel surface. Landscaping (grass and mature trees) is located along the eastern, northern, and western edges of the property. Sidewalks are adjacent to the eastern and northern property boundaries. A block wall is located along the western edge of the property, adjacent to the residential uses.

Parcel 3, located adjacent to Evergreen Street, is developed with a single-story, tilt-up building that contains industrial/warehousing suites. Surface parking is located on the north, east, and west sides of the building. Landscaping (grass and mature trees) is located around the edges of the property. There are no sidewalks adjacent to this parcel. There is a landscaped embankment within the Caltrans ROW sloping up to the Foothill Freeway, which is planted with trees and shrubs. A masonry sound wall is located at the top of this embankment beginning to the west of the western edge of the property.

Prominent factors influencing the character of the project site and its surroundings are the variety of uses that occur within the area including the residential neighborhood to the west, Foothill Freeway to the north, Duarte/Lewis Business Center to the east, and Metro railroad right-of-way, City of Hope Campus, and Santa Fe Dam Recreation Area to the south.

Views of the northern portion of the project site from residential uses fronting Denning Avenue are unobstructed. Views from residential uses fronting Glenford Avenue are intermittent with some residences having unobstructed views of the portion of the project site located immediately adjacent to Business Center Drive. A block wall separates the rear and/or side yards of the residences located immediately adjacent to the western project boundary, limiting direct views towards the project site. The Foothill Freeway is slightly elevated, providing a visual barrier of the project site from uses to the north. However, eastbound and westbound travelers on the Foothill Freeway have views of the project site. A rock berm separating the Santa Fe Dam Recreation Area from Duarte Road limits views of the project site from the south. Views of the project site from the City of Hope Campus are limited to surface parking within the western portion of the project site, closest to Duarte Road. Views of the project site from the Metro railroad right-of-way are relatively unobstructed.

LIGHT AND GLARE

Lighting effects are associated with the use of artificial light during the evening and nighttime hours. There are two primary sources of light: light emanating from building interiors passing through windows and light from exterior sources (i.e., street lighting, building illumination, security lighting, parking lot lighting and landscape lighting). Light introduction can be a nuisance to adjacent residential areas, diminish the view of the clear night sky, and if uncontrolled, can cause disturbances. Uses such as residences and hotels are considered light sensitive since occupants have expectations of privacy during evening hours and may be

subject to disturbance by bright light sources. Light spill is typically defined as the presence of unwanted light on properties adjacent to the property being illuminated. With respect to lighting, the degree of illumination may vary widely depending on the amount of light generated, height of the light source, presence of barriers or obstructions, type of light source and weather conditions.

Glare is primarily a daytime occurrence caused by the reflection of sunlight or artificial light by highly polished surfaces, such as window glass or reflective materials and, to a lesser degree, from broad expanses of light-colored surfaces. Perceived glare is the unwanted and potentially objectionable sensation as observed by a person as they look directly into the light source of a luminaire. Daytime glare generation is common in urban areas and is typically associated with buildings with exterior facades largely or entirely comprised of highly reflective glass. Glare can also be produced during evening and nighttime hours by the reflection of artificial light sources such as automobile headlights. Glare-sensitive uses include residences, hotels, transportation corridors, and aircraft landing corridors.

Lighting within the project site and surrounding area is typical of developed urban areas. Primary sources of light and glare in the area include motor vehicle headlights, streetlights, parking lot and exterior security lighting, and interior building lighting. Currently, light and glare are being emitted from existing industrial, office, residential, and surface parking uses located within the area. The location of the project site, adjacent to roadways and the I-210 Freeway, results in car headlights and street lighting that affect the project site and its surroundings.

SHADE AND SHADOW

The longest shadows are cast during the winter months and the shortest shadows are cast during the summer months. Shadow sensitive uses within the project vicinity include front, rear, and side yards associated with single-family residential uses to the north and west of the project site. These shadow-sensitive uses are not currently shaded by existing on-site structures.

5.2.3 SIGNIFICANCE THRESHOLD CRITERIA

The issues presented in the Initial Study Environmental Checklist (*CEQA Guidelines* Appendix G) have been utilized as thresholds of significance in this Section. Accordingly, a project may create a significant environmental impact if it causes one or more of the following to occur:

- Have a substantial adverse effect on a scenic vista (refer to Section 8.0, Effects Found Not To Be Significant).
- Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway (refer to Section 8.0, 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.

Based on these significance thresholds and criteria, the project's effects have been categorized as either "no impact," a "less than significant impact," or a "potentially significant impact." Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a significant unavoidable impact.

5.2.4 PROJECT IMPACTS AND MITIGATION MEASURES

OVERVIEW OF DUARTE STATION SPECIFIC PLAN (PROPOSED PROJECT)

Below is an overview of key sections of the proposed Duarte Station Specific Plan that pertain to aesthetics: Section 4, Land Use and Development Regulations, and Section 5, Design Guidelines.

Section 4 – Land Use and Development Regulations

This section describes all the standards and guidelines for street design, site planning, and building design for the Plan Area. The regulations are district and building specific. These are the regulations that govern new construction, as well as alterations and additions, in the Plan Area.

To create a vibrant, thriving and special community, the Development Standards are "Form Based" to create a predictable public realm by establishing guidelines and regulations that focus primarily on the physical form of the environment. By addressing the relationships between building facades and the public realm, the form and mass of buildings in relation to one another, and the scale and types of streets and blocks, through an integrated package of requirements for street and building design, massing and scale and setbacks, the Standards help in creating a unique character for the Plan Area.

Section 4 covers: General Provisions and Building Use Regulations. Within the Building Use Regulations subsection are standards relating to:

- Development Standards
- Building Setbacks
- Building Heights
- Ground Floor Area
- Street Standards
- Typical Alley Section

Section 5 - Design Guidelines

The Design Guidelines include both mandatory standards and interpretive design guidelines to guide future development within Plan Area. The word "should" means that an action is required unless a determination is made that the intent of the Guideline is satisfied by other means. The Guidelines are minimum requirements, and developers may be required to provide additional amenities to meet the goals of the Specific Plan.

Section 5 covers:

- Site Planning
  - Block Pattern
  - Pedestrian Connectivity To and From the Station
  - Parking Areas

- General Building Design
  - Architectural Character
  - Building Orientation
  - Building Massing and Articulation
  - Fenestrations
  - Building Materials
  - Service Areas
  - Signage

- Design Guidelines by Building Type
  - Multi-Family Residential/Multi-Family Residential Mixed-Use
  - Office/Office Mixed Use
  - Hotel
  - Stand Alone Retail
  - Parking Structure

- Landscape Guidelines

SHORT-TERM VISUAL CHARACTER/QUALITY

■ **CONSTRUCTION ACTIVITIES ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT COULD RESULT IN SIGNIFICANT IMPACTS RELATED TO TEMPORARY DEGRADATION OF THE VISUAL CHARACTER/QUALITY OF THE SITE AND ITS SURROUNDINGS.**

Impact Analysis: Short-term construction-related activities associated with future development in the Specific Plan Area would temporarily alter the existing visual character of the development sites and their surroundings. The visual impact associated with construction activities would involve graded surfaces, construction materials, equipment, and truck traffic. Soil would be stockpiled and equipment for grading activities would be staged at various locations. In addition, temporary structures could be located on the respective development site during various stages of construction, within materials storage areas, or associated with construction debris piles on-site. Exposed trenches, roadway bedding, spoils/debris piles and steel plates would be visible during construction of proposed street and utility infrastructure improvements. These construction activities and equipment could temporarily degrade the existing visual character and quality of localized sites within the Specific Plan Area and their surroundings during the construction phase. The typical “window” of construction-related activities at a particular location would vary depending on the scale and nature of the proposed development.

Construction-related activities are not considered significant, because they would be short-term and temporary; construction activity would not be continuous and would proceed on a project-by-project basis. Temporary screening of a particular construction staging site would partially relieve the visual impacts typically associated with construction activities. Moreover, development of specific sites within the Specific Plan Area would vary such that areas of temporary construction-related visual impacts would change throughout the implementation of the proposed Specific Plan. Compliance with Mitigation Measure AES-1, which would be incorporated into construction documents, would reduce potential construction-related visual impacts to less than significant.

Mitigation Measures:

AES-1 Prior to the issuance of a building permit, each project applicant shall submit a Construction Management Plan for review and approval by the City of Duarte Community Development Director. The Construction Management Plan shall, at a minimum, indicate the equipment and vehicle staging areas, stockpiling of materials, fencing (i.e., temporary fencing with opaque material), and construction haul route(s). Staging areas shall be screened from view from residential properties. Construction worker parking may be located off-site with prior approval by the City; however on-street parking of construction worker vehicles on residential streets shall be prohibited. Vehicles shall be kept clean and free of mud and dust before leaving the development site. Surrounding streets shall be swept daily and maintained free of dirt and debris.

Level of Significance: Less Than Significant Impact With Mitigation Incorporated.

LONG-TERM VISUAL CHARACTER/QUALITY

■ **IMPLEMENTATION OF THE PROPOSED PROJECT COULD RESULT IN SIGNIFICANT IMPACTS RELATED TO THE LONG-TERM DEGRADATION OF THE VISUAL CHARACTER/QUALITY OF THE SITE AND ITS SURROUNDINGS.**

Impact Analysis:

Visual Quality/Character

The visual analysis of a proposed project must consider its visual quality and compatibility in consideration of the area's visual sensitivity. The following analysis examines the proposed project for compatibility with the character of the surrounding land uses, in consideration of the following visual elements:

- Architectural features (e.g., repetition of design elements: materials, texture, colors, form, type of construction, details, and building systems);
- Scale and Height (e.g., size/height relationships between adjacent buildings, and between buildings and adjacent open spaces); and
- Property setbacks (e.g., setbacks providing distance and/or a visual buffer between the project site and receptors).

The proposed Duarte Station Specific Plan would allow for a mix of uses to be developed on the approximately 19-acre site located adjacent to the Duarte Gold Line Station, currently under construction. The project site is located within a developed area that includes residential, industrial, and institutional land uses. Single-family residential uses are located to the north and west, adjacent to the site. Residential uses north of Business Center Drive have limited views of the project site, depending upon their orientation and location, whereas the residences fronting Denning Avenue have an unobstructed view of the project site, specifically Parcel 3. A block wall separates the rear and/or side yards of the residences located immediately adjacent to the western project boundary, limiting direct views towards the project site. Partial views of the upper levels of proposed buildings within the site may occur. The residences are primarily single-story. The existing industrial buildings east of Highland Avenue are located at a minimum of 60 feet from the property line.

The existing visual character/quality of the project site would be altered with implementation of the proposed project, as the project site would be developed into a transit-oriented development. Existing single-story industrial buildings would be removed and replaced with a mix of uses and buildings with maximum heights ranging from 45 feet to 90 feet. A new interior roadway network supporting potential development would also be provided.

The proposed Specific Plan Area is broadly divided into three major districts: High Density Residential, Mixed Use, and Station Plaza Mixed Use, refer to *Exhibit 3-4*. The Development Scenario includes retail, office, hotel, and high-density residential uses, as well as open space and interior roads; refer to *Exhibit 3-5* and *Exhibit 5.2-1*, *Illustrative Site Plan*.

Development within the Specific Plan Area would be required to comply with Section 4.0 of the proposed Duarte Station Specific Plan, which identifies the standards and guidelines for street design, site planning, and building design for the Specific Plan Area. Required building setbacks would take into consideration the streets that the setbacks are adjacent to, the intensity of proposed land uses, proposed building mass and scale, and the surrounding context and edge conditions.

Ten-foot setbacks would primarily be required throughout the Plan Area with the exception of buildings along Denning Avenue and a portion of Highland Avenue, which require 20-foot and 25-foot setbacks, respectively; refer to *Exhibit 5.2-2*, *Building Setbacks*.

Maximum building heights would range from four stories (45 feet) to 8 stories (90 feet). Where the proposed development area is adjacent to single-family residential, specific height limits and step-back conditions would be required; refer to *Exhibit 5.2-3*, *Building Heights*. Transition Zone 1 (TZ1), along the Plan Area's western edge between Business Center Drive and Duarte Road, requires step-backs after a maximum height of 35-feet. TZ2 and TZ3, south of Business Center Drive between the western edge and Denning Avenue, and TZ4, adjacent to Denning Avenue, require step-backs after a maximum height of 45-feet. Refer to *Exhibit 5.2-4*, *Residential Transition Zones*. Additionally, the proposed Specific Plan requires that landscaped buffers at the existing residential interface be implemented as part of any site plan component.

The proposed Specific Plan also includes both mandatory standards and interpretive design guidelines to guide future development within the Plan Area. These guidelines address a variety of areas including architectural character, building orientation, building massing and articulation, and building materials. Future development within the Plan Area would be reviewed to determine compliance with development regulations. Additionally, the proposed

Specific Plan requires a completed Site Plan and Design Review Application with completed development and architectural plans to be submitted to the Duarte Planning, Building and Safety, and Public Works/Engineering Divisions. The Community Development Director would be required to make a finding of conformance with the land use and development standards of the Specific Plan prior to site plan submittal to the Architectural Review Board. The proposed Specific Plan review requirements would ensure that the design and general appearance of future development within the Plan Area would be in compliance with land use and development regulations and design guidelines that maintain and enhance the appearance of the area. Although the character of the area would be altered with the replacement of industrial uses with higher density residential, office, hotel, and retail uses, overall, the proposed project would improve the visual character/quality of the area. Less than significant impacts would occur in this regard.

Shade/Shadow

Implementation of the proposed project would result in new shade and shadow patterns in the area, as the proposed Specific Plan would allow for the development of structures at a greater height than the existing on-site structures. The only shadow sensitive uses in the project area are existing residential uses located along the western project edge, north of Business Center Drive and west of Denning Avenue. These existing residential uses feature mature trees within their yards and within the project site along the western edge, which provide for existing shading at portions of these uses.

Implementation of the proposed project could result in the construction of new structures up to 65 feet in height within the western portion of the project site, adjacent to existing residential uses. Additionally, new structures up to 90 feet in height could be constructed within the central and northern portion of the project site, across from existing residential uses located north of Business Center Drive and west of Denning Avenue. These new structures would cast new shadows on-site and off-site in the project area. Potential shade and shadow impacts would be dependent upon the siting, massing, and heights of future buildings within the Plan Area. Due to the adjacency of residential uses and the potential for the residences to experience shade and shadow impacts as a result of future development within the Plan Area, impacts are considered significant and unavoidable in this regard.

Mitigation Measures: No mitigation measures are required for visual character/quality. No mitigation measures are feasible for shade/shadow.

Level of Significance: Significant and Unavoidable Impact for Shade/Shadow Impacts. Less Than Significant Impact for Visual Quality/Character.

LIGHT AND GLARE

■ **IMPLEMENTATION OF THE PROPOSED PROJECT COULD CREATE A NEW SOURCE OF LIGHT AND/OR GLARE, WHICH COULD AFFECT DAYTIME AND/OR NIGHTTIME VIEWS IN THE AREA.**

Source: Dahlin Group, July 24, 2013.

NOT TO SCALE

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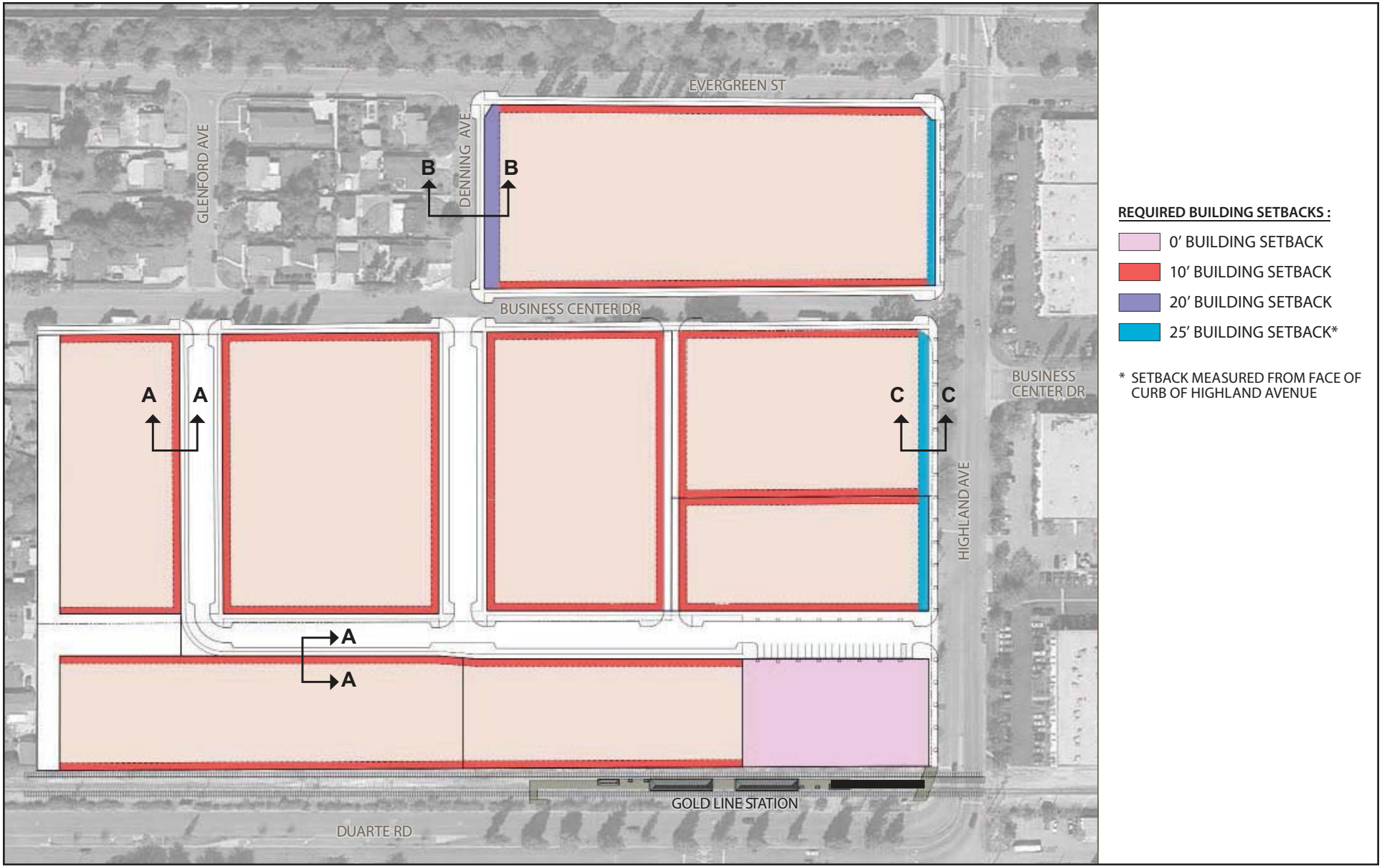
DUARTE STATION SPECIFIC PLAN
ENVIRONMENTAL IMPACT REPORT

Illustrative Site Plan

Exhibit 5.2-1



Source: Dahlin Group, August 2013.

NOT TO SCALE

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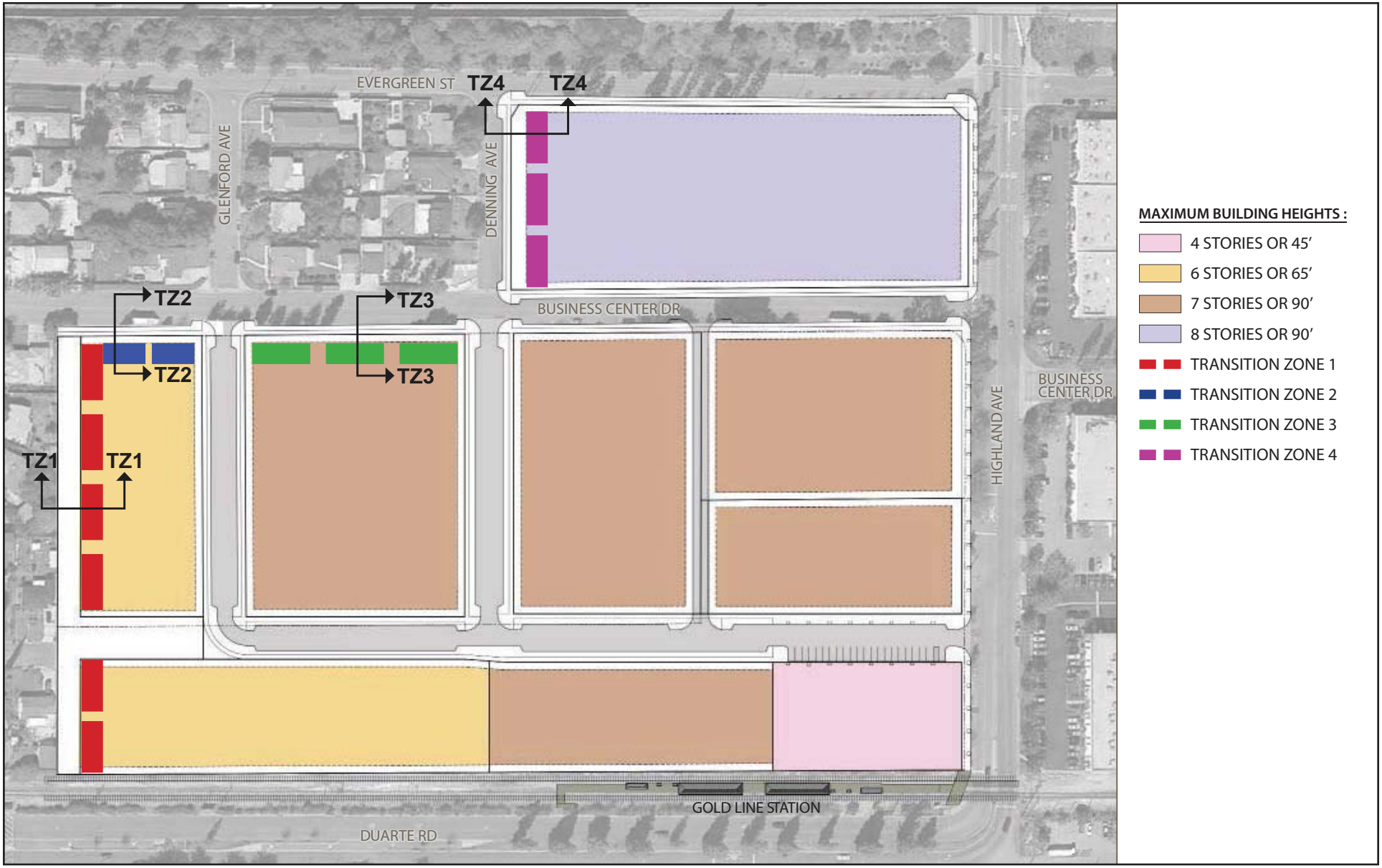
DUARTE STATION SPECIFIC PLAN
ENVIRONMENTAL IMPACT REPORT

Building Setbacks

Exhibit 5.2-2



Source: Dahlin Group, August 2013.

NOT TO SCALE

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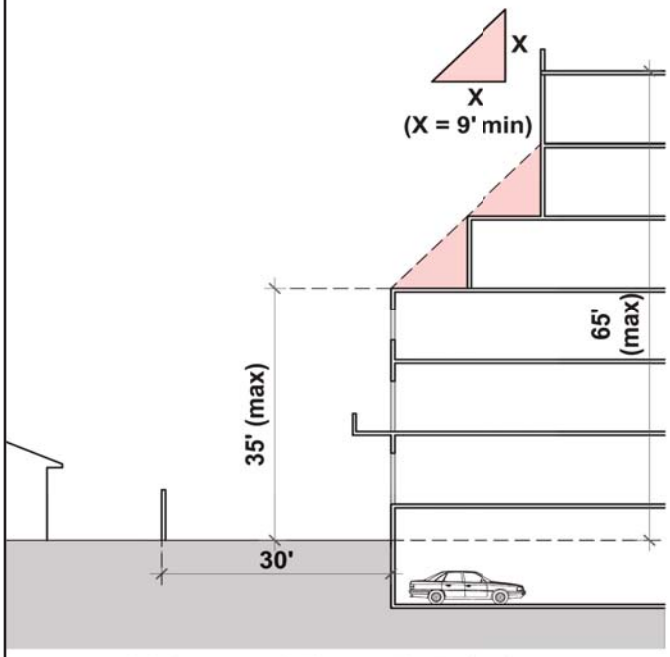
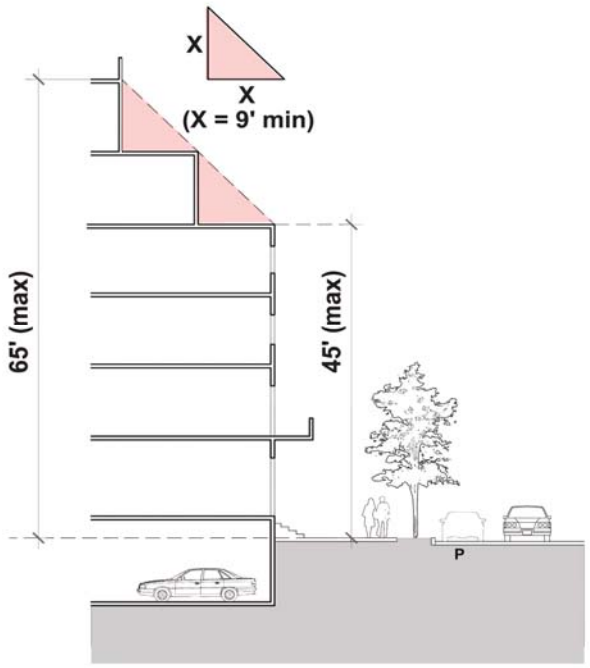
DUARTE STATION SPECIFIC PLAN
ENVIRONMENTAL IMPACT REPORT

Building Heights

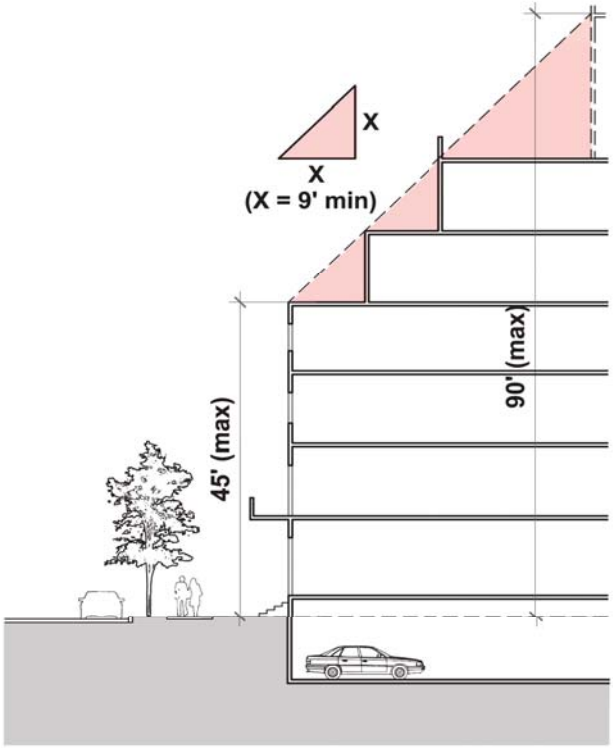
Exhibit 5.2-3



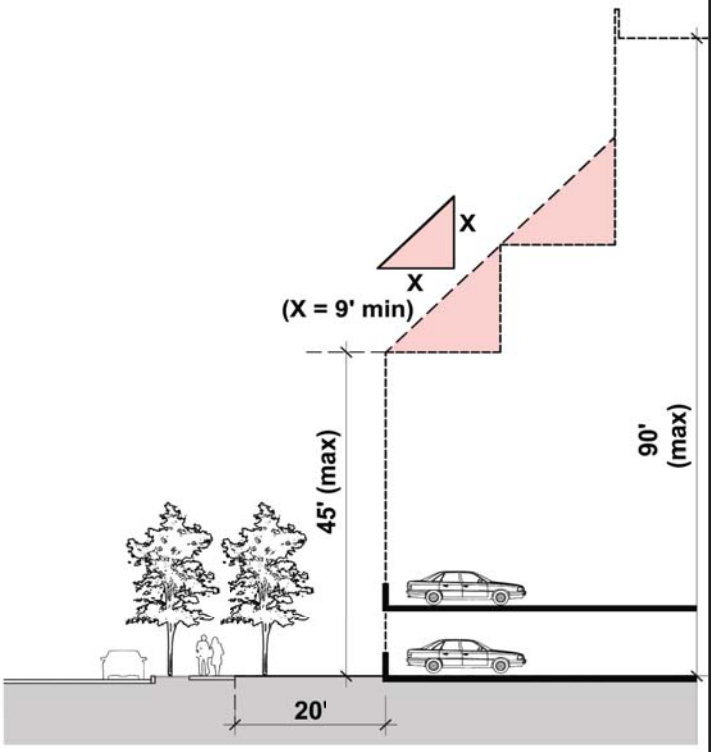
SECTION TZ1-TZ1: RESIDENTIAL TRANSITION ZONE 1



SECTION TZ2-TZ2: RESIDENTIAL TRANSITION ZONE 2



SECTION TZ3-TZ3: RESIDENTIAL TRANSITION ZONE 3



SECTION TZ4-TZ4: HOTEL/MIXED-USE TRANSITION ZONE 4

Source: Dahlin Group, August 2013.

NOT TO SCALE

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DUARTE STATION SPECIFIC PLAN
ENVIRONMENTAL IMPACT REPORT

Residential Transition Zones

Exhibit 5.2-4

Impact Analysis:

Short-Term Construction Impacts

Construction activities are anticipated to occur during the day hours; however, security lighting would result in short-term light and glare impacts associated with construction activities. Residential uses are currently located adjacent to the Plan Area to the west and north, and are considered light sensitive since occupants have expectations of privacy during evening hours and may be subject to disturbance by bright light sources. Implementation of the recommended mitigation involving shielding of construction-related lighting would reduce the impact to a less than significant level.

Long-Term Operational Impacts

Lighting and Glare from Proposed Structures

Implementation of the proposed project would introduce additional sources of light and glare including light from proposed residential, office, retail, and hotel uses, as well as security lighting and vehicle headlights at proposed roads and driveways. The project site currently generates light from building interiors and security lighting around buildings and within surface parking areas. Lighting is also being emitted from street lamps and car headlights associated with adjacent roadways.

Implementation of the proposed Specific Plan would allow for future development of residential and non-residential land uses at greater densities/intensities than currently exist. Development would have the potential to create new sources of light and glare in the form of lighting emanating from building interiors, streetlights, exterior lighting, and lighting for the purposes of safety, as well as glare effects caused by reflective surfaces. These new sources of light and glare would be most visible from development along adjacent roadways, and to receptors such as residents and traveling motorists.

The proposed Specific Plan requires that building lighting preclude direct glare onto adjacent properties and that pedestrian scale lighting be provided at entries, plazas, courtyards, parking lots, and other areas where nighttime pedestrian activity is expected. Additionally, future development would be subject to *Municipal Code* Section 19.50.070, Outdoor Lighting, which establishes lighting standards to ensure that light trespass (spill light), light pollution, and glare have a negligible impact on surrounding properties, particularly residential uses. Compliance with the proposed Specific Plan and *Municipal Code* requirements would reduce potential light and glare impacts from proposed structures to a less than significant level.

Vehicle Headlights

Implementation of the proposed project would introduce new roadways and/or extension of existing roadways within the Plan Area. Additionally, new driveways may be constructed to serve future on-site development. Vehicles entering and existing future developments within the Plan Area may introduce new or increased nighttime lighting, potentially impacting adjacent residential uses. Future development within the Plan Area would be reviewed to determine compliance with development regulations. Additionally, the proposed Specific Plan requires a completed Site Plan and Design Review Application with completed development and architectural plans to be submitted to the Duarte Planning, Building and Safety, and Public

Works/Engineering Divisions. As part of the Site Plan and Design Review, site access would be reviewed. In order to reduce potential impacts on adjacent residential uses associated with vehicle headlights, vehicular access locations should not be sited directly across from residential uses. In the event access is located across from residential uses, existing screening (i.e., landscaping, perimeter walls, etc.) should remain in place or new screening should be installed to reduce vehicle headlights from directly shining onto residential uses (Mitigation Measure AES-4). With implementation of mitigation, potential impacts associated with vehicle headlights would be reduced to a less than significant level.

Mitigation Measures:

AES-2 Construction equipment staging areas shall use appropriate screening (i.e., temporary fencing with opaque material) to buffer views of construction equipment and material, when feasible. Staging locations shall be indicated on Final Development Plans and Grading Plans.

AES-3 All construction-related lighting shall include shielding in order to direct lighting down and away from adjacent hotel and residential uses and consist of the minimal wattage necessary to provide safety at the construction site. A construction safety lighting plan shall be submitted to the City for review concurrent with Grading Permit application.

AES-4 As part of Site Plan and Design Review, site access locations shall be reviewed to ensure that vehicle access locations are not sited in a manner that would result in vehicle headlights directly shining onto residential uses. If siting of vehicle access locations would result in headlights directly shining onto residential uses, the project applicant shall implement screening, consistent with the Duarte Station Specific Plan, to reduce lighting impacts.

Level of Significance: Less Than Significant Impact With Mitigation Incorporated.

5.2.5 CUMULATIVE IMPACTS AND MITIGATION MEASURES

■ **DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT AND OTHER RELATED CUMULATIVE PROJECTS COULD RESULT IN CUMULATIVELY CONSIDERABLE AESTHETICS IMPACTS.**

Impact Analysis: The aesthetic-related impacts associated with visual character/quality, light and glare, and shade and shadow to the surrounding area are not considered cumulatively considerable, as there are no cumulative projects located in the immediate project vicinity. The nearest project, City of Hope, is located southwest of the project site, south of Duarte Road. Impacts to visual character would be unique to each respective development site. Impacts to visual character, light and glare, and shade/shadow (both during construction and operations of the project) would be dependent upon project- and site-specific variables, including proximity to visually sensitive receptors, the visual sensitivity of the respective development sites, and duration of demolition and construction. The potential visual impacts of other projects would be evaluated on a project-by-project basis. It is assumed that cumulative development would progress in accordance with the City's *Municipal Code*. Cumulative impacts to visual

character/quality or the substantial increase in light and glare to the surrounding area would be less than significant, and the proposed project would not be cumulatively considerable.

Mitigation Measures: Refer to Mitigation Measure AES-1 through AES-4. No additional mitigation measures are required.

Level of Significance: Less Than Significant Impact With Mitigation Incorporated.

5.2.6 SIGNIFICANT UNAVOIDABLE IMPACTS

With implementation of the proposed Duarte Station Specific Plan, significant unavoidable project impacts would occur with respect to shade and shadow impacts on adjacent existing residential uses.

All other aesthetics impacts associated with implementation of the proposed Duarte Station Specific Plan are either at less than significant levels or can be mitigated to less than significant levels.

If the City of Duarte approves the proposed Duarte Station Specific Plan, the City shall be required to cite their findings in accordance with *CEQA Guidelines* Section 15091 and prepare a Statement of Overriding Considerations in accordance with *CEQA Guidelines* Section 15093.

5.2.7 SOURCES CITED

City of Duarte, *City of Duarte Comprehensive General Plan 2005-2020*, August 14, 2007.

City of Duarte, *City of Duarte Municipal Code*, current through Ordinance 838, passed July 31, 2012.

IBI Group, *Duarte Gold Line Station Area Vision Final Study Report*, March 2008.

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5.3 POPULATION AND HOUSING

This section identifies the existing population, housing, and employment statistics for the City of Duarte (City) and County of Los Angeles (County), and provides an analysis of potential impacts that may result from project implementation. More specifically, the impact analysis evaluates how project implementation could induce population, housing, or employment growth in the City, either directly or indirectly. The primary sources of data presented in this section are the U.S. Census 2000 and 2010, California Department of Finance, Southern California Association of Governments, and *City of Duarte Comprehensive General Plan 2005-2020* (*General Plan*).

5.3.1 REGULATORY SETTING

SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS

The Southern California Association of Governments (SCAG) is the responsible agency for developing and adopting regional household, population, and employment growth forecasts for local governments from Imperial, Los Angeles, Orange, Riverside, Los Angeles, and Ventura counties. To facilitate regional planning efforts, SCAG's planning area is further organized into subregions. The City of Duarte is a member agency of the San Gabriel Valley Association of Governments (SGVCOG), one of 14 Subregional Organizations that make up SCAG. The SGVCOG is a joint powers authority of 31 cities (inclusive of Duarte), the three Supervisorial Districts representing the unincorporated areas in the San Gabriel Valley, and the Valley's three water agencies.

SCAG's Forecasting Section has produced the Adopted 2012 Integrated Growth Forecast (March 12, 2012), which includes socio-economic estimates and projections at multiple geographic levels for multiple years. These socio-economic estimates and projections are used for federal and state mandated long-range planning efforts such as the *2012-2035 Regional Transportation Plan/Sustainable Communities Strategy: Towards a Sustainable Future (2012-2035 RTP/SCS)* and Air Quality Management Plan (AQMP), among others. Additionally, the projections enable the proper planning of infrastructure and facilities to adequately meet the needs of the anticipated growth. The growth forecasts provide population, household, and employment data for 2008, 2020, and 2035.

Additionally, every two years, SCAG produces Local Profiles for each SCAG jurisdiction. These Local Profiles are intended to provide updated jurisdictional data and analysis to support community planning and outreach efforts. The 2013 Local Profiles were released by SCAG in May 2013.

REGIONAL HOUSING NEEDS ASSESSMENT

The Regional Housing Needs Assessment (RHNA) is mandated by State Housing Law as part of the periodic process of updating local General Plan housing elements. The RHNA quantifies the need for housing by income group within each jurisdiction during specified planning periods. Jurisdictions are required to provide their fair share of regional housing needs. The housing construction need is determined for four broad household income categories:

- Very low (households making less than 50 percent of median family income);
- Low (50 to 80 percent of median family income);

- Moderate (80 to 120 percent of median family income); and
- Above moderate (more than 120 percent of median family income).

The intent of the future needs allocation by income groups is to relieve the undue concentration of very low and low-income households in a single jurisdiction and to help allocate resources in a fair and equitable manner.

The RHNA Allocation Plan, which covers the planning period from January 1, 2006 to June 30, 2014, is the most recently completed RHNA allocation. As indicated in *Table 5.3-1*, *Duarte RHNA Allocation 2006-2014*, Duarte's RHNA allocation for the 2006-2014 planning period is 367 housing units, including 150 units within the extremely low, very low, and low income categories.

Table 5.3-1
Duarte RHNA Allocation 2006-2014

Income Category	Housing Allocation
Extremely Low	46
Very Low	46
Low	58
Moderate	63
Above Moderate	154
Total	**367**

Source: *City of Duarte 2008-2014 Housing Element*, April 2011.

The 5th cycle RHNA Allocation Plan, which covers the planning period from October 2013 to October 2021, was adopted by SCAG's Regional Council on October 4, 2012. Fifth cycle housing element updates must be adopted by October 15, 2013. SCAG has determined that Duarte's RHNA allocation for the 2013-2021 planning period is 337 housing units, including 140 units within the very low and low income categories; refer to *Table 5.3-2*, *Duarte RHNA Allocation 2013-2021*.

Table 5.3-2
Duarte RHNA Allocation 2013-2021

Income Category	Housing Allocation
Very Low	87
Low	53
Moderate	55
Above Moderate	142
Total	**337**

Source: Southern California Association of Governments, *5th Cycle Regional Housing Needs Assessment Final Allocation Plan, 1/1/2014-10/1/2021,* http://rtpscs.scag.ca.gov/Documents/rhna/5thCyclePFinalRHNAplan.pdf, accessed May 17, 2013.

CITY OF DUARTE GENERAL PLAN HOUSING ELEMENT

The City of Duarte Housing Element, which was certified by the City Council in 2011, is an 8.5-year plan that covers the planning period from January 2006 to June 2014. The Element sets forth a strategy to address the City's identified housing needs, including specific implementing programs and activities.

As previously noted, Duarte's RHNA allocation for the 2006-2014 planning period is 367 housing units. The City facilitated the construction of 132 units during the "gap period" between January 1, 2006 and October 2010. Additionally, two projects with a total of 45 units have planning entitlements, which can be credited toward the City's requirements for the 2006-2014 planning period. In consideration of the constructed and entitled units, the City's adjusted need for 2006-2014 is 190 housing units, including 68 units within the very low and low income categories; refer to *Table 5.3-3*, *Duarte Adjusted RHNA Allocation 2006-2014*.

Table 5.3-3
Duarte Adjusted RHNA Allocation 2006-2014

Income Category	2006-2014 RHNA Obligation	Units Constructed or Entitled (1/2006-10/2010)	Net RHNA Need
Very Low	92	80	12
Low	58	2	56
Moderate	63	0	63
Above Moderate	154	95	59
Total	**367**	**177**	**190**

Source: *City of Duarte 2008-2014 Housing Element*, April 2011.

The Housing Element concluded there are adequate sites to be designated at appropriate densities to fulfill its regional housing need for all income levels. While the City has identified a shortfall in sites to address moderate income needs, the surplus in sites/units for very low and low income households can be used to offset this need.

5.3.2 ENVIRONMENTAL SETTING

POPULATION

County of Los Angeles

Los Angeles County's population totaled 9,519,338 persons in 2000 and 9,818,605 persons in 2010, representing a growth rate of approximately three percent for this time period; refer to *Table 5.3-4*, *Population Estimates and Projections*. As of January 2013, the County's population was an estimated 9,958,091 persons. According to SCAG, with a forecast population of approximately 11,353,000 persons by 2035, the County's population is projected to grow approximately 14 percent between 2013 and 2035.

Table 5.3-4
Population Estimates and Projections

Year	County of Los Angeles	City of Duarte
2000 Census[1]	9,519,338	21,486
2010 Census[2]	9,818,605	21,321
2000 - 2010 Change	*+299,267*	*(165)*
2000 - 2010 % Change	*+3.1%*	*-0.7%*
2013 Existing Conditions[3]	9,958,091	21,554
2010 – 2013 Change	*+139,486*	*+233*
2010 – 2013 % Change	*+1.4%*	*+1.1%*
2035 SCAG Forecasts[4]	11,353,000	23,400
2013 – 2035 Change	*+1,394,909*	*+1,846*
2013 – 2035 % Change	*+14.0%*	*+8.6%*

Notes:
1. U.S. Census Bureau, *Census 2000*.
2. U.S. Census Bureau, *Census 2010*.
3. State of California Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties, and the State, January 2011-2013, With 2010 Benchmark*. Sacramento, California, May 2013.
4. Southern California Association of Governments, *Adopted 2012 RTP Growth Forecast*, http://www.scag.ca.gov/forecast/index.htm, accessed May 17, 2013.

City of Duarte

As indicated in *Table 5.3-4*, the City's population was an estimated 21,486 persons in 2000 and 21,321 persons in 2010, representing a population decline of approximately 0.7 percent between 2000 and 2010. The City's 2013 population is approximately 21,554 persons. SCAG forecasts the City's population will increase to approximately 23,400 persons by 2035, or approximately 8.6 percent between 2013 and 2035. Comparatively, the City is forecast to grow at a much lower rate than the County, which is forecast to grow by approximately 14 percent. By 2035, the City will constitute less than one-quarter percent of the County's total population.

HOUSING

County of Los Angeles

The County's housing data is presented in *Table 5.3-5*, *Household and Housing Estimates and Projections*. The County's 2000 housing inventory was an estimated 3,270,909 dwelling units, representing an increase of approximately 5.3 percent over the 2010 inventory of 3,445,076 dwelling units. The County's 2013 housing inventory totaled 3,463,382 dwelling units, with a 5.9 percent vacancy rate and an average of 3.0 persons per household. The County's households are forecast to total 3,852,000 by 2035. Based on a vacancy rate of 5.9 percent, the County's housing inventory is forecast to total approximately 4,093,518 dwelling units by 2035. County households are forecast to grow approximately 18 percent between 2013 and 2035; refer to *Table 5.3-5*.

Table 5.3-5
Household and Housing Estimates and Projections

Year/Description	County of Los Angeles		City of Duarte	
	Households	Dwelling Units	Households	Dwelling Units
2000 Census[1]	3,133,774	3,270,909	6,635	6,805
2010 Census[2]	3,241,204	3,445,076	7,013	7,254
2000 - 2010 Change	*+107,430*	*+174,167*	*+378*	*+449*
2000 - 2010 % Change	*+3.4%*	*+5.3%*	*+5.7%*	*+6.6%*
2013 Existing Conditions[3]	3,258,265	3,463,382	7,030	7,271
2010 - 2013 *Change*	*+17,061*	*+18,512*	*+17*	*+17*
2010 – 2013 % Change	*+0.5%*	*+0.54%*	*+0.002%*	*+0.002%*
2013 Existing Vacancy Rate[3]	--	5.9%	--	3.3%
2013 Existing Persons per Household[3]	3.00	--	3.01	--
2035 SCAG Forecasts[4]	3,852,000	4,093,518[5]	7,900	8,170
2013 – 2035 Change	*+593,735*	*+630,136*	*+870*	*+899*
2013 – 2035 % Change	*+18.2%*	*+18.2%*	*+12.4%*	*+12.4%*

Notes:
1. U.S. Census Bureau, *Census 2000*.
2. U.S. Census Bureau, *Census 2010*.
3. State of California Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties, and the State, January 2011-2013, With 2010 Benchmark*. Sacramento, California, May 2013.
4. Southern California Association of Governments, *Adopted 2012 RTP Growth Forecast*, http://www.scag.ca.gov/forecast/index.htm, accessed May 17, 2013.
5. SCAG provides population, household, and employment forecasts, however, no housing forecasts. Therefore, the County's 2035 housing forecast has been extrapolated, based on 3,852,000 households and 5.9 percent vacancy rate.
6. The City's 2035 housing forecast has been extrapolated, based on 7,900 households and 3.3 percent vacancy rate.

City of Duarte

The City's 2010 housing inventory was an estimated 7,254 dwelling units, representing an increase of approximately 6.6 percent over the 2000 inventory of 6,805 dwelling units; refer to *Table 5.3-5*. Comparatively, the City's housing growth rate between 2000 and 2010 was slightly higher than the County's growth rate for the same period (approximately five percent). As of January 2013, the City's housing inventory totaled 7,254 dwelling units. The City's households total 7,013 with an average of 3.01 persons per household. SCAG forecasts the City's households will total 7,900 by 2035, representing an increase of approximately 12.4 percent between 2013 and 2035; refer to *Table 5.3-5*. Based on a vacancy rate of 3.3 percent, the City's housing inventory is forecast to total approximately 8,170 dwelling units by 2035.

Vacancy rates are a measure of the general availability of housing. They also indicate how well the types of available units meet the housing market demand. A low vacancy rate suggests that households may have difficulty finding housing within their price range, whereas a high vacancy rate indicates that either the units available are not suited to the population's needs or there is an oversupply of housing units. The availability of vacant housing units provides households with choices of type and price to accommodate their specific needs. Low vacancy rates can result in higher prices, limited choices, and settling with inadequate housing. It may also contribute to overcrowding. A vacancy rate between 4.0 and 6.0 is considered "healthy." As

indicated in *Table 5.3-5*, the City's 2013 vacancy rate is 3.3 percent, which is considered low. Comparatively, the City's vacancy rate was less than the County's overall vacancy rate of 5.9 percent.

EMPLOYMENT

County of Los Angeles

As indicated in *Table 5.3-6*, *Labor Force and Employment Estimates*, the County's 2000 civilian labor force was an estimated 4,307,762 persons, of which approximately 8.2 percent were unemployed.

Table 5.3-6
Labor Force and Employment Estimates

Year	County of Los Angeles			City of Duarte		
	Labor Force	Unemployed Number	Unemployed Rate	Labor Force	Unemployed Number	Unemployed Rate
2000 Census[1]	4,307,762	354,347	8.2%	10,041	545	3.4%
2010 Census[2]	5,014,682	623,414	12.4%	10,514	1,158	6.7%
2000 – 2010 Change	*+706,920*	*+269,067*	*+4.2%*	*+473*	*+613*	*+3.3%*
2000 – 2010 % Change	*+16%*	*+76%*	*+51%*	*+4.7%*	*+112%*	*+97%*
2013 Existing Conditions[3]	4,893,200	453,900	9.3%	11,500	700	6.5%
2010 – 2013 Change	*-121,482*	*-169,514*	*-3.1%*	*+986*	*-458*	*-0.2%*
2010 – 2013 % Change	*-2.4%*	*-27.2%*	*-25%*	*+9.4%*	*-40%*	*-3.0%*

Notes:
1. U.S. Census Bureau, Census 2000.
2. U.S. Census Bureau, Census 2010.
3. State of California, Employment Development Department Labor Market Information Division, *Monthly Labor Force Data for Cities and Census Designated Places (CDP) April 2013 - Preliminary, Data Not Seasonally Adjusted*, May 21, 2013.

By 2010, the County's civilian labor force increased to an estimated 5,014,682 persons. Between 2000 and 2010, the County's unemployment rate increased from 8.2 percent to 12.4 percent. According to the U.S. Census 2010, approximately 35.2 percent of the County's labor force was employed in management, business, science, and arts occupations, and approximately 26 percent was employed in sales and office occupations. The largest industry sector in the County was educational services and health care and social assistance (21 percent). The County's existing labor force (as of May 2013) is an estimated 4,893,200 persons, with an unemployment rate of approximately 9.3 percent.

Table 5.3-7, *Employment Estimates and Projections*, presents the County's existing employment and forecast employment, according to SCAG. As indicated in *Table 5.3-7*, Los Angeles County's labor market is projected to increase from 4,209,116 jobs in 2012 to 4,827,000 jobs in 2035. Thus, SCAG forecasts the County's labor market will grow approximately 15 percent between 2012 and 2035 (617,884 jobs).

Table 5.3-7
Employment Estimates and Projections

Year	County of Los Angeles	City of Duarte
2012 Existing Conditions[1]	4,209,116	6,454
2035 SCAG Forecasts[2]	4,827,000	7,300
2012 – 2035 Change	*+617,884*	*+846*
2012 – 2035 % Change	*+14.7%*	*+13.1%*

Notes:
1. Southern California Association of Governments, *2013 Local Profiles of SCAG Jurisdictions*, http://www.scag.ca.gov/resources/profiles.htm, accessed May 20, 2013.
2. Southern California Association of Governments, *Adopted 2012 RTP Growth Forecast*, http://www.scag.ca.gov/forecast/index.htm, accessed May 20, 2013.

City of Duarte

As indicated in *Table 5.3-6*, the City's 2000 civilian labor force totaled approximately 10,041 persons, with an unemployment rate of approximately 3.4 percent. In 2010, the City's civilian labor force totaled 10,514 persons. Between 2000 and 2010, the City's unemployment rate almost doubled, from 3.4 to 6.7 percent. The U.S. Census 2010 reports that the majority (approximately 33.8 percent) of the City's labor force was employed in management, business, science, and arts occupations. The labor force's next highest occupation category, representing approximately 27 percent, was sales and office occupations. As of May 2013, the City's labor force was an estimated 11,500 persons, with an unemployment rate of approximately 6.5 percent. Comparatively, the City's existing unemployment rate is approximately 30 percent less than the County's existing unemployment rate of approximately 9.3 percent.

As indicated in *Table 5.3-7*, SCAG reports the number of jobs in the City in 2012 totaled 6,454. The majority of the City's 2012 jobs were in the education sector (32.3 percent) and retail sector (14.3 percent). SCAG forecasts the City's labor market will grow to 7,300 jobs by 2035, an increase of approximately 846 jobs (approximately 13 percent) between 2012 and 2035.

The jobs/housing ratio is used as a general measure of balance between a community's employment opportunities and the housing needs of its residents. A ratio of 1.0 or greater generally indicates that a City provides adequate employment opportunities, potentially allowing its residents to work within the City. The City's current (2012) jobs/housing ratio is approximately 0.90, indicating employment opportunities for residents to work within the City are not readily available.[1]

5.3.3 SIGNIFICANCE THRESHOLD CRITERIA

The issues presented in the Initial Study Environmental Checklist (*CEQA Guidelines* Appendix G) have been utilized as thresholds of significance in this Section. Accordingly, a project may create a significant environmental impact if it causes one or more of the following to occur:

[1] Southern California Association of Governments, *2013 Local Profiles of SCAG Jurisdictions*, http://www.scag.ca.gov/resources/profiles.htm, accessed May 20, 2013.

- 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; refer to Section 8.0, Effects Found Not To Be Significant.

- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere; refer to Section 8.0, Effects Found Not To Be Significant.

Based on these significance thresholds and criteria, the project's effects have been categorized as either "no impact," a "less than significant impact," or a "potentially significant impact." Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a significant unavoidable impact.

5.3.4 PROJECT IMPACTS AND MITIGATION MEASURES

POPULATION GROWTH

■ **IMPLEMENTATION OF THE PROPOSED PROJECT COULD INDUCE SUBSTANTIAL POPULATION GROWTH IN THE CITY.**

Impact Analysis: A project could induce population growth in an area, either directly (for example, by proposing new residential and employment-generating land uses) or indirectly (for example, through extension of roads or other infrastructure). The proposed project could induce new population growth through new residential and employment-generating land uses. Although the project proposes a new private roadway network through the Specific Plan Area to support potential development, it does not involve the extension of roads or other infrastructure into undeveloped areas; refer to Section 5.4, Traffic. Therefore, project implementation would not induce population growth indirectly through extension of roads or other infrastructure.

The proposed project would increase the City's existing housing inventory by 475 units, resulting in a potential population growth of 1,430 persons, or approximately 6.6 percent over existing conditions.[2]

As indicated in *Table 5.3-8*, *Project Employment Forecasts*, the net increase of non-residential land uses proposed with the Specific Plan are forecast to create approximately 1,418 new jobs.

Table 5.3-9, *Project Compared to Existing Conditions*, compares the proposed project's population, household, and employment forecasts with existing conditions in the City.

[2] Based on 3.01 persons per household and 100 percent occupancy.

Table 5.3-8
Project Employment Forecasts

Land Use	Employment Factor (SF per Employee)[1]	Employment Factor (Employees per Room)[2]	Square Feet	Hotel Rooms	Employment Estimate
Existing (to be removed)					
Warehouse/Industrial	1,518		199,356		131
Manufacturing			114,599		300[3]
Total Existing			**313,955**		**431**
Proposed Project					
Retail	500		12,000		24
Office	250		400,000		1,600
Hotel		0.9		250	225
Total Proposed Project			**412,000**	**250**	**1,849**
Total Proposed Project Less Existing			**98,045**	**250**	**1,418**

Notes:
1. Southern California Association of Governments, *Employment Density Study Summary Report*, October 31, 2001.
2. Institute of Transportation Engineers, Trip Generation, 9th Edition, 2012.
3. Represents average employment for Woodward-Duarte (formally GE Aviation), which is greater than typical manufacturing uses.

Table 5.3-9
Project Compared to Existing Conditions

Description	Housing (Dwelling Units)	Households (Occupied Dwelling Units)	Population (Persons)	Employment (Jobs)
Project				
Employment Generating Land Uses	0	0	722[1]	1,418
Residential Land Uses	475	475[2]	1,430[3]	0
Total Project	***475***	***475***	***1,430***	***1,418***
Existing + Project Conditions				
Existing Conditions	7,271	7,030	21,554	6,454
Existing / Project Implemented Total	*7,746*	*7,505*	*22,984*	*7,872*
Existing / Project Implemented % Change	*+6.5%*	*+6.8%*	*+6.6%*	*+21.9%*

Notes:
1. Assumes new employees occupy currently vacant dwelling units (240 units) and 3.01 persons per household (State of California Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties, and the State, January 2011-2013, With 2010 Benchmark*. Sacramento, California, May 2013).
2. Assumes 100 percent occupancy of new residential.
3. Assumes 3.01 persons per household (State of California Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties, and the State, January 2011-2013, With 2010 Benchmark*. Sacramento, California, May 2013).

As indicated in *Table 5.3-9*, the potential residential development would increase the City's population by 1,430 persons, or approximately 6.6 percent above existing conditions. As also indicated in *Table 5.3-9*, implementation of the proposed project would increase the City's employment by approximately 21.9 percent over existing conditions (1,418 jobs). This employment growth would result in population growth within the City, as the potential exists that future employees (and their families) would choose to relocate to the City. However, estimating the number of these future employees who would choose to relocate to the City would be highly speculative, since many factors influence personal housing location decisions. Based on the City's vacancy rate of 3.3 percent, only 240 dwelling units are available (vacant), as of January 1, 2013. Therefore, if all 240 of the City's available dwelling units were occupied by future project employees, implementation of the proposed project could potentially increase the City's population by approximately 722 persons, or approximately 3.4 percent over existing conditions.

New residential and employment generating land uses could result in a total population increase of 2,152 persons. The additional population associated with potential employees relocating to the City and occupying existing vacant housing, has already been accounted for by the City's *General Plan*. However, it is anticipated that fewer than 240 of the proposed project's future employees would chose to relocate to the City as numerous alternative housing opportunities would be available in surrounding cities and 100 percent occupancy of the City's housing is not likely. Further, there are approximately 700 unemployed persons currently residing within the City. Some of these currently unemployed persons could fill jobs created by the proposed project.

Additional population associated with new residential development within the Specific Plan Area has been considered in the *General Plan*. The *2008-2014 Housing Element* acknowledges a minimum of 80 to100 housing units within the Gold Line Station Area, resulting in a potential population increase of approximately 361 persons. New residential uses associated with the proposed project would result in approximately 1,069 more persons within the area than anticipated by the *General Plan*. However, as concluded in Section 5.10 through Section 5.17, existing public services and utility/service systems can be readily upgraded and/or extended into the Specific Plan Area to serve the increased population. Project implementation would not require substantial development of unplanned or unforeseen public services and utility/service systems. Individual development projects would be reviewed on a project-by-project basis to determine if existing services and utilities are sufficient or if new and/or upgraded facilities are necessary to serve the development. The increased demands for public services and utility/service systems would not significantly reduce or impair any existing or future levels of services, either locally or regionally. Further, development within the Specific Plan Area is anticipated to occur over multiple years based on market demand, which would allow for development of necessary services and infrastructure to serve the anticipated growth. Therefore, impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.3.5 CUMULATIVE IMPACTS AND MITIGATION MEASURES

■ **DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT AND OTHER RELATED CUMULATIVE PROJECTS COULD INDUCE SUBSTANTIAL POPULATION AND HOUSING GROWTH IN THE AREA.**

Impact Analysis: The cumulative projects involve various residential and non-residential development that have the potential to result in population growth in Duarte and each of the respective jurisdictions where the cumulative sites are located.

Cumulative projects located within Duarte could result the addition of approximately 461 residential units within the City. This potential residential development could increase the City's population by 1,388 persons, or approximately 6.4 percent above existing conditions. Combined, the proposed project and cumulative development could result in a population growth of 2,818 persons associated with new residential development. The *Duarte General Plan* assumed additional growth within the City, specifically associated with the Andres Duarte Terrace Specific Plan, Gold Line Station Area, and Town Center Specific Plan. Although the development associated with the proposed project would be greater than anticipated by the *General Plan*, development of the Duarte Station Specific Plan Area would not require substantial development of unplanned or unforeseen public services and utility/service systems. As concluded in Section 5.10 through Section 5.17, existing public services and utility/service systems can be readily upgraded and/or extended into the Specific Plan Area to serve the increased population. Development within the Specific Plan Area is anticipated to occur over several years based on market demand, which would allow for development of necessary services and infrastructure to serve the anticipated growth. Further, the proposed project would contribute towards meeting the City's RHNA allocation. Cumulative impacts associated with new residential development within the City would be considered less than significant in this regard.

The cumulative projects involve non-residential development that would generate additional employment within Duarte. The proposed project is forecast to generate approximately 1,418 new jobs in the City. The cumulative employment growth could result in population growth within the City, as the potential exists that future employees (and their families) would choose to relocate to the area. As discussed above, there are a total of 240 vacant (available) dwelling units in the City. Therefore, assuming 3.01 persons per household, the maximum population growth in Duarte through non-residential cumulative development could potentially be 722 persons, or approximately 3.4 percent over existing conditions. Additionally, population growth through non-residential cumulative development could occur in the neighboring cities wherein cumulative projects have been identified. However, cumulative development is anticipated to result in a less than significant impact involving population growth, given the existing supply of vacant (available) dwelling units and unemployed persons within the respective cities that could fill new jobs generated by the cumulative development. Thus, impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.3.6 SIGNIFICANT UNAVOIDABLE IMPACTS

Implementation of the proposed project would result in less than significant project and cumulative impacts related to population and housing. As such, no significant unavoidable impacts would result from implementation of the Duarte Station Specific Plan.

5.3.7 SOURCES CITED

City of Duarte, *City of Duarte 2008-2014 Housing Element*, April 2011.

Institute of Transportation Engineers, *Trip Generation*, 9th Edition, 2012.

Southern California Association of Governments, *2013 Local Profiles of SCAG Jurisdictions*, http://www.scag.ca.gov/resources/profiles.htm, accessed May 20, 2013.

Southern California Association of Governments, *5th Cycle Regional Housing Needs Assessment Final Allocation Plan*, 1/1/2014-10/1/2021, http://rtpscs.scag.ca.gov/Documents/rhna/5thCyclePFinalRHNAplan.pdf, accessed May 17, 2013.

Southern California Association of Governments, *Adopted 2012 RTP Growth Forecast*, http://www.scag.ca.gov/forecast/index.htm, accessed May 16, 2013.

State of California Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties, and the State, January 2011-2013, With 2010 Benchmark*, Sacramento, California, May 2013.

State of California Employment Development Department Labor Market Information Division, *Monthly Labor Force Data for Cities and Census Designated Places (CDP) April 2013 - Preliminary, Data Not Seasonally Adjusted*, May 21, 2013.

United States Census Bureau, Census 2000.

United States Census Bureau, Census 2010.

5.4 TRAFFIC

This section is based upon the *Duarte Station Specific Plan Traffic Impact Analysis* (*Traffic Impact Analysis*), dated August 29, 2013, prepared by RBF Consulting (RBF), which is included as Appendix D, Traffic Impact Analysis. The purpose of the *Traffic Impact Analysis* is to evaluate development of the proposed project from a traffic and circulation standpoint. Mitigation measures are recommended, if necessary, to avoid or reduce project impacts on traffic and circulation.

The *Traffic Impact Analysis* analyzes existing and future AM and PM peak hour traffic conditions for the following scenarios:

- Existing Conditions
- Existing With Project Conditions
- Forecast Year 2020 Without Project Conditions
- Forecast Year 2020 With Project Conditions

5.4.1 REGULATORY SETTING

CALIFORNIA DEPARTMENT OF TRANSPORTATION

The California Department of Transportation (Caltrans) publishes the *Guide for the Preparation of Traffic Impact Studies*, which provides guidelines and recommended elements of traffic studies for projects that could potentially impact state facilities such as State Route highways and freeway facilities. This is a State-level document that is used by each of the Caltrans District offices.

The Guide defines when traffic studies should be conducted to address impacts to state facilities, but does not define quantitative impact standards. The Guide states that Measures of Effectiveness (MOEs) are used to evaluate Caltrans facilities, and that the agency strives to maintain a LOS value of C on its facilities. However, the Guide states that the appropriate target LOS varies by facility and congestion level, and is defined differently by Caltrans depending on the analyzed facility.

LOS ANGELES COUNTY METROPOLITAN TRANSPORTATION AUTHORITY

The Los Angeles County Metropolitan Transportation Authority (Metro) is the agency that operates the Metro bus transit lines and the Metrorail facilities, including the proposed Gold Line through Duarte. Metro also administers the Los Angeles County Congestion Management Program (CMP) and prepares the Long Range Transportation Plan (LRTP).

The Los Angeles County CMP is mandated by State of California law. This law is administered locally by Metro and requires that the traffic generated by individual development projects be analyzed for potential impacts to the regional roadway system. It also requires that local jurisdictions (cities and counties) maintain CMP conformance by monitoring development activity, reporting the results annually to Metro, and adopting a CMP transportation demand management ordinance. The only two CMP highways in or near Duarte are the I-210 and I-605 Freeways. There are no CMP arterial roadways in Duarte.

The LRTP, which is prepared by Metro, is the blueprint for implementing future transportation improvements in Los Angeles County. It is a program of recommended transportation projects that assists decision-makers in understanding the options that are available for improving the transportation system. The LRTP recommends a balanced transportation program with a strong emphasis on public transit to meet the region's growing travel demands.

CITY OF DUARTE

City of Duarte General Plan

The Circulation Element of the General Plan serves as the City's primary guide for transportation planning. Specifically, the Circulation Element establishes a program that is intended to provide a balanced transportation/circulation system that will support the anticipated growth in local and regional land uses.

The Circulation Element focuses on providing a safe and efficient circulation system that improves the flow of traffic while enhancing pedestrian and vehicular safety, promoting commerce, and providing for alternative modes of transportation.

Circulation Element policies that pertain to the proposed project include, but are not limited to, the following:

- Circ 1.1.4 - Evaluate the traffic impacts of new development and require developers to employ appropriate mitigation measures to reduce traffic or improve roadway and traffic conditions.
- Circ 2.1.1 - Discourage through traffic on local streets that are located in residential neighborhoods.
- Circ 2.1.4 - Discourage non-resident motorists from traveling through residential neighborhoods.
- Circ 2.1.5 - Appropriate mitigation measures should be implemented to ensure that the adverse impacts from trucks and employee traffic can be reduced.
- Circ 3.1.1 - Continue to promote the development of the MTA Gold Line and a Duarte Station.
- Circ 3.1.4 - Ensure that new developments incorporate both local and regional transit measures into the project design that promote the use of alternate modes of transportation.
- Circ 3.1.5 - Provide incentives for appropriate pedestrian and bicycle facilities throughout Duarte, particularly for bike lanes to the Gold Line Station.

5.4.2 ENVIRONMENTAL SETTING

STUDY AREA

Primary access to the project site is provided at Highland Avenue and Business Center Drive.

Local Roadways

The characteristics of the roadway system in the vicinity of the project site are described below:

- *Interstate 210 (I-210)* provides regional access for the project site as a six- to eight-lane freeway facility, traversing southern California in an east-west orientation. I-210 originates on the west end near the Sylmar district of Los Angeles at I-5 and continues east to its terminus at its interchange with State Route 57 (SR-57) in the Glendora area. I-210 continues east as State Route 210 (SR-210) from Glendora to its eastern terminus at I-10 in the Redlands area.

- *Mountain Avenue* is a four-lane divided roadway with a painted median trending in a north-south direction. The posted speed limit is between 35 and 40 miles per hour on Mountain Avenue within the project vicinity; on-street parking is permitted north of Central Avenue. On-street parking is prohibited south of Central Avenue.

- *Buena Vista Street* is a four-lane undivided roadway trending in a north-south direction. The posted speed limit is 35 miles per hour on Buena Vista Street within the project vicinity; on-street parking is permitted.

- *Duncannon Avenue* is a two-lane undivided roadway trending in a north-south direction. There is no posted speed limit on Duncannon Avenue within the project vicinity; on-street parking is permitted.

- *Highland Avenue* is a four-lane undivided roadway trending in a north-south direction. The posted speed limit is 35 miles per hour on Highland Avenue within the project vicinity; on-street parking is permitted.

- *Mt. Olive Drive* is a two-lane divided roadway trending in a north-south direction originating at the northern terminus of the I-605 Freeway in the City of Duarte. There is no speed limit posted on Mt. Olive Drive within the project vicinity; on-street parking is permitted. South of Huntington Drive, this roadway transitions to the I-605 Freeway off/on-ramp, which is generally four lanes divided.

- *Cinco Robles Drive* is a two-lane undivided roadway trending in a north-south direction. There is no speed limit posted on Cinco Robles Drive within the project vicinity; on-street parking is permitted. Cinco Robles Drive terminates in a cul-de-sac approximately 1,150 feet south of Duarte Rd.

- *Village Road* is a two-lane divided private roadway with a painted median within the project vicinity. There is no speed limit posted on Village Road; on-street parking is permitted.

- *Huntington Drive* is a four-lane divided roadway with a raised median trending in an east-west direction. The posted speed limit is 40 miles per hour on Huntington Drive within the project vicinity; on-street parking is permitted.

- *Central Avenue* is a two-lane undivided roadway trending in an east-west direction east of Bradbury Avenue. West of Bradbury Avenue, Central Avenue is a one-way westbound frontage roadway with two to three lanes providing access to and from the I-210 freeway. The posted speed limit is 35 miles per hour within the project vicinity; on-street parking is permitted.

- *Evergreen Street* west of Buena Vista Street is a one-way eastbound frontage roadway with prohibited parking providing access to and from the I-210 freeway. Evergreen Street east of Buena Vista Street is a two-lane undivided roadway trending in the east-west direction. The posted speed limit is 30 miles per hour on Evergreen Street east of Buena Vista Street and on-street parking is permitted.

- *Business Center Drive* is a two-lane undivided roadway trending in an east-west direction. There is no speed limit posted on Business Center Drive within the project vicinity; on-street parking is permitted.

- *Three Ranch Road* is a two-lane undivided roadway trending in an east-west direction. There is no speed limit posted on Three Ranch Road within the project vicinity; on-street parking is permitted.

- *Duarte Road* is a four-lane divided roadway with a raised median trending in an east-west direction. The posted speed limit is 40 miles per hour on Duarte Road within the project vicinity; on-street parking is permitted.

Study Intersections

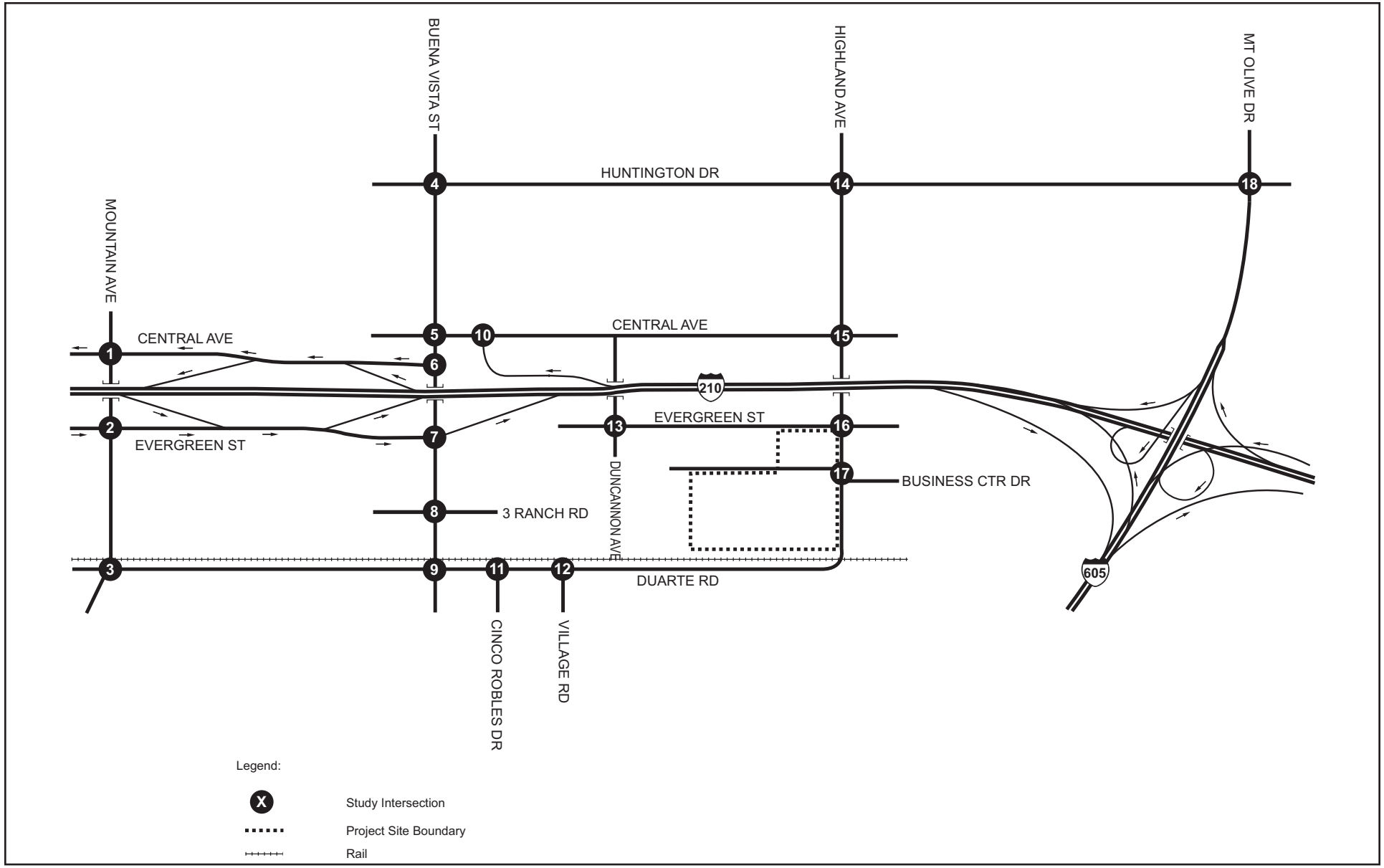
Table 5.4-1, *Study Intersections*, identifies the study intersections and respective jurisdictions. *Exhibit 5.4-1*, *Study Intersections*, illustrates the location of the study intersections.

ANALYSIS METHODOLOGY

The traffic analysis is based upon the potential impacts associated with the proposed project. The traffic analysis evaluates existing operating conditions at key study intersections within the project vicinity, estimates the trip generation potential of the proposed project, and forecasts future operating conditions with and without the proposed project. For a detailed discussion of the analytical methodology, refer to Appendix D, Traffic Impact Analysis.

Existing Conditions

To determine existing operation of the study intersections, weekday AM and PM peak period traffic movement counts were collected in November and December 2012 during typical weekday conditions. The AM peak period intersection counts were collected from 7:00 AM to 9:00 AM; the PM peak period intersection counts were collected from 4:00 PM to 6:00 PM. The traffic volumes used in this analysis were taken from the highest hour within the two-hour peak period counted. Detailed traffic count data sheets are contained in Appendix D.



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DUARTE STATION SPECIFIC PLAN
ENVIRONMENTAL IMPACT REPORT

Study Intersection Location

Exhibit 5.4-1

Table 5.4-1
Study Intersections

Intersection Number	Study Intersection	Jurisdiction	
		City of Duarte	Caltrans
1	Mountain Avenue/Central Avenue	X	
2	Mountain Avenue/Evergreen Street	X	
3	Mountain Avenue/Duarte Road	X	
4	Buena Vista Street/Huntington Drive	X	
5	Buena Vista Street/Central Avenue	X	
6	Buena Vista Street/I-210 WB On-Ramp		X
7	Buena Vista Street/I-210 EB On-Ramp		X
8	Buena Vista Street/Three Ranch Road	X	
9	Buena Vista Street/Duarte Road	X	
10	I-210 WB Off-Ramp/Central Avenue		X
11	Cinco Robles Drive/Duarte Road	X	
12	Village Road/Duarte Road	X	
13	Duncannon Avenue/Evergreen Street	X	
14	Highland Avenue/Huntington Drive	X	
15	Highland Avenue/Central Avenue	X	
16	Highland Avenue/Evergreen Street	X	
17	Highland Avenue/Business Center Drive	X	
18	I-605 Terminus/Mt. Olive Drive/Huntington Drive		X

WB = westbound; EB = eastbound.

INTERSECTION LEVEL OF SERVICE METHODOLOGY

City of Duarte

INTERSECTION CAPACITY UTILIZATION (ICU) METHOD OF ANALYSIS

Level of service (LOS) is commonly used as a qualitative description of intersection operation and is based on the capacity of the intersection and the volume of traffic using the intersection. The Intersection Capacity Utilization (ICU) analysis method is utilized by the City of Duarte to determine the operating LOS of signalized intersections. The ICU analysis methodology describes the operation of an intersection using a range of LOS from LOS A (free-flow conditions) to LOS F (severely congested conditions), based on the corresponding volume to capacity (V/C) ratios shown in *Table 5.4-2*, *Signalized Study Intersection V/C and Level of Service Ranges*.

Table 5.4-2
Signalized Study Intersection V/C and Level of Service Ranges

V/C Ratio	Level of Service (LOS)
≤ 0.60	A
0.61 to ≤ 0.70	B
0.71 to ≤ 0.80	C
0.81 to ≤ 0.90	D
0.91 to ≤ 1.00	E
> 1.00	F

Source: 1990 Transportation Research Board.
V/C = Volume to Capacity

HIGHWAY CAPACITY MANUAL METHOD OF ANALYSIS

The Highway Capacity Manual (HCM) intersection analysis methodology is used to analyze the operation of unsignalized study intersections. The HCM analysis methodology describes the operation of an unsignalized intersection using a range of LOS from LOS A (free-flow conditions) to LOS F (severely congested conditions), based on the corresponding stopped delay experienced per vehicle as shown in *Table 5.4-3*, *Unsignalized Study Intersection Level of Service and Delay Ranges*.

Table 5.4-3
Unsignalized Study Intersection Level of Service and Delay Ranges

Level of Service (LOS)	Delay (second/vehicle)
A	≤ 10.0
B	> 10.0 to ≤ 15.0
C	> 15.0 to ≤ 25.0
D	> 25.0 to ≤ 35.0
E	> 35.0 to ≤ 50.0
F	> 50.0

Source: 2000 Highway Capacity Manual.

HCM level of service is based on the average stopped delay per vehicle for all movements of all-way stop-controlled intersections; for one-way or two-way stop-controlled intersections, LOS is based on the worst stop-controlled approach.

California Department of Transportation

This intersection analysis of State-controlled study intersections has been prepared in accordance with the California Department of Transportation (Caltrans) *Guide for the Preparation of Traffic Impact Studies* (State of California Department of Transportation, December 2002).

HIGHWAY CAPACITY MANUAL METHOD OF ANALYSIS

Caltrans advocates use of HCM intersection analysis methodology to analyze the operation of signalized intersections. The HCM analysis methodology describes the operation of signalized intersections and unsignalized intersections using a range of LOS from LOS A (free-flow conditions) to LOS F (severely congested conditions), based on the corresponding stopped delay experienced per vehicle as shown in *Table 5.4-4*, *State-Controlled Intersection Level of Service and Delay Ranges*.

Table 5.4-4
State-Controlled Intersection Level of Service and Delay Ranges

Level of Service (LOS)	Delay (seconds/vehicle)	
	Signalized Intersections	Unsignalized Intersections
A	≤ 10.0	≤ 10.0
B	> 10.0 to ≤ 20.0	> 10.0 to ≤ 15.0
C	> 20.0 to ≤ 35.0	> 15.0 to ≤ 25.0
D	> 35.0 to ≤ 55.0	> 25.0 to ≤ 35.0
E	> 55.0 to ≤ 80.0	> 35.0 to ≤ 50.0
F	> 80.0	> 50.0

Source: 2000 Highway Capacity Manual.

Level of service (LOS) is based on the average stopped delay per vehicle for all movements of signalized intersections and all-way stop-controlled intersections; for one-way or two-way stop controlled intersections, LOS is based on the worst stop-controlled approach.

EXISTING INTERSECTION LEVELS OF SERVICE

City of Duarte

Table 5.4-5, *Existing Conditions AM and PM Peak Hour City Intersection Level of Service*, summarizes the existing peak hour LOS for the City study intersections.

Caltrans

Table 5.4-6, *Existing Conditions AM and PM Peak Hour State-Controlled Intersection Level of Service*, summarizes existing AM and PM peak hour LOS of the State-controlled study intersections; detailed LOS analysis sheets are contained in Appendix D.

EXISTING TRANSIT SERVICE

The City of Duarte, Foothill Transit, and Metro provide bus service to the City. The Duarte commuter line makes two early morning runs through the residential areas of Duarte and transports passengers to Foothills Transit and Metro transfer points on Huntington Drive. The commuter line travels along Evergreen Street between Highland Avenue and Buena Vista Street with a stop at Evergreen Street and Highland Avenue. The Green Line travels along Buena Vista Street, Duarte Road, Highland Avenue, and Evergreen Street with a stop at Evergreen Street and Highland Avenue.

Table 5.4-5
Existing Conditions AM and PM Peak Hour City Intersection Level of Service

Study Intersection		V/C – Delay – LOS	
		AM Peak Hour	PM Peak Hour
1	Mountain Avenue / Central Avenue	0.60 – N/A – A	0.72 – N/A – C
2	Mountain Avenue / Evergreen Street	0.55 – N/A – A	0.81 – N/A – D
3	Mountain Avenue / Duarte Rd	0.59 – N/A – A	0.65 – N/A – B
4	Buena Vista Street / Huntington Drive	0.64 – N/A – B	0.76 – N/A – C
5	Buena Vista Street / Central Avenue	0.47 – N/A – A	0.50 – N/A – A
8	Buena Vista Street / Three Ranch Road*	N/A – 16.1 – C	N/A – 24.7 – C
9	Buena Vista Street / Duarte Road	0.61 – N/A – B	0.75 – N/A – C
11	Cinco Robles Drive / Duarte Road*	N/A – 16.9 – C	N/A – 14.2 – B
12	Village Road / Duarte Road*	N/A – 20.3 – C	N/A – 21.4 – C
13	Duncannon Avenue / Evergreen Street*	N/A – 7.6 – A	N/A – 7.2 – A
14	Highland Avenue / Huntington Drive	0.70 – N/A – B	0.74 – N/A – C
15	Highland Avenue / Central Avenue*	N/A – 19.9 – C	N/A – 15.2 – C
16	Highland Avenue / Evergreen Street*	N/A – 18.3 – C	N/A – 15.9 – C
17	Highland Avenue / Business Center Drive*	N/A – 14.8 – B	N/A – 20.2 – C

Delay shown in seconds
* = unsignalized study intersection; V/C = volume to capacity; N/A = Not Applicable

Table 5.4-6
Existing Conditions AM and PM Peak Hour
State-Controlled Intersection Level of Service

State-Controlled Study Intersection		Delay – LOS	
		AM Peak Hour	PM Peak Hour
6	Buena Vista Street / I-210 WB On-Ramp	4.2 – A	8.9 – A
7	Buena Vista Street / I-210 EB On-Ramp	24.1 – C	25.4 – C
10	I-210 WB Off-Ramp / Central Avenue	23.6 – C	20.9 – C
18	I-605/Mt. Olive Drive / Huntington Drive	39.2 – D	59.7 – E

Delay shown in seconds.
WB = westbound; EB = eastbound

Foothill Transit Line 272 provides service between the cities of Duarte, Baldwin Park, and West Covina. This line has a stop at City of Hope Medical Center and travels along Duarte Road and Highland Avenue within the vicinity of the project site.

Metro Line 264 provides service between the cities of Altadena, Pasadena (Sierra Madre Station), Arcadia and Duarte, including a stop at the City of Hope. The line travels along Duarte Road, Highland Avenue, Evergreen Street, Business Center Drive and Dennings Avenue within the project area.

The Metro Gold Line Foothill Extension is currently under construction. Upon completion, the Gold Line will extend from Pasadena to Azusa, with a stop at the Duarte Gold Line Station, located adjacent to the project site. Metro will integrate the Metro Gold Line Foothill Extension into existing Metro Rail service and operate the line upon construction completion. Metro riders will be able to connect with Metro Rail and Bus lines, Metrolink commuter rail lines, and other regional transportation services at Union Station.

EXISTING PEDESTRIAN AND BICYCLE FACILITIES

Pedestrian facilities are limited within the project area. Currently, sidewalks are limited to Highland Avenue and the south side of Business Center Drive. There are no bicycle facilities within the project area. The Duarte Gold Line Station, currently under construction, will include sidewalks on the north side of Duarte Road and west of Highland Avenue.

5.4.3 SIGNIFICANCE THRESHOLD CRITERIA

DEFINITION OF SIGNIFICANT IMPACT

Significant Study Intersection Traffic Impact Criteria

Traffic impacts are identified if a project would result in a significant adverse change in traffic conditions on an analyzed facility. A significant impact is typically identified if traffic generated by a project would cause service levels to deteriorate beyond a threshold limit specified by the overseeing agency. Impacts can also be significant if an intersection is already operating below the poorest acceptable level and project traffic would substantially worsen the condition, thereby causing a further decline below the threshold.

CITY OF DUARTE

Consistent with the Los Angeles County CMP, to determine whether the addition of project-generated trips results in a significant impact at the City of Duarte signalized study intersections, and thus requires mitigation, the following threshold of significance are utilized:

- A significant project impact occurs when a proposed project increases traffic demand at a signalized study intersection by two-percent or more of capacity (V/C $\geqslant$ 0.02), causing or worsening LOS E or F (V/C $>$ 1.00).

At City of Duarte stop-controlled study intersections, a significant traffic impact occurs if one of the minor street movements are forecast to operate at LOS F and the addition of project-generated trips causes an increase in delay of two or more seconds to that movement. However, this is not a rigid threshold and judgment is required to consider the relevance of turning traffic volume, lane configuration, queuing impacts, and other parameters affecting intersection operations.

CALTRANS

While Caltrans has not established traffic thresholds of significance, this analysis utilizes the following traffic threshold of significance:

- A significant project impact occurs at a State Highway study intersection when the addition of project-generated trips to an intersection operating at LOS D or worse causes the peak hour performance and associated level of service of the study intersection to deteriorate one letter grade or more when compared to pre-project conditions.

Significance Criteria

Environmental impact thresholds as indicated in *CEQA Guidelines* Appendix G (Initial Study Checklist Form) are also used as significance thresholds in this analysis. As such, a project would create a significant impact 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 (refer to Section 8.0, 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 (refer to Section 8.0, Effects Found Not To Be Significant); and

- Conflict with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decrease the performance or safety of such facilities.

Based on these significance thresholds and criteria, the project's effects have been categorized as either "no impact," a "less than significant impact," or a "potentially significant impact." Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a significant unavoidable impact.

5.4.4 PROJECT IMPACTS AND MITIGATION MEASURES

PROJECT TRIP GENERATION

To determine the number of trips currently generated by the existing land uses that would be displaced by the proposed project, traffic counts were collected at the project site in November 2012 during typical weekday conditions. *Table 5.4-7*, *Trip Generation of Existing Land Uses*, shows the trip generation of the existing land uses that would be displaced by the proposed project based on observed data.

Table 5.4-7
Trip Generation of Existing Land Uses

Land Use	AM Peak Hour Trips			PM Peak Hour Trips			Daily Trips
	In	Out	Total	In	Out	Total	
Warehouse/Industrial	95	24	119	52	150	202	1,808

As indicated in *Table 5.4-7*, the existing site is currently generating approximately 1,808 daily trips, which includes approximately 119 AM peak hour trips and 202 PM peak hour trips.

The proposed project would consist of a mixed-use transit-oriented development with 12,000 square feet of retail, 400,000 square feet of office, a 250-room hotel, and 475 residential units. Existing on-site uses would be removed by the proposed project.

To calculate trips forecast to be generated by the proposed project, Institute of Transportation Engineers (ITE) trip generation rates were utilized. *Table 5.4-8*, *ITE Trip Generation Rates for Proposed Project Land Uses*, summarizes the ITE trip generation rates used to calculate the number of trips forecast to be generated by the proposed project.

Table 5.4-8
ITE Trip Generation Rates for Proposed Project Land Uses

Land Use (ITE Code)	Units	AM Peak Hour Rates			PM Peak Hour Rates			Daily Trip Rates
		In	Out	Total	In	Out	Total	
Retail (820)	tsf	0.60	0.36	0.96	1.78	1.93	3.71	42.70
Office (710)	tsf	1.37	0.19	1.56	0.25	1.24	1.49	11.03
Hotel (310)	tsf	0.31	0.22	0.53	0.31	0.29	0.60	8.17
Apartment (220)	du	0.10	0.41	0.51	0.40	0.22	0.62	6.65

Source: 2012 ITE Trip Generation Manual, 9th Edition.
tsf = thousand square feet; du = dwelling units.

Pass-by Trip Reduction

As documented in ITE's *Trip Generation Manual (Institute of Transportation Engineers, 9th Edition, 2012),* a pass-by trip reduction is applicable to retail land uses located along busy arterial highways attracting vehicle trips already on the roadway; this is particularly the case when the roadway is experiencing peak operating conditions. For example, during the PM peak hour, a motorist already traveling along Highland Avenue between work and home or other destinations may stop at the proposed project site. A pass-by discount under this example would reduce/eliminate both the inbound trip and the outbound trip from the surrounding roadway circulation system since the vehicle was already traveling on the roadway. Without the pass-by trip discount, two trips would be generated: an inbound trip to the project site, and an outbound trip from the project site.

Table 5.4-9, *Pass-by Trip Reduction Percentages Applicable to Proposed Project*, summarizes the pass-by trip reductions applicable to the proposed project land uses as documented in the ITE *Trip Generation Manual*.

Table 5.4-9
Pass-by Trip Reduction Percentages Applicable to Proposed Project

Proposed Project Land Use	Peak Hour	
	AM Peak Hour	PM Peak Hour
Retail	0%	34%
Source: 2012 ITE Trip Generation Manual, 9th Edition.		

Trip Reduction for Development Near Transit Centers and Light Rail Stations

Table 5.4-10, *ITE Trip Reduction for Developments Near Transit Centers/Light Rail Stations*, presents an estimated reduction in site vehicle trip generation for developments within 0.25 mile of transit centers or light rail stations (such as the proposed project) as documented in ITE's *Trip Generation Manual*. As shown in *Table 5.4-10*, the vehicle trip reduction factor increases based on the density/intensity of the development; the larger trip reduction factors are achieved with development patterns that ITE would consider mixed use.

Trip reductions associated with proximity to transit or light rail center for the proposed project have been estimated by applying the applicable ITE-recommended trip reduction factors shown in *Table 5.4-10* to the commercial and residential components of the proposed project.

Table 5.4-10
ITE Trip Reduction for Developments Near Transit Centers/Light Rail Stations

Vehicle Trip Reduction Factor	Development Pattern	Density/Intensity
5%	Locate commercial and/or light industrial users within 0.25 mile of a transit center or light rail station.	Minimum FAR of 1 per gross acre for commercial/industrial development.
10%	Locate residential development within 0.25 mile of a transit center or light rail station.	Minimum residential density of 24 dwelling units per gross acre.
15%	Locate commercial and/or light industrial users within 0.25 mile of a transit center or light rail station.	Minimum FAR of 2 per gross acre for commercial/industrial development.
15%	Locate residential-oriented mixed use development within 0.25 mile of a transit center or light rail station. Minimum 15% of floor area devoted to commercial uses oriented toward use by residences.	Minimum residential density of 24 dwelling units per gross acre.
20%	Locate commercial and light industrial development that includes non-residential uses within 0.25 mile of a transit center or light rail station. At least 30% of floor area for residential use.	Minimum FAR of 2 per gross acre for commercial/industrial development.

Source: *2012 ITE Trip Generation Manual*, 9th Edition.
FAR = floor area ratio

Table 5.4-11, *Proposed Project Applicable ITE Trip Reduction Percentages for Development Near Transit Centers/Light Rail Stations*, summarizes the trip reduction factors applicable to the proposed project land uses based on ITE-recommended trip reduction factors shown in *Table 5.4-10*.

Table 5.4-11
Proposed Project Applicable ITE Trip Reduction Percentages for Development Near Transit Centers/Light Rail Stations

Proposed Project Land Use	Applicable ITE-Recommended Trip Reduction Associated with Proximity to Light Rail and Transit
Office	15%
Residential	10%

Internal Trip Capture Reduction for Proposed Project

As documented in ITE's *Trip Generation Manual,* an internal trip capture reduction is applicable when a project has mixed land uses in which a trip originates from a land use located at the site and ends at a land use located within the same site. For example, a development with residential and office land uses has the potential to generate a pedestrian trip from the residential land use to the office land use within the same site in lieu of generating a vehicular trip to an offsite office.

Consistent with industry standards, internal trip capture has been calculated as directed in ITE's *Trip Generation Manual.* Detailed internal trip capture summary calculation sheets are contained in Appendix D. *Table 5.4-12*, *ITE Internal Trip Capture Percentages for Proposed Project*, shows the proposed project internal capture rates utilized in the analysis.

Table 5.4-12
ITE Internal Trip Capture Percentages for Proposed Project

Internal Trip Capture Percentage		
AM Peak Hour	PM Peak Hour	Daily
0%	1%	1%

As indicated in *Table 5.4-12*, the ITE methodology for on-site trip capture results in a one percent reduction for the PM peak hour trip generation and a one percent reduction for the daily trip generation. Hence, this is a rather conservative analysis because a greater on-site trip capture would be expected for a mixed use development such as the proposed project.

Forecast Trip Generation of Proposed Project

Table 5.4-13, *Forecast Trip Generation of Proposed Project*, summarizes the forecast trip generation of the proposed project utilizing the ITE trip generation rates shown in *Table 5.4-8*, the ITE applicable pass-by trip reduction adjustment rates shown in *Table 5.4-9*, the ITE applicable trip reduction for development near transit centers/light rail stations shown in *Table*

5.4-11, the ITE applicable internal trip capture adjustment rates shown in *Table 5.4-12*, and accounting for the existing displaced land uses.

Table 5.4-13
Forecast Trip Generation of Proposed Project

Land Use	AM Peak Hour Trips			PM Peak Hour Trips			Daily Trips
	In	Out	Total	In	Out	Total	
12.000-tsf Retail	7	4	11	21	23	44	512
ITE Pass-by Reduction for Retail Land Use (34% PM)	0	0	0	-7	-8	-15	-15
Retail Subtotal	**7**	**4**	**11**	**14**	**15**	**29**	**497**
400.000-tsf Office	548	76	624	100	496	596	4,412
ITE Trip Reduction for Development Near Transit Centers/Light Rail Stations (15%)	-82	-11	-93	-15	-74	-89	-662
ITE On-Site Trip Capture Reduction (1% PM & 1% Daily)	0	0	0	-1	-4	-5	-38
Office Subtotal	**466**	**65**	**531**	**84**	**418**	**502**	**3,712**
250-room Hotel	78	55	133	78	73	151	2,043
Hotel Subtotal	**78**	**55**	**133**	**78**	**73**	**151**	**2,043**
475-du Multi-family Residential (Apartments)	48	195	243	190	105	295	3,159
ITE Trip Reduction for Development Near Transit Centers/Light Rail Stations (10%)	-5	-20	-25	-19	-11	-30	-316
ITE On-Site Trip Capture Reduction (1% PM & 1% Daily)	0	0	0	-2	-1	-3	-28
Apartments Subtotal	**43**	**175**	**218**	**169**	**93**	**262**	**2,815**
Total Project	**594**	**299**	**893**	**345**	**599**	**944**	**9,067**
Displaced Existing Land Uses	**-95**	**-24**	**-119**	**-52**	**-150**	**-202**	**-1,808**
Total Project (Net)	**499**	**275**	**774**	**293**	**449**	**742**	**7,259**

tsf = thousand square feet; du = dwelling unit

As indicated in *Table 5.4-13*, when accounting for the displaced land uses, the proposed project is forecast to generate a total of approximately 7,259 net new daily trips, which includes approximately 774 net new AM peak hour trips, and approximately 742 net new PM peak hour trips.

Forecast Project Trip Distribution and Assignment

Project trip distribution refers to the paths or routes that project trips are forecast to utilize within the study area when travelling to and from the project site, taking into account the typical minimum time and distance paths. To determine the forecast project trip distribution, various sources of information are reviewed, including the location and land use of surrounding development, the surrounding roadway network, and the directionality of existing traffic.

Exhibit 7, Forecast Percent Trip Distribution of Proposed Project (Residential Land Use Component) and Exhibit 8, Forecast Percent Trip Distribution of Proposed Project (Non-Residential Land Use Component), of the *Traffic Impact Analysis* (as provided in Appendix D), illustrate the forecast trip percent distribution of the residential and non-residential land use components of the proposed project.

Exhibit 9, Forecast AM & PM Peak Hour Trip Assignment of Proposed Project, of the *Traffic Impact Analysis* (as provided in Appendix D), illustrates the corresponding assignment of

project-generated net peak hour trips assuming the trip percent distributions shown in Exhibit 7 and Exhibit 8.

EXISTING WITH PROJECT CONDITIONS

This section addresses the impacts associated with adding project-related trips to Existing Conditions traffic volumes. The Existing with Project scenario is a hypothetical scenario that assumes the proposed project would be fully implemented at the present time, with no other changes to area traffic volumes or to the street network serving the project site. This analysis is intended to comply with the *CEQA Guidelines* Section 15125, and specifically recent court cases, including but not limited to, Sunnyvale West Neighborhood Association v. City of Sunnyvale. This scenario assumes the full development of the proposed project and full absorption of the proposed project traffic on the circulation systems at the present time. This scenario is provided for information purposes only, and will not be used to for impact determinations or mitigation.

City Study Intersections

Existing with project conditions AM and PM peak hour volumes were derived by adding forecast project-generated trips to existing conditions traffic volumes.

Exhibit 10, Forecast Existing Plus Project AM & PM Peak Hour Study Intersection Volumes, of the *Traffic Impact Analysis* (as provided in Appendix D) illustrates peak hour traffic volumes for existing with project conditions.

Table 5.4-14, *Existing With Project Conditions AM and PM Peak Hour City Study Intersection Level of Service*, summarizes existing plus project conditions AM and PM peak hour LOS of the City study intersections; detailed LOS analysis sheets are contained in Appendix D.

As indicated in *Table 5.4-14*, based on the thresholds of significance, the addition of project-generated trips is forecast to result in a significant traffic impact at the following City study intersection for forecast existing with project conditions:

- Village Road/Duarte Road (AM and PM peak hours).

State-Controlled Intersections

Forecast existing with project conditions AM and PM peak hour volumes were derived by adding forecast project-generated trips to existing conditions traffic volumes.

Table 5.4-15, *Existing With Project Conditions AM and PM Peak Hour State Highway Intersection Level of Service*, summarizes existing with project conditions AM and PM peak hour LOS of the State-controlled study intersections; detailed LOS analysis sheets are contained in Appendix D.

Table 5.4-14
Existing With Project Conditions AM and PM Peak Hour
City Study Intersection Level of Service

Study Intersection		Existing Conditions		Existing With Project Conditions		Change in V/C		Significant Impact?
		V/C – Delay – LOS				AM Peak Hour	PM Peak Hour	
		AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour			
1	Mountain Ave / Central Ave	0.60 – (N/A) – A	0.72 – (N/A) – C	0.61 – (N/A) – B	0.72 – (N/A) – C	0.01	0.00	No
2	Mountain Ave / Evergreen St	0.55 – (N/A) – A	0.81 – (N/A) – D	0.55 – (N/A) – A	0.82 – (N/A) – D	0.00	0.01	No
3	Mountain Ave / Duarte Rd	0.59 – (N/A) – A	0.65 – (N/A) – B	0.63 – (N/A) – B	0.66 – (N/A) – B	0.04	0.01	No
4	Buena Vista St / Huntington Dr	0.64 – (N/A) – B	0.76 – (N/A) – C	0.64 – (N/A) – B	0.77 – (N/A) – C	0.00	0.01	No
5	Buena Vista St / Central Ave	0.47 – (N/A) – A	0.50 – (N/A) – A	0.48 – (N/A) – A	0.52 – (N/A) – A	0.01	0.02	No
8	Buena Vista St / Three Ranch Rd*	N/A – 16.1 – C	N/A – 24.7 – C	N/A – 21.4 – C	N/A – 37.1 – E	5.3	12.4	No
9	Buena Vista St / Duarte Rd	0.61 – (N/A) – B	0.75 – (N/A) – C	0.78 – (N/A) – C	0.92 – (N/A) – E	0.17	0.17	No
11	Cinco Robles Dr / Duarte Rd*	N/A – 16.9 – C	N/A – 14.2 – B	N/A – 24.0 – C	N/A – 18.7 – C	7.1	4.5	No
12	Village Rd / Duarte Rd*	N/A – 20.3 – C	N/A – 21.4 – C	**N/A – 35.5 – E**	**N/A – 54.1 – F**	15.2	32.7	**Yes**
13	Duncannon Ave / Evergreen St*	N/A – 7.6 – A	N/A – 7.2 – A	N/A – 7.6 – A	N/A – 7.5 – A	0.0	0.3	No
14	Highland Ave / Huntington Dr	0.70 – (N/A) – B	0.74 – (N/A) – C	0.72 – (N/A) – C	0.81 – (N/A) – D	0.02	0.07	No
15	Highland Ave / Central Ave*	N/A – 19.9 – C	N/A – 15.2 – C	N/A – 29.5 – D	N/A – 18.4 – C	9.6	3.2	No
16	Highland Ave / Evergreen St*	N/A – 18.3 – C	N/A – 15.9 – C	N/A – 27.7 – D	N/A – 16.2 – C	9.4	0.3	No
17	Highland Ave / Business Center Dr*	N/A – 14.8 – B	N/A – 20.2 – C	N/A – 43.8 – E	N/A – 42.0 – E	29.0	21.8	No

V/C = volume to capacity; N/A = Not Applicable; * = Unsignalized Study Intersection
Delay shown in seconds.

Table 5.4-15
Existing With Project Conditions AM and PM Peak Hour
State Highway Intersection Level of Service

State-Controlled Study Intersection		Existing Conditions		Existing Plus Project Conditions		Increase In Delay		Significant Impact?
		Delay – LOS				AM Peak Hour	PM Peak Hour	
		AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour			
6	Buena Vista St / I-210 WB On-Ramp	4.2 – A	8.9 – A	7.1 – A	11.5 – B	2.9	2.6	No
7	Buena Vista St / I-210 EB On-Ramp	24.1 – C	25.4 – C	25.3 – C	26.5 – C	1.2	1.1	No
10	I-210 WB Off-Ramp / Central Ave	23.6 – C	20.9 – C	21.4 – C	19.6 – C	-2.2	-1.3	No
18	I-605/Mt. Olive Dr / Huntington Dr	39.2 – D	59.7 – E	41.4 – D	63.4 – E	2.2	3.7	No

WB = westbound; EB = eastbound.
Delay shown in seconds.

As indicated in *Table 5.4-15*, the change in delay at the I-210 Westbound Off-Ramp/Central Avenue intersection is forecast to decrease with the addition of project traffic because the control delay reported is based on the average of the worst-case approach. In this case, the I-210 WB Off-Ramp consists of one dedicated left turn lane and one dedicated right turn lane. Under existing conditions, the left turn movement experiences significantly more delay than the right turn movement. Therefore, the addition of project-generated trips forecast to utilize the right-turn lane, which experiences less delay, causes the average delay of the approach to decrease.

FORECAST YEAR 2020 WITH PROJECT CONDITIONS – CITY STUDY INTERSECTIONS

■ **IMPLEMENTATION OF THE PROPOSED PROJECT COULD CAUSE A SIGNIFICANT INCREASE IN TRAFFIC AT LOCAL STUDY INTERSECTIONS UNDER FORECAST YEAR 2020 CONDITIONS WHEN COMPARED TO THE TRAFFIC CAPACITY OF THE STREET SYSTEM.**

Impact Analysis: Year 2020 traffic with the proposed project is considered in comparison to the forecast year 2020 traffic conditions without the project. Traffic from cumulative projects are factored into the forecast year 2020 traffic conditions for all of the study intersections.

Forecast Year 2020 Without Project Conditions

Forecast year 2020 without project conditions assumes the following funded improvements within the study area are installed as part of the Gold Line project currently under construction:

- Highland Avenue/Central Avenue – A new traffic signal is assumed to be installed at the Highland Avenue/Central Avenue intersection.

- Highland Avenue/Business Center Drive – A new traffic signal is assumed to be installed at the Highland Avenue/Business Center Drive intersection.

There is one additional improvement associated with the Gold Line project that would be implemented in 2030, and as such has not been utilized for this analysis- the future signalization of the Duarte Road/Hope Drive intersection.

Consistent with the *Los Angeles County Congestion Management Program (Los Angeles County Metropolitan Transportation Authority, 2010)* future growth forecasts for this area of the San Gabriel Valley, forecast year 2020 without project traffic volumes were derived by applying an annual growth rate of 0.79 percent per year over a seven year period to existing traffic volumes to account for background and cumulative growth. It should be noted this is a conservative assumption since the growth rate is applied to all movements at the study intersections.

Additionally, in accordance with City staff direction, forecast year 2020 without project traffic volumes include the addition of trips associated with the cumulative projects identified in Section 4.0, that are assumed to be constructed and generating trips by project opening. Exhibit 11, Forecast Year 2020 Without Project AM & PM Peak Hour Study Intersection Volumes, of the Traffic Impact Study (as provided in Appendix D) illustrates forecast year 2020 without project conditions AM and PM peak hour volumes at the study intersections.

Table 5.4-16, Cumulative Projects Trip Generation, summarizes the trips forecast to be generated by the cumulative projects.

As indicated in *Table 5.4-16*, the cumulative projects are forecast to generate approximately 2,412 AM peak hour trips and approximately 2,746 PM peak hour trips.

Table 5.4-16
Cumulative Projects Trip Generation

Land Use	Trip Generation					
	AM Peak Hour			PM Peak Hour		
	In	Out	Total	In	Out	Total
Metro Gold Line Duarte Station Parking Facility Project (Duarte)[2]	215	53	268	180	130	310
Rose Gardens at Santa Teresita Project (Duarte)[3]	3	2	5	19	10	29
Andres Duarte Terrace Phase II Project (Duarte)	4	18	22	17	9	26
Huntington Courts Phase III Project (Duarte)	3	9	12	10	6	16
Huntington Courts Phase II Project (Duarte)	1	5	6	5	2	7
Magellan Self-Storage Project (Duarte)	9	7	16	15	15	30
Huntington/Buena Vista Project (Duarte)[4, 5]	19	18	37	15	15	30
Town Center Specific Plan Project (Duarte)[4, 6]	122	110	232	135	154	289
City of Hope Phase 1 Project (Duarte)	154	34	188	84	202	286
Station Square Transit Village Phase 1 Project (Monrovia)[3]	109	170	279	150	112	262
5th and Huntington Project (Monrovia)[4]	16	63	79	63	36	99
South Magnolia Avenue Project (Monrovia)	4	12	16	13	8	21
Olive Avenue Project (Monrovia)	2	7	9	7	4	11
Huntington Oaks Shopping Center Project (Monrovia)[5]	126	102	228	75	71	146
Car Wash Project (Monrovia)[7]	18	18	36	41	41	82
KARE Youth League/Santa Fe Dam Sports Park Project (Irwindale)	0	0	0	1	1	2
Mixed Use Project (Azusa)[4, 8]	12	33	45	36	23	59
Residential Project (Azusa)	1	5	6	5	2	7
Metro Gold Line Station and Parking Structure Project (Azusa)	473	116	589	396	286	682
Industrial Business Park Project (Azusa)	277	62	339	75	277	352
Forecast Total Cumulative Project Trip Generation	**1,568**	**844**	**2,412**	**1,342**	**1,404**	**2,746**

1. Unless noted otherwise, trip generation based on *2012 ITE Trip Generation Manual, 9th Edition* Apartment (220) Land Use, Single-Family Detached Residential (210) Land Use, Residential Condominium/Townhome (230) Land Use, Mini-Warehouse (151) Land Use, Shopping Center (820) Land Use, Fast-Food Restaurant With Drive-Through (934) Land Use, General Office Building (710) Land Use, Medical/Dental Office Building (720) Land Use, Research and Development Center (760) Land Use, Fast-Food Restaurant Without Drive-Through (933) Land Use, County Park (412) Land Use, Light Rail Transit Station with Parking (93) Land Use, and Industrial Park (130) Land Use.
2. Trip generation based on *Metro Gold Line Foothill Extension Phase 2A Supplemental EIR No. 2 for Additional Project Refinements.*
3. Trip generation based on *The Rose Gardens at Santa Teresita Master Plan Traffic Impact Analysis (RBF Consulting, February 16, 2011)*.
4. Trip generation includes pass-by vehicle trip reduction of 34% during the PM peak hour for retail land uses, based on *2012 ITE Trip Generation Manual, 9th Edition.*
5. Trip generation includes pass-by vehicle trip reduction of 49% and 50% during the AM and PM peak hours, respectively, for fast-food restaurant land uses, based on *2012 ITE Trip Generation Manual, 9th Edition.*
6. Trip generation includes on-site trip capture reduction of 15% during the PM peak hour, based on *2012 ITE Trip Generation Manual, 9th Edition.*
7. Trip generation based on *Traffic Generation Rates (San Diego Association of Governments, April 2002).*
8. Trip generation includes on-site trip capture reduction of 8% during the PM peak hour, based on *2012 ITE Trip Generation Manual, 9th Edition.*

Table 5.4-17, *Forecast Year 2020 Without Project Conditions AM and PM Peak Hour City Study Intersection Level of Service*, summarizes forecast year 2020 without project conditions AM and PM peak hour LOS of the City study intersections; detailed LOS analysis sheets are contained in Appendix D.

Table 5.4-17
Forecast Year 2020 Without Project Conditions
AM and PM Peak Hour City Study Intersection Level of Service

City Study Intersection		Forecast Year 2020 Without Project Conditions	
		AM Peak Hour	PM Peak Hour
		V/C – Delay – LOS	
1	Mountain Ave / Central Ave	0.64 – (N/A) – B	0.76 – (N/A) – C
2	Mountain Ave / Evergreen St	0.57 – (N/A) – A	0.86 – (N/A) – D
3	Mountain Ave / Duarte Rd	0.66 – (N/A) – B	0.71 – (N/A) – C
4	Buena Vista St / Huntington Dr	0.70 – (N/A) – B	0.91 – (N/A) – E
5	Buena Vista St / Central Ave	0.52 – (N/A) – A	0.55 – (N/A) – A
8	Buena Vista St / Three Ranch Rd*	N/A – 18.8 – C	N/A – 35.5 – E
9	Buena Vista St / Duarte Rd	0.79 – (N/A) – C	1.00 – (N/A) – E
11	Cinco Robles Dr / Duarte Rd*	N/A – 21.5 – C	N/A – 18.0 – C
12	Village Rd / Duarte Rd*	N/A – 32.0 – D	**N/A – 101.0 – F**
13	Duncannon Ave / Evergreen St*	N/A – 7.6 – A	N/A – 7.2 – A
14	Highland Ave / Huntington Dr	0.76 – (N/A) – C	0.84 – (N/A) – D
15	Highland Ave / Central Ave*	0.67 – (N/A) – B	0.54 – (N/A) – A
16	Highland Ave / Evergreen St*	N/A – 27.4 – D	N/A – 21.8 – C
17	Highland Ave / Business Center Dr*	0.40 – (N/A) – A	0.41 – (N/A) – A

V/C = volume to capacity; N/A = Not Applicable; * = unsignalized intersection
Delay shown in seconds.

To account for the performance reduction associated with the future Gold Line at-grade rail crossing on the north leg of the Buena Vista Street/Duarte Road intersection, a volume to capacity ratio adjustment of 0.10, or 10 percent, has been added to the intersection. The volume to capacity adjustment is based on the methodology applied in the EIR prepared for the Gold Line project.

Forecast Year 2020 With Project Conditions

Consistent with forecast year 2020 without project conditions, forecast year 2020 with project conditions assumes funded improvements at Highland Avenue/Central Avenue and Highland Avenue/Business Center Drive, described above, are installed as part of the Gold Line project currently under construction:

Forecast year 2020 with project conditions AM and PM peak hour volumes were derived by adding forecast project-generated trips to forecast year 2020 without project conditions traffic volumes.

Exhibit 12, Forecast Year 2020 With Project AM & PM Peak Hour Study Intersection Volumes, of the *Traffic Impact Analysis* (as provided in Appendix D) illustrates forecast year 2020 with project conditions AM and PM peak hour volumes at the study intersections.

Table 5.4-18, *Forecast Year 2020 With Project Conditions AM and PM Peak Hour City Study Intersection Level of Service*, summarizes forecast year 2020 with project AM and PM peak hour LOS of the City study intersections; detailed LOS analysis sheets are contained in Appendix D.

Table 5.4-18
Forecast Year 2020 With Project Conditions AM and PM Peak Hour City Study Intersection Level of Service

Study Intersection		Forecast Year 2020 Without Project Conditions		Forecast Year 2020 With Project Conditions		Change in V/C		Significant Impact?
		V/C – Delay – LOS				AM Peak Hour	PM Peak Hour	
		AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour			
1	Mountain Ave / Central Ave	0.64 – (N/A) – B	0.76 – (N/A) – C	0.64 – (N/A) – B	0.76 – (N/A) – C	0.00	0.00	No
2	Mountain Ave / Evergreen St	0.57 – (N/A) – A	0.86 – (N/A) – D	0.58 – (N/A) – A	0.86 – (N/A) – D	0.01	0.00	No
3	Mountain Ave / Duarte Rd	0.66 – (N/A) – B	0.71 – (N/A) – C	0.70 – (N/A) – B	0.72 – (N/A) – C	0.04	0.01	No
4	Buena Vista St / Huntington Dr	0.70 – (N/A) – B	0.91 – (N/A) – E	0.71 – (N/A) – C	0.92 – (N/A) – E	0.01	0.01	No
5	Buena Vista St / Central Ave	0.52 – (N/A) – A	0.55 – (N/A) – A	0.52 – (N/A) – A	0.57 – (N/A) – A	0.00	0.02	No
8	Buena Vista St / Three Ranch Rd*	N/A – 18.8 – C	N/A – 35.5 – E	N/A – 26.3 – D	**N/A – 60.0 – F**	7.5	24.5	**Yes**
9	Buena Vista St / Duarte Rd	0.79 – (N/A) – C	1.00 – (N/A) – E	0.97 – (N/A) – E	1.16 – (N/A) – F	0.18	0.16	**Yes**
11	Cinco Robles Dr / Duarte Rd*	N/A – 21.5 – C	N/A – 18.0 – C	N/A – 32.3 – D	N/A – 24.9 – C	10.8	6.9	No
12	Village Rd / Duarte Rd*	N/A – 32.0 – D	**N/A – 101.0 – F**	**N/A – 76.8 – F**	**N/A – 309.5 – F**	44.8	208.5	**Yes**
13	Duncannon Ave / Evergreen St*	N/A – 7.6 – A	N/A – 7.2 – A	N/A – 7.7 – A	N/A – 7.5 – A	0.1	0.3	No
14	Highland Ave / Huntington Dr	0.76 – (N/A) – C	0.84 – (N/A) – D	0.76 – (N/A) – C	0.90 – (N/A) – D	0.00	0.06	No
15	Highland Ave / Central Ave*	0.67 – (N/A) – B	0.54 – (N/A) – A	0.79 – (N/A) – C	0.56 – (N/A) – A	0.12	0.02	No
16	Highland Ave / Evergreen St*	N/A – 27.4 – D	N/A – 21.8 – C	**N/A – 50.9 – F**	N/A – 20.1 – C	23.5	-1.7	**Yes**
17	Highland Ave / Business Center Dr*	0.40 – (N/A) – A	0.41 – (N/A) – A	0.67 – (N/A) – B	0.55 – (N/A) – A	0.27	0.14	No

V/C = volume to capacity; N/A = Not Applicable; * = Unsignalized Study Intersection
Delay shown in seconds.

As indicated in *Table 5.4-18*, the addition of project-generated trips is forecast to result in a significant traffic impact at the following four City study intersections for forecast year 2020 with project conditions based on City of Duarte thresholds of significance:

- Buena Vista Street/Three Ranch Road (PM peak hour only);
- Buena Vista Street/Duarte Road (PM peak hour only);
- Village Road/Duarte Road (AM and PM peak hours); and
- Highland Avenue/Evergreen Street (AM peak hour only).

Recommended Improvements

The following improvements are recommended to address the forecast significant traffic impacts at the City study intersections for forecast year 2020 with project conditions:

- Village Road/Duarte Road – Install a new traffic signal at the Village Road/Duarte Road intersection. The Village Road/Duarte Road study intersection is forecast to satisfy peak hour signal warrants for forecast year 2020 with project conditions. Detailed signal warrant analysis sheets are contained in Appendix D.

- Buena Vista Street/Duarte Road – Modify the traffic signal by implementing a right-turn overlap phase at the westbound Duarte Road approach.

- Buena Vista Street/Three Ranch Road – Install "KEEP CLEAR" or "DO NOT BLOCK" signing and striping in both directions of travel on Buena Vista Street at the Buena Vista Street/Three Ranch Road intersection.

The only feasible improvements that would fully eliminate the identified significant impacts at the Buena Vista Street/Three Ranch Road intersection and the Highland Avenue/Evergreen Street intersection would be to signalize the intersections; however, neither of these two intersections satisfied a traffic signal warrant for forecast year 2020 with project conditions.

Although it is not quantifiable by the analysis methodology, the recommended improvement at the Buena Vista Street/Three Ranch Road intersection would reduce, but not eliminate, the significant impact by preventing queued vehicles on Buena Vista Street from blocking the intersection and thus allowing vehicles at Three Ranch Road to enter the intersection during periods of congestion.

It should be noted that the analysis of the Buena Vista Street/Three Ranch Road intersection and the Highland Avenue/Evergreen Street intersection is conservative because the analysis methodology at these intersections does not account for breaks in traffic flow created by the future Gold Line rail crossing on Buena Vista Street and the traffic signal improvements at the Highland Avenue/Central Avenue and Business Center Drive/Highland Avenue intersections. The breaks in traffic flow created by these future conditions may cause the actual delay at these intersections to be less than reported.

Table 5.4-19, *Mitigated Forecast Year 2020 With Project Conditions AM and PM Peak Hour City Study Intersection Level of Service*, shows the forecast LOS of the significantly impacted City study intersections assuming implementation of the recommended improvements for forecast year 2020 with project conditions; detailed LOS analysis sheets are contained in Appendix D.

Table 5.4-19
Mitigated Forecast Year 2020 With Project Conditions AM and PM Peak Hour
City Study Intersection Level of Service

Study Intersection		Forecast Year 2020 Without Project Conditions		Forecast Year 2020 With Project Conditions		Change in V/C		Significant Impact Remains?
		V/C – Delay – LOS				AM Peak Hour	PM Peak Hour	
		AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour			
8	Buena Vista St / Three Ranch Rd*	N/A – 18.8 – C	N/A – 35.5 – E	N/A – 26.3 – D	**N/A – 60.0 – F**	7.5	24.5	**Yes**
9	Buena Vista St / Duarte Rd	0.79 – (N/A) – C	1.00 – (N/A) – E	0.88 – (N/A) – D	0.96 – N/A – E	0.09	-0.04	No
12	Village Rd / Duarte Rd*	N/A – 32.0 – D	**N/A – 101.0 – F**	0.44 – N/A – A	0.55 – N/A – A	N/A	N/A	No
16	Highland Ave / Evergreen St*	N/A – 27.4 – D	N/A – 21.8 – C	**N/A – 50.9 – F**	N/A – 20.1 – C	23.5	-1.7	**Yes**

V/C = volume to capacity; N/A = Not Applicable; * = Unsignalized Study Intersection
Delay shown in seconds.

As indicated in *Table 5.4-19*, assuming implementation of the recommended improvements, the significant traffic impacts at Village Road/Duarte Road study intersection and Buena Vista Street/Duarte Road study intersection are forecast to be reduced to a level considered less than significant for forecast year 2020 with project conditions.

As also indicated in *Table 5.4-19*, the forecast significant traffic impacts at the Buena Vista Street/Three Ranch Road and the Highland Avenue/Evergreen Street study intersections are forecast to remain significant and unavoidable for forecast year 2020 with project conditions since these two study intersections would not meet traffic signal warrants for forecast year 2020 with project conditions. Detailed signal warrant worksheets are contained in Appendix D.

Mitigation Measures:

TRF-1 Village Road/Duarte Road – Install a new traffic signal at the Village Road/Duarte Road intersection.

All project applicants within the Duarte Station Specific Plan Area and the City of Hope (Phase 1) shall have a fair-share contribution for signal modification at the Buena Vista Street/Duarte Road intersection. The first development project(s) shall be responsible for the signal modification and will be reimbursed on a fair share basis by the remainder of the developments in the Duarte Station Specific Plan Area and/or the City of Hope (Phase 1).

TRF-2 Buena Vista Street/Duarte Road – Modify the traffic signal by implementing a right-turn overlap phase at the westbound Duarte Road approach.

All project applicants within the Duarte Station Specific Plan Area and the City of Hope (Phase 1) shall have a fair-share contribution for signal modification at the Buena Vista Street/Duarte Road intersection. The first development project(s) shall be responsible for the signal modification and will be reimbursed on a fair share basis by the remainder of the developments in the Duarte Station Specific Plan Area and/or the City of Hope (Phase 1).

TRF-3 Buena Vista Street/Three Ranch Road – Install "KEEP CLEAR" or "DO NOT BLOCK" signing and striping in both directions of travel on Buena Vista Street at the Buena Vista Street/Three Ranch Road intersection.

The City shall install the signage and striping and will be reimbursed on a fair-share basis by all development within the Duarte Station Specific Plan Area and the City of Hope (Phase 1).

Level of Significance: Significant and Unavoidable Impact for Buena Vista Street/Three Ranch Road and Highland Avenue/Evergreen Street. Less Than Significant Impact for all other study intersections.

FORECAST YEAR 2020 WITH PROJECT CONDITIONS – STATE-CONTROLLED INTERSECTIONS

■ **IMPLEMENTATION OF THE PROPOSED PROJECT COULD CAUSE A SIGNIFICANT INCREASE IN TRAFFIC AT STATE-CONTROLLED STUDY INTERSECTIONS UNDER FORECAST YEAR 2020 CONDITIONS WHEN COMPARED TO THE TRAFFIC CAPACITY OF THE STREET SYSTEM.**

Impact Analysis: Year 2020 traffic with the proposed project is considered in comparison to the forecast year 2020 traffic conditions without the project.

Table 5.4-20, *Forecast Year 2020 Without Project Conditions AM and PM Peak Hour State-Controlled Study Intersection Level of Service*, summarizes forecast year 2020 without project conditions AM and PM peak hour LOS of the State-controlled study intersections; detailed LOS analysis sheets are contained in Appendix D.

Table 5.4-20
Forecast Year 2020 Without Project Conditions AM and PM Peak Hour
State-Controlled Study Intersection Level of Service

State-Controlled Study Intersection		AM Peak Hour	PM Peak Hour
		Delay – LOS	
6	Buena Vista Street / I-210 WB On-Ramp	4.4 – A	10.3 – B
7	Buena Vista Street / I-210 EB On-Ramp	25.0 – C	27.0 – C
10	I-210 WB Off-Ramp / Central Avenue	29.2 – D	25.7 – D
18	I-605/Mt. Olive Drive / Huntington Drive	46.7 – D	74.9 – E

Delay shown in seconds.
WB = westbound; EB = eastbound

Table 5.4-21, *Forecast Year 2020 With Project Conditions AM and PM Peak Hour State-Controlled Study Intersection Level of Service*, summarizes forecast year 2020 with project conditions AM and PM peak hour LOS of the State-controlled study intersections; detailed LOS analysis sheets are contained in Appendix D.

Table 5.4-21
Forecast Year 2020 With Project Conditions AM and PM Peak Hour
State-Controlled Study Intersection Level of Service

Study Intersection		Forecast Year 2020 Without Project Conditions		Forecast Year 2020 With Project Conditions		Increase in Delay		Significant Impact?
		Delay – LOS				AM Peak Hour	PM Peak Hour	
		AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour			
6	Buena Vista St / I-210 WB On-Ramp	4.4 – A	10.3 – B	7.1 – A	12.8 – B	2.7	2.5	No
7	Buena Vista St / I-210 EB On-Ramp	25.0 – C	27.0 – C	26.7 – C	29.3 – C	1.7	2.3	No
10	I-210 WB Off-Ramp / Central Ave	29.2 – D	25.7 – D	26.8 – D	24.3 – C	-2.4	-1.4	No
18	I-605/Mt. Olive Dr / Huntington Dr	46.7 – D	74.9 – E	50.9 – D	78.8 – E	4.2	3.9	No

Delay shown in seconds.
WB = westbound; EB = eastbound

As indicated in *Table 5.4-21*, the proposed project is forecast to result in no significant traffic impacts at the State-controlled study intersections for forecast year 2020 with project conditions based on the thresholds of significance.

The City of Duarte wants to ensure that freeway on- and off-ramp impacts associated with future development within the Plan Area remain consistent with these conclusions, and as such, would require Mitigation Measure TRF-4 of future project applicants within the Duarte Station Specific Plan Area.

Mitigation Measures:

TRF-4 All project applicants within the Duarte Station Specific Plan Area shall prepare and submit at their time of their development application to the Community Development Department a traffic study that: 1) documents the project-related trips and provides a comparative review with the analysis in this EIR, and 2) uses the Highway Capacity Manual (HCM) intersection analysis methodology to determine whether the individual project increases the average delay per vehicle intersections having an existing unacceptable level of service without project traffic.

The thresholds to be used for the delay analysis are:

a. Signalized Intersections: The project increases the average delay by more than 5 seconds per vehicle at an intersection having an unacceptable LOS without project traffic.

b. All-Way Stop Intersections: The project increases the overall average delay by more than 5 seconds per vehicle at an intersection that has an unacceptable LOS without the project and the intersection also meets the peak hour volume signal warrant.

c. One- and Two-Way Stop Intersections:
The project causes the following to occur for the worst-case movement:
-The LOS declines to an unacceptable LOS, and
-The volume to capacity ratio exceeds 0.75, and
-The 95th percentile queue exceeds 75 feet (3 vehicles), or
The project causes the worst-case movement's acceptable LOS to decline to an unacceptable LOS and the peak hour volume signal warrant is met, or
The project increases the average delay for the worst-case movement by more than 5 seconds per vehicle at an intersection that has an unacceptable LOS without the project and the intersection also meets the peak hour volume signal warrant.

The study will need to identify appropriate mitigation and timing, if impacts are identified. The study and mitigation requires review and approval from the City Engineer.

Potential improvements to be considered as mitigation include, but are not limited to:

- Restrict on-street parking during peak hours
- Install "KEEP CLEAR" or "DO NOT BLOCK" signage and striping

- Install signalized pedestrian crossing
- Install Two-Way Stop
- Install Four-Way Stop
- Signal timing and coordination
- Addition of lanes within existing right-of-way, including restriping
- Lengthening of existing turn lanes to accommodate additional vehicles
- Widening of right-of-way consistent with Circulation Element Diagram CIR-1, Standard Roadway Cross-Sections, and Diagram CIRC-4, Circulation System, requirements

Level of Significance: Less Than Significant Impact With Mitigation Incorporated.

OFF-RAMP QUEUING

■ **IMPLEMENTATION OF THE PROPOSED PROJECT COULD RESULT IN A HAZARDOUS TRAFFIC CONDITION ASSOCIATED WITH QUEUING AT THE STATE-CONTROLLED STUDY INTERSECTION OFF-RAMPS.**

Impact Analysis: Peak hour vehicular queues were analyzed at the following State-controlled study intersection off-ramps:

- I-210 Westbound Off-Ramp/Central Avenue; and
- I-605 Terminus/Mt. Olive Drive/Huntington Drive.

Table 5.4-22, *AM and PM Peak Hour State-Controlled Study Intersection Off-Ramp Queue Analysis*, summarizes the results of the peak hour vehicular queue analysis at the State-controlled study intersections off-ramps for the evaluated scenarios; detailed LOS analysis sheets are contained in Appendix D.

Table 5.4-22
AM and PM Peak Hour State-Controlled Study Intersection Off-Ramp Queue Analysis

State-Controlled Study Intersection Off-Ramp	Available Storage Capacity (feet)	Vehicular Queue (feet)								Adequate Storage Provided to Accommodate Queue?
		Existing Conditions		Forecast Existing With Project Conditions		Forecast Year 2020 Without Project Conditions		Forecast Year 2020 With Project Conditions		
		AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	AM Peak Hour	PM Peak Hour	
I-210 WB Off-Ramp / Central Ave	550	115	110	115	113	160	155	163	160	Yes
I-605/Mt. Olive Dr / Huntington Dr	1,000+	375	725	400	750	450	875	475	925	Yes

As indicated in *Table 5.4-22*, adequate storage capacity is currently provided to accommodate existing and forecast future peak hour vehicular queues at the State-controlled study intersection off-ramps for the evaluated scenarios. Impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

HAZARDOUS TRAFFIC CONDITIONS

■ **IMPLEMENTATION OF THE PROPOSED PROJECT COULD RESULT IN A HAZARDOUS TRAFFIC CONDITION ASSOCIATED WITH NEIGHBORHOOD PASS-THROUGH TRAFFIC.**

Impact Analysis:

Traffic Intrusion into Residential Neighborhood

As previously discussed, the traffic impact analysis provides a distribution of both residential and non-residential land use trips on the I-210 and I-605 Freeways and on the City's road network, specifically:

- Huntington Drive (Principal Arterial)
- Central Avenue (Collector)
- Evergreen Street (Collector)
- Mountain Avenue (Principal Arterial/Minor Arterial)
- Buena Vista Street (Minor Arterial)
- Highland Avenue (Minor Arterial)

No trips were distributed to local streets, which includes the residential streets located east of Buena Vista, south of Evergreen Street, north of Duarte Road, and generally west of Highland Avenue, as none of the streets within the residential neighborhood are identified as collector roadways. In addition, the local streets within the neighborhood are not configured in a traditional grid pattern. Instead, the existing configuration includes Evergreen Street (Collector) that runs along the north side of the neighborhood from Brightside Avenue on the west to Highland Avenue (Minor Arterial) on the east. Within the neighborhood, the street network includes a number of cul-de-sacs or roadways that dead end into other streets, with five of the nine north-south streets west of the Plan Area providing direct connections between Evergreen Street (Collector) and Three Ranch Road (Local Street), which extends from Buena Vista Street on the west and terminates as a cul-de-sac on the east the Specific Plan boundary.

However, individual drivers could look for alternative ways to travel to/from the Plan Area throughout the day to avoid perceived congested roadways or intersections, which could include driving through the residential neighborhood. While no traffic impacts have been identified in this regard, to ensure that the adjacent residential neighborhood does not experience increased nuisance impacts from the proposed project, such as cut-through traffic, increased traffic volumes, or higher speeds on the local streets, Mitigation Measure TRF-5 includes the development and implementation of a Neighborhood Traffic Management Plan (NTMP), when deemed necessary by the City's Community Development Director and/or City Engineer. The NTMP would be warranted after the City has received a sufficient number of comments from neighborhood residents, which would be forwarded to the Traffic Safety Commission for their review and recommendation.

The Plan would identify measures to make local streets less attractive to through traffic, such as would identify measures to make local routes less attractive to through traffic, such as speed reduction measures, movement prohibitions, physical mitigations, and parking restrictions. The NTMP would be implemented on an area-wide basis with all affected parties, including neighborhood residents, planners, traffic engineers, and project applicants involved in development of the Plan. Improvements that could be considered include speed reduction measures speed tables and stop signs, movement prohibitions (e.g., restricted turns), physical measures (e.g., road narrowing, curb extensions), and parking controls. Development and compliance with the NTMP would reduce impacts to a less than significant level.

Mitigation Measures:

TRF-5 When deemed necessary by the City Community Development Director and/or City Engineer, the project applicant(s) shall prepare, implement, and fund a Neighborhood Traffic Management Plan (NTMP), which shall include three components: education, enforcement, and enhancement.

The educational component of the NTMP shall provide the community with a means of understanding traffic management tools and processes and also increase public awareness of the impact that traffic will have on the neighborhood. Educational efforts that could be implemented as part of the NTMP include, but are not limited to, the following:

- Coordination of neighborhood NTMP meetings
- Coordination of a speed watch program
- Coordination of the placement of temporary NTMP yard signs with volunteers
- Design and distribution of NTMP brochures
- Coordination of applicant and/or staff presentations to neighborhood groups

The enforcement component of the NTMP entails focusing law enforcement efforts to acknowledge areas of concern. Enforcement efforts that could be implemented as part of the NTMP include, but are not limited to, the following:

- Increased enforcement
- Real-time speed feedback signs
- Signage (“Entering residential neighborhood…”)

The enhancement component of the NTMP consists of non-physical and physical transportation system improvements. Numerous traffic-calming devices may be selected by a neighborhood for placement on a street. Potential improvements that could be implemented by the applicant and/or City of Duarte as part of the NTMP include, but are not limited to, the following:

- Pavement marking/lane narrowing
- Temporary speed tables
- Neckdowns/bulbouts (extensions of curbs/corner sidewalks at an intersection)
- Choker/Chicane (chokers are build-outs added to a road to narrow it, while chicanes are sequences of tight serpentine curves designed to slow roadway traffic)

- Turn movement restrictions
- Diagonal intersection diverters
- Median barrier through intersection
- Forced turn island

Level of Significance: Less Than Significant Impact With Mitigation Incorporated.

CONFLICT WITH POLICIES, PLANS, OR PROGRAMS

■ **IMPLEMENTATION OF THE PROPOSED PROJECT COULD RESULT IN A DECREASE OF THE PERFORMANCE OR SAFETY OF PUBLIC TRANSIT, BICYCLE, OR PEDESTRIAN FACILITIES AS A RESULT OF A CONFLICT WITH ADOPTED POLICIES, PLANS, OR PROGRAMS.**

Impact Analysis: Bus service is currently provided within the project area. Implementation of the proposed project would not interfere with the establishment of new or expanded bus routes within the area. The transit-oriented nature of the proposed project adjacent to the Duarte Transit Station would encourage and support new and expanded bus service within the area.

Within the project area, sidewalks are currently limited to Highland Avenue and the south side of Business Center Drive. The proposed Specific Plan Circulation Plan identifies a private roadway network through the Specific Plan Area. The proposed Specific Plan Development Standards include street sections for roadways within the Specific Plan Area, which include sidewalk locations and dimensions and planter strips separating curbs and sidewalks. Additionally, the proposed Design Guidelines address pedestrian connectivity to and from the Duarte Transit Station. Two pedestrian connections are required to connect the proposed project to the station platform. The pedestrian connections would be required to provide direct and unobstructed access at least six feet side and designed to meet all applicable accessible standards. Thus, pedestrian connections would be improved within the project area.

There are currently no bicycle facilities within the project area. The proposed Specific Plan Development Standards includes requirements for bicycle parking based on the land use.

The proposed project would not conflict with any of the following Circulation Element policies pertaining to public transit, bicycle, or pedestrian facilities:

- Circ 3.1.1 - Continue to promote the development of the MTA Gold Line and a Duarte Station.

- Circ 3.1.4 - Ensure that new developments incorporate both local and regional transit measures into the project design that promote the use of alternate modes of transportation.

- Circ 3.1.5 - Provide incentives for appropriate pedestrian and bicycle facilities throughout Duarte, particularly for bike lanes to the Gold Line Station.

The proposed project would encourage and support the use of public transit and other forms of transportation including bicycles. Additionally, the proposed project would provide pedestrian facilities that currently do not exist within the project area. Thus, implementation of the proposed project would not conflict with adopted policies, plans, or programs that would result in

a decrease of the performance or safety of public transit, bicycle, or pedestrian facilities. Impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.4.5 CUMULATIVE IMPACTS AND MITIGATION MEASURES

■ **DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT AND OTHER RELATED CUMULATIVE PROJECTS COULD RESULT IN CUMULATIVELY CONSIDERABLE IMPACTS RELATED TO TRAFFIC AND CIRCULATION.**

Impact Analysis: As previously stated, forecast year 2020 without project traffic volumes were derived by applying an annual growth rate of 0.79 percent per year over a seven year period to existing traffic volumes to account for background and cumulative growth. Additionally, forecast year 2020 without project traffic volumes include the addition of trips associated with cumulative projects that are assumed to be constructed and generating trips by project opening; refer to Section 4.0. Thus, the analysis provided above within Section 5.4.4 inherently includes cumulative impacts related to the identified cumulative projects within Section 4.0.

As determined in Section 5.4.4, the proposed project would result in a cumulatively considerable traffic impacts at the following local intersections:

- Buena Vista Street/Three Ranch Road (PM peak hour only);
- Buena Vista Street/Duarte Road (PM peak hour only);
- Village Road/Duarte Road (AM and PM peak hours); and
- Highland Avenue/Evergreen Street (AM peak hour only).

As indicated in *Table 5.4-20*, with implementation of recommended improvements, the significant traffic impacts at Village Road/Duarte Road study intersection and Buena Vista Street/Duarte Road study intersection are forecast to be reduced to a level considered less than significant for forecast year 2020 with project conditions.

However, as also indicated in *Table 5.4-20*, the forecast significant traffic impacts at the Buena Vista Street/Three Ranch Road and the Highland Avenue/Evergreen Street study intersections are forecast to remain significant and unavoidable for forecast year 2020 with project conditions since these two study intersections would not meet traffic signal warrants for forecast year 2020 with project conditions. Thus, the proposed project would result in a significant and unavoidable cumulative traffic impact.

As also determined in Section 5.4.4, the proposed project would not result in a cumulative considerable traffic or queuing impact in regards to a State-controlled intersection or off-ramp. Impacts would be less than significant in this regard.

Given the nature and location of the identified cumulative projects, it is not anticipated that cumulatively considerable impacts related to hazardous traffic conditions would occur. The proposed project, in combination with identified cumulative developments, would not result in

the creation of dangerous design features or hazardous intersections. Each project would undergo review by the applicable jurisdiction to ensure that circulation and access components comply with existing city standards.

Cumulative projects within the City would be required to comply with the City's adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities on a project-by-project basis. Implementation of the proposed project would not impede the existing public transit, bicycle, or pedestrian facilities. Implementation of the Specific Plan would improve pedestrian walkability within the area, including the provision of sidewalks and paths connecting existing and proposed residential areas with the Transit Station. The proposed project would not conflict with any of the applicable policies of the Circulation Element pertaining to public transit, bicycle, or pedestrian facilities.

Mitigation Measures: Refer to Mitigation Measures TRF-1 through TRF-3. No additional mitigation measures are required.

Level of Significance: Significant and Unavoidable Impact for Buena Vista Street/Three Ranch Road and Highland Avenue/Evergreen Street. All other impacts are Less Than Significant or Less Than Significant With Mitigation Incorporated.

5.4.6 SIGNIFICANT UNAVOIDABLE IMPACTS

With implementation of the proposed Duarte Station Specific Plan, significant unavoidable project and cumulative project impacts would occur at the following intersections:

- Buena Vista Street/Three Ranch Road; and
- Highland Avenue/Evergreen Street.

All other traffic and circulation impacts associated with implementation of the proposed Duarte Station Specific Plan are either at less than significant levels or can be mitigated to less than significant levels.

If the City of Duarte approves the proposed Duarte Station Specific Plan, the City shall be required to cite their findings in accordance with *CEQA Guidelines* Section 15091 and prepare a Statement of Overriding Considerations in accordance with *CEQA Guidelines* Section 15093.

5.4.7 SOURCES CITED

City of Duarte, *City of Duarte Comprehensive General Plan 2005-2020*, August 14, 2007.

City of Duarte website, http://www.accessduarte.com/, accessed August 30, 2013.

Metro Gold Line Foothill Extension Construction Authority, http://www.foothillextension.org/cities-stations/duarte/, accessed September 1, 2013.

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5.5 AIR QUALITY

This section addresses the air emissions generated by the construction and operation of the proposed project, and the potential impacts to air quality. The analysis also addresses the consistency of the proposed project with the air quality policies set forth within the South Coast Air Quality Management District's (SCAQMD) *2012 Air Quality Management Plan*. The analysis of project-generated air emissions focuses on whether the proposed project would cause an exceedance of an ambient air quality standard or SCAQMD significance threshold. Air quality technical data is included in Appendix E, Air Quality/Greenhouse Gas Data.

5.5.1 REGULATORY SETTING

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

The United States Environmental Protection Agency (U.S. EPA) is responsible for implementing the Federal Clean Air Act (FCAA), which was first enacted in 1955 and amended numerous times after. The FCAA established Federal air quality standards known as the National Ambient Air Quality Standards (NAAQS). These standards identify levels of air quality for "criteria" pollutants that are considered the maximum levels of ambient (background) air pollutants considered safe, with an adequate margin of safety, to protect the public health and welfare. The criteria pollutants are ozone (O_3), carbon monoxide (CO), nitrogen dioxide (NO_2), which is a form of nitrogen oxides (NO_X), sulfur dioxide (SO_2), which is a form of sulfur oxides (SO_X), particulate matter 10 microns in diameter or less (PM_{10}), particulate matter 2.5 microns in diameter or less ($PM_{2.5}$), and lead (Pb); refer to *Table 5.5-1*, *National and California Ambient Air Quality Standards*.

CALIFORNIA AIR RESOURCES BOARD

The California Air Resources Board (CARB) administers the air quality policy in California. The California Ambient Air Quality Standards (CAAQS) were established in 1969 pursuant to the Mulford-Carrell Act. These standards, included with the NAAQS in *Table 5.5-1*, are generally more stringent and apply to more pollutants than the NAAQS. In addition to the criteria pollutants, CAAQS have been established for visibility reducing particulates, hydrogen sulfide, and sulfates. The California Clean Air Act (CCAA), which was approved in 1988, requires that each local air district prepare and maintain an Air Quality Management Plan (AQMP) to achieve compliance with CAAQS. These AQMPs also serve as the basis for preparation of the State Implementation Plan (SIP) for the State of California.

Like the U.S. EPA, CARB also designates areas within California as either attainment or nonattainment for each criteria pollutant based on whether the CAAQS have been achieved. Under the CCAA, areas are designated as nonattainment for a pollutant if air quality data show that a state standard for the pollutant was violated at least once during the previous three calendar years. Exceedances that are affected by highly irregular or infrequent events are not considered violations of a State standard, and are not used as a basis for designating areas as nonattainment.

Table 5.5-1
National and California Ambient Air Quality Standards

Pollutant	Averaging Time	California[1]		Federal[2]	
		Standard[3]	Attainment Status	Standards[4]	Attainment Status
Ozone (O_3)	1 Hour	0.09 ppm (180 μg/m³)	**Nonattainment**	N/A[5]	N/A[5]
	8 Hour	0.070 ppm (137 μg/m³)	Unclassified	0.075 ppm (147 μg/m³)	**Nonattainment**
Particulate Matter (PM_{10})	24 Hour	50 μg/m³	**Nonattainment**	150 μg/m³	Attainment
	Annual Arithmetic Mean	20 μg/m³	**Nonattainment**	N/A[7]	Attainment
Fine Particulate Matter ($PM_{2.5}$)	24 Hour	No Separate State Standard		35 μg/m³	**Nonattainment**
	Annual Arithmetic Mean	12 μg/m³	**Nonattainment**	12 μg/m³	**Nonattainment**
Carbon Monoxide (CO)	1 Hour	20 ppm (23 mg/m³)	Attainment	35 ppm (40 mg/m³)	Attainment
	8 Hour	9.0 ppm (10 mg/m³)	Attainment	9 ppm (10 mg/m³)	Attainment
Nitrogen Dioxide (NO_2)[6]	1 Hour	0.18 ppm (339 μg/m³)	Attainment	100 ppb (188 μg/m³)	N/A
	Annual Arithmetic Mean	0.030 ppm (57 μg/m³)	N/A	0.053 ppm (100 μg/m³)	Attainment
Sulfur Dioxide (SO_2)	1 Hour	0.25 ppm (655 μg/m³)	Attainment	75 ppb (196 μg/m³)	N/A
	3 Hour	N/A	N/A	N/A	Attainment
	24 Hour	0.04 ppm (105 μg/m³)	Attainment	0.14 ppm (for certain areas)[8]	Attainment
	Annual Arithmetic Mean	N/A	N/A	0.30 ppm (for certain areas)[8]	Attainment
Lead (Pb)	30 day average	1.5 μg/m³	Attainment	N/A	N/A
	Calendar Quarter	N/A	N/A	1.5 μg/m³ (for certain areas)	Attainment
	Rolling 3-Month Average	N/A	N/A	0.15 μg/m³	Attainment
Visibility-Reducing Particles	8 Hours (10 a.m. to 6 p.m., PST)	Extinction coefficient = 0.23 km@<70% RH	Unclassified	**No Federal Standards**	
Sulfates	24 Hour	25 μg/m³	Attainment		
Hydrogen Sulfide	1 Hour	0.03 ppm (42 μg/m³)	Unclassified		

μg/m³ = micrograms per cubic meter; ppm = parts per million; ppb = parts per billion; km = kilometer(s); RH = relative humidity; PST = Pacific Standard Time; N/A = Not Applicable.

Notes:

1. California standards for ozone, carbon monoxide (except Lake Tahoe), sulfur dioxide (1- and 24-hour), nitrogen dioxide, suspended particulate matter-PM_{10} and visibility-reducing particles, are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations. In 1990, CARB identified vinyl chloride as a toxic air contaminant, but determined that there was not sufficient available scientific evidence to support the identification of a threshold exposure level. This action allows the implementation of health-protective control measures at levels below the 0.010 ppm ambient concentration specified in the 1978 standard.
2. National standards (other than ozone, particulate matter and those based on annual averages or annual arithmetic mean) are not to be exceeded more than once a year. EPA also may designate an area as *attainment/unclassifiable*, if: (1) it has monitored air quality data that show that the area has not violated the ozone standard over a three-year period; or (2) there is not enough information to determine the air quality in the area. For PM_{10}, the 24-hour standard is attained when 99 percent of the daily concentrations, averaged over the three years, are equal to or less than the standard. For $PM_{2.5}$, the 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.
3. Concentration is expressed first in units in which it was promulgated. Equivalent units given in parentheses are based upon a reference temperature of 25°C and a reference pressure of 760 mm of mercury. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 mm of mercury (1,013.2 millibar); ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.
4. National Primary Standards: The levels of air quality necessary, with an adequate margin of safety, to protect the public health.
5. The Federal 1-hour ozone standard was revoked on June 15, 2005 in all areas except the 14 8-hour ozone nonattainment Early Action Compact (EAC) areas.
6. The Nitrogen Dioxide ambient air quality standard was amended in February 22, 2007 to lower the 1-hour standard to 0.18 ppm and establish a new annual standard of 0.030 ppm.
7. The EPA revoked the annual PM_{10} standard in 2006 (effective December 16, 2006).
8. On June 2, 2010, a new 1-hour SO_2 standard was established and the existing 24-hour and annual primary standards were revoked. To attain the 1-hour national standard, the 3-year average of the annual 99th percentile of the 1-hour daily maximum concentrations at each site must not exceed 75 ppb. The 1971 SO_2 national standards (24-hour and annual) remain in effect until one year after an area is designated for the 2010 standard, except that in areas designated nonattainment for the 1971 standards, the 1971 standards remain in effect until implementation plans to attain or maintain the 2010 standards are approved.

Source: California Air Resources Board and U.S. Environmental Protection Agency, June 4, 2013.

SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT

The *2012 Air Quality Management Plan* (*2012 AQMP*), adopted in December 2012, proposes policies and measures to achieve Federal and State standards for improved air quality in the South Coast Air Basin and those portions of the Salton Sea Air Basin (formerly named the Southeast Desert Air Basin) that are under the South Coast Air Quality Management District's (SCAQMD's) jurisdiction. The *2012 AQMP* relies on a regional and multi-level partnership of governmental agencies at the Federal, State, regional, and local level. These agencies (U.S. EPA, CARB, local governments, Southern California Association of Governments [SCAG] and the SCAQMD) are the primary agencies that implement the *2012 AQMP* programs. The *2012 AQMP* incorporates the latest scientific and technical information and planning assumptions, including the *2012 Regional Transportation Plan/Sustainable Communities Stra*tegy, updated emission inventory methodologies for various source categories, and SCAG's latest growth forecasts.

The *2012 AQMP* addresses several State and Federal planning requirements and incorporates new scientific information, primarily in the form of updated emissions inventories, ambient measurements, and new meteorological air quality models. The *2012 AQMP* highlights the reductions and the interagency planning necessary to identify additional strategies, especially in the area of mobile sources, to meet all Federal criteria pollutant standards within the timeframes allowed under the FCAA. The primary task of the *2012 AQMP* is to bring the Basin into attainment with Federal health-based standards.

SOUTHERN CALIFORNIA ASSOCIATION OF GOVERNMENTS

The Southern California Association of Governments (SCAG) is the regional planning agency for Los Angeles, Orange, Ventura, Riverside, San Bernardino, and Imperial Counties and serves as a forum for regional issues relating to transportation, the economy, community development, and the environment. SCAG serves as the Federally-designated metropolitan planning organization (MPO) for the Southern California region and is the largest metropolitan planning organization in the United States. With respect to air quality planning, SCAG has prepared the *Regional Comprehensive Plan: Helping Communities Achieve a Sustainable Future* for the region, which includes Growth Management and Regional Mobility chapters that form the basis for the land use and transportation control portions of the *2012 AQMP*. SCAG is responsible under the FCAA for determining conformity of projects, plans, and programs within the SCAQMD.

5.5.2 ENVIRONMENTAL SETTING

SOUTH COAST AIR BASIN

Geography

The City of Duarte is located in the South Coast Air Basin (Basin), 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 Basin includes all of Orange County and the nondesert portions of Los Angeles, Riverside, and San Bernardino Counties, in addition to the San Gorgonio Pass area of Riverside County.

The extent and severity of the air pollution problem in the Basin is a function of the area's natural physical characteristics (weather and topography), as well as man-made influences (development patterns and lifestyle). Factors such as wind, sunlight, temperature, humidity, rainfall, and topography all affect the accumulation and/or dispersion of air pollutants throughout the Basin.

Climate

The general region lies in the semipermanent high-pressure zone of the eastern Pacific. As a result, the climate is mild, tempered by cool sea breezes. The climate consists of a semiarid environment with mild winters, warm summers, moderate temperatures, and comfortable humidity. Precipitation is limited to a few winter storms. The usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds. The average annual temperature varies little throughout the Basin, averaging 75 degrees Fahrenheit (°F). However, with a less-pronounced oceanic influence, the eastern inland portions of the Basin show greater variability in annual minimum and maximum temperatures. All portions of the Basin have recorded temperatures over 100°F in recent years.

Although the Basin has a semi-arid climate, the air near the surface is moist due to the presence of a shallow marine layer. Except for infrequent periods when dry, continental air is brought into the Basin by offshore winds, the ocean effect is dominant. Periods with heavy fog are frequent, and low stratus clouds, occasionally referred to as "high fog," are a characteristic climate feature. Annual average relative humidity is 70 percent at the coast and 57 percent in the eastern part of the Basin. Precipitation in the Basin is typically 9 to 14 inches annually and is rarely in the form of snow or hail due to typically warm weather. The frequency and amount of rainfall is greater in the coastal areas of the Basin.

The height of the inversion is important in determining pollutant concentration. When the inversion is approximately 2,500 feet above sea level, the sea breezes carry the pollutants inland to escape over the mountain slopes or through the passes. At a height of 1,200 feet, the terrain prevents the pollutants from entering the upper atmosphere, resulting in a settlement in the foothill communities. Below 1,200 feet, the inversion puts a tight lid on pollutants, concentrating them in a shallow layer over the entire coastal basin. Usually, inversions are lower before sunrise than during the day. Mixing heights for inversions are lower in the summer and more persistent, being partly responsible for the high levels of ozone (O_3) observed during summer months in the Basin. Smog in southern California is generally the result of these temperature inversions combining with coastal day winds and local mountains to contain the pollutants for long periods of time, allowing them to form secondary pollutants by reacting with sunlight. The Basin has a limited ability to disperse these pollutants due to typically low wind speeds.

The area in which the project site is located offers clear skies and sunshine, yet is still susceptible to air inversions. These inversions trap a layer of stagnant air near the ground, where it is then further loaded with pollutants. These inversions cause haziness, which is caused by moisture, suspended dust, and a variety of chemical aerosols emitted by trucks, automobiles, furnaces, and other sources.

LOCAL AMBIENT AIR QUALITY

The SCAQMD monitors air quality at 37 monitoring stations throughout the Basin. Each monitoring station is located within a Source Receptor Area (SRA). The communities within an

SRA are expected to have similar climatology and ambient air pollutant concentrations. The proposed project is in the City of Duarte, which is located in SRA 9 (East San Gabriel Valley). The monitoring stations usually measure pollutant concentrations 10 feet above ground level; therefore, air quality is often referred to in terms of ground-level concentrations.

The monitoring station representative of this area is the Azusa station, which is located approximately 2.5 miles northeast of the project site. The air pollutants measured at the Azusa station site include Ozone (O_3), Carbon Monoxide (CO), Nitrogen Dioxide (NO_2), and particulates (PM_{10} and $PM_{2.5}$). The air quality data monitored at the Azusa station from 2010 to 2012 are presented in *Table 5.5-2*, *Local Air Quality Levels*.

Table 5.5-2
Local Air Quality Levels

Pollutant	Primary Standard		Year	Maximum[1] Concentration	Number of Days State/Federal Std. Exceeded
	California	Federal			
Carbon Monoxide (CO) (1-Hour)[2]	20 ppm for 1 hour	35 ppm for 1 hour	2010 2011 2012	2.50 ppm 2.41 1.85	0/0 0/0 0/0
Carbon Monoxide (CO) (8-Hour)[2]	9 ppm for 8 hours	9 ppm for 8 hours	2010 2011 2012	1.38ppm 1.36 1.13	0/0 0/0 0/0
Ozone (O_3) (1-Hour)[2]	0.09 ppm for 1 hour	NA[3]	2010 2011 2012	0.104 ppm 0.111 0.134	5/0 13/0 18/1
Ozone (O_3) (8-Hour)[2]	0.070 ppm for 8 hours	0.075 ppm for 8 hours	2010 2011 2012	0.081 ppm 0.092 0.095	3/8 12/19 10/20
Nitrogen Dioxide (NO_2)[2]	0.18 ppm for 1 hour	0.100 ppm for 1 hour	2010 2011 2012	0.077 ppm 0.080 0.072	0/NA 0/NA 0/NA
Particulate Matter (PM_{10})[2,4,5]	50 µg/m^3 for 24 hours	150 µg/m^3 for 24 hours	2010 2011 2012	70.0 µg/m^3 65.0 78.0	0/0 0/0 0/0
Fine Particulate Matter ($PM_{2.5}$)[2, 5]	No Separate State Standard	35 µg/m^3 for 24 hours	2010 2011 2012	44.4 µg/m^3 94.6 39.6	NM/0 NM/0 NM/0

ppm = parts per million
µg/m^3 = micrograms per cubic meter
NM = Not Measured
PM_{10} = particulate matter 10 microns in diameter or less
$PM_{2.5}$ = particulate matter 2.5 microns in diameter or less
NA = Not Applicable

Notes:
1. Maximum concentration is measured over the same period as the California Standard.
2. Measurements taken at the Azusa Monitoring Station (located at 803 North Loren Avenue, Azusa, California 91702).
3. The United States Environmental Protection Agency revoked the Federal 1-hour Standard in June of 2005.
4. PM_{10} exceedances are based on State thresholds established prior to amendments adopted on June 20, 2002.
5. PM_{10} and $PM_{2.5}$ exceedances are derived from the number of samples exceeded, not days.

Source: California Air Resources Board, *Aerometric Data Analysis and Measurement System (ADAM) Air Quality Data Statistics*, http://www.arb.ca.gov/adam/welcome.html, accessed on July 15, 2013.

Carbon Monoxide. Carbon Monoxide (CO) is an odorless, colorless toxic gas that is emitted by mobile and stationary sources as a result of incomplete combustion of hydrocarbons or other carbon-based fuels. In cities, automobile exhaust can cause as much as 95 percent of all CO emissions.

CO replaces oxygen in the body's red blood cells. Individuals with a deficient blood supply to the heart, patients with diseases involving heart and blood vessels, fetuses (unborn babies), and patients with chronic hypoxemia (oxygen deficiency) as seen in high altitudes are most susceptible to the adverse effects of CO exposure. People with heart disease are also more susceptible to developing chest pains when exposed to low levels of carbon monoxide. Exposure to high levels of carbon monoxide can slow reflexes and cause drowsiness, and result in death in confined spaces at very high concentrations.

Ozone. Ozone (O_3) occurs in two layers of the atmosphere. The layer surrounding the earth's surface is the troposphere. The troposphere extends approximately 10 miles above ground level, where it meets the second layer, the stratosphere. The stratospheric (the "good" ozone layer) extends upward from about 10 to 30 miles and protects life on earth from the sun's harmful ultraviolet rays.

"Bad" ozone is a photochemical pollutant, and needs volatile organic compounds (VOC), Nitrogen Oxides (NO_X), and sunlight to form; therefore, VOCs and NO_X are ozone precursors. To reduce ozone concentrations, it is necessary to control the emissions of these ozone precursors. Significant ozone formation generally requires an adequate amount of precursors in the atmosphere and a period of several hours in a stable atmosphere with strong sunlight. High ozone concentrations can form over large regions when emissions from motor vehicles and stationary sources are carried hundreds of miles from their origins.

While ozone in the upper atmosphere (stratosphere) protects the earth from harmful ultraviolet radiation, high concentrations of ground-level ozone (in the troposphere) can adversely affect the human respiratory system and other tissues. Ozone is a strong irritant that can constrict the airways, forcing the respiratory system to work hard to deliver oxygen. Individuals exercising outdoors, children, and people with pre-existing lung disease such as asthma and chronic pulmonary lung disease are considered to be the most susceptible to the health effects of ozone. Short-term exposure (lasting for a few hours) to ozone at levels typically observed in Southern California can result in aggravated respiratory diseases such as emphysema, bronchitis and asthma, shortness of breath, increased susceptibility to infections, inflammation of the lung tissue, increased fatigue, as well as chest pain, dry throat, headache, and nausea.

Nitrogen Dioxide. Nitrogen oxides (NO_X) are a family of highly reactive gases that are a primary precursor to the formation of ground-level ozone, and react in the atmosphere to form acid rain. NO_2 (often used interchangeably with NO_X) is a reddish-brown gas that can cause breathing difficulties at high levels. Peak readings of NO_2 occur in areas that have a high concentration of combustion sources (e.g., motor vehicle engines, power plants, refineries, and other industrial operations).

NO_2 can irritate and damage the lungs, and lower resistance to respiratory infections such as influenza. Short-term exposure to NO_2 may increase resistance to air flow and airway contraction. Continued or frequent exposure to NO_2 concentrations that are typically much higher than those normally found in the ambient air, may increase acute respiratory illnesses in children and increase the incidence of chronic bronchitis and lung irritation. Chronic exposure to NO_2 may aggravate eyes and mucus membranes and cause pulmonary dysfunction.

Coarse Particulate Matter. Coarse Particulate Matter (PM_{10}) refers to suspended particulate matter, which is smaller than 10 microns or ten one-millionths of a meter. PM_{10} arises from sources such as road dust, diesel soot, combustion products, construction operations, and dust storms. PM_{10} scatters light and significantly reduces visibility. In addition, these particulates penetrate into lungs and can potentially damage the respiratory tract. On June 19, 2003, CARB adopted amendments to the statewide 24-hour particulate matter standards based upon requirements set forth in the Children's Environmental Health Protection Act (Senate Bill 25).

Fine Particulate Matter. Due to recent increased concerns over health impacts related to fine particulate matter ($PM_{2.5}$ [particulate matter 2.5 microns in diameter or less]), both State and Federal $PM_{2.5}$ standards have been created. Particulate matter impacts primarily affect infants, children, the elderly, and those with pre-existing cardiopulmonary disease. In 1997, the U.S. EPA announced new $PM_{2.5}$ standards. Industry groups challenged the new standard in court and the implementation of the standard was blocked. However, upon appeal by the U.S. EPA, the United States Supreme Court reversed this decision and upheld the U.S. EPA's new standards.

On January 5, 2005, the U.S. EPA published a Final Rule in the Federal Register that designates the Basin as a nonattainment area for Federal $PM_{2.5}$ standards. On June 20, 2002, CARB adopted amendments for statewide annual ambient particulate matter air quality standards. These standards were revised/established due to increasing concerns by CARB that previous standards were inadequate, as almost everyone in California is exposed to levels at or above the current State standards during some parts of the year, and the statewide potential for significant health impacts associated with particulate matter exposure was determined to be large and wide-ranging.

SENSITIVE RECEPTORS

Sensitive populations are more susceptible to the effects of air pollution than the general population. Sensitive populations (sensitive receptors) that are in proximity to localized sources of toxics and CO are of particular concern. Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. The following types of people are most likely to be adversely affected by air pollution, as identified by CARB: children under 14, elderly over 65, athletes, and people with cardiovascular and chronic respiratory diseases.

Locations that may contain a high concentration of these sensitive population groups are called sensitive receptors and include residential areas, hospitals, day-care facilities, elder-care facilities, elementary schools, and parks. Sensitive receptors in the project vicinity include residential uses adjacent to the north and west of the project site. Additional existing sensitive receptors located in the project vicinity include single- and multi-family residential homes, hotels, motels, schools, parks, and places of worship. Sensitive receptors are depicted below in *Table 5.5-3*, *Sensitive Receptors*.

Table 5.5-3
Sensitive Receptors

Type	Name	Distance from Project Site (feet)	Direction from Project Site
Residential	Residential Uses	70	North
		800	North (north side of I-210)
		1,170	Southwest
		430	Northeast (north side of I-210)
		30	West
Hotels/Motels	Days Inn	2,000	North
	Duarte Inn	3,100	Northwest
	Quality Inn	3,690	Northwest
Schools	Northview Intermediate School	700	North
	Duarte High School	1,000	Northwest
	Duarte Montessori School	2,135	North
	Beardslee Elementary School	2,970	Southwest
	Mt. Olive High School	3,480	Northeast
Places of Worship	Church of Christ	1,000	North
	Christian Alliance Bible Church	2,060	North
	Grace Fellowship Church	2,065	Northwest
	Church of the Foothills United Methodist Church	2,185	North
	First Baptist Church of Duarte	3,100	Northeast
	Church of Jesus Christ Latter Day Saints	3,170	North
	New Life Assembly of God	3,530	Northeast
Parks	Northview Park	400	North
	Pioneer Park	600	Southwest
	Duarte Sports Park	1,640	Northwest
	Heritage Park	1,900	Southwest
	Third Street Park	2,065	North
	Beardslee Park	3,000	Southwest
	Aloysia Moore Park	3,200	Southwest
	Otis Gordon Sports Park	3,400	Northeast
Hospitals	Royal Terrace Health Care	830	North
	Monrovia Convalescent Hospital	2,765	Northwest
	Royal Oaks Hospice	3,565	Northwest

Note:
1. Distances are measured from the exterior project boundary only and not from individual construction projects/areas within the interior of the project site.

Source: Google Earth, 2013.

5.5.3 SIGNIFICANCE THRESHOLD CRITERIA

METHODOLOGY

Regional Air Quality

In their *CEQA Air Quality Handbook* (November 1993), the SCAQMD established significance thresholds to assess the impact of project related air pollutant emissions. *Table 5.5-4*, *SCAQMD Regional Pollutant Emission Thresholds of Significance*, presents these significance thresholds. There are separate thresholds for short-term construction and long-term operational emissions. A project with daily emission rates below these thresholds is considered to have a less than significant effect on regional air quality. The SCAQMD is in the process of updating the thresholds.

Table 5.5-4
SCAQMD Regional Pollutant Emission Thresholds of Significance

Phase	Pollutant (lbs/day)					
	VOC	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Construction	75	100	550	150	150	55
Operation	55	55	550	150	150	55
CO = carbon monoxide; VOC = volatile organic compounds; NO_X = nitrogen oxides; PM_{10} = particulate matter smaller than 10 microns; $PM_{2.5}$ = particulate matter smaller than 2.5 microns						
Source: South Coast Air Quality Management District, *CEQA Air Quality Handbook,* November 1993.						

CONSTRUCTION

Mass daily combustion emissions, fugitive PM_{10} and $PM_{2.5}$, and off-gassing emissions were calculated using the California Emissions Estimator Model (CalEEMod), as recommended by the SCAQMD. CalEEMod separates the construction process into multiple phases, including demolition and site clearing, grading, trenching, paving, building construction, and architectural coating. Construction emissions account for on-site construction equipment emissions, haul truck trips, and worker commute trips. Construction activities were based upon construction scheduling and other preliminary construction details provided by the City. Where appropriate, CalEEMod defaults were utilized. CalEEMod assumptions are provided in Appendix E, Air Quality/Greenhouse Gas Data.

OPERATIONS

The CalEEMod software was also used to quantify the daily emissions from mobile and area sources that would occur during long-term operation of the proposed project. Mobile source emissions calculations in CalEEMod were supplemented with traffic trips within the *Traffic Impact Analysis*. Area source emissions were quantified using CalEEMod default emissions and exclude emissions from wood burning fireplaces and stoves.

Local Air Quality

LOCALIZED SIGNIFICANCE THRESHOLDS

Localized Significance Thresholds (LSTs) were developed in response to the SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the *Final Localized Significance Threshold Methodology* (revised July 2008) for guidance. The LST methodology assists lead agencies in analyzing localized impacts associated with project-specific level proposed projects. The SCAQMD provides the LST lookup tables for one, two, and five acre projects emitting CO, NO_X, particulate matter less than 10 microns in aerodynamic diameter (PM_{10}), and particulate matter less than 2.5 microns in aerodynamic diameter ($PM_{2.5}$). The LST methodology and associated mass rates are not designed to evaluate localized impacts from mobile sources traveling over the roadways. The SCAQMD recommends that any project over five acres should perform air quality dispersion modeling to assess impacts to nearby sensitive receptors.

LOCALIZED CO

In addition, the project would result in a local air quality impact if the project results in increased traffic volumes and/or decreases in Level of Service (LOS) that would result in an exceedance of the CO ambient air quality standards of 20 ppm for 1-hour CO concentration levels, and 9 ppm for 8-hour CO concentration levels. If the CO concentrations at potentially impacted intersections with the project are lower than the standards, then there is no significant impact. If future CO concentrations with the project are above the standard, then the project would have a significant local air quality impact.

Cumulative Emissions

The SCAQMD's *2012 AQMP* was prepared to accommodate growth, meet state and federal air quality standards, and minimize the fiscal impact that pollution control measures have on the local economy. According to the SCAQMD *CEQA Air Quality Handbook*, project-related emissions that fall below the established construction and operational thresholds should be considered less than significant unless there is pertinent information to the contrary.

If a project exceeds these emission thresholds, the SCAQMD *CEQA Air Quality Handbook* states that the significance of a project's contribution to cumulative impacts should be determined based on whether the rate of growth in average daily trips exceeds the rate of growth in population.

CEQA SIGNIFICANCE CRITERIA

The issues presented in the Initial Study Environmental Checklist (*CEQA Guidelines* Appendix G) have been utilized as thresholds of significance in this Section. Accordingly, a project may create a significant environmental impact if it causes one or more of the following to occur:

- Conflict with or obstruct implementation of the applicable air quality plan.
- Violate any air quality standard or contribute substantially to an existing or projected air quality violation.

- Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable Federal or State ambient air quality standard (including releasing emissions that exceed quantitative thresholds for ozone precursors).

- Expose sensitive receptors to substantial pollutant concentrations.

- Create objectionable odors affecting a substantial number of people.

Based on these significance thresholds and criteria, the project's effects have been categorized as either "no impact," a "less than significant impact," or a "potentially significant impact." Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a significant unavoidable impact.

The standards used to evaluate the significance of impacts are often qualitative rather than quantitative because appropriate quantitative standards are either not available for many types of impacts or are not applicable for some types of projects.

5.5.4 PROJECT IMPACTS AND MITIGATION MEASURES

SHORT-TERM CONSTRUCTION AIR EMISSIONS

■ **SHORT-TERM CONSTRUCTION ACTIVITIES ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT COULD RESULT IN AIR POLLUTANT EMISSION IMPACTS OR EXPOSE SENSITIVE RECEPTORS TO SUBSTANTIAL POLLUTANT CONCENTRATIONS.**

Impact Analysis: Short-term temporary impacts would result from project-related construction activities. Short-term air emissions would result from the following activities:

- Particulate (fugitive dust) emissions from grading and building construction; and
- Exhaust emissions from the construction equipment and the motor vehicles of the construction crew.

Potential odors could arise from the diesel construction equipment used on-site, as well as from architectural coatings and asphalt off-gassing. Odors generated from the referenced sources are common in the man-made environment and are not known to be substantially offensive to adjacent receptors. Additionally, odors generated during construction activities would be temporary and are not considered to be a significant impact.

The project site currently consists of 313,955 square feet of warehouse/industrial uses. The project proposes the development of 475 high density multi-family residential dwelling units, 250 hotel rooms, 400,000 square feet of office uses and 12,000 square feet of retail uses. For the purposes of analysis, the proposed project is anticipated to occur over multiple years based upon market conditions and therefore, a buildout year of 2020 is utilized.

Project-related construction would require excavators, graders, scrapers, and tractors during grading and clearing; pavers, rollers, and paving equipment during paving; tractors, and forklifts during building construction; and air compressors during architectural coating. Emissions for

each construction phase have been quantified based upon the phase durations and equipment types. The analysis of daily construction emissions has been prepared utilizing CalEEMod. Refer to Appendix E, Air Quality/Greenhouse Gas Data, for the CalEEMod outputs and results. *Table 5.5-5*, *Maximum Daily Pollutant Emissions During Construction*, presents the anticipated daily short-term construction emissions. A conservative approach was used for the analysis with a compressed construction schedule occurring over several years. Should the construction schedule extend beyond the three years assumed in the model, any emissions would be less than shown in *Table 5.5-5* due to improved equipment and technology, and other factors assumed in the model.

Table 5.5-5
Maximum Daily Pollutant Emissions During Construction

Emissions Source	Daily Pollutant Emissions (lbs/day)[1]					
	ROG[2]	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Year 1						
Unmitigated	25.09	81.52	90.04	0.15	26.51	12.88
Mitigated[3]	25.09	81.45	90.02	0.15	21.45	8.08
SCAQMD Construction Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Mitigated Emissions Exceed Thresholds?	***No***	***No***	***No***	***No***	***No***	***No***
Year 2						
Unmitigated	72.36	55.31	93.29	0.17	12.22	5.10
Mitigated[2]	72.36	55.28	93.27	0.17	12.22	5.10
SCAQMD Construction Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Mitigated Emissions Exceed Thresholds?	***No***	***No***	***No***	***No***	***No***	***No***
Year 3						
Unmitigated	70.34	51.02	86.61	0.17	11.99	4.89
Mitigated[2]	70.34	50.99	86.59	0.17	11.99	4.88
SCAQMD Construction Thresholds	*75*	*100*	*550*	*150*	*150*	*55*
Mitigated Emissions Exceed Thresholds?	***No***	***No***	***No***	***No***	***No***	***No***

CO = carbon monoxide; VOC = volatile organic compounds; NO_X = nitrogen oxides; PM_{10} = particulate matter smaller than 10 microns; $PM_{2.5}$ = particulate matter smaller than 2.5 microns

Notes:

1. Emissions were calculated using CalEEMod, as recommended by the SCAQMD.
2. ROG emissions are calculated with low VOC coatings. CalEEMod does not include this as a mitigation option for construction.
3. The reduction/credits for construction emission mitigations are based on mitigation included in the CalEEMod model and as typically required by the SCAQMD through Rule 403. The mitigation includes the following: properly maintain mobile and other construction equipment; replace ground cover in disturbed areas quickly; water exposed surfaces twice daily; cover stock piles with tarps; water all haul roads twice daily; limit speeds on unpaved roads to 15 miles per hour; and use CARB certified engines.

Refer to Appendix E, Air Quality/Greenhouse Gas Data, for assumptions used in this analysis.

Air pollutants would be emitted by construction equipment and fugitive dust would be generated during demolition of the existing structures and improvements, as well as during grading of the site. Emissions during the primary phases of construction were calculated using the CalEEMod program. The equipment modeled during each phase was based on the defaults in CalEEMod modified as needed to represent the project specifics. All fugitive dust calculations accounted for watering and other dust control methods required to be implemented per SCAQMD Rule 403

Fugitive Dust Emissions

Fugitive dust (PM_{10} and $PM_{2.5}$) from grading and construction is expected to be short-term and would cease following completion of the proposed project improvements. Most of this material is composed of inert silicates, which are less harmful to health than the complex organic particulates released from combustion sources. These particles are either directly emitted or are formed in the atmosphere from the combustion of gases such as NO_X and SO_X combining with ammonia. The greatest amount of fugitive dust generated is expected to occur during site grading and excavation. Dust generated by such activities usually becomes more of a local nuisance than a serious health problem. Of particular concern is the amount of PM_{10} generated as a part of fugitive dust emissions.

The CalEEMod computer model calculates PM_{10} and $PM_{2.5}$ fugitive dust as part of the site earthwork activity emissions; refer to *Table 5.5-5*. Maximum particulate matter emissions would occur during the initial stages of construction, when grading activities would occur. Mitigation Measure AQ-1 requires that construction activities comply with SCAQMD Rule 403, such that excessive fugitive dust emissions shall be controlled by regular watering or other dust prevention measures. In addition, SCAQMD Rule 402 is required for implementation of dust suppression techniques to prevent fugitive dust from creating a nuisance off-site and after implementation would reduce short-term fugitive dust impacts on nearby sensitive receptors. With adherence to Mitigation Measures AQ-1, AQ-2 and other dust control techniques, the maximum mitigated particulate matter concentration would be 21.45 pounds per day (lbs/day) for PM_{10} and 8.08 lbs/day for $PM_{2.5}$ in construction Year 1. Therefore, emissions in each year are below SCAQMD thresholds of 150 lbs/day for PM_{10} and 55 lbs/day for $PM_{2.5}$. Although the unmitigated particulate matter levels are below the SCAQMD thresholds in the absence of specific dust reduction measures, Mitigation Measures AQ-1 and AQ-2 have been recommended to ensure impacts remain at less than significant levels as the Basin is nonattainment for PM_{10} and $PM_{2.5}$.

ROG Emissions

In addition to gaseous and particulate emissions, the application of asphalt and surface coatings creates ROG emissions, which are O_3 precursors. As required, all architectural coatings for the proposed project structures would comply with SCAQMD Regulation XI, Rule 1113 – *Architectural Coating*.[1] Rule 1113 provides specifications on painting practices as well as regulates the ROG content of paint. In addition to Rule 1113, Mitigation Measure AQ-3 requires the use of high-pressure-low-volume (HPLV) paint applicators with a minimum transfer efficiency of at least 50 percent and using pre-painted construction materials. Mitigation Measure AQ-3 also limits the ROG/VOC content of architectural coatings (paints) to 50 grams per liter or less. Compliance with Mitigation Measure AQ-3 would ensure that emissions would be at less than significant levels.

Construction Exhaust Emissions

Exhaust emissions would be generated by the operation of vehicles and equipment on the construction site, such as tractors, dozers, backhoes, cranes, and trucks. The majority of construction equipment and vehicles would be diesel powered, which tends to be more efficient than gasoline-powered equipment. Diesel-powered equipment produces lower carbon monoxide and hydrocarbon emissions than gasoline equipment, but produces greater amounts

[1] South Coast Air Quality Management District, http://www.aqmd.gov/rules/reg/reg11_tofc.html.

of NO_X, SO_X, and particulates per hour of activity. The transportation of machinery, equipment and materials to and from the project site, as well as construction worker trips, would also generate vehicle emissions during construction. As depicted in *Table 5.5-5*, construction exhaust emissions would be below SCAQMD thresholds. Mitigation Measure AQ-4 would be required to ensure that construction equipment is maintained to be consistent with the emissions calculated in *Table 5.5-5*.

Asbestos

Pursuant to guidance issued by the Governor's Office of Planning and Research, State Clearinghouse, lead agencies are encouraged to analyze potential impacts related to naturally occurring asbestos (NOA). Asbestos is a term used for several types of naturally occurring fibrous minerals that are a human health hazard when airborne. The most common type of asbestos is chrysotile, but other types such as tremolite and actinolite are also found in California. Asbestos is classified as a known human carcinogen by State, Federal, and international agencies and was identified as a toxic air contaminant by the CARB in 1986.

Asbestos can be released from serpentinite and ultramafic rocks when the rock is broken or crushed. At the point of release, the asbestos fibers may become airborne, causing air quality and human health hazards. These rocks have been commonly used for unpaved gravel roads, landscaping, fill projects, and other improvement projects in some localities. Asbestos may be released to the atmosphere due to vehicular traffic on unpaved roads, during grading for development projects, and at quarry operations. All of these activities may have the effect of releasing potentially harmful asbestos into the air. Natural weathering and erosion processes can act on asbestos bearing rock and make it easier for asbestos fibers to become airborne if such rock is disturbed.

Serpentinite and/or ultramafic rock are known to be present in 44 of California's 58 counties. These rocks are particularly abundant in the counties of the Sierra Nevada foothills, the Klamath Mountains, and Coast Ranges. According to the Department of Conservation Division of Mines and Geology, *A General Location Guide for Ultramafic Rocks in California – Areas More Likely to Contain Naturally Occurring Asbestos Report* (dated August 2000), the proposed project is not located in an area where NOA is likely to be present. Therefore impacts would be considered less than significant.

It is also possible that asbestos-containing materials may exist within older existing buildings that may be modified or demolished. Therefore, the possibility exists that asbestos fibers may be released into the air should no asbestos assessment or removal (if needed) take place prior to demolition. Standard practice pursuant to SCAQMD Rule 1403 is to conduct an asbestos assessment for candidate buildings to determine the presence of asbestos. If identified, an asbestos abatement contractor would be retained to develop an abatement plan and remove the asbestos containing materials, in accordance with local, State, and Federal requirements. After removal, demolition may proceed without significant concern to the release of asbestos fibers into the air. Also refer to Section 5.8, Hazards and Hazardous Materials, for an additional discussion of asbestos and asbestos containing materials.

Total Daily Construction Emissions

In accordance with the SCAQMD Guidelines, CalEEMod was utilized to model construction emissions for ROG, NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$. Construction would occur over several years, with the greatest emissions being generated during the first year of construction.

CalEEMod allows the user to input mitigation measures such as watering the construction area to limit fugitive dust and applying soil stabilizers to the project area. Mitigation measures selected within CalEEMod allow for certain reduction credits and result in a decrease of pollutant emissions. Reduction credits are based upon studies developed by CARB, SCAQMD, and other air quality management district's throughout California, and were programmed within the CalEEMod model. As indicated in *Table 5.5-5*, CalEEMod calculates the reduction associated with recommended mitigation measures.

Implementation of Mitigation Measures AQ-1 through AQ-4 would lessen construction-related impacts by requiring measures to reduce air pollutant emissions from construction activities. These measures call for the maintenance of construction equipment, the use of non-polluting and non-toxic building equipment, and minimizing fugitive dust. With implementation of Mitigation Measures AQ-1 through AQ-4, emissions from future development and infrastructure projects associated with implementation of the proposed Specific Plan are not anticipated to exceed SCAQMD thresholds. Therefore, construction emissions are either at or can be mitigated to less than significant levels.

Mitigation Measures:

AQ-1 Prior to issuance of a Grading Permit, the City Engineer and the Chief Building Official shall confirm that the Grading Plan, Building Plans, and specifications stipulate that, in compliance with SCAQMD Rule 403, excessive fugitive dust emissions shall be controlled by regular watering or other dust prevention measures, as specified in the SCAQMD's Rules and Regulations. 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 portions of the construction site shall be watered every three hours during daily construction activities and when dust is observed migrating from the project site to prevent excessive amounts of dust.
- Pave or apply water every three hours during daily construction activities or apply non-toxic soil stabilizers on all unpaved access roads, parking areas, and staging areas. More frequent watering shall occur if dust is observed migrating from the site during site disturbance.
- Any on-site stockpiles of debris, dirt, or other dusty material shall be enclosed, covered, or watered twice daily, or non-toxic soil binders shall be applied.
- All grading and excavation operations shall be suspended when wind speeds exceed 25 miles per hour.
- Disturbed areas shall be replaced with ground cover or paved immediately after construction is completed in the affected area.
- Track-out devices such as gravel bed track-out aprons (3 inches deep, 25 feet long, 12 feet wide per lane and edged by rock berm or row of stakes) shall be installed to reduce mud/dirt trackout from unpaved truck exit routes. Alternatively a wheel washer shall be used at truck exit routes.
- On-site vehicle speed shall be limited to 15 miles per hour.
- 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.
- Reroute construction trucks away from congested streets or sensitive receptor areas.

AQ-2 All trucks that are to haul excavated or graded material on-site shall comply with State Vehicle Code Section 23114 (Spilling Loads on Highways), with special attention to Sections 23114(b)(F), (e)(4) as amended, regarding the prevention of such material spilling onto public streets and roads. Prior to the issuance of grading permits, each project applicant shall demonstrate to the City Engineer how the project operations subject to that specification during hauling activities shall comply with the provisions set forth in Sections 23114(b)(F), (e)(4).

AQ-3 The following measures shall be implemented by the contractor to reduce ROG emissions resulting from application of architectural coatings:

- Use high-pressure-low-volume (HPLV) paint applicators with a minimum transfer efficiency of at least 50 percent;
- Use pre-painted construction materials; and
- VOC content of architectural coatings shall not exceed 50 grams per liter.

AQ-4 Prior to issuance of any Grading Permit, the City Engineer and the Chief Building Official shall confirm that the Grading Plan, Building Plans, and specifications stipulate that, in compliance with SCAQMD Rule 403, O_3 precursor emissions from construction equipment vehicles shall be controlled by maintaining equipment engines in good condition and in proper tune per manufacturer's specifications, to the satisfaction of the City Engineer. Maintenance records shall be provided to the City. The City Inspector shall be responsible for ensuring that contractors comply with this measure during construction.

Level of Significance: Less Than Significant Impact.

LONG-TERM OPERATIONAL AIR EMISSIONS

■ **IMPLEMENTATION OF THE PROPOSED PROJECT COULD FACILITATE THE CONSTRUCTION OF NEW LAND USES THAT COULD GENERATE DUST AND EQUIPMENT EMISSIONS.**

Impact Analysis: Operational emissions generated by both stationary and mobile sources would result from normal daily activities on the project site after occupation (i.e., increased concentrations of O_3, PM_{10}, and CO). Stationary area source emissions would be generated by the consumption of natural gas for space and water heating devices, the operation of landscape maintenance equipment, and the use of consumer products. Stationary energy emissions would result from energy consumption associated with the proposed project. Mobile emissions would be generated by the motor vehicles traveling to and from the project site. Emissions associated with each of these sources were calculated and are discussed below.

Mobile Source Emissions

Mobile sources are emissions from motor vehicles, including tailpipe and evaporative emissions. Depending upon the pollutant being discussed, the potential air quality impact may be of either regional or local concern. For example, ROG, NO_X, SO_X, PM_{10}, and $PM_{2.5}$ are all pollutants of regional concern (NO_X and ROG react with sunlight to form O_3 [photochemical smog], and wind currents readily transport SO_X, PM_{10}, and $PM_{2.5}$). However, CO tends to be a localized pollutant, dispersing rapidly at the source.

Project-generated vehicle emissions have been estimated using CalEEMod. This model predicts ROG, NO_X, PM_{10}, and $PM_{2.5}$ emissions from motor vehicle traffic associated with new or modified land uses; refer to Appendix E, Air Quality and Greenhouse Gas Data. According to the *Traffic Impact Analysis*, the proposed project would generate 7,259 net new daily trips at buildout. *Table 5.5-6*, *Long-Term Operational Air Emissions*, presents the anticipated mobile source emissions.

Table 5.5-6
Long-Term Operational Air Emissions

Emissions Source	Pollutant (pounds/day)[1, 2]					
	ROG	NO_X	CO	SO_X	PM_{10}	$PM_{2.5}$
Existing Emissions						
Area	8.21	0.00	0.03	0.00	0.00	0.00
Energy	0.10	0.92	0.77	0.00	0.07	0.07
Mobile	32.37	28.62	107.30	0.21	15.68	4.47
Total Existing Emissions	***40.69***	***29.54***	***108.11***	***0.22***	***15.75***	***4.55***
Proposed Unmitigated Emissions						
Area[3]	156.47	3.63	278.97	0.38	36.50	36.49
Energy	0.54	4.81	3.55	0.03	0.37	0.37
Mobile	136.40	120.92	469.89	0.88	64.18	18.33
Total Proposed Unmitigated Emissions	***293.41***	***129.36***	***752.41***	***1.29***	***101.05***	***55.19***
Proposed Mitigated Emissions						
Area[3]	32.83	0.48	40.26	0.00	0.79	0.78
Energy	0.54	4.81	3.55	0.03	0.37	0.37
Mobile	80.07	71.64	310.52	0.48	34.00	9.74
Total Proposed Mitigated Emissions	***113.44***	***76.93***	***354.33***	***0.51***	***35.16***	***10.90***
SCAQMD Threshold	*55*	*55*	*550*	*150*	*150*	*55*
Mitigated Net Increase Over Existing Emissions	***72.75***	***47.39***	***246.22***	***0.29***	***19.41***	***6.35***
Is Threshold Exceeded? (Significant Impact?)	***Yes***	*No*	*No*	*No*	*No*	*No*

Notes:
1. Based on CalEEMod results, worst-case seasonal emissions for area and mobile emissions have been modeled.
2. Totals may be slightly off due to rounding.
3. Area sources include natural gas burning fireplaces and exclude the use of wood burning fireplaces and wood burning stoves per SCAQMD Rule 445 (Wood-Burning Devices).
4. Refer to Appendix E, Air Quality and Greenhouse Gas Data, for assumptions used in this analysis.

Stationary Source Emissions

Stationary source emissions would be generated due to an increased demand for electrical energy and natural gas with implementation of proposed project; refer to *Table 5.5-6*. This assumption is based on the supposition that those power plants supplying electricity to the site are utilizing fossil fuels. Electric power generating plants are distributed throughout the Basin and western United States, and their emissions contribute to the total regional pollutant burden. The primary use of natural gas by the proposed land uses would be for combustion to produce

space heating, water heating, other miscellaneous heating, or air conditioning, consumer products, and landscaping.

Impact Conclusion

Modeled area source emissions include the natural gas burning fireplaces and exclude the use of wood burning fireplaces per SCAQMD Rule 445. Additionally, mobile source emissions would be reduced as the proposed project includes retail, office, hotel, and residential uses adjacent to a Gold Line Station. These land use attributes that are inherent in the project design and location were incorporated into the mitigation module of CalEEMod. It should be noted that although the CalEEMod results depict these emissions as "mitigated" emissions, they are part of the project design. Therefore, no additional mitigation measures are available to reduce ROG emissions that can be quantified in CalEEMod. In addition, the proposed Duarte Station Specific Plan sets forth goals and objectives for sustainable development practices that would further reduce area source and mobile source emissions. These include adherence to the City's *Development Code* on Levels of Sustainable Development Practices, and City regulations and standards on disposal of construction and demolition waste. Additional objectives include considering building layout, siting and design to not inhibit alternative energy production on-site, maximizing energy efficiency through local and state standards and LEED principles, and incorporating water-efficient design features and drought-tolerant landscaping to reduce heat island effects within the Plan Area. As shown in *Table 5.5*-6, the operational mitigated emissions would remain above SCAQMD thresholds for ROG. Therefore, impacts in this regard would be significant and unavoidable. Impacts related to NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$ emissions are below the SCAMD thresholds and are concluded to be less than significant.

Mitigation Measures: No feasible mitigation measures are available.

Level of Significance: Significant Unavoidable Impact for ROG emissions. Less Than Significant Impact for NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$.

LOCALIZED EMISSIONS

■ **DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT COULD RESULT IN LOCALIZED EMISSIONS IMPACTS OR EXPOSE SENSITIVE RECEPTORS TO SUBSTANTIAL POLLUTANT CONCENTRATIONS.**

Impact Analysis:

Localized Significance Thresholds

Localized Significance Thresholds (LSTs) were developed in response to SCAQMD Governing Boards' Environmental Justice Enhancement Initiative (I-4). The SCAQMD provided the *Final Localized Significance Threshold Methodology* (dated June 2003 [revised 2008]) for guidance. The LST methodology assists lead agencies in analyzing localized impacts associated with project-specific level proposed projects. The SCAQMD provides the LST lookup tables for one, two, and five acre projects emitting CO, NO_X, $PM_{2.5}$, or PM_{10}. The LST methodology and associated mass rates are not designed to evaluate localized impacts from mobile sources traveling over the roadways. The SCAQMD recommends that any project over five acres should perform air quality dispersion modeling to assess impacts to nearby sensitive receptors. The project site is located within Sensitive Receptor Area (SRA) 9, East San Gabriel Valley.

The closest sensitive receptors to the Plan Area are the residential uses adjacent to the northern project boundary; there are within 25 meters of the Plan Area. If receptors are within 25 meters of the site, the methodology document states that the threshold for the 25-meter distance should be used. *Table 5.5-7*, *Localized Significance of Emissions*, depicts the mitigated construction-related emissions for NO_X, CO, PM_{10}, and $PM_{2.5}$ compared to the LSTs for SRA 9, East San Gabriel Valley. It should be noted that *Table 5.6-7* uses the 5-acre LST threshold for screening purposes. Additionally, for proposed project operations, the five-acre threshold was conservatively used for receptors of 25 meters away. The LST analysis only includes on-site sources; therefore, the operational emissions shown include area sources. As shown in *Table 5.5-7*, construction emissions would not exceed the LSTs. Additionally, operational emissions would not exceed the LSTs for SRA 9. Therefore, localized significance impacts for proposed project operations would be less than significant.

Table 5.5-7
Localized Significance of Emissions

On-Site Sources	Pollutant (pounds/day)			
	NO_X	CO	PM_{10}	$PM_{2.5}$
CONSTRUCTION				
Year 1				
Total Mitigated On-Site Emissions	80.64	51.53	10.85	7.13
Localized Significance Threshold	*203*	*2,022*	*14*	*8*
Thresholds Exceeded?	***No***	***No***	***No***	***No***
Year 2				
Total Mitigated On-Site Emissions	30.00	18.72	2.11	1.98
Localized Significance Threshold	*203*	*2,022*	*14*	*8*
Thresholds Exceeded?	***No***	***No***	***Yes***	***No***
Year 3				
Total Mitigated On-Site Emissions	22.37	14.80	1.26	1.16
Localized Significance Threshold	*203*	*2,022*	*14*	*8*
Thresholds Exceeded?	***Yes***	***No***	***Yes***	***Yes***
OPERATIONS				
Area Source Emissions	0.48	40.26	0.79	0.78
Localized Significance Threshold	*203*	*2,022*	*4*	*2*
Thresholds Exceeded?	***No***	***No***	***No***	***No***

Note:
1. The Localized Significance Threshold was determined using Appendix C of the SCAQMD *Final Localized Significant Threshold Methodology* guidance document for pollutants NO_X, CO, PM_{10}, and $PM_{2.5}$. The Localized Significance Threshold conservatively uses the 5 acre threshold, the distance to sensitive receptors (25 meters), and the source receptor area (SRA 9).

Carbon Monoxide Hotspots

CO emissions are a function of vehicle idling time, meteorological conditions and traffic flow. Under certain extreme meteorological conditions, CO concentrations near a congested roadway or intersection may reach unhealthful levels (i.e., adversely affect residents, school children, hospital patients, the elderly, etc.). The SCAQMD requires a quantified assessment of CO hotspots when a project increases the volume-to-capacity ratio (also called the intersection capacity utilization) by 0.02 (two percent) for any intersection with an existing level of service LOS D or worse. Because traffic congestion is highest at intersections where vehicles queue and are subject to reduced speeds, these hotspots are typically produced at intersections.

Table 5.5-8, *Project Buildout Carbon Monoxide Concentrations*, provides the CO hotspot analysis results for the study intersections that warranted a CO hotspot analysis.

Table 5.5-8
Project Buildout Carbon Monoxide Concentration

Intersection	1-hour CO (ppm)[1]		8-Hour CO (ppm) [1]	
	1-hour Standard	Future + Project	8-hour Standard	Future + Project
Buena Vista Street and Three Ranch Road	20 ppm	2.1	9 ppm	1.28
Buena Vista Street and Duarte Road	20 ppm	2.1	9 ppm	1.28
Highland Avenue and Evergreen Street	20 ppm	2.0	9 ppm	1.22
Mount Olive Drive and Huntington Drive	20 ppm	2.2	9 ppm	1.34

Note:
1. As measured at a distance of 10 feet from the corner of the intersection predicting the highest value. Presented 1 hour CO concentrations include a background concentration of 1.85 ppm. Eight-hour concentrations are based on a persistence of 0.61 of the 1-hour concentration. Refer to Appendix E, Air Quality/Greenhouse Gas Data.

The projected traffic volumes were modeled using the BREEZE ROADS dispersion model. The resultant values were then added to an ambient concentration. A receptor height of 1.8 meters was used in accordance with the EPA's recommendations. The calculations assume a meteorological condition of almost no wind (0.5 meters/second), a flat topological condition between the source and the receptor and a mixing height of 1,000 meters. A standard deviation of five degrees was used for the deviation of wind direction. The suburban land classification was used for the aerodynamic roughness coefficient. This follows the BREEZE ROADS user's manual definition of suburban as "regular coverage with large obstacles, open spaces roughly equal to obstacle heights, villages, mature forests." All of the above parameters are based on the standards stated in the *Transportation Project-Level Carbon Monoxide (CO Protocol)*, December 1997.

For the purposes of this analysis, the ambient concentration used in the modeling was the highest one-hour measurement (the highest concentration of the last three years data was available) of SCAQMD monitoring data at the Azusa Monitoring Station. Actual future ambient CO levels may be lower due to emissions control strategies that would be implemented between now and the proposed project buildout date. Due to changing meteorological conditions over an eight-hour period which diffuses the local CO concentrations, the eight-hour CO level concentrations have been found to be typically proportional and lower than the one-hour concentrations, where it is possible to have stable atmospheric conditions last for the entire hour. Therefore, eight-hour CO levels were calculated using the locally derived persistence factor as stated in the CO Protocol. The local persistence factor is derived by calculating the highest ratio of eight-hour to one-hour maximum locally measured CO concentrations from the most recent three years of data. Of the most recent three years of data, the highest eight-hour to one-hour ratio was 0.61.

The intersections listed in *Table 5.5-8* would operate at LOS D or worse and implementation of the proposed project would increase the volume-to-capacity ratio by 0.02 (two percent), thus requiring a CO hotspot analysis. As indicated in *Table 5.5-8*, CO concentrations would be well below the State and Federal standards. The modeling results are compared to the CAAQS for CO of 9 ppm on an eight-hour average and 20 ppm on a one-hour average. Neither the one-

hour average nor the eight-hour average would be equaled or exceeded. Impacts with respect to CO hotspots are considered less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

AIR QUALITY PLAN

■ **IMPLEMENTATION OF THE PROPOSED PROJECT COULD CONFLICT WITH OR OBSTRUCT IMPLEMENTATION OF THE APPLICABLE AIR QUALITY PLAN.**

Impact Analysis: On December 7, 2012, the SCAQMD Governing Board approved the *2012 AQMP*, which outlines its strategies for meeting the NAAQS for $PM_{2.5}$ and ozone. The *2012 AQMP* was forwarded to CARB for inclusion into the California *State Implementation Plan* (*SIP*) on January 2013. Subsequently, the *2012 AQMP* was submitted to the U.S. EPA on February 13, 2013 as the 24-hour $PM_{2.5}$ *SIP* addressing the 2006 $PM_{2.5}$ NAAQS and as a limited update to the approved 8-hour ozone *SIP*. The 1-hour ozone attainment demonstration and vehicle miles traveled (VMT) emissions offset demonstration will also be submitted through CARB to the EPA. According to the SCAQMD's *2012 AQMP*, two main criteria must be addressed.

Criterion 1

With respect to the first criterion, SCAQMD methodologies require that an air quality analysis for a project include forecasts of project emissions in relation to contributing to air quality violations and delay of attainment.

a) Would the project result in an increase in the frequency or severity of existing air quality violations?

Since the consistency criteria identified under the first criterion pertain to pollutant concentrations, rather than to total regional emissions, an analysis of a project's pollutant emissions relative to localized pollutant concentrations is used as the basis for evaluating project consistency.

As previously discussed, localized concentrations of CO, NO_X, PM_{10}, and $PM_{2.5}$ would be less than significant during proposed project operations. Therefore, the proposed project would not result in an increase in the frequency or severity of existing air quality violations. Because ROGs are not a criteria pollutant, there is no ambient standard or localized threshold for ROGs. Due to the role ROG plays in ozone formation, it is classified as a precursor pollutant and only a regional emissions threshold has been established.

b) Would the project cause or contribute to new air quality violations?

As previously discussed, proposed project operations would result in emissions that would exceed the SCAQMD operational thresholds. Therefore, the proposed project would have the potential to cause or affect a violation of the ambient air quality standards.

c) *Would the project delay timely attainment of air quality standards or the interim emissions reductions specified in the AQMP?*

The proposed project would result in less than significant impacts with regard to localized concentrations during operations. As such, the proposed project would not delay the timely attainment of air quality standards or 2012 AQMP emissions reductions.

Criterion 2

With respect to the second criterion for determining consistency with SCAQMD and SCAG air quality policies, it is important to recognize that air quality planning within the Basin focuses on attainment of ambient air quality standards at the earliest feasible date. Projections for achieving air quality goals are based on assumptions regarding population, housing, and growth trends. Thus, the SCAQMD's second criterion for determining project consistency focuses on whether or not the proposed project exceeds the assumptions utilized in preparing the forecasts presented in the *2012 AQMP*. Determining whether or not a project exceeds the assumptions reflected in the *2012 AQMP* involves the evaluation of the three criteria outlined below. The following discussion provides an analysis of each of these criteria.

a) *Would the project be consistent with the population, housing, and employment growth projections utilized in the preparation of the AQMP?*

In the case of the *2012 AQMP*, three sources of data form the basis for the projections of air pollutant emissions: the *Comprehensive General Plan of the City of Duarte* (*General Plan*), *SCAG's Growth Management Chapter of the Regional Comprehensive Plan (*RCP), and SCAG's *2012-2035 Regional Transportation Plan/Sustainable Communities Strategy* (*2012-2035 RTP/SCS*). The *2012-2035 RTP/SCS* also provides socioeconomic forecast projections of regional population growth.

The project site is designated Gold Line Station Area Development Specific Plan by the *General Plan.* The project proposes the adoption of a specific plan/zone change as Duarte Station Specific Plan, a mixed use "transit village" development, consisting of residential, office, hotel, commercial/retail, and open space land uses. The proposed Specific Plan establishes the following land use designations: Mixed Use (MU) Station Plaza Mixed Use (SPMU), High Density Residential (HDR) and Recreation/Open Spaces (OS/REC). The proposed Specific Plan would allow for retail shops, boutiques, restaurants, small-scale entertainment amenities, and an outdoor plaza, all placed around the Gold Line Station. The MU designation incorporates a mixed use approach that allows for a full range of high density residential, office, hotel, and commercial uses. The HDR designation is anticipated to include condominiums and apartment units. The OS/REC designation provides green spaces throughout the Plan Area.

The proposed project is consistent with the *General Plan* designation as the project involves the preparation of a Specific Plan with a mix of retail and commercial uses. Thus, the proposed project is consistent with the types, intensity, and patterns of land use envisioned for the site vicinity in the *RCP*. The population, housing, and employment forecasts, which are adopted by SCAG's Regional Council, are based on the local plans and policies applicable to the City; these are used by SCAG in all phases of implementation and review. Additionally, as the SCAQMD has incorporated these same projections into the *2012 AQMP*, it can be concluded that the proposed project would be consistent with the projections.

b) Would the project implement all feasible air quality mitigation measures?

The proposed project would be required to comply with applicable emission reduction measures identified by the SCAQMD. These measures have been included as Mitigation Measures AQ-1 through AQ-4. As such, the proposed project meets this AQMP consistency criterion.

c) Would the project be consistent with the land use planning strategies set forth in the AQMP?

The proposed project would serve to implement various City and SCAG policies. The proposed project is located within a developed portion of the City, and is considered to be an infill development. The project site is located along Duarte Road and Highland Avenue in the vicinity of a mix of uses including residential, industrial, and institutional.

In conclusion, the determination of *2012 AQMP* consistency is primarily concerned with the long-term influence of a project on air quality in the Basin. The proposed project would be consistent with the goals and policies of the AQMP for control of fugitive dust. As discussed above, the proposed project's long-term influence would also be consistent with the SCAQMD and SCAG's goals and policies and is, therefore, considered consistent with the *2012 AQMP*.

However, the proposed project would potentially result in a long-term impact on the region's ability to meet State and Federal air quality standards due to the exceedance of operational ROG thresholds. Therefore, impacts would be significant and unavoidable with respect to ROG emissions, and less than significant for all other pollutant criterion emissions.

Mitigation Measures: Refer to Mitigation Measures AQ-1 through AQ-4. No additional mitigation measures are available.

Level of Significance: Significant Unavoidable Impact for Plan Consistency – ROG Emissions. Less Than Significant Impact for Plan Consistency for All Other Pollutant Criterion Emissions.

ODOR IMPACTS

■ **CONSTRUCTION AND OPERATION ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT COULD CREATE OBJECTIONAL ODORS AFFECTING A SUBSTANTIAL NUMBER OF PEOPLE**

Impact Analysis: According to the SCAQMD *CEQA Air Quality Handbook*, land uses associated with odor complaints typically include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies, and fiberglass molding. The proposed project does not include any uses identified by the SCAQMD as being associated with odors.

Construction activities associated with implementation of the proposed project may generate detectable odors from heavy-duty equipment exhaust. Construction-related odors would be short-term in nature and cease upon construction completion. Any impacts to existing adjacent land uses would be short-term and are considered less than significant.

Mitigation Measures*:* No mitigation measures are required.

Level of Significance: Less Than Significant Impact.\

5.5.5 CUMULATIVE IMPACTS

Table 4-1, *Cumulative Projects List*, identifies the related projects and other possible development in the area determined as having the potential to interact with the proposed project to the extent that a significant cumulative effect may occur. The following discussions are included per topic area to determine whether a significant cumulative effect would occur.

SHORT-TERM CONSTRUCTION AIR EMISSIONS

■ **SHORT-TERM CONSTRUCTION ACTIVITIES ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT AND OTHER RELATED CUMULATIVE PROJECTS COULD RESULT IN AIR POLLUTANT EMISSION IMPACTS OR EXPOSE SENSITIVE RECEPTORS TO SUBSTANTIAL POLLUTANT CONCENTRATIONS.**

Impact Analysis: The SCAQMD neither recommends quantified analyses of cumulative construction or operational emissions, nor does it provide separate methodologies or thresholds of significance to be used to assess cumulative construction or operational impacts. Instead, the SCAQMD recommends that a project's potential contribution to cumulative impacts should be assessed using the same significance criteria as those for project-specific impacts. Therefore, individual development projects that generate construction-related or operational emissions that exceed the SCAQMD recommended daily thresholds for project-specific impacts would also cause a cumulative considerable increase in emissions for those pollutants for which the Basin is nonattainment.

Of the projects that have been identified within the project study area, there are a number of related projects that have not been built or are currently under construction. Since a project applicant has no control over the timing or sequencing of the related projects, any quantitative analysis to ascertain the daily construction emissions that assumes multiple, concurrent construction would be speculative. Based on the projects identified in Section 4.0, Basis of Cumulative Analysis, the cities of Duarte, Irwindale, Monrovia, and Azusa anticipate several development projects.

With respect to the proposed project's construction-period air quality emissions and cumulative Basin conditions, the SCAQMD has developed strategies to reduce criteria pollutant emissions outlined in the *2012 AQMP* pursuant to FCAA mandates. As such, the proposed project would comply with SCAQMD Rule 403 requirements, and implement all feasible mitigation measures. In addition, the proposed project would comply with adopted *2012 AQMP* emissions control measures. Per SCAQMD rules and mandates, as well as the *CEQA* requirement that significant impacts be mitigated to the extent feasible, these same requirements (i.e., Rule 403 compliance, the implementation of all feasible mitigation measures, and compliance with adopted 2012 AQMP emissions control measures) would also be imposed on construction projects throughout the Basin, which would include each of the related projects listed in Section 4.0, Basis of Cumulative Analysis.

Compliance with SCAQMD rules and regulations would reduce construction-related impacts to a less than significant level during construction. Thus, it can be reasonably inferred that the project-related construction activities, in combination with those from other projects in the area, would not deteriorate the local air quality. Cumulative construction-related impacts would be less than significant.

Mitigation Measures: Refer to Mitigation Measures AQ-1 through AQ-4. No additional mitigation measures are required.

Level of Significance: Less Than Significant Impact With Mitigation Incorporated.

LONG-TERM OPERATIONAL AIR EMISSIONS

■ **IMPLEMENTATION OF THE PROPOSED PROJECT AND OTHER RELATED CUMULATIVE PROJECTS COULD RESULT IN SIGNIFICANT IMPACTS PERTAINING TO OPERATIONAL AIR EMISSIONS.**

Impact Analysis: Due to the Basin's nonattainment status for O_3, $PM_{2.5}$, and PM_{10}, additional emissions in excess of SCAQMD thresholds under a long-term condition for ROG, NO_X, $PM_{2.5}$, and PM_{10} would be considered significant and unavoidable for cumulative impacts. ROG emissions are projected to be above the significance thresholds for buildout conditions. Despite the fact that the proposed project is a transit-oriented development, proposed project-related operational emissions would still be significant and unavoidable for ROG. Thus, it can be reasonably inferred that the project-related operational activities, in combination with those from other projects in the area, would deteriorate the local air quality and lead to cumulative operational-related significant and unavoidable impacts.

Mitigation Measures: No feasible mitigation measures are available.

Level of Significance: Significant Unavoidable Impact for ROG emissions. Less Than Significant Impact for NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$.

5.5.6 SIGNIFICANT UNAVOIDABLE IMPACTS

With implementation of the proposed Duarte Station Specific Plan, significant unavoidable impacts would occur for:

- Project- and cumulative project-related operational emissions for ROG
- Plan Consistency - exceedance of operational ROG thresholds

All other air quality impacts associated with implementation of the proposed Duarte Station Specific Plan are either at less than significant levels or can be mitigated to less than significant levels.

If the City of Duarte approves the proposed Duarte Station Specific Plan, the City shall be required to cite their findings in accordance with *CEQA Guidelines* Section 15091 and prepare a Statement of Overriding Considerations in accordance with *CEQA Guidelines* Section 15093.

5.5.7 SOURCES CITED

California Air Resources Board, *Aerometric Data Analysis and Measurement System* (*ADAM) Air Quality Data Statistics*, http://www.arb.ca.gov/adam/welcome.html, accessed on July 15, 2013.

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5.6 GREENHOUSE GAS EMISSIONS

This section evaluates greenhouse gas (GHG) emissions associated with the proposed project and analyzes compliance with applicable regulations. Consideration of the project's consistency with applicable plans, policies, and regulations, as well as the introduction of new sources of GHGs, is included in this section. GHG technical data is included in Appendix E, Air Quality/Greenhouse Gas Emissions Data.

5.6.1 REGULATORY SETTING

FEDERAL

The Federal government is extensively engaged in international climate change activities in areas such as science, mitigation, and environmental monitoring. The U.S. Environmental Protection Agency (U.S. EPA) actively participates in multilateral and bilateral activities by establishing partnerships and providing leadership and technical expertise. Multilaterally, the United States is a strong supporter of activities under the United Nations Framework Convention on Climate Change (UNFCCC) and the Intergovernmental Panel on Climate Change (IPCC).

In 1988, the United Nations and the World Meteorological Organization established the IPCC to assess the scientific, technical, and socioeconomic information relevant to understanding the scientific basis of human-induced climate change, its potential impacts, and options for adaptation and mitigation. The most recent reports of the IPCC have emphasized the scientific consensus around the evidence that real and measurable changes to the climate are occurring, that they are caused by human activity, and that significant adverse impacts on the environment, the economy, and human health and welfare are unavoidable.

In December 2007, Congress passed the first increase in corporate average fleet fuel economy (CAFE) standards. The new CAFE standards represent an increase to 35 miles per gallon (mpg) by 2020. In March 2009, the Obama Administration announced that for the 2011 model year, the standard for cars and light trucks will be 27.3 mpg, the standard for cars will be 30.2 mpg; and standard for trucks would be 24.1 mpg. Additionally, in May 2009 President Barack Obama announced plans for a national fuel-economy and GHG emissions standard that would significantly increase mileage requirements for cars and trucks by 2016. The new requirements represent an average standard of 39 mpg for cars and 30 mpg for trucks by 2016.

In May 2010, EPA and Department of Transportation's National Highway Traffic Safety Administration (NHTSA) issued a joint Final Rule to establish a National Program comprised of new standards for light-duty vehicles that will reduce GHG emissions and improve fuel economy. In October 2012, EPA and NHTSA issued final rules to extend the National Program standards to further decrease greenhouse gas emissions and increase fuel economy for light-duty vehicles for model years 2017-2025. NHTSA is finalizing CAFÉ standards for model years 2017-2012 while issuing augural standards for 2022-2025 model years under the Energy and Security Act. EPA is finalizing GHG emission standards for 2017-2025 model years under the Clean Air Act and modifying changes to the regulations applicable to model years 2012-2016 in regards to air conditions performance, nitrous oxides measurement, off-cycle technology credits, and police and emergency vehicles.

In September 2009, the U.S. EPA finalized a GHG reporting and monitoring system that began on January 1, 2010. In general, this national reporting requirement will provide the EPA with accurate and timely GHG emissions data from facilities that emit 25,000 metric tons (MT) or more of carbon dioxide (CO_2) per year. This publicly available data will allow the reporters to track their own emissions, compare them to similar facilities, and aid in identifying cost-effective emissions reduction strategies. This new program covers approximately 85 percent of the nation's GHG emissions and applies to approximately 10,000 facilities. The reporting system is intended to provide a better understanding of where GHGs are coming from and will guide development of the best possible policies and programs to reduce emissions.

Currently, the U.S. EPA is moving forward with two key climate change regulatory proposals, one to establish a mandatory GHG reporting system and one to address the 2007 Supreme Court decision in *Massachusetts v. EPA* (Supreme Court Case 05-1120) regarding the U.S. EPA's obligation to make an endangerment finding under Section 202(a) of the Federal Clean Air Act (FCAA) with respect to GHGs. *Massachusetts v. EPA* was argued before the United States Supreme Court on November 29, 2006. Under the FCAA, the U.S. EPA is now obligated to issue rules regulating global warming pollution from all major sources. In April 2009, the U.S. EPA concluded that GHGs are a danger to public health and welfare, establishing the basis for GHG regulation.

STATE

Various statewide and local initiatives to reduce California's contribution to GHG emissions have raised awareness that, even though the various contributors to and consequences of global climate change are not yet fully understood, global climate change is occurring, and that there is a real potential for severe adverse environmental, social, and economic effects in the long term. Every nation emits GHGs and as a result makes an incremental cumulative contribution to global climate change; therefore, global cooperation will be required to reduce the rate of GHG emissions enough to slow or stop the human-caused increase in average global temperatures and associated changes in climatic conditions.

Executive Order B-18-12. Executive Order B-18-12 directs State agencies to significantly reduce energy purchases and GHG emissions. It sets goals to reduce entity-wide GHG emissions by at least 10 percent by 2015 and 20 percent by 2020 from a 2010 baseline. It also establishes goals to reduce grid-based energy purchases for State-owned buildings by at least 20 percent by 2018 and reduce other non-building, grid-based retail energy purchases by 20 percent by 2018 from a 2003 baseline. The Executive Order also consists of a Green Building Action Plan that directs all new State buildings and major renovations beginning design after 2025 and 50 percent of new facilities beginning design after 2020 to be constructed as Zero Net Energy facilities.

Executive Order S-1-07. Executive Order S-1-07 proclaims that the transportation sector is the main source of GHG emissions in California, generating more than 40 percent of statewide emissions. It establishes a goal to reduce the carbon intensity of transportation fuels sold in California by at least ten percent by 2020. This order also directs the California Air Resources Board (CARB) to determine whether this Low Carbon Fuel Standard (LCFS) could be adopted as a discrete early-action measure as part of the effort to meet the mandates in AB 32.

Executive Order S-3-05. Executive Order S-3-05 set forth a series of target dates by which statewide emissions of GHGs would be progressively reduced, as follows:

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

The Executive Order directed the secretary of the California Environmental Protection Agency (Cal/EPA) to coordinate a multi-agency effort to reduce GHG emissions to the target levels. The secretary will also submit biannual reports to the governor and California Legislature describing the progress made toward the emissions targets, the impacts of global climate change on California's resources, and mitigation and adaptation plans to combat these impacts. To comply with the executive order, the secretary of Cal/EPA created the California Climate Action Team (CAT), made up of members from various State agencies and commissions. The team released its first report in March 2006. The report proposed to achieve the targets by building on the voluntary actions of California businesses, local governments, and communities and through State incentive and regulatory programs.

Executive Order S-13-08. Executive Order S-13-08 seeks to enhance the State's management of climate impacts including sea level rise, increased temperatures, shifting precipitation, and extreme weather events by facilitating the development of State's first climate adaptation strategy. This will result in consistent guidance from experts on how to address climate change impacts in the State of California.

Executive Order S-14-08. Executive Order S-14-08 expands the State's Renewable Energy Standard to 33 percent renewable power by 2020. Additionally, Executive Order S-21-09 (signed on September 15, 2009) directs CARB to adopt regulations requiring 33 percent of electricity sold in the State come from renewable energy by 2020. CARB adopted the "Renewable Electricity Standard" on September 23, 2010, which requires 33 percent renewable energy by 2020 for most publicly owned electricity retailers.

Executive Order S-20-04. Executive Order S-20-04, the California Green Building Initiative, (signed into law on December 14, 2004), establishes a goal of reducing energy use in State-owned buildings by 20 percent from a 2003 baseline by 2015. It also encourages the private commercial sector to set the same goal. The initiative places the California Energy Commission (CEC) in charge of developing a building efficiency benchmarking system, commissioning and retro-commissioning (commissioning for existing commercial buildings) guidelines, and developing and refining building energy efficiency standards under Title 24 to meet this goal.

Executive Order S-21-09. Executive Order S-21-09, 33 percent Renewable Energy for California, directs CARB to adopt regulations to increase California's Renewable Portfolio Standard (RPS) to 33 percent by 2020. This builds upon SB 1078 (2002) which established the California RPS program, requiring 20 percent renewable energy by 2017, and SB 107 (2006) which advanced the 20 percent deadline to 2010, a goal which was expanded to 33 percent by 2020 in the 2005 Energy Action Plan II.

Assembly Bill 32 (California Global Warming Solutions Act of 2006). California passed the California Global Warming Solutions Act of 2006 (AB 32; *California Health and Safety Code* Division 25.5, Sections 38500 - 38599). AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and establishes a cap on statewide GHG emissions. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020. AB 32 specifies that regulations adopted in response to AB 1493 should be used to address GHG emissions from vehicles. However, AB 32 also includes language stating

that if the AB 1493 regulations cannot be implemented, then CARB should develop new regulations to control vehicle GHG emissions under the authorization of AB 32.

Assembly Bill 1493. AB 1493 (also known as the Pavley Bill) requires that CARB develop and adopt, by January 1, 2005, regulations that achieve "the maximum feasible reduction of GHG emitted by passenger vehicles and light-duty trucks and other vehicles determined by CARB to be vehicles whose primary use is noncommercial personal transportation in the State."

To meet the requirements of AB 1493, CARB approved amendments to the *California Code of Regulations* (*CCR*) in 2004 by adding GHG emissions standards to California's existing standards for motor vehicle emissions. Amendments to *CCR* Title 13, Sections 1900 and 1961 and adoption of 13 *CCR* Section 1961.1 require automobile manufacturers to meet fleet-average GHG emissions limits for all passenger cars, light-duty trucks within various weight criteria, and medium-duty weight classes for passenger vehicles (i.e., any medium-duty vehicle with a gross vehicle weight rating less than 10,000 pounds that is designed primarily to transport people), beginning with the 2009 model year. Emissions limits are reduced further in each model year through 2016. When fully phased in, the near-term standards will result in a reduction of about 22 percent in GHG emissions compared to the emissions from the 2002 fleet, while the mid-term standards will result in a reduction of about 30 percent.

Assembly Bill 3018. AB 3018 established the Green Collar Jobs Council (GCJC) under the California Workforce Investment Board (CWIB). The GCJC will develop a comprehensive approach to address California's emerging workforce needs associated with the emerging green economy. This bill will ignite the development of job training programs in the clean and green technology sectors.

Senate Bill 97. SB 97, signed in August 2007 (Chapter 185, Statutes of 2007; PRC Sections 21083.05 and 21097), acknowledges that climate change is a prominent environmental issue that requires analysis under the *California Environmental Quality Act* (*CEQA*). This bill directs the Governor's Office of Planning and Research (OPR), which is part of the State Natural Resources Agency, to prepare, develop, and transmit to CARB guidelines for the feasible mitigation of GHG emissions (or the effects of GHG emissions), as required by *CEQA*.

OPR published a technical advisory recommending that CEQA lead agencies make a good-faith effort to estimate the quantity of GHG emissions that would be generated by a proposed project. Specifically, based on available information, CEQA lead agencies should estimate the emissions associated with project-related vehicular traffic, energy consumption, water usage, and construction activities to determine whether project-level or cumulative impacts could occur, and should mitigate the impacts where feasible. OPR requested CARB technical staff to recommend a method for setting CEQA thresholds of significance as described in *CEQA Guidelines* Section 15064.7 that will encourage consistency and uniformity in the CEQA analysis of GHG emissions throughout the State.

The Natural Resources Agency adopted the CEQA Guidelines Amendments prepared by OPR, as directed by SB 97. On February 16, 2010, the Office of Administration Law approved the CEQA Guidelines Amendments, and filed them with the Secretary of State for inclusion in the *California Code of Regulations*. The CEQA Guidelines Amendments became effective on March 18, 2010.

Senate Bill 375. SB 375, signed in September 2008 (Chapter 728, Statutes of 2008), aligns regional transportation planning efforts, regional GHG reduction targets, and land use and housing allocation. SB 375 requires Metropolitan Planning Organizations (MPOs) to adopt a sustainable communities strategy (SCS) or alternative planning strategy (APS) that will prescribe land use allocation in that MPOs regional transportation plan. CARB, in consultation with MPOs, will provide each affected region with reduction targets for GHGs emitted by passenger cars and light trucks in the region for the years 2020 and 2035. These reduction targets will be updated every eight years but can be updated every four years if advancements in emissions technologies affect the reduction strategies to achieve the targets. CARB is also charged with reviewing each MPO's SCS or APS for consistency with its assigned targets. If MPOs do not meet the GHG reduction targets, transportation projects may not be eligible for funding programmed after January 1, 2012.

Senate Bills 1078 and 107. SB 1078 (Chapter 516, Statutes of 2002) requires retail sellers of electricity, including investor-owned utilities and community choice aggregators, to provide at least 20 percent of their supply from renewable sources by 2017. SB 107 (Chapter 464, Statutes of 2006) changed the target date to 2010.

Senate Bill 1368. SB 1368 (Chapter 598, Statutes of 2006) is the companion bill of AB 32 and was signed into law in September 2006. SB 1368 required the California Public Utilities Commission (CPUC) to establish a performance standard for baseload generation of GHG emissions by investor-owned utilities by February 1, 2007. SB 1368 also required the CEC to establish a similar standard for local publicly owned utilities by June 30, 2007. These standards could not exceed the GHG emissions rate from a baseload combined-cycle, natural gas fired plant. Furthermore, the legislation states that all electricity provided to California, including imported electricity, must be generated by plants that meet the standards set by CPUC and CEC.

CARB Scoping Plan

On December 11, 2008, CARB adopted its Scoping Plan, which functions as a roadmap to achieve GHG reductions in California required by AB 32 through subsequently enacted regulations. CARB's Scoping Plan contains the main strategies California will implement to reduce CO_2eq[1] emissions by 174 million metric tons (MT), or approximately 30 percent, from the State's projected 2020 emissions level of 596 million MT CO_2eq under a business as usual (BAU)[2] scenario. This is a reduction of 42 million MT CO_2eq, or almost ten percent, from 2002 to 2004 average emissions, but requires the reductions in the face of population and economic growth through 2020.

CARB's Scoping Plan calculates 2020 BAU emissions as the emissions that would be expected to occur in the absence of any GHG reduction measures. The 2020 BAU emissions estimate was derived by projecting emissions from a past baseline year using growth factors specific to each of the different economic sectors (e.g., transportation, electrical power, commercial and residential, industrial, etc.). CARB used three-year average emissions, by sector, for 2002 to

[1] Carbon Dioxide Equivalent (CO_2eq) - A metric measure used to compare the emissions from various greenhouse gases based upon their global warming potential.

[2] "Business as Usual" refers to emissions that would be expected to occur in the absence of GHG reductions. See http://www.arb.ca.gov/cc/inventory/data/forecast.htm. Note that there is significant controversy as to what BAU means. In determining the GHG 2020 limit, CARB used the above as the "definition." It is broad enough to allow for design features to be counted as reductions.

2004 to forecast emissions to 2020. At the time CARB's Scoping Plan process was initiated, 2004 was the most recent year for which actual data was available. The measures described in CARB's Scoping Plan are intended to reduce the projected 2020 BAU to 1990 levels, as required by AB 32.

LOCAL

South Coast Air Quality Management District

The South Coast Air Quality Management District (SCAQMD) adopted a *Policy on Global Warming and Stratospheric Ozone Depletion* in April 1990. The policy commits the SCAQMD to consider global impacts in rulemaking and in drafting revisions to the Air Quality Management Plan. In March 1992, the SCAQMD Governing Board reaffirmed this policy and adopted amendments to the policy to include the following directives:

- Phase out the use and corresponding emissions of CFCs, methyl chloroform (1,1,1-trichloroethane or TCA), carbon tetrachloride, and halons by December 1995;
- Phase out the large quantity use and corresponding emissions of HCFCs by the year 2000;
- Develop recycling regulations for HCFCs (e.g., SCAQMD Rules 1411 and 1415);
- Develop an emissions inventory and control strategy for methyl bromide; and
- Support the adoption of a California GHG emission reduction goal.

The legislative and regulatory activity detailed above is expected to require significant development and implementation of energy efficient technologies and shifting of energy production to renewable sources.

City of Duarte

The City of Duarte does not have any plans, policies, regulations, significance thresholds, or laws addressing climate change at this time. The *Duarte Municipal Code* Chapter 19.52 (Sustainable Development Practices) promotes natural resources conservation, increased energy efficiency, and use of sustainable practices in the development process and the implementation of State laws involving reducing greenhouse gas emissions, water conservation and other resource conservation directives for all new construction in the City.

On November 13, 2012, the City adopted an *Energy Action Plan*, created in partnership with the San Gabriel Valley Council of Governments (SGVCOG) and Southern California Edison (SCE). The Plan provides the City guidance in following the California's Long Term Energy Efficiency Strategic Plan (CEESP) by ascertaining existing and future energy use and develops an energy efficiency strategy to meet future energy reduction goals. As the Plan is a part of a unified regional framework, it also assists in identifying a clear path to successfully implementing actions, policies, and goals that will achieve the City's reduction targets. Additionally, the City promotes utility company incentive programs to retrofit existing development with energy efficient lighting, air conditioning and heating systems to reduce energy consumption.

5.6.2 ENVIRONMENTAL SETTING

The project site lies within the southern portion of the South Coast Air Basin (Basin). The Basin 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 Basin 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 Basin's terrain and geographical location (i.e., a coastal plain with connecting broad valleys and low hills) determine its distinctive climate.

The general region lies in the semi-permanent high-pressure zone of the eastern Pacific. The climate is mild and tempered by cool sea breezes. The usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds. The extent and severity of the air pollution problem in the Basin is a function of the area's natural physical characteristics (weather and topography), as well as man-made influences (development patterns and lifestyle). Factors such as wind, sunlight, temperature, humidity, rainfall, and topography all affect the accumulation and/or dispersion of pollutants throughout the Basin.

SCOPE OF ANALYSIS FOR CLIMATE CHANGE

The study area for climate change and the analysis of GHG emissions is broad as climate change is influenced by world-wide emissions and their global effects. However, the study area is also limited by the *CEQA Guidelines* Section 15064(d), which directs lead agencies to consider an "indirect physical change" only if that change is a reasonably foreseeable impact which may be caused by the project.

The baseline against which to compare potential impacts of the project includes the natural and anthropogenic drivers of global climate change, including world-wide GHG emissions from human activities that have grown more than 70 percent between 1970 and 2004. The State of California is leading the nation in managing GHG emissions. Accordingly, the impact analysis for this project relies on guidelines, analyses, policy, and plans for reducing GHG emissions established by CARB.

GLOBAL CLIMATE CHANGE – GREENHOUSE GASES

The natural process through which heat is retained in the troposphere is called the "greenhouse effect."[3] The greenhouse effect traps heat in the troposphere through a threefold process as follows: Short wave radiation emitted by the Sun is absorbed by the Earth; the Earth emits a portion of this energy in the form of long wave radiation; and GHG in the upper atmosphere absorb this long wave radiation and emit this long wave radiation into space and toward the Earth. This "trapping" of the long wave (thermal) radiation emitted back toward the Earth is the underlying process of the greenhouse effect.

[3] The troposphere is the bottom layer of the atmosphere, which varies in height from the Earth's surface to 10 to 12 kilometers.

The most abundant GHGs are water vapor and carbon dioxide. Many other trace gases have greater ability to absorb and re-radiate long wave radiation; however, these gases are not as plentiful. For this reason, and to gauge the potency of GHGs, scientists have established a Global Warming Potential (GWP) for each GHG based on its ability to absorb and re-radiate long wave radiation. GHGs normally associated with the proposed project include the following:[4]

- *Water Vapor (H_2O)*. Although water vapor has not received the scrutiny of other GHGs, it is the primary contributor to the greenhouse effect. Natural processes, such as evaporation from oceans and rivers, and transpiration from plants, contribute 90 percent and 10 percent of the water vapor in our atmosphere, respectively. The primary human related source of water vapor comes from fuel combustion in motor vehicles; however, this is not believed to contribute a significant amount (less than one percent) to atmospheric concentrations of water vapor. The IPCC has not determined a Global Warming Potential for water vapor.

- *Carbon Dioxide (CO_2)*. Carbon dioxide is primarily generated by fossil fuel combustion in stationary and mobile sources. Due to the emergence of industrial facilities and mobile sources in the past 250 years, the concentration of carbon dioxide in the atmosphere has increased 39 percent.[5] Carbon dioxide is the most widely emitted GHG and is the reference gas (Global Warming Potential of 1) for determining Global Warming Potentials for other GHGs.

- *Methane (CH_4)*. Methane is emitted from biogenic sources, incomplete combustion in forest fires, landfills, manure management, and leaks in natural gas pipelines. In the United States, the top three sources of methane are landfills, natural gas systems, and enteric fermentation. Methane is the primary component of natural gas, which is used for space and water heating, steam production, and power generation. The Global Warming Potential of methane is 21.

- *Nitrous Oxide (N_2O)*. Nitrous oxide is produced by both natural and human related sources. Primary human related sources include agricultural soil management, animal manure management, sewage treatment, mobile and stationary combustion of fossil fuel, adipic acid production, and nitric acid production. The Global Warming Potential of nitrous oxide is 310.

- *Hydrofluorocarbons (HFCs)*. HFCs are typically used as refrigerants for both stationary refrigeration and mobile air conditioning. The use of HFCs for cooling and foam blowing is growing, as the continued phase out of chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs) gains momentum. The Global Warming Potential of HFCs range from 140 for HFC-152a to 11,700 for HFC-23.[6]

[4] All Global Warming Potentials are given as 100 year GWP. Unless noted otherwise, all Global Warming Potentials were obtained from the Intergovernmental Panel on Climate Change. Climate Change (Intergovernmental Panel on Climate Change, *Climate Change, The Science of Climate Change – Contribution of Working Group I to the Second Assessment Report of the IPCC*, 1996).

[5] U.S. Environmental Protection Agency, *Inventory of United States Greenhouse Gas Emissions and Sinks 1990 to 2010*, April 2012.

[6] United States Environmental Protection Agency, *Greenhouse Gas Emissions – Emissions of Fluorinated Gases,* June 14, 2012. http://epa.gov/climatechange/ghgemissions/gases/fgases.html.

- *Perfluorocarbons (PFCs)*. Perfluorocarbons are compounds consisting of carbon and fluorine. They are primarily created as a byproduct of aluminum production and semiconductor manufacturing. Perfluorocarbons are potent GHGs with a Global Warming Potential several thousand times that of carbon dioxide, depending on the specific PFC. Another area of concern regarding PFCs is their long atmospheric lifetime (up to 50,000 years).[7] The Global Warming Potential of PFCs range from 6,500 to 9,200.

- *Sulfur hexafluoride (SF_6)*. Sulfur hexafluoride is a colorless, odorless, nontoxic, nonflammable gas. It is most commonly used as an electrical insulator in high voltage equipment that transmits and distributes electricity. Sulfur hexafluoride is the most potent GHG that has been evaluated by the Intergovernmental Panel on Climate Change with a Global Warming Potential of 23,900. However, its global warming contribution is not as high as the Global Warming Potential would indicate due to its low mixing ratio compared to carbon dioxide (4 parts per trillion [ppt] in 1990 versus 365 parts per million [ppm], respectively).[8]

In addition to the six major GHGs discussed above (excluding water vapor), many other compounds have the potential to contribute to the greenhouse effect. Some of these substances were previously identified as stratospheric ozone (O_3) depletors; therefore, their gradual phase out is currently in effect. The following is a listing of these compounds:

- *Hydrochlorofluorocarbons (HCFCs)*. HCFCs are solvents, similar in use and chemical composition to CFCs. The main uses of HCFCs are for refrigerant products and air conditioning systems. As part of the Montreal Protocol, all developed countries that adhere to the Montreal Protocol are subject to a consumption cap and gradual phase out of HCFCs. The United States is scheduled to achieve a 100 percent reduction to the cap by 2030. The Global Warming Potentials of HCFCs range from 93 for HCFC-123 to 2,000 for HCFC-142b.[9]

- *1,1,1 trichloroethane*. 1,1,1 trichloroethane or methyl chloroform is a solvent and degreasing agent commonly used by manufacturers. The Global Warming Potential of methyl chloroform is 110 times that of carbon dioxide.[10]

- *Chlorofluorocarbons (CFCs)*. CFCs are used as refrigerants, cleaning solvents, and aerosols spray propellants. CFCs were also part of the U.S. Environmental Protection Agency's (EPA) Final Rule (57 FR 3374) for the phase out of O_3 depleting substances. Currently, CFCs have been replaced by HFCs in cooling systems and a variety of alternatives for cleaning solvents. Nevertheless, CFCs remain suspended in the atmosphere contributing to the greenhouse effect. CFCs are potent GHGs with Global Warming Potentials ranging from 4,600 for CFC 11 to 14,000 for CFC 13.[11]

[7] Ibid.
[8] Ibid.
[9] United States Environmental Protection Agency, *Protection of Stratospheric Ozone: Listing of Global Warming Potential for Ozone Depleting Substances*, dated November 7, 2006. http://www.epa.gov/EPA-AIR/1996/January/Day-19/pr-372.html.
[10] Ibid.
[11] United States Environmental Protection Agency, *Class I Ozone Depleting Substances*, August 19, 2010. http://www.epa.gov/ozone/ods.html.

5.6.3 SIGNIFICANCE THRESHOLD CRITERIA

At this time, there is no absolute consensus in the State of California among CEQA lead agencies regarding the analysis of global climate change and the selection of significance criteria. In fact, numerous organizations, both public and private, have released advisories and guidance with recommendations designed to assist decision-makers in the evaluation of GHG emissions given the current uncertainty regarding when emissions reach the point of significance.

Lead agencies may elect to rely on thresholds of significance recommended or adopted by State or regional agencies with expertise in the field of global climate change (*CEQA Guidelines* Section 15064.7(c).) *CEQA* leaves the determination of significance to the reasonable discretion of the lead agency and encourages lead agencies to develop and publish thresholds of significance to use in determining the significance of environmental effects. However, the City of Duarte has not yet established specific quantitative significance thresholds for GHG emissions for development projects.

The SCAQMD has formed a GHG CEQA Significance Threshold Working Group (Working Group) to provide guidance to local lead agencies on determining significance for GHG emissions in their CEQA documents. As of the last Working Group meeting (Meeting No. 15) held in September 2010, the SCAQMD is proposing to adopt a tiered approach for evaluating GHG emissions for development projects where SCAQMD is not the lead agency.[12]

With the tiered approach, the project is compared with the requirements of each tier sequentially and would not result in a significant impact if it complies with any tier. Tier 1 excludes projects that are specifically exempt from SB 97 from resulting in a significant impact. Tier 2 excludes projects that are consistent with a GHG reduction plan that has a certified final CEQA document and complies with AB 32 GHG reduction goals. Tier 3 excludes projects with annual emissions lower than a screening threshold. For all non-industrial projects, the SCAQMD is proposing a screening threshold of 3,000 $MTCO_2eq$ per year. SCAQMD concluded that projects with emissions less than the screening threshold would not result in a significant cumulative impact.

Tier 4 consists of three decision tree options. Under the Tier 4 first option, the project would be excluded if design features and/or mitigation measures resulted in emissions 30 percent lower than business as usual emissions. Under the Tier 4 second option the project would be excluded if it had early compliance with AB 32 through early implementation of CARB's Scoping Plan measures. Under the Tier 4 third option, project would be excluded if was below an efficiency-based threshold of 4.8 $MTCO_2eq$ per service population (SP) per year.[13] Tier 5 would exclude projects that implement offsite mitigation (GHG reduction projects) or purchase offsets to reduce GHG emission impacts to less than the proposed screening level.

[12] The most recent SCAQMD GHG CEQA Significance Threshold Working Group meeting was held on September 2010.

[13] The project-level efficiency-based threshold of 4.8 $MTCO_2eq$ per SP per year is relative to the 2020 target date. The SCAQMD has also proposed efficiency-based thresholds relative to the 2035 target date to be consistent with the GHG reduction target date of SB 375. GHG reductions by the SB 375 target date of 2035 would be approximately 40 percent. Applying this 40 percent reduction to the 2020 targets results in an efficiency threshold for plans of 4.1 $MTCO_2eq$ per SP per year and an efficiency threshold at the project level of 3.0 $MTCO_2eq$/year.

The 30 percent below business as usual threshold has been selected as the significance threshold, as it is most applicable to the proposed project. The 30 percent below business as usual threshold is used in addition to the qualitative thresholds of significance set forth below from Section VII of *CEQA Guidelines* Appendix G.

CEQA SIGNIFICANCE CRITERIA

The issues presented in the Initial Study Environmental Checklist (*CEQA Guidelines* Appendix G) have been utilized as thresholds of significance in this Section. Accordingly, a project may create a significant environmental impact if it causes one or more of the following to occur:

- Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment; refer to Impact Statement GHG-1.

- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases; refer to Impact Statement GHG-2.

Based on these significance thresholds and criteria, the project's effects have been categorized as either "no impact," a "less than significant impact," or a "potentially significant impact." Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a significant unavoidable impact.

The standards used to evaluate the significance of impacts are often qualitative rather than quantitative because appropriate quantitative standards are either not available for many types of impacts or are not applicable for some types of projects.

5.6.4 PROJECT IMPACTS AND MITIGATION MEASURES

GREENHOUSE GAS EMISSIONS

■ **GREENHOUSE GAS EMISSIONS GENERATED BY DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT COULD HAVE A SIGNIFICANT IMPACT ON GLOBAL CLIMATE CHANGE.**

Impact Analysis: The proposed project's "existing business as usual" and "proposed business as usual" GHG emissions have been calculated. As previously stated, "Business as Usual" refers to emissions that would be expected to occur in the absence of GHG reduction measures. This allows for a more direct comparison of existing and proposed conditions to more adequately account for what the "net" emissions would be.

The existing condition GHG emissions account for the operation of the existing 313,955 square feet of buildings and the existing measured trip generation at the project site (1,808 daily trips). The proposed business as usual GHG emissions account for the construction and operation of proposed 12,000 square feet of retail, 400,000 square feet of office, a 250-room hotel, and 475 multi-family dwelling units and forecast trip generation (7,259 net new daily trips).

Direct Project-Related Sources of Greenhouse Gases

Direct project-related GHG emissions for "business as usual" conditions include emissions from construction activities, area sources, and mobile sources. *Table 5.6-1*, *Business As Usual Greenhouse Gas Emissions*, presents the estimated CO_2, N_2O, and CH_4 emissions.

Table 5.6-1
Business As Usual Greenhouse Gas Emissions

Source	CO_2	CH_4		N_2O		Total Metric Tons of CO_2eq
	Metric Tons/year[1]	Metric Tons/year[1]	Metric Tons of CO_2eq[2]	Metric Tons/year[1]	Metric Tons of CO_2eq[2]	
EXISTING GHG EMISSIONS						
Direct Emissions						
▪ Area Source	0.01	0.00	0.00	0.00	0.00	0.01
▪ Mobile Source	2,627.10	0.12	2.52	0.00	0.00	2,629.62
Total Unmitigated Direct Emissions[3]						
Indirect Emissions						
▪ Energy	1,488.55	0.06	1.33	0.02	4.90	1,494.77
▪ Water Demand	293.56	2.38	49.94	0.06	18.10	361.61
▪ Waste	79.02	4.67	98.07	0.00	0.00	177.10
Total Unmitigated Indirect Emissions[3]	*4,488.23*	*7.23*	*151.87*	*0.07*	*23.00*	*4,663.11*
Total Project-Related Emissions[3]	***4,663.11 MTCO₂eq/yr***					
PROPOSED BUSINESS AS USUAL GHG EMISSIONS						
Direct Emissions						
▪ Construction (amortized over 30 years)	108.58	0.01	0.22	0.00	0.00	108.83
▪ Area Source	155.43	0.16	3.34	0.00	1.06	159.83
▪ Mobile Source	11,422.11	0.53	11.16	0.00	0.00	11,433.27
Total Unmitigated Direct Emissions[3]	*11,686.12*	*0.70*	*14.72*	*0.00*	*1.06*	*11,701.93*
Indirect Emissions						
▪ Energy	4,050.24	0.16	3.36	0.05	14.60	4,068.20
▪ Solid Waste	150.21	8.88	186.42	0.00	0.00	336.63
▪ Water Demand	646.37	3.59	75.36	0.09	27.87	749.60
Total Unmitigated Indirect Emissions[3]	*4,846.82*	*12.63*	*265.14*	*0.14*	*42.47*	*5,154.43*
Total Project-Related Emissions[3]	**16,856.36 MTCO₂eq/year**					
TOTAL NET GHG EMISSIONS[3]	**12,193.19 MTCO₂eq/year**					

Notes:
1. Emissions calculated using the CalEEMod computer model.
2. CO_2 Equivalent values calculated using the EPA Website, *Greenhouse Gas Equivalencies Calculator*, http://www.epa.gov/cleanenergy/energy-resources/calculator.html, accessed June 2013.
3. Totals may be slightly off due to rounding.

Refer to Appendix E, Air Quality/Greenhouse Gas Emissions Data, for detailed model input/output data.

The California Emissions Estimator Model (CalEEMod) computer model outputs contained within the Appendix E, Air Quality/Greenhouse Gas Emissions Data, were used to calculate mobile source, area source, and construction related GHG emissions. Operational GHG estimations are based on energy emissions from natural gas usage and automobile emissions. CalEEMod relies upon construction phasing and project specific land use data to calculate emissions; refer to Appendix E.

GHGs associated with the proposed project area sources and mobile sources would be 159.83 $MTCO_2eq$/year and 11,433.27 $MTCO_2eq$/year, respectively. GHG emissions from construction would result in 3,264.85 $MTCO_2eq$ for all construction phases. Construction GHG emissions are typically summed and amortized over the lifetime of the project (assumed to be 30 years), then added to the operational emissions.[14] Total proposed project-related direct operational emissions would result in 11,701.93 $MTCO_2eq$/year.

Indirect Project Related Sources of Greenhouse Gases

Energy Consumption. Energy Consumption emissions were calculated using the CalEEMod model and project-specific land use data. Electricity would be provided to the project site via Southern California Edison. The proposed project would indirectly result in 4,068.20 $MTCO_2eq$/year due to energy consumption; refer to *Table 5.6-1*.

Solid Waste. Solid waste associated with operations of the proposed project would result in 336.63 $MTCO_2eq$/year; refer to *Table 5.6-1*.

Water Demand. California American Water (Cal-Am) would be the main water supply provider to the proposed project. Emissions from indirect energy impacts due to water supply would result in 749.60 $MTCO_2eq$/year.

Total Project-Related Sources of Greenhouse Gases. As shown in *Table 5.6-1*, the total amount of project-related "business as usual" GHG emissions from direct and indirect sources combined would total 16,856.36 $MTCO_2eq$/year, and a net increase of 12,193.25 $MTCO_2eq$/year over existing conditions.

Reduced Greenhouse Gas Emissions

As shown in *Table 5.6-1*, the net increase in proposed "business as usual" GHG emissions above the existing condition is 12,193.25 $MTCO_2eq$/yr. GHG reductions associated with the proposed project were calculated using CalEEMod. *Table 5.6-2*, *Reduced Proposed Greenhouse Gas Emissions*, shows the calculated reductions in GHG emissions through implementation of the project design features (e.g., transit station, mix of uses, etc.) and presents the net increase in emissions between existing GHG emissions and proposed reduced GHG emissions.

Conclusion

As shown in *Table 5.6-1*, "business as usual" emissions would be 16,856.36 $MTCO_2eq$/year and the reduced project emissions would be 11,281.27 $MTCO_2eq$/year. The existing land uses on the project site generate 4,663.11 $MTCO_2eq$/year. Therefore, the proposed project's net

[14] The project lifetime is based on the standard 30-year assumption of the South Coast Air Quality Management District (http://www.aqmd.gov/hb/2008/December/081231a.htm).

increase in GHG emissions would be 12,193.25 $MTCO_2eq$/year under a business as usual scenario, and 6,618.16 $MTCO_2eq$/year when accounting for the project's design features.

The proposed project includes retail, office, hotel, and residential uses. The project design features reduce emissions in the transportation, water, solid waste, and land use emission sectors. The project design features would reduce the net GHG emissions by 45 percent from a business as usual scenario. Therefore, GHG emissions would be reduced from the business as usual scenario by more than 30 percent. In addition, the proposed Duarte Station Specific Plan provides goal and objectives for sustainable development practices that would further reduce GHG emissions. The objectives focus on compliance with the City's *Development Code* on Levels of Sustainable Development Practices and City regulations and standards on construction and demolition waste disposal. Other objectives include considering building layout, siting and design to not preclude alternative energy production on-site, maximizing energy efficiency through local and state standards and LEED principles, and integrating water-efficient design features and drought-tolerant landscaping to reduce heat island effects within the Plan Area. Therefore, impacts in this regard would be less than significant.

Table 5.6-2
Reduced Proposed Greenhouse Gas Emissions

GHG Source	Existing Business as Usual GHG Emissions ($MTCO_2eq/yr$)[1]	Proposed Business As Usual GHG Emissions ($MTCO_2eq/yr$)[1]	Project Design Feature Applied in CalEEMod	Resultant GHG Emissions ($MTCO_2eq/yr$)[1]
Mobile	2,629.62	11,433.27	Increase Density (25 dwelling units/acre and 86 jobs/acre) Increase Transit Accessibility (project proposes a light rail station) Increase Transit Frequency (project proposes new light rail station)	6,196.27
Area	0.01	159.83	Only Natural Gas Hearth Use Low VOC Paint	111.48
Energy	1,494.77	4,068.20	N/A	4,068.20
Water	361.61	749.60	Install Low Flow Bathroom Faucets Install Low Flow Toilets Install Low Flow Showers Use Water Efficient Irrigation Systems	628.18
Waste	177.10	366.63	Institute Recycling and Composting Services	168.31
Construction	N/A	108.83	N/A	108.77
TOTAL	***4,663.11***	***16,856.30***	***N/A***	***11,281.27***
TOTAL BUSINESS AS USUAL NET EMISSIONS (Proposed Reduced GHG Emissions – Existing Business as Usual Emissions)			***(16,856.36 $MTCO_2eq/yr$ – 4,663.11 $MTCO_2eq/yr$) = 12,193.25 $MTCO_2eq/yr$***	
TOTAL NET EMISSIONS (With Reductions) (Proposed Reduced GHG Emissions – Existing Business as Usual Emissions)			***(11,281.27 $MTCO_2eq/yr$ – 4,663.11 $MTCO_2eq/yr$) = 6,618.16 $MTCO_2eq/yr$***	
Reduction from Business As Usual			***45% Less Than Significant Impact***	

Notes:
1. Emissions calculated using the CalEEMod computer model.
Refer to Appendix E, Air Quality/Greenhouse Gas Emissions Data, for detailed model input/output data.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

CONSISTENCY WITH APPLICABLE GHG PLANS, POLICIES, OR REGULATIONS

■ **IMPLEMENTATION OF THE PROPOSED PROJECT COULD CONFLICT WITH AN APPLICABLE GREENHOUSE GAS REDUCTION PLAN, POLICY, OR REGULATION.**

Impact Analysis: The City of Duarte does not have an applicable plan, policy, or regulation adopted for the purpose of reducing the emissions of GHGs. The *Duarte Municipal Code* Chapter 19.52 (Sustainable Development Practices) promotes natural resources conservation, increased energy efficiency, and use of sustainable practices in the development process and the implementation of State laws involving reducing GHG emissions, water conservation and other resource conservation directives for all new construction in the City. The City also adopted an *Energy Action Plan* on November 13, 2012, created in partnership with the San Gabriel Valley Council of Governments (SGVCOG) and Southern California Edison (SCE). The Plan provides the City guidance in following the California's Long Term Energy Efficiency Strategic Plan (CEESP) by ascertaining existing and future energy use and develops an energy efficiency strategy to meet future energy reduction goals. As discussed above, the proposed project would reduce its GHG emissions by 45 percent from a business as usual scenario and would not conflict with these existing and potential City policies.

In addition, the proposed project would also be subject to all applicable regulatory requirements, further reducing project-related GHG emissions. The proposed project is a transit-oriented development with a mix of commercial, retail, hotel, and residential uses that would inherently reduce vehicle trips, vehicle miles traveled, and related GHG emissions. The proposed project would not conflict with or impede implementation of reduction goals identified in AB 32 and other strategies to help reduce GHG emissions. Therefore, the proposed project would not conflict with an applicable GHG reduction plan, policy, or regulation. Impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.6.5 CUMULATIVE IMPACTS AND MITIGATION MEASURES

Table 4-1, Cumulative Projects List, identifies the related projects and other possible development in the area determined as having the potential to interact with the proposed project to the extent that a significant cumulative effect may occur. The following discussions are included per topic area to determine whether a significant cumulative effect would occur.

■ **GREENHOUSE GAS EMISSIONS GENERATED BY IMPLEMENTATION OF THE PROPOSED PROJECT AND OTHER RELATED CUMULATIVE PROJECTS COULD HAVE A SIGNIFICANT IMPACT ON GLOBAL CLIMATE CHANGE.**

Impact Analysis: As stated above, due to the project design elements, the proposed project would result in a less than significant impact regarding GHG emissions. The proposed project is

a transit-oriented development with a mix of uses that would inherently reduce vehicle trips, vehicle miles traveled, and related GHG emissions.

On December 30, 2009, the Natural Resources Agency adopted the CEQA Guideline Amendments prepared by Office of Planning and Research (OPR), as directed by SB 97. On February 16, 2010, the Office of Administration Law approved the CEQA Guidelines Amendments, and filed them with the Secretary of State for inclusion in the *California Code of Regulations*. The CEQA Guidelines Amendments became effective on March 18, 2010. The Natural Resources Agency originally proposed to add subdivision (f) to Section 15130 to clarify that Sections 21083 and 21083.05 of the Public Resources Code do not require a detailed analysis of GHG emissions solely due to the emissions of other projects (i.e., CEQA Guidelines Section 15130(a)(1); *Santa Monica Chamber of Commerce v. City of Santa Monica* (2002) 101 Cal.App.4th 786, 799). Rather, the proposed subdivision (f) would have provided that a detailed analysis is required when evidence shows that the incremental contribution of the project's GHG emissions is cumulatively considerable when added to other cumulative projects (i.e., *Communities for a Better Environment v. California Resources Agency* (2002), supra, 103 Cal.App.4th at 119-120). In essence, the proposed addition would be a restatement of law as applied to GHG emissions. Analysis of GHG emissions as a cumulative impact is consistent with case law arising under the National Environmental Policy Act (e.g., *Center for Biological Diversity v. National Highway Traffic Safety Administration*, 538 F.3d 1172, 1215-1217 [9th Cir. 2008]). Other portions of the CEQA Guideline Amendments address how lead agencies may determine whether a project's emissions are cumulatively considerable (e.g., Proposed Sections 15064(h)(3) and 15064.4). However, public comments noted that the new subdivision merely restated the law, and was capable of misinterpretation. The Natural Resources Agency, therefore, determined that because other provisions of the CEQA Guideline Amendments address the analysis of GHG emissions as a cumulative impact, and because the reasoning of those is fully explained in the Initial Statement of Reasons, subdivision (f) should not be added to the CEQA Guidelines. The deletion was reflected in the revisions that were made available for further public review and comment on October 23, 2009, and was not adopted as part of the CEQA Guidelines Amendments that became effective on March 18, 2010.

It is generally the case that an individual project of this size and nature is of insufficient magnitude by itself to influence climate change or result in a substantial contribution to the global GHG inventory.[15] GHG impacts are recognized as exclusively cumulative impacts; there are no non-cumulative GHG emission impacts from a climate change perspective.[16] The additive effect of the project's GHG emissions would not result in a reasonably foreseeable cumulatively considerable contribution to global climate change. In addition, the proposed project as well as other cumulative related projects would also be subject to all applicable regulatory requirements, which would further reduce GHG emissions. The proposed project would result in a less than significant impact regarding GHG emissions. Therefore, the proposed project's cumulative GHG emissions would be considered less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

[15] California Air Pollution Control Officers Association, C*EQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act*, 2008.
[16] Ibid.

5.6.6 SIGNIFICANT UNAVOIDABLE IMPACTS

Implementation of the proposed project would result in less than significant project and cumulative impacts related to GHG emissions. As such, no significant unavoidable impacts would result from implementation of the Duarte Station Specific Plan.

5.6.7 SOURCES CITED

California Air Pollution Control Officers Association, C*EQA & Climate Change: Evaluating and Addressing Greenhouse Gas Emissions from Projects Subject to the California Environmental Quality Act*, 2008.

City of Duarte, *Energy Action Plan,* November 2012. http://www.accessduarte.com/~accessdu/images/stories/City_departments/city_manager/city_clerk/agendas_minutes/2012/energy%20action%20plan%20pt.%201.pdf.

Intergovernmental Panel on Climate Change, *Climate Change, The Science of Climate Change – Contribution of Working Group I to the Second Assessment Report of the IPCC*, 1996.

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United States Environmental Protection Agency, *Protection of Stratospheric Ozone: Listing of Global Warming Potential for Ozone Depleting Substances*, dated November 7, 2006. http://www.epa.gov/EPA-AIR/1996/January/Day-19/pr-372.html.

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5.7 NOISE

The purpose of this section is to analyze project-related noise source impacts on-site and to surrounding land uses. This section evaluates short-term construction-related impacts, as well as future buildout conditions. Information in this section was obtained from the *Duarte General Plan Noise Element*, dated 2005, and the *Duarte Municipal Code* (*Municipal Code*). For the purposes of mobile source noise modeling and contour distribution, traffic information contained in the *Duarte Station Specific Plan Traffic Impact Analysis,* dated August 29, 2013, was utilized; refer to Appendix D, Traffic Impact Analysis.

5.7.1 REGULATORY SETTING

This section summarizes the laws, ordinances, regulations, and standards that are applicable to the project. Regulatory requirements related to environmental noise are typically promulgated at the local level. However, Federal and State agencies provide standards and guidelines to the local jurisdictions.

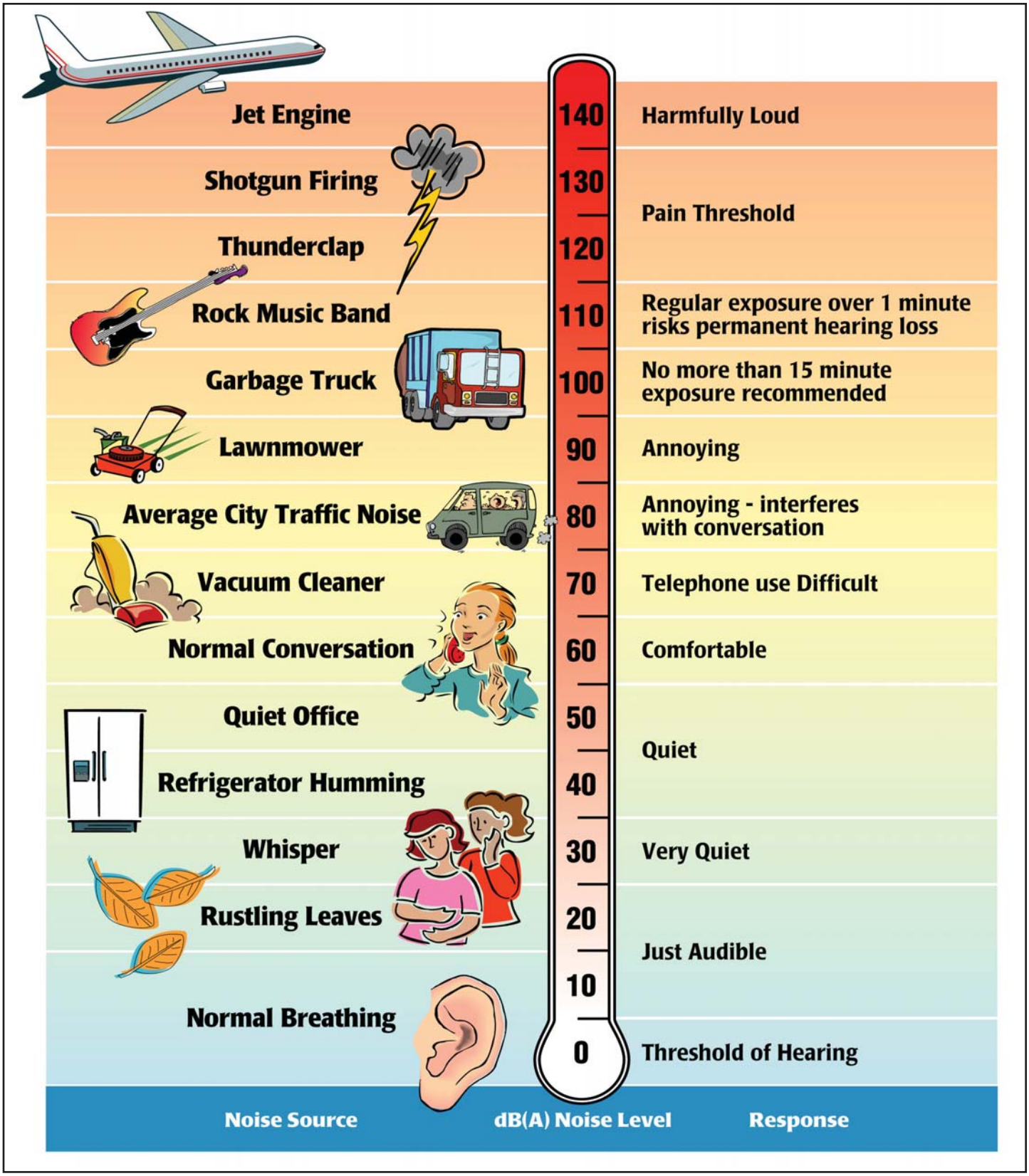
Sound is described in terms of the loudness (amplitude) of the sound and frequency (pitch) of the sound. The standard unit of measurement of the loudness of sound is the decibel (dB). Since the human ear is not equally sensitive to sound at all frequencies, a special frequency-dependent rating scale has been devised to relate noise to human sensitivity. The A-weighted decibel scale (dBA) performs this compensation by discriminating against frequencies in a manner approximating the sensitivity of the human ear.

Decibels are based on the logarithmic scale. The logarithmic scale compresses the wide range in sound pressure levels to a more usable range of numbers in a manner similar to the Richter scale used to measure earthquakes. In terms of human response to noise, a sound 10 dBA higher than another is judged to be twice as loud, and 20 dBA higher four times as loud, and so forth. Everyday sounds normally range from 30 dBA (very quiet) to 100 dBA (very loud). Examples of various sound levels in different environments are illustrated on *Exhibit 5.7-1*, *Sound Levels and Human Response*.

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; and
- The community response to changes in the community noise environment.

Numerous methods have been developed to measure sound over a period of time; refer to *Table 5.7-1*, *Noise Descriptors*.



Source: Melville C. Branch and R. Dale Beland, *Outdoor Noise in the Metropolitan Environment*, 1970.
Environmental Protection Agency, *Information on Levels of Environmental Noise Requisite to Protect Public Health and Welfare with an Adequate Margin of Safety* (EPA/ONAC 550/9-74-004), March 1974.

Table 5.7-1
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 measured sound to a reference pressure (20 micropascals).
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 (L_{eq})	The sound level containing the same total energy as a time varying signal over a given time period. The L_{eq} is the value that expresses the time averaged total energy of a fluctuating sound level.
Maximum Sound Level (L_{max})	The highest individual sound level (dBA) occurring over a given time period.
Minimum Sound Level (L_{min})	The lowest individual sound level (dBA) occurring over a given time period.
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 are +5 dBA for the evening, 7:00 PM to 10:00 PM, and +10 dBA for the night, 10:00 PM to 7:00 AM.
Day/Night Average (L_{dn})	The L_{dn} is a measure of the 24-hour average noise level at a given location. It was adopted by the U.S. Environmental Protection Agency (EPA) for developing criteria for the evaluation of community noise exposure. It is based on a measure of the average noise level over a given time period called the L_{eq}. The L_{dn} is calculated by averaging the L_{eq}'s for each hour of the day at a given location after penalizing the "sleeping hours" (defined as 10:00 PM to 7:00 AM) by 10 dBA to account for the increased sensitivity of people to noises that occur at night.
Exceedance Level (L_n)	The A-weighted noise levels that are exceeded 1%, 10%, 50%, and 90% (L_{01}, L_{10}, L_{50}, L_{90}, respectively) of the time during the measurement period.

Source: Cyril M. Harris, *Handbook of Noise Control*, dated 1979.

STATE OF CALIFORNIA GUIDELINES

California Environmental Quality Act

The *California Environmental Quality Act* (*CEQA*) was enacted in 1970 and requires that all known environmental effects of a project be analyzed, including environmental noise impacts. Under *CEQA*, a project has a potentially significant impact if the project exposes people to noise levels in excess of standards established in the local general plan or noise ordinance. Additionally, under *CEQA*, a project has a potentially significant impact if the project creates a substantial increase in the ambient noise levels in the project vicinity above levels existing without the project. If a project has a potentially significant impact, mitigation measures must be considered. If mitigation measures to reduce the impact to less than significant levels are not

feasible due to economic, social, environmental, legal or other conditions, the most feasible mitigation measures must be considered.

California Government Code

California Government Code Section 65302(f) mandates that the legislative body of each county and city adopt a noise element as part of their comprehensive general plan. The local noise element must recognize the land use compatibility guidelines established by the State Department of Health Services. The guidelines rank noise land use compatibility in terms of "normally acceptable", "conditionally acceptable" and "clearly unacceptable" noise levels for various land use types. Single-family homes are "normally acceptable" in exterior noise environments up to 60 CNEL and "conditionally acceptable" up to 70 CNEL. Multiple-family residential uses are "normally acceptable" up to 65 CNEL and "conditionally acceptable" up to 70 CNEL. Schools, libraries and churches are "normally acceptable" up to 70 CNEL, as are office buildings and business, commercial and professional uses.

LOCAL GUIDELINES

Duarte Comprehensive General Plan 2005 – 2020

The *California Government Code* requires that a noise element be included in the general plan of each county and City in the state. The Noise Element of the *Duarte General Plan* evaluates sources of noise and provides goals and policies that ensure that noise from various sources does not create an unacceptable noise environment. Chapter 4, Noise Element, of the *Duarte General Plan* includes the following goals and policies:

Noise Goal 1: To reduce noise impacts from transportation sources.

Policies:

N1.1.1: Ensure noise mitigation measures are included in the design of new developments.

N 1.1.2: Encourage the State Department of Transportation (Caltrans) to continue Programs that lead to the reduction of the noise levels on I-210 and I-605.

N 1.1.3: Continue the City's beautification program along arterials to help reduce noise levels.

N 1.1.4: Encourage acoustical materials in all new residential and commercial developments where noise levels exceed the compatibility standards outlined in the Noise Element.

N 1.1.5: Limit construction, delivery, and through truck traffic to designated routes.

N 1.1.6: Ensure Community Noise Equivalent Levels (CNEL) for noise sensitive land uses meet or exceed normally acceptable levels, as defined by State of California standards.

N 1.1.7: The City should encourage, support, and enforce all State and Federal legislation designed to abate and control noise pollution.

N 1.1.8: The City should encourage the use of rubberized asphalt city streets.

Noise Goal 2: Develop measures to control non-transportation noise impacts.

Policies:

N 2.1.1: Continuously review the Noise Ordinance to ensure noise-generating uses are adequately addressed.

N 2.1.2: Strive to resolve existing and potential conflicts between noise generating uses and human activities.

N 2.1.3: Reduce noise from rock quarrying operations.

N 2.1.4: Prohibit significant noise generating activities from locating adjacent to residential neighborhoods and near schools.

N 2.1.5: Evaluate the noise impacts from projects and existing uses in adjacent cities and work cooperatively with these cities to develop mitigation measures that will improve ambient noise conditions in Duarte.

Noise Goal 3: To establish land uses which are compatible with noise levels within the community.

N 3.1.1: Establish a system of locating land uses according to the maximum noise levels they generate.

N 3.1.2: Enforce limits set by the State to control noise levels, particularly those governing motor vehicles.

N 3.1.3: Ensure that construction noise does not cause an adverse impact to the residents of the City.

N 3.1.4: Minimize noise and light spillage onto other residential properties.

The Noise Element also identifies noise sensitive land uses and noise sources, and defines areas of noise impact for the purpose of developing programs to ensure that City of Duarte residents will be protected from excessive noise intrusion. *Table 5.7-2*, *Noise and Land Use Compatibility* (Table N-1 of the *General Plan*), shows the exterior and interior noise compatibility standards.

Duarte Municipal Code

The *Duarte Municipal Code* provides noise guidelines and standards for significant noise generators in Title 9, Chapter 9368, Noise Regulations. It is intended to prohibit unnecessary, excessive and annoying noises from all sources subject to its police power. At certain levels, noises are unfavorable to the public health and welfare of the citizenry and, in the public interest, such noise levels shall be systematically proscribed. *Table 5.7-3*, *City of Duarte Noise Standards*, presents the City's noise standards that apply to all properties, separated by designated zones.

Table 5.7-2
Noise and Land Use Compatibility

Land Use Category	Community Noise Exposure (L_{dn} or CNEL, dBA)			
	Normally Acceptable	Conditionally Acceptable	Normally Unacceptable	Clearly Unacceptable
Residential - Low Density, Single-Family, Duplex, Mobile Homes	50 - 60	55 - 70	70-75	75-85
Residential - Multiple Family	50 - 65	60 - 70	70 - 75	70 – 85
Transient Lodging - Motel, Hotels	50 - 65	60 - 70	70 - 80	80 – 85
Schools, Libraries, Churches, Hospitals, Nursing Homes	50 - 70	60 - 70	70 - 80	80 – 85
Auditoriums, Concert Halls, Amphitheaters	NA	50 - 70	NA	65 – 85
Sports Arenas, Outdoor Spectator Sports	NA	50 - 75	NA	70 – 85
Playgrounds, Neighborhood Parks	50 - 70	NA	67.5 - 75	72.5 – 85
Golf Courses, Riding Stables, Water Recreation, Cemeteries	50 - 70	NA	70 - 80	80 – 85
Office Buildings, Business Commercial and Professional	50 - 70	67.5 - 77.5	75 - 85	NA
Industrial, Manufacturing, Utilities, Agriculture	50 - 75	70 - 80	75 - 85	NA

NA: Not Applicable

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 be discouraged. If new construction or development does proceed, a detailed analysis of the noise reduction requirements must be made and needed noise insulation features included in the design.
Clearly Unacceptable – New construction or development should generally not be undertaken.

Source: City of Duarte, *Duarte General Plan 2005-2020 Noise Element*, 2005 and Office of Planning and Research, California, *General Plan Guidelines*, October 2003.

Table 5.7-3
City of Duarte Noise Standards

Noise Zone	Day (7:00 AM – 9:00 PM)	Night (9:00 PM – 7:00 AM)
R-1 and R-2	55 dBA	45 dBA
R-3 and R-4	55 dBA	50 dBA
Commercial	60 dBA	55 dBA
Industrial and Light Manufacturing	70 dBA	70 dBA

Source: City of Duarte, *City of Duarte Municipal Code, Title 9 (Public Peace and Safety), Chapter 9368 (Noise Regulations), Section 9.68050 (Ambient Base Noise Levels)*.

Municipal Code Section 9.68.120 (Construction of Building and Projects) addresses the following special provisions:

> *It is unlawful for any person within a residential zone, or within a radius of five hundred feet therefrom, to operate equipment or perform any outside construction or repair work on buildings, structures, or projects or to operate any pile-driver, power shovel,*

pneumatic hammer, derrick, power hoist, or any other construction type device (between the hours of ten PM of one day and seven AM of the next day) in such a manner that a reasonable person of normal sensitiveness residing in the area is caused discomfort or annoyance unless beforehand a permit shall be required to perform emergency work as defined in Section 9.68.020(h).

5.7.2 ENVIRONMENTAL SETTING

HEALTH EFFECTS OF NOISE

Human response to sound is highly individualized. Annoyance is the most common issue regarding community noise. However, many factors influence people's response to noise. The factors can include 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 the person's 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 people's response. As such, response to noise varies widely from one person to another and with any particular noise, individual responses will range from "not annoyed" to "highly annoyed."

The effects of noise are often only transitory, but adverse effects can be cumulative with prolonged or repeated exposure. The effects of noise on the community can be organized into six broad categories:

- Noise-Induced Hearing Loss
- Interference with Communication
- Effects of Noise on Sleep
- Effects on Performance and Behavior
- Extra-Auditory Health Effects
- Annoyance

According to the United States Public Health Service, nearly ten million of the estimated 21 million Americans with hearing impairments owe their losses to noise exposure. 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. It can also disrupt effective communication between teachers and pupils in schools, and can cause fatigue and vocal strain in those who need to communicate in spite of the noise.

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 adverse effects on mood changes and job performance, with the possibility of more serious effects on health if it continues over long periods. Noise can cause adverse effects on task performance and behavior at work, and non-occupational and social settings. These effects are the subject of some controversy, since the presence and degree of effects depends on a variety of intervening variables. Most research in this area has focused mainly on occupational settings, where noise levels must be sufficiently high and the task sufficiently complex for effects on performance to occur.

Annoyance can be viewed 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. Field evaluations of community annoyance are useful for predicting the consequences of planned actions involving highways, airports, road traffic, railroads, or other noise sources. The consequences of noise-induced annoyance are privately held dissatisfaction, publicly expressed complaints to authorities, and potential adverse health effects, as discussed above. In a study conducted by the United States Department of Transportation, the effects of annoyance to the community were quantified. In areas where noise levels were consistently above 60 dBA CNEL, approximately nine percent of the community is highly annoyed. When levels exceed 65 dBA CNEL, that percentage rises to 15 percent. Although evidence for the various effects of noise have differing levels of certainty, it is clear that noise can affect human health. Most of the effects are, to a varying degree, stress related.

SENSITIVE RECEPTORS

Human response to noise varies widely depending on the type of noise, time of day, and sensitivity of the receptor. The effects of noise on humans can range from temporary or permanent hearing loss to mild stress and annoyance due to such things as speech interference and sleep deprivation. Prolonged stress, regardless of the cause, is known to contribute to a variety of health disorders. Noise, or the lack thereof, is a factor in the aesthetic perception of some settings, particularly those with religious or cultural significance. Certain land uses are particularly sensitive to noise, including schools, hospitals, rest homes, long-term medical and mental care facilities, and parks and recreation areas. Residential areas are also considered noise sensitive, especially during the nighttime hours.

Sensitive receptors in the project vicinity include adjacent residential uses to the east and west of the project site. Additional existing sensitive receptors located in the project vicinity include single and multi-family residential homes, hotels, motels, schools, hospitals, parks, and places of worship. Sensitive receptors are depicted below in *Table 5.7-4*, *Sensitive Receptors*. The distances are measured from the exterior project boundary only and not from individual construction projects/areas within the interior of the project site.

AMBIENT NOISE MEASUREMENTS

In order to quantify existing ambient noise levels in the project area, RBF Consulting conducted noise measurements on July 24, 2013 between the hours of 9:00 and 11:00 AM; refer to *Table 5.7-5*, *Noise Measurements*. The noise measurement sites were representative of typical existing noise exposure within and immediately adjacent to the project site; refer to *Exhibit 5.7-2*, *Noise Measurement Locations*. Three noise measurement locations were selected at the project site. The primary noise source at Site 1 was the traffic along the adjoining Interstate 210 freeway, while the main source of noise at Sites 2 and 3 was the traffic along the adjacent local roads.

Noise monitoring equipment used for the ambient noise survey consisted of a Brüel & Kjær Hand-held Analyzer Type 2250 equipped with a 4189 pre-polarized microphone. The monitoring equipment complies with applicable requirements of the American National Standards Institute for Type I (precision) sound level meters. The results of the field measurements are provided in Appendix F, Noise Data.

Table 5.7-4
Sensitive Receptors

Type	Name	Distance from Project Site (feet)	Direction from Project Site
Residential	Residential Uses	70	North
		800	North (north side of I-210)
		1,170	Southwest
		430	Northeast (north side of I-210)
		30	West
Hotels/Motels	Days Inn	2,000	North
	Duarte Inn	3,100	Northwest
	Quality Inn	3,690	Northwest
Schools	Northview Intermediate School	700	North
	Duarte High School	1,000	Northwest
	Duarte Montessori School	2,135	North
	Beardslee Elementary School	2,970	Southwest
	Mt. Olive High School	3,480	Northeast
Places of Worship	Church of Christ	1,000	North
	Christian Alliance Bible Church	2,060	North
	Grace Fellowship Church	2,065	Northwest
	Church of the Foothills United Methodist Church	2,185	North
	First Baptist Church of Duarte	3,100	Northeast
	Church of Jesus Christ Latter Day Saints	3,170	North
	New Life Assembly of God	3,530	Northeast
Parks	Northview Park	400	North
	Pioneer Park	600	Southwest
	Duarte Sports Park	1,640	Northwest
	Heritage Park	1,900	Southwest
	Third Street Park	2,065	North
	Beardslee Park	3,000	Southwest
	Aloysia Moore Park	3,200	Southwest
	Otis Gordon Sports Park	3,400	Northeast
Hospitals	Royal Terrace Health Care	830	North
	Monrovia Convalescent Hospital	2,765	Northwest
	Royal Oaks Hospice	3,565	Northwest

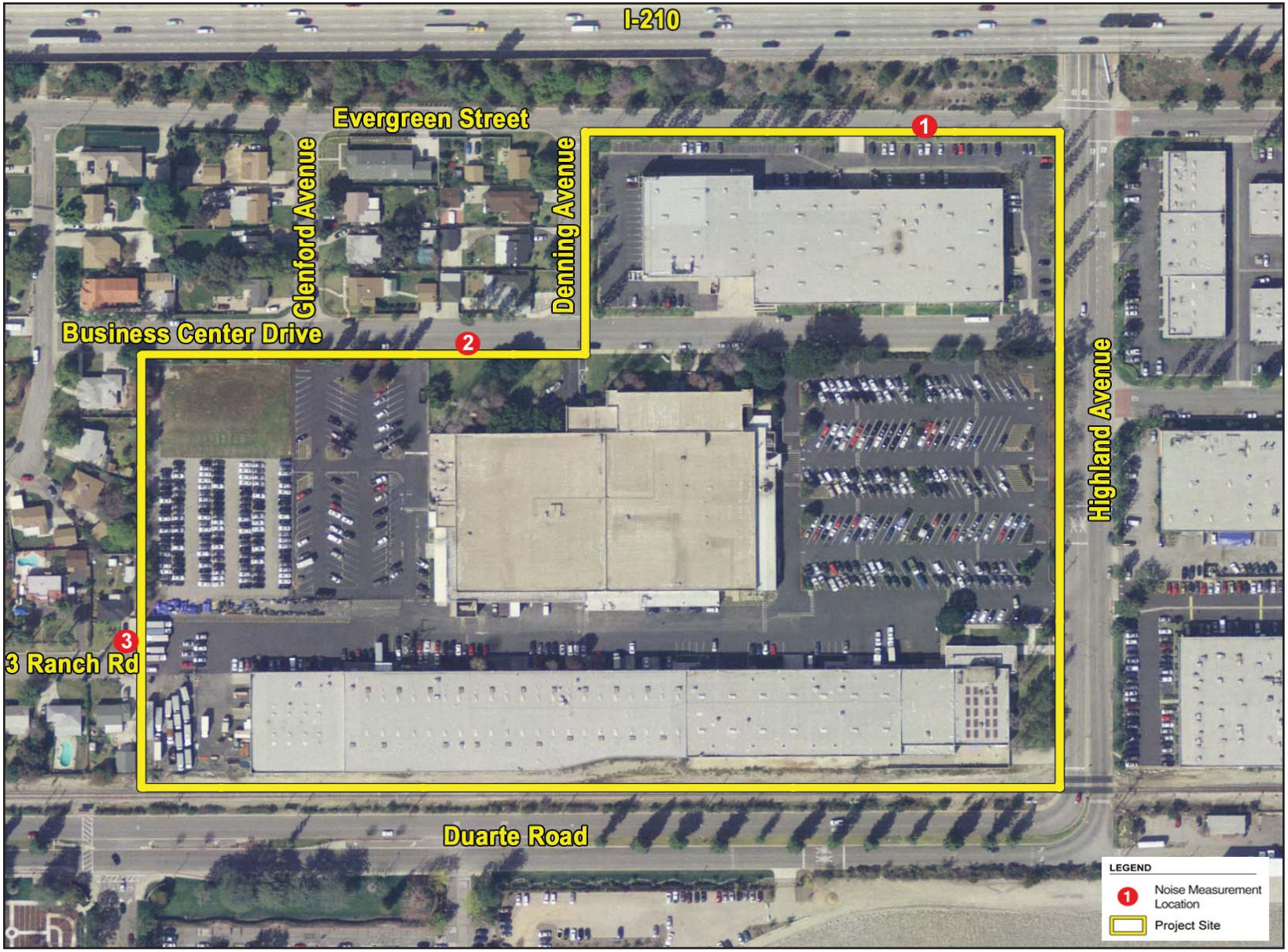
Note:
1. Distances are measured from the exterior project boundary only and not from individual construction projects/areas within the interior of the project site.

Source: Google Earth, 2013.

Table 5.7-5
Noise Measurements

Site No.	Location	Leq (dBA)	L_{min} (dBA)	L_{max} (dBA)	Time
1	Along south side of Evergreen Street, between Denning Avenue and Highland Avenue.	70.2	63.4	83.6	9:24 AM to 10:39 AM
2	Along south side of Business Center Drive, between Glenford Avenue and Denning Avenue.	54.3	50.0	69.9	9:55 AM to 10:10 AM
3	Cul-de-sac of Three Ranch Road.	50.2	46.7	64.1	10:23 AM to 10:38 AM

Source: RBF Consulting field reconnaissance; July 24, 2013.



Source: Google Maps, 2013.

NOT TO SCALE

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DUARTE STATION SPECIFIC PLAN
ENVIRONMENTAL IMPACT REPORT

Noise Measurement Locations

Exhibit 5.7-2

MOBILE SOURCES

In order to assess the potential for mobile source noise impacts, it is necessary to determine the noise currently generated by vehicles traveling through the project area. The existing roadway noise levels in the vicinity of the project site were projected. The project site is located north of Duarte Road and south of I-210. Highland Avenue is located to the east.

Noise models were run using the Federal Highway Administration's Highway Noise Prediction Model (FHWA RD-77-108) together with several roadway and site parameters. These parameters determine the projected impact of vehicular traffic noise and include the roadway cross-section (such as the number of lanes), roadway width, average daily traffic (ADT), vehicle travel speed, percentages of auto and truck traffic, roadway grade, angle-of-view, and site conditions ("hard" or "soft"). The model does not account for ambient noise levels (i.e., noise from adjacent land uses) or topographical differences between the roadway and adjacent land uses. Noise projections are based on modeled vehicular traffic as derived from the *Traffic Impact Analysis*.

A 35- to 45-mile per hour (mph) average vehicle speed was assumed for existing conditions based on empirical observations and posted maximum speeds along the adjacent roadways. The Average Daily Trip (ADT) estimates were obtained from the *Traffic Impact Analysis*. Existing modeled traffic noise levels can be found in *Table 5.7-6*, *Existing Traffic Noise Levels*. As shown in *Table 5.7-6*, noise within the project area from mobile sources range from 50.0 dBA to 67.5 dBA.

STATIONARY NOISE SOURCES

The project area consists of residential and commercial uses served by a grid system of arterial and collector streets. The primary sources of stationary noise in the project vicinity are urban-related activities (e.g., parking areas, conversations, and recreational areas). The noise associated with these sources may represent a single-event or a continuous occurrence.

5.7.3 SIGNIFICANCE THRESHOLD CRITERIA

The issues presented in the Initial Study Environmental Checklist (*CEQA Guidelines* Appendix G) have been utilized as thresholds of significance in this Section. Accordingly, a project may create a significant environmental impact if it causes one or more of the following to occur:

- Expose persons to, or generate, noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies;
- Expose persons to or generate excessive ground borne vibration or ground borne noise;
- 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 a plan has not been adopted, within two miles of a public airport or public use airport, expose people residing or working in the project area to excessive noise levels (refer to Section 8.0, Effects Found Not To Be Significant); and

- For a project within the vicinity of a private airstrip, expose people residing or working in the project area to excessive noise levels (refer to Section 8.0, Effects Found Not To Be Significant).

Table 5.7-6
Existing Traffic Noise Levels

Roadway Segment	Existing Conditions				
	ADT	dBA @ 100 Feet from Roadway Centerline	Distance from Roadway Centerline to: (Feet)		
			60 CNEL Noise Contour	65 CNEL Noise Contour	70 CNEL Noise Contour
Mountain Avenue					
Central Avenue to Evergreen Street	20,700	64.9	357	113	36
Evergreen Street to Duarte Road	16,400	63.9	283	90	28
Buena Vista Street					
Huntington Drive to Central Avenue	16,600	64.0	286	91	29
Central Avenue to I-210 Westbound On-Ramp	20,400	64.7	352	111	35
I-210 Westbound On-Ramp to I-210 Eastbound Ramp	19,200	64.3	331	105	33
I-210 Eastbound On-Ramp to Three Ranch Road	18,700	64.5	322	102	32
Three Ranch Road to Duarte Road	18,500	64.5	319	101	32
Duncannon Avenue					
Central Avenue to Evergreen Street	1,900	51.7	16	5	2
Highland Avenue					
Huntington Drive to Central Avenue	9,300	58.6	80	25	8
Central Avenue to Evergreen Street	12,900	63.0	223	70	22
Evergreen Street to Business Center Drive	11,400	62.4	197	62	20
Business Center Drive to Duarte Road	11,700	62.5	202	64	20
Huntington Drive					
Buena Vista Street to Highland Avenue	26,800	67.3	628	199	63
Highland Avenue to Mt Olive Drive	28,200	67.5	661	209	66
Central Avenue					
East of Mountain Avenue	9,300	61.4	160	51	16
West of Buena Vista Street	7,200	60.5	124	39	12
Buena Vista Street to I-210 WB Off-Ramp	11,300	62.2	195	62	19
I-210 WB Off-Ramp to Duncannon Avenue	8,000	57.7	69	22	7
Duncannon Avenue to Highland Avenue	5,900	59.6	102	32	10
Evergreen Street					
East of Mountain Ave	17,800	64.4	307	97	31
West of Buena Vista Street	8,700	61.3	150	47	15
Duncannon Avenue to Highland Avenue	900	50.0	11	4	1
Duarte Road					
Mountain Avenue to Buena Vista Street	15,000	64.8	352	111	35
Buena Vista Street to Cinco Robles Drive	14,700	64.7	345	109	34
Cinco Robles Drive to Village Road	14,300	64.5	335	106	33
Village Road to Highland Avenue	12,100	63.8	284	90	28

Notes: ADT = average daily trips; dBA = A-weighted decibels; CNEL = community noise equivalent level.

Source: Noise modeling is based upon traffic data within the *Duarte Station Specific Plan Traffic Impact Analysis,* prepared by RBF Consulting, dated August 29, 2013.

TRAFFIC NOISE

A proposed project would normally have a significant offsite traffic noise impact if both of the following criteria are met:

- Project traffic would cause a noise level increase of 3dB or more on a roadway segment adjacent to a noise sensitive land use. Noise sensitive land uses include the following: residential (single-family, multi-family, duplex, mobile home); transient lodging hotels; motels; nursing homes; hospitals; parks, playgrounds and recreation areas; and schools.

- The resulting "future with project" noise level exceeds the noise standard for sensitive land uses as identified in the City of Duarte General Plan (refer to *Table 5.7-1*).

STATIONARY NOISE

The project would normally have a significant noise impact if it would:

- Exceed the stationary source noise criteria for the City of Duarte as identified in *Table 5.7-2* (City of Duarte Noise Ordinance).

Based on these significance thresholds and criteria, the proposed project's effects have been categorized as either "no impact," a "less than significant impact," or a "potentially significant impact." Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a significant unavoidable impact.

5.7.4 PROJECT IMPACTS AND MITIGATION MEASURES

SHORT-TERM CONSTRUCTION NOISE IMPACTS

■ **GRADING AND CONSTRUCTION ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT COULD RESULT IN SIGNIFICANT TEMPORARY NOISE IMPACTS TO NEARBY NOISE SENSITIVE RECEIVERS.**

Impact Analysis: Construction activities have a short and temporary duration, lasting from a few days to a period of several months, depending upon the specific activity. Groundborne noise and vibration, as well as other types of construction-related noise impacts may occur during the initial site preparation, which can create the highest levels of noise and vibration. Generally, site preparation has the shortest duration of all construction phases. Activities that occur during this phase include earthmoving and soils compaction. High groundborne noise and other vibration levels and other miscellaneous noise levels can occur during this phase by the operation of heavy-duty trucks, backhoes, and other heavy-duty construction equipment.

Noise from construction activities is generated by two primary sources: 1) the transport of workers and equipment to construction sites, and 2) the noise related to active construction equipment. These noise sources can be a nuisance to local residents and businesses or unbearable to sensitive receptors (i.e., residences, hospitals, senior centers, schools, day care facilities, etc.). The Federal Transit Administration (FTA) has compiled data regarding noise generating characteristics of specific types of construction equipment and typical construction

activities. These noise levels would decrease rapidly with distance from the construction site at a rate of approximately 6 dBA per doubling of distance.

Potential future development associated with implementation of the proposed project could generate significant amounts of noise and vibration during grading and construction operations. Adjacent sensitive receptors would be exposed to sporadic high noise and vibration levels associated with construction activities (as a result of power tools, jack-hammers, truck noise, etc.). It is anticipated that construction traffic would access the potential construction sites within the project area from several major roadways, including Duarte Road, Highland Avenue, and Buena Vista Street. As previously stated, various sensitive receptors exist in close proximity to the project area. The closest sensitive receptors are located immediately adjacent to the western project boundary and to the north across Business Center Drive.

Construction noise can be created by the operation of heavy-duty trucks, backhoes, bulldozers, excavators, front-end loaders, scrapers, and other heavy-duty construction equipment. *Table 5.7-7*, *Maximum Noise Levels Generated by Construction Equipment*, indicates the anticipated noise levels of construction equipment. *Table 5.7-7* provides a description of construction equipment noise levels and is based on the quantity, type, and Acoustical Use Factor for each type of equipment that would be used.

Table 5.7-7
Maximum Nose Levels Generated by Construction Equipment

Type of Equipment	Acoustical Use Factor[1] (percent)	Lmax at 50 Feet (dBA)
Crane	16	81
Dozer	40	82
Excavator	40	81
Generator	50	81
Grader	40	85
Other Equipment (greater than five horse power)	50	85
Paver	50	77
Pile Driver (impact)	20	101
Pile Driver (sonic)	20	96
Roller	20	80
Tractor	40	84
Truck	40	80
Welder	40	73

Note:
1. Acoustical use factor (percent): Estimates the fraction of time each piece of construction equipment is operating at full power (i.e., its loudest condition) during a construction operation.

Source: Federal Highway Administration, Roadway Construction Noise Model (FHWA-HEP-05-054), January 2006.

Operating cycles for construction equipment used during these phases may involve one or two minutes of full power operation followed by three to four minutes at lower power settings. Other primary sources of acoustical disturbance would be random incidents, which would last less than one minute (such as dropping large pieces of equipment or the hydraulic movement of machinery lifts). These estimations of noise levels take into account the distance to the receptor, attenuation from molecular absorption and anomalous excess attenuation.

Construction noise impacts generally occur when construction activities occur in areas immediately adjoining noise sensitive land uses, during noise sensitive times of the day, or when construction durations last over extended periods of time. Construction activities associated with the proposed project would occur in multiple phases. The closest that construction activities could occur is 50 feet from existing and proposed residences. This is the distance from the edge of the project boundary to the closest sensitive receptors. The majority of the construction would occur at distances of 100 to 400 feet or more from the nearest sensitive receptors and would not be expected to interfere with normal residential activities.

Construction activities would begin in one specific development area and subsequently move to the other specific development areas. Therefore, construction would not occur in any one location for an extended period of time. All future development within the Specific Plan Area would be subject to compliance with the implementing policies of the *Duarte General Plan* Noise Element. Additionally, implementation of the Mitigation Measure N-1 would reduce construction noise associated with future development by requiring the preparation of a construction noise management plan that would include limiting construction to the less noise sensitive periods of the day (i.e., between the hours of 7:00 AM and 10:00 PM per *Municipal Code* Section 9.68.120) and ensuring that proper operating procedures are followed during construction so that nearby sensitive receptors are not adversely affected by noise and vibration. However, the details (e.g., timing/duration, sequencing, grading volumes, and exact proximity to receptors, etc.) of the future construction activities are not known at this time. As a result, construction has the potential to occur in close proximity to existing sensitive receptors to the west and north. Therefore, despite the implementation of Mitigation Measure N-1, construction noise impacts remain significant and unavoidable.

Mitigation Measures:

N-1 Individual project applicants shall prepare a construction noise management plan that identifies measures to be taken to minimize construction noise on surrounding sensitive receptors (e.g., residential uses and schools) and includes specific noise management measures to be included into project plans and specifications subject to review and approval by the City. These measures shall include, but not be limited to the following:

- All construction equipment shall be equipped with mufflers and sound control devices (e.g., intake silencers and noise shrouds) no less effective than those provided on the original equipment and no equipment shall have an un-muffled exhaust.
- The City shall require that the contractor maintain and tune-up all construction equipment to minimize noise emissions.
- Stationary equipment shall be placed so as to maintain the greatest possible distance to the sensitive receptors.
- All equipment servicing shall be performed so as to maintain the greatest possible distance to the sensitive receptors.
- Impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electronically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools

themselves shall be used where feasible, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever feasible.

- Each project applicant shall provide, to the satisfaction of the City of Duarte Planning Department, a qualified "Noise Disturbance Coordinator." The Disturbance Coordinator shall be responsible for responding to any local complaints about construction noise. When a complaint is received, the Disturbance Coordinator shall notify the City within 24 hours of the complaint and determine the cause of the noise complaint (e.g., starting too early, malfunctioning muffler, etc.) and shall implement reasonable measures to resolve the compliant, as deemed acceptable by the Duarte Planning Department. Notices shall be sent to residential units immediately surrounding the construction site. The notices that are sent and the signs posted at the construction site shall include the contact name and the telephone number for the Noise Disturbance Coordinator.
- Select demolition methods to minimize vibration, where possible (e.g., sawing masonry into sections rather than demolishing it by pavement breakers).
- Construction activities shall not take place outside of the allowable hours specified by the City's Municipal Code Section *9.68.120* (7:00 AM and 10:00 PM).

Level of Significance: Significant Unavoidable Impact.

VIBRATION IMPACTS

■ **IMPLEMENTATION OF THE PROPOSED PROJECT COULD RESULT IN SIGNIFICANT VIBRATION IMPACTS TO NEARBY SENSITIVE RECEPTORS.**

Impact Analysis: Project construction can generate varying degrees of ground-borne vibration, depending on the construction procedure and the construction equipment used. Operation of construction equipment generates vibrations that spread through the ground and diminish in amplitude with distance from the source. The effect on buildings located in the vicinity of the construction site often varies depending on soil type, ground strata, and construction characteristics of the receiver building(s). The results from vibration can range from no perceptible effects at the lowest vibration levels, to low rumbling sounds and perceptible vibration at moderate levels, to slight damage at the highest levels. Ground-borne vibrations from construction activities rarely reach levels that damage structures.

The FTA has published standard vibration velocities for construction equipment operations. In general, the FTA architectural damage criterion for continuous vibrations (i.e., 0.2 inch/second) appears to be conservative. The types of construction vibration impact include human annoyance and building damage. Human annoyance occurs when construction vibration rises significantly above the threshold of human perception for extended periods of time. Building damage can be cosmetic or structural. Ordinary buildings that are not particularly fragile would not experience any cosmetic damage (e.g., plaster cracks) at distances beyond 30 feet. This distance can vary substantially depending on the soil composition and underground geological layer between vibration source and receiver. In addition, not all buildings respond similarly to vibration generated by construction equipment. The vibration produced by construction equipment, is illustrated in *Table 5.7-8*, *Typical Vibration Levels for Construction Equipment*.

Table 5.7-8
Typical Vibration Levels for Construction Equipment

Equipment	Approximate peak particle velocity at 25 feet (inches/second)	Approximate peak particle velocity at 50 feet (inches/second)
Large bulldozer	0.089	0.031
Loaded trucks	0.076	0.027
Small bulldozer	0.003	0.001
Auger/drill rigs	0.089	0.031
Jackhammer	0.035	0.012
Vibratory hammer	0.035	0.012
Vibratory compactor/roller	0.003	0.001

Notes:
1. Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Guidelines*, May 2006. Table 12-2.
2. Calculated using the following formula:

$PPV_{equip} = PPV_{ref} \times (25/D)^{1.5}$

where: PPV (equip) = the peak particle velocity in in/sec of the equipment adjusted for the distance
PPV (ref) = the reference vibration level in in/sec from Table 12-2 of the FTA *Transit Noise and Vibration Impact Assessment Guidelines*
D = the distance from the equipment to the receiver

Source: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Guidelines*, May 2006.

Ground-borne vibration decreases rapidly with distance. As indicated in *Table 5.7-8*, based on the FTA data, vibration velocities from typical heavy construction equipment operations that would be used during project construction range from 0.003 to 0.089 inch-per-second peak particle velocity (PPV) at 25 feet from the source of activity. The closest structures to the nearest construction activity area are single-family residential uses, which are approximately 30 feet to the west of the project site. With regard to the proposed project, ground-borne vibration would be generated primarily during site clearing and grading activities on-site and by off-site haul-truck travel. At 50 feet from the source of activity, vibration velocities range from 0.001 to 0.031 inch-per-second PPV. Therefore, as each of these values is below the 0.2 inch-per-second PPV significance threshold, vibration impacts associated with construction would be less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

LONG-TERM MOBILE NOISE IMPACTS

■ **TRAFFIC GENERATED BY THE PROPOSED PROJECT COULD SIGNIFICANTLY CONTRIBUTE TO EXISTING TRAFFIC NOISE IN THE AREA OR EXCEED THE CITY'S ESTABLISHED STANDARDS**.

Impact Analysis:

Off-Site Noise Conditions

Existing Traffic Noise

The following analysis compares the "Existing" condition to the "Existing Plus Project" condition. There are often circumstances in which an "Existing Plus Project" analysis would result in only a hypothetical comparison of impacts which would not occur. There may, for example, be circumstances in which a project is not expected to become operational for several years. During the period after the environmental analysis is prepared, and before the project becomes operational, there may be reason to believe that traffic conditions would change due to regional or area wide growth, or planned and funded traffic improvements, to name a few. In those instances, there may be reason to believe that an "Existing Plus Project" analysis would be less accurate than an analysis that takes into account the reasonably foreseeable interim changes in the environment, versus assuming static environmental conditions.

As indicated in *Table 5.7-9*, *Existing Noise Scenario*, under the "Existing" scenario, noise levels at a distance of 100 feet from the centerline would range from approximately 50.0 dBA to 67.5 dBA. The highest noise levels under "Existing" conditions would occur along Huntington Drive between Highland Avenue and Mount Olive Drive. Under the "Existing Plus Project" scenario, noise levels at a distance of 100 feet from the centerline would range from 51.6 dBA to 67.6 dBA. The highest noise levels under Future with Project conditions would occur along Huntington Drive between Highland Avenue and Mount Olive Drive. *Table 5.7-9* also compares the "Existing" scenario to the "Existing Plus Project" scenario. The proposed project would increase noise levels on the surrounding roadways by a maximum of 1.4 dBA along Duarte Road between Village Road and Highland Avenue. As stated under the *Significance Criteria*, a significant impact would occur if noise levels increase by 3.0 dBA or more. Therefore, near-term noise levels resulting from the proposed project would be less than significant.

Future Traffic Noise

The "2020 Without Project" and "2020 With Project" were compared for long-term conditions. As indicated in *Table 5.7-10*, *Long-Term Noise Scenario*, under the "2020 Without Project" scenario, noise levels at a distance of 100 feet from the centerline would range from approximately 50.5 dBA to 68.0 dBA. The highest noise levels under "2020 Without Project" conditions would occur along Huntington Drive, between Buena Vista Street and Highland Avenue. Under the "2020 With Project" scenario, noise levels at a distance of 100 feet from the centerline would range from approximately 51.9 dBA to 68.1 dBA. The highest noise levels under future with project conditions would also occur along Huntington Drive between Buena Vista Street and Highland Avenue and between Highland Avenue and Mount Olive Drive. The proposed project would increase noise levels on the surrounding roadways by a maximum of 1.4 dBA along Evergreen Street between Duncannon Avenue and Highland Avenue. Therefore, future noise levels resulting from the proposed project would be less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

Table 5.7-9
Existing Noise Scenario

Roadway Segment	Existing					Existing Plus Project					Difference in dBA @ 100 feet from Roadway	Potentially Significant Impact?
	ADT	dBA @ 100 Feet from Roadway Centerline	Distance from Roadway Centerline to: (Feet)			ADT	dBA @ 100 Feet from Roadway Centerline	Distance from Roadway Centerline to: (Feet)				
			60 CNEL Noise Contour	65 CNEL Noise Contour	70 CNEL Noise Contour			60 CNEL Noise Contour	65 CNEL Noise Contour	70 CNEL Noise Contour		
Mountain Avenue												
Central Avenue to Evergreen Street	20,700	64.9	357	113	36	20,900	64.9	360	114	36	0	***No***
Evergreen Street to Duarte Road	16,400	63.9	283	90	28	16,600	63.9	286	91	29	0	***No***
Buena Vista Street												
Huntington Drive to Central Avenue	16,600	64.0	286	91	29	16,600	64.0	286	91	29	0	***No***
Central Avenue to I-210 Westbound On-Ramp	20,400	64.7	352	111	35	20,500	64.8	353	112	35	0.1	***No***
I-210 Westbound On-Ramp to I-210 Eastbound Ramp	19,200	64.5	331	105	33	20,100	64.7	347	110	35	0.2	***No***
I-210 Eastbound On-Ramp to Three Ranch Road	18,700	64.5	322	102	32	21,700	65.1	375	118	37	0.6	***No***
Three Ranch Road to Duarte Road	18,500	64.5	319	101	32	21,500	65.1	371	117	37	0.6	***No***
Duncannon Avenue												
Central Avenue to Evergreen Street	1,900	51.7	16	5	2	2,300	52.5	20	6	2	0.8	***No***
Highland Avenue												
Huntington Drive to Central Avenue	9,300	58.6	80	25	8	11,200	59.4	96	30	10	0.8	***No***
Central Avenue to Evergreen Street	12,900	63.0	223	70	22	15,500	63.8	267	84	27	0.8	***No***
Evergreen Street to Business Center Drive	11,400	62.4	197	62	20	14,400	63.4	248	78	25	1.0	***No***
Business Center Drive to Duarte Road	11,700	62.5	202	64	20	14,900	63.6	257	81	26	1.1	***No***
Huntington Drive												
Buena Vista Street to Highland Avenue	26,800	67.3	628	199	63	27,500	67.4	644	204	64	0.1	***No***
Highland Avenue to Mt Olive Drive	28,200	67.5	661	209	66	29,100	67.6	682	216	68	0.1	***No***
Central Avenue												
East of Mountain Avenue	9,300	61.4	160	51	16	9,300	61.4	160	51	16	0	***No***
West of Buena Vista Street	7,200	60.5	124	39	12	8,200	61.0	141	45	14	0.5	***No***
Buena Vista Street to I-210 WB Off-Ramp	11,300	62.2	195	62	19	11,400	62.3	196	62	20	0.1	***No***
I-210 WB Off-Ramp to Duncannon Avenue	8,000	57.7	69	22	7	9,100	58.3	78	25	8	0.6	***No***
Duncannon Avenue to Highland Avenue	5,900	59.6	102	32	10	6,600	60.1	114	36	11	0.5	***No***
Evergreen Street												
East of Mountain Ave	17,800	64.4	307	97	31	17,800	64.4	307	97	31	0	***No***
West of Buena Vista Street	8,700	61.3	150	47	15	9,700	61.8	167	53	17	0.5	***No***
Duncannon Avenue to Highland Avenue	900	50.0	11	4	1	1,300	51.6	16	5	2	1.6	***No***
Duarte Road												
Mountain Avenue to Buena Vista Street	15,000	64.8	352	111	35	16,100	65.1	378	119	38	0.3	***No***
Buena Vista Street to Cinco Robles Drive	14,700	64.7	345	109	34	19,000	65.8	445	141	44	1.1	***No***
Cinco Robles Drive to Village Road	14,300	64.5	335	106	33	18,600	65.7	436	138	44	1.2	***No***
Village Road to Highland Avenue	12,100	63.8	284	90	28	16,400	65.2	385	122	38	1.4	***No***

Notes: ADT = average daily trips; dBA = A-weighted decibels; CNEL = community noise equivalent level

Source: Noise modeling is based upon traffic data within the *Duarte Station Specific Plan Traffic Impact Analysis, prepared by RBF Consulting, dated August 29, 2013.*

Table 5.7-10
Long-Term Noise Scenario

Roadway Segment	2020 No Project					2020 Plus Project					Difference in dBA @ 100 feet from Roadway	Potentially Significant Impact?
	ADT	dBA @ 100 Feet from Roadway Centerline	Distance from Roadway Centerline to: (Feet)			ADT	dBA @ 100 Feet from Roadway Centerline	Distance from Roadway Centerline to: (Feet)				
			60 CNEL Noise Contour	65 CNEL Noise Contour	70 CNEL Noise Contour			60 CNEL Noise Contour	65 CNEL Noise Contour	70 CNEL Noise Contour		
Mountain Avenue												
Central Avenue to Evergreen Street	22,000	65.1	379	120	38	22,200	65.2	383	121	38	0.1	***No***
Evergreen Street to Duarte Road	17,400	64.1	300	95	30	17,600	64.2	303	96	30	0.1	***No***
Buena Vista Street												
Huntington Drive to Central Avenue	19,600	64.7	338	107	34	19,600	64.7	338	107	34	0	***No***
Central Avenue to I-210 Westbound On-Ramp	23,400	65.3	404	128	40	23,500	65.4	405	128	40	0.1	***No***
I-210 Westbound On-Ramp to I-210 Eastbound Ramp	22,000	65.1	379	120	38	22,900	65.3	394	125	39	0.2	***No***
I-210 Eastbound On-Ramp to Three Ranch Road	21,600	65.1	373	118	37	24,600	65.7	424	134	42	0.6	***No***
Three Ranch Road to Duarte Road	21,200	65.1	366	116	37	24,200	65.7	417	132	42	0.6	***No***
Duncannon Avenue												
Central Avenue to Evergreen Street	2,000	51.9	17	5	2	2,400	52.7	21	6	2	0.8	***No***
Highland Avenue												
Huntington Drive to Central Avenue	10,400	59.0	89	28	9	12,300	59.8	106	33	11	0.8	***No***
Central Avenue to Evergreen Street	14,500	63.5	250	79	25	17,100	64.2	295	93	29	0.7	***No***
Evergreen Street to Business Center Drive	12,900	62.9	223	70	22	15,900	63.8	274	87	27	0.9	***No***
Business Center Drive to Duarte Road	13,000	63.0	224	71	22	16,200	63.9	279	88	28	0.9	***No***
Huntington Drive												
Buena Vista Street to Highland Avenue	31,600	68.0	740	234	74	32,300	68.1	757	239	76	0.1	***No***
Highland Avenue to Mt Olive Drive	31,300	67.9	733	232	73	32,200	68.1	755	239	76	0.2	***No***
Central Avenue												
East of Mountain Avenue	9,800	61.6	169	53	17	9,800	61.6	169	53	17	0	***No***
West of Buena Vista Street	8,300	61.1	143	45	14	9,300	61.6	161	51	16	0.5	**No**
Buena Vista Street to I-210 WB Off-Ramp	12,100	62.5	209	66	21	12,200	62.6	210	67	21	0.1	**No**
I-210 WB Off-Ramp to Duncannon Avenue	8,800	58.2	75	24	8	9,900	58.7	85	27	8	0.5	***No***
Duncannon Avenue to Highland Avenue	6,500	60.0	112	35	11	7,200	60.5	124	39	12	0.5	***No***
Evergreen Street												
East of Mountain Ave	18,800	64.6	324	103	32	18,800	64.6	324	102	32	0	***No***
West of Buena Vista Street	9,900	61.9	171	54	17	10,900	62.3	188	59	19	0.4	***No***
Duncannon Avenue to Highland Avenue	1,000	50.5	12	4	1	1,400	51.9	17	5	2	1.4	***No***
Duarte Road												
Mountain Avenue to Buena Vista Street	17,200	65.4	403	127	40	18,300	65.6	428	136	43	0.2	***No***
Buena Vista Street to Cinco Robles Drive	17,000	65.4	398	126	40	21,300	66.3	499	158	50	0.9	***No***
Cinco Robles Drive to Village Road	16,600	65.2	389	123	39	20,900	66.2	490	155	49	1.0	***No***
Village Road to Highland Avenue	13,400	64.3	314	99	31	17,700	65.5	415	131	42	1.2	***No***

Notes: ADT = average daily trips; dBA = A-weighted decibels; CNEL = community noise equivalent level

Source: Noise modeling is based upon traffic data within the *Duarte Station Specific Plan Traffic Impact Analysis, prepared by RBF Consulting, dated August 29, 2013.*

LONG-TERM STATIONARY NOISE IMPACTS

■ **IMPLEMENTATION OF THE PROPOSED PROJECT COULD RESULT IN A SIGNIFICANT INCREASE IN LONG-TERM STATIONARY AMBIENT NOISE LEVELS.**

Impact Analysis: The project proposes the construction of 12,000 square feet of retail, 400,000 square feet of office, 475 multi-family dwelling units, and a 250-room hotel. Noise associated with operational activities of the proposed uses is typically generated by the following sources:

- Residential uses
- Delivery Trucks
- Mechanical equipment (air conditioners, trash compactors, emergency generators, etc.)
- Typical parking lot activities (e.g., parking lot traffic and car door slamming)

Residential Uses

The proposed project would increase the amount of residential dwelling units in the area. Noise that is typical of residential areas includes children playing, pets, amplified music, mechanical equipment, car repair, and home repair. Noise from residential stationary sources would primarily occur during the daytime activity hours. Noise impacts to surrounding uses associated with implementation of the proposed residential uses would be less than significant.

Slow-Moving Trucks (Deliveries)

The proposed project includes office, hotel, and retail uses that would necessitate occasional truck delivery operations. Typically, a medium 2-axle truck used to make deliveries can generate a maximum noise level of 75 dBA at a distance of 50 feet. These are levels generated by a truck that is operated by an experienced "reasonable" driver with typically applied accelerations. Higher noise levels may be generated by the excessive application of power. Lower levels may be achieved, but would not be considered representative of a nominal truck operation. As depicted in *Exhibit 3-5*, *Development Scenario*, the residential uses would be located within the western portion of the project site, which is adjacent to the existing residential uses. Delivery trucks would access the office, retail, and hotel uses, which are located toward the center, north, and east side of the project site. The proposed hotel would be located closest to the existing sensitive receptors, which would be approximately 60 feet across Denning Avenue. Thus, sensitive receptors surrounding the project site could be directly exposed to noise from on-site delivery operations created by the proposed project. Therefore, Mitigation Measure N-2 is required to ensure that any potential loading docks would be located away from existing or proposed sensitive receptors Impacts would be mitigated to a less than significant level in this regard.

Mechanical Equipment

Future uses within the Plan Area would require the use of heating, ventilation, and air conditioning units (HVAC). HVAC systems typically result in noise levels that average between 40 and 50 dBA Leq at 50 feet from the equipment. As the future residential uses would be 50 to 60 feet from the project boundary, and further from the closest potential location of the HVAC equipment, potential noise levels would be below the City's limits of 55 dBA for residential uses (*Duarte Municipal Code* Section 9.68.050). Mitigation Measure N-2 would be required to ensure

that mechanical equipment is shielded or placed a sufficient distance away to comply with the City's noise standards. Impacts would be mitigated to a less than significant level in this regard.

Parking Areas

Traffic associated with parking lots is typically not of sufficient volume to exceed community noise standards, which are based on a time-averaged scale such as the CNEL scale. Also, noise would primarily remain on-site and would be intermittent (during peak-events). However, the instantaneous maximum sound levels generated by a car door slamming, engine starting up and car pass-bys may be an annoyance to adjacent noise-sensitive receptors. Parking lot noise can also be considered a "stationary" noise source. However, parking lot noise would not occur on a consistent basis after 10:00 PM.

The proposed Specific Plan includes parking areas within the Plan Area along Denning Avenue, and in two locations south of Business Center Drive. The parking areas south of Business Center Drive would be as close as 75 feet from proposed sensitive receptors (i.e., residences) and the parking area along Denning Avenue would be approximately 90 feet east of existing sensitive receptors.

Noise associated with proposed parking structures would be of greatest annoyance to the existing adjacent residential uses to the east, but could also affect the residences proposed on-site. Most of the noise generated in the parking area would be at a distance of 75 feet or more from the nearest sensitive receptor. As shown in *Table 5.7-11*, *Maximum Noise Levels Generated by Parking Lots*, during operation of the proposed project, noise levels from parking activities would range from approximately 56.5 to 59.5 dBA at the exteriors of the nearby residential uses, assuming no reductions from barriers. Thus, noise associated with parking activities has the potential to exceed the City's exterior standard of 55 dBA; refer to *Table 5.7-3*. However, parking noise is anticipated to be lower than the levels presented in *Table 5.7-11* as the noise would be partially masked by landscaping and intervening topography that would be within the building setbacks. Additionally, Mitigation Measure N-3 requires parking structures to have a closed design for exterior walls that face residences and are located within 150 feet of the residences. With the implementation of Mitigation Measure N-3, sensitive receptors would not be exposed to excessive noise from parking areas and a less than significant impact would occur in this regard.

Train Noise

The proposed project abuts Metro railroad right-of-way and the future Gold Line Station. The proposed on-site multi-family residences could be located as close as 50 feet north of the railroad centerline. Train noise impacts were analyzed within the *Gold Line Phase II Final EIR* (February 2007) prepared by the Metro Gold Line Foothill Extension Construction Authority, as well as the Supplemental EIRs that were prepared in December 2010 and January 2012. The environmental documentation for the Gold Line extension determined that noise impacts could occur in the vicinity of the proposed project, including at the existing residences located along the north side of the railroad alignment east of Mountain Avenue to the Duarte Station. Additionally, the *Gold Line Phase II Final EIR* identified potential noise mitigation (i.e., a sound wall) that would be installed along the railway alignment between Buena Vista Street and the proposed Duarte Station. The *Gold Line Phase II Final EIR* also identified warning devices for the at-grade crossings and mitigation measures to reduce noise in residential areas. Implementation of those mitigation measures is the responsibility of Metro.

Table 5.7-11
Maximum Noise Levels Generated by Parking Lots

Noise Source	Maximum Noise Levels at 50 Feet from Source (dBA L_{eq})	Maximum Noise Levels at 75 Feet from Source (dBA L_{eq}) [1,2]	Maximum Noise Levels at 75 Feet from Source (dBA L_{eq}) [1,2]
Car door slamming	63	59.5	53.5
Car starting	60	56.5	50.5
Car idling	61	57.5	51.5

Notes:
1. Distance is from the nearest sensitive receptor to the closest parking space at the project site.
2. Estimated parking lot activity noise level is calculated by applying a 6-dBA reduction per doubling distance to the noise profiles at 50 feet. More precisely, the formula is as follows:

$$dBA2 = dBA1 + 10Log_{10} (d1/d2)^2$$

where:
dBA2 = Estimated Parking Lot Activity Noise Level;
dBA1 = Reference noise level at 50 feet;
d1 = reference distance of 50 feet;
d2 = Approximate Receptor Location Distance

No detailed site plans, grading plans, floor plans, elevations, building orientation diagrams, building material palettes, or mechanical drawings associated with the Duarte Station Specific Plan are available at this time to determine specific noise impacts to future residential uses. The actual noise impacts can only be determined on a case-by-case basis, taking local obstructions, barriers/reflectors, and detailed site plans into account. As a result, sound attenuation techniques would need to be considered for the development adjacent to the Gold Line transit corridor. Thus, at this time, noise impacts to future residential uses along the Gold Line railway are considered to be significant. Mitigation Measure N-4 would be required to ensure that subsequent noise studies for proposed development within 200 feet of the Gold Line railroad right-of-way to ensure that residences are adequately shielded and/or located at an adequate distance from railroad noise sources. Impacts would be mitigated to a less than significant level in this regard.

Off-Site Traffic Noise Impacts to On-Site Sensitive Receptors

The proposed project includes sensitive receptors (i.e., multi-family residences and hotel uses) that could be located within 200 to 400 feet of the I-210 freeway. Based on the noise measurements in *Table 5.7-5*, existing noise levels are 70.2 dBA L_{eq} in this area. As a result, freeway noise levels have the potential to exceed the City's land use compatibility noise standards of 65 dBA for multi-family and hotel uses. As described above, detailed project site plans, floor plans, and elevations have not been prepared yet. Therefore, Mitigation Measure N-5 would be required to ensure that a subsequent noise study is conducted for sensitive uses within 400 feet of the I-210 Freeway. Impacts would be mitigated to a less than significant level in this regard.

Mitigation Measures:

N-2 Prior to issuance of building permits, a noise assessment shall be prepared for the hotel and commercial uses to ensure that commercial property loading docks and outdoor mechanical equipment would not exceed the City's noise limits identified in Municipal Code Section 9.68.050. The noise assessment shall identify any noise control measures necessary to comply with the Municipal Code Noise Regulations. Individual project applicants shall implement all noise control measures identified in the assessment.

N-3 Prior to site plan approval, the Community Development Director shall confirm that all applicable building plans and specifications include a closed design (i.e., a solid wall) for the walls of parking structures that are within 150 feet of residences, including the western side of the parking structure that faces Denning Avenue. The closed design is only required for walls that face residences.

N-4 Prior to the issuance of building permits, any residential development located within 200 feet of the Gold Line railway corridor shall have a Focused Acoustical Analysis prepared to analyze noise from train pass-bys and develop measures, if required, to ensure that the City's exterior land use compatibility standards of 65 dBA for multi-family residential (refer to Duarte General Plan Table N-1) and 45 dBA for residential interiors are achieved.

N-5 Prior to the issuance of building permits, any residential or hotel development located within 400 feet of the I-210 freeway corridor shall have a Focused Acoustical Analysis prepared to fully analyze acoustical impacts and develop measures, if required, to ensure that the City's exterior land use compatibility standards of 65 dBA for multi-family residential (refer to Duarte General Plan Table N-1) and 45 dBA for residential interiors are achieved.

Level of Significance: Less Than Significant With Mitigation Incorporated.

5.7.5 CUMULATIVE IMPACTS AND MITIGATION MEASURES

Table 4-1, *Cumulative Projects List*, identifies the related projects and other possible development in the area determined as having the potential to interact with the proposed project to the extent that a significant cumulative effect may occur. The following discussions are included per topic area to determine whether a significant cumulative effect would occur.

SHORT-TERM CONSTRUCTION NOISE IMPACTS

■ **DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT AND OTHER RELATED CUMULATIVE PROJECTS COULD RESULT IN SIGNIFICANT SHORT-TERM NOISE IMPACTS TO NEARBY NOISE SENSITIVE RECEIVERS.**

Impact Analysis: Construction activities associated with the proposed project and cumulative projects may overlap, resulting in construction noise in the area. However, as analyzed above, construction noise impacts primarily affect the areas immediately adjacent to the construction

site. Construction noise for the proposed project was determined to be significant and unavoidable despite implementation of Mitigation Measure N-1 due to the fact that several existing residences adjoin the project site. This project-level impact is due to local receptors and would not contribute cumulatively to construction noise in other areas of the City of Duarte, Irwindale, or Azusa.

The closest cumulative project is the City of Hope project that involves hospital, residential, and commercial uses. Although the City of Hope is located approximately 200 feet south of the proposed project, the main development would occur approximately 400 feet or more away from the adjacent residential areas. Additionally, the City of Hope is located south of the Gold Line railroad right-of-way and Duarte Road, which would buffer construction noise. Due to these distances and the intervening uses and structures, City of Hope construction noise would not interact with the proposed project. Therefore, this cumulative project along with proposed project would result in less than significant cumulative noise impacts.

Furthermore, the City of Duarte has no control over the timing or sequencing of the related projects, and as such, any quantitative analysis to ascertain the daily noise that assumes multiple, concurrent construction would be highly speculative. Construction-related noise for the proposed project and each related project would be localized. In addition, it is likely that each of the related projects would have to comply with the applicable City Municipal Code and/or Noise Ordinance, as well as mitigation measures that may be prescribed pursuant to CEQA provisions that require significant impacts to be reduced to the extent feasible.

Thus, as construction noise is localized in nature and drops off rapidly from the source, and with implementation of project-specific mitigation measures, less than significant cumulative construction related noise impacts would result.

Mitigation Measures: Refer to Mitigation Measure N-1. No additional mitigation measures are required.

Level of Significance: Less Than Significant Impact With Mitigation Incorporated.

LONG-TERM CUMULATIVE NOISE IMPACTS

■ **DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT AND OTHER RELATED CUMULATIVE PROJECTS COULD RESULT IN CUMULATIVELY CONSIDERABLE LONG-TERM NOISE IMPACTS.**

Impact Analysis:

Cumulative Stationary Noise

Although related cumulative projects have been identified within the project study area, the noise generated by stationary equipment on-site cannot be quantified due to the speculative nature of conceptual nature of each development. However, each cumulative project would require separate discretionary approval and CEQA assessment, which would address potential noise impacts and identify necessary attenuation measures, where appropriate. Additionally, as noise dissipates as it travels away from its source, noise impacts from stationary sources would be limited to each of the respective sites and their vicinities. As no other project sites are located within the immediate vicinity of the proposed project that would involve stationary noise

sources, the proposed project would not contribute to a cumulative stationary noise impact and impacts would be less than significant.

As noted above, with the implementation of Mitigation Measures N-2 and N-3, the proposed project would not result in significant stationary noise impacts. The proposed project would not result in stationary long-term equipment that would significantly affect surrounding sensitive receptors. Thus, the proposed project and identified cumulative projects are not anticipated to result in a significant cumulative impact. Less than significant impacts would occur in this regard.

Cumulative Mobile Noise

The cumulative mobile noise analysis is conducted in a two-step process. First, the combined effects from both the proposed project and other projects are compared. Second, for combined effects that are determined to be cumulatively significant, the project's incremental effects then are analyzed. A project's contribution to a cumulative traffic noise increase would be considered significant when the combined effect exceeds perception level (i.e., auditory level increase) threshold. The combined effect compares the "cumulative plus project" condition to "existing" conditions. This comparison accounts for the traffic noise increase from the proposed project generated in combination with traffic generated by projects in the cumulative projects list. The following criteria have been utilized to evaluate the combined effect of the cumulative noise increase.

- *Combined Effects*: The cumulative with project noise level ("2020 Plus Project") would cause a significant cumulative impact if a 3 dBA increase over existing conditions occurs and the resulting noise level exceeds the applicable exterior standard at a sensitive use.

Although there may be a significant noise increase due to the proposed project in combination with identified cumulative projects (combined effects), it must also be demonstrated that the project has an incremental effect. In other words, a significant portion of the noise increase must be due to the proposed project. The following criteria have been utilized to evaluate the incremental effect of the cumulative noise increase.

- *Incremental Effects: The "2020 Plus Project" causes a 1 dBA increase in noise over the "2020 No Project" noise level.*

A significant impact would result only if both the combined and incremental effects criteria have been exceeded. Noise by definition is a localized phenomenon, and drastically reduces as distance from the source increases. Consequently, only proposed projects and growth due to occur in the general vicinity of the project site would contribute to cumulative noise impacts. *Table 5.7-12*, *Cumulative Noise Scenario*, lists the traffic noise effects along roadway segments in the project vicinity for "Existing," "2020 No Project," and "2020 Plus Project," including incremental and net cumulative impacts.

Table 5.7-12
Cumulative Noise Scenario

Roadway Segment	Existing	2020 Without Project	2020 With Project	Combined Effects	Incremental Effects	Cumulatively Significant Impact?
	dBA @ 100 Feet from Roadway Centerline	dBA @ 100 Feet from Roadway Centerline	dBA @ 100 Feet from Roadway Centerline	Difference in dBA Between Existing and 2020 With Project	Difference in dBA Between 2020 Without Project and 2020 With Project	
Mountain Avenue						
Central Avenue to Evergreen Street	64.9	65.1	65.2	0.3	0.1	No
Evergreen Street to Duarte Road	63.9	64.1	64.2	0.3	0.1	No
Buena Vista Street						
Huntington Drive to Central Avenue	64.0	64.7	64.7	0.7	0	No
Central Avenue to I-210 Westbound On-Ramp	64.7	65.3	65.4	0.7	0.1	No
I-210 Westbound On-Ramp to I-210 Eastbound Ramp	64.3	65.1	65.3	1.0	0.2	No
I-210 Eastbound On-Ramp to Three Ranch Road	64.5	65.1	65.7	1.2	0.6	No
Three Ranch Road to Duarte Road	64.5	65.1	65.7	1.2	0.6	No
Duncannon Avenue						
Central Avenue to Evergreen Street	51.7	51.9	52.7	1.0	0.8	No
Highland Avenue						
Huntington Drive to Central Avenue	58.6	59.0	59.8	1.2	0.8	No
Central Avenue to Evergreen Street	63.0	63.5	64.2	1.2	0.7	No
Evergreen Street to Business Center Drive	62.4	62.9	63.8	1.4	0.9	No
Business Center Drive to Duarte Road	62.5	63.0	63.9	1.4	0.9	No
Huntington Drive						
Buena Vista Street to Highland Avenue	67.3	68.0	68.1	0.8	0.1	No
Highland Avenue to Mt Olive Drive	67.5	67.9	68.1	0.6	0.2	No
Central Avenue						
East of Mountain Avenue	61.4	61.6	61.6	0.2	0	No
West of Buena Vista Street	60.5	61.1	61.6	1.1	0.5	No
Buena Vista Street to I-210 WB Off-Ramp	62.2	62.5	62.6	0.4	0.1	No
I-210 WB Off-Ramp to Duncannon Avenue	57.7	58.2	58.7	1.0	0.5	No
Duncannon Avenue to Highland Avenue	59.6	60.0	60.5	0.9	0.5	No
Evergreen Street						
East of Mountain Ave	64.4	64.6	64.6	0.2	0	No
West of Buena Vista Street	61.3	61.9	62.3	1.0	0.4	No
Duncannon Avenue to Highland Avenue	50.0	50.5	51.9	1.9	1.4	No
Duarte Road						
Mountain Avenue to Buena Vista Street	64.8	65.4	65.6	0.8	0.2	No
Buena Vista Street to Cinco Robles Drive	64.7	65.4	66.3	1.6	0.9	No
Cinco Robles Drive to Village Road	64.5	65.2	66.2	1.7	1.0	No
Village Road to Highland Avenue	63.8	64.3	65.5	1.7	1.2	No

Notes: ADT = average daily trips; dBA = A-weighted decibels; CNEL = community noise equivalent level

Source: Noise modeling is based upon traffic data within the *Duarte Station Specific Plan Traffic Impact Analysis*, prepared by RBF Consulting, dated August 29, 2013.

First, it must be determined whether the Cumulative Plus Project Increase Above Existing Conditions (*Combined Effects*) is exceeded. Per *Table 5.7-12*, this criterion is not exceeded along any of the segments. Next, under the *Incremental Effects* criteria, cumulative noise impacts are defined by determining if the ambient (2020 No Project) noise level is increased by 1 dB or more. Based on the results of *Table 5.7-12*, Evergreen Street (between Duncannon Avenue and Highland Avenue) would experience an increase of 1.4 dBA. However, the combined effects increase would be 1.9 dBA (less than 3 dBA) and the resultant noise level would be 51.9, which is within the land use compatibility criteria for the area. Therefore, there would not be any roadway segments that would result in significant impacts, as they would not exceed both the combined and incremental effects criteria. The proposed project would not result in long-term mobile noise impacts based on project-generated traffic as well as cumulative and incremental noise levels. Therefore, the proposed project, in combination with cumulative background traffic noise levels, would result in a less than significant cumulative impact in this regard.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.7.6 SIGNIFICANT UNAVOIDABLE IMPACTS

With implementation of the proposed Duarte Station Specific Plan, significant unavoidable project impacts would occur for short-term construction noise.

All other project and cumulative project noise impacts associated with implementation of the proposed Duarte Station Specific Plan are either at less than significant levels or can be mitigated to less than significant levels.

If the City of Duarte approves the proposed Duarte Station Specific Plan, the City shall be required to cite their findings in accordance with *CEQA Guidelines* Section 15091 and prepare a Statement of Overriding Considerations in accordance with *CEQA Guidelines* Section 15093.

5.7.7 SOURCES CITED

California Office of Planning and Research, *General Plan Guidelines*, October 2003.

City of Duarte, *Duarte General Plan 2005-2020*, 2005.

City of Duarte, C*ity of Duarte Municipal Code,* July 2012.

Cyril M. Harris, *Handbook of Noise Control*, 1979.

Federal Transit Administration, *Transit Noise and Vibration Impact Assessment Guidelines*, May 2006.

RBF Consulting, *Duarte Station Specific Plan Traffic Impact Analysis,* August 29, 2013.

5.8 HAZARDS AND HAZARDOUS MATERIALS

The purpose of this section is to identify the potential for the proposed project to expose the public or the environment to hazards and hazardous materials related to existing conditions or new hazards created as a result of the proposed project. Where significant impacts are identified, mitigation measures are provided to reduce these impacts to the extent feasible. This section is based on available documentation reviewed by RBF Consulting, provided in Appendix G, Hazardous Materials Documentation. This documentation encompasses a review of information provided by Environmental Data Resources, Inc. (EDR), including historical aerial photographs and topographic maps, a City Directory Search Report, and an EDR Database Search, as well as review of available property data and interviews.

For this EIR, the term "hazardous material" includes any material that, because of its quantity, concentration, or physical, chemical, or biological characteristics, poses a considerable present or potential hazard to human health or safety, or to the environment. It refers generally to hazardous chemicals, radioactive materials, and biohazards materials. "Hazardous waste," a subset of hazardous material, is material that is to be abandoned, discarded, or recycled and includes chemicals, radioactive, and bio-hazardous waste (including medical waste).

5.8.1 REGULATORY SETTING

FEDERAL AND STATE

According to the Federal Environmental Protection Agency (EPA), a "hazardous" waste is defined as one "which because of its quantity, concentrations, or physiochemical or infectious properties, may either increase mortality or produce irreversible or incapacitating illness, or pose a substantial present or potential hazard to human health or the environment when improperly treated, stored, transported, or disposed of, or otherwise managed" (*U.S. Public Health and Welfare Code* Section 6903). Special handling and management are required for materials and wastes that exhibit hazardous properties. Treatment, storage, transport, and disposal of these materials are highly regulated at both the Federal and State levels. Compliance with Federal and State hazardous materials laws and regulations minimizes the potential risks to the public and the environment presented by these potential hazards, which include, but are not limited to, the following:

- Resources Conservation and Recovery Act (RCRA) – Hazardous waste management
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) – Cleanup of contamination
- Superfund Amendment and Reauthorization Act (SARA) – Cleanup of contamination
- Hazardous Materials Transportation Act (HMTA) – Safe transport of hazardous materials

These laws provide the "cradle to grave" regulation of hazardous wastes. Businesses, institutions, and other entities that generate hazardous waste are required to identify and track their hazardous waste from the point of generation until it is recycled, reused, or disposed of. The primary responsibility for implementing RCRA is assigned to the EPA, although individual states are encouraged to seek authorization to implement some or all RCRA provisions.

The EPA and the California Department of Toxic Substances Control (DTSC) have developed and continue to update lists of hazardous wastes subject to regulation. In addition to the EPA

and DTSC, the Regional Water Quality Control Board (RWQCB), Los Angeles Region (Region 4), is the enforcing agency for the protection and restoration of water resources, including remediation of unauthorized releases of hazardous substances in soil and groundwater. Other state agencies involved in hazardous materials management include the Office of Emergency Services, California Department of Transportation (Caltrans), California Highway Patrol (CHP), California Air Resources Board (CARB), and California Department of Resources Recycling and Recovery (CalRecycle). California hazardous materials management laws include, but are not limited to, the following:

- Hazardous Materials Management Act – business plan reporting
- Hazardous Substance Act – cleanup of contamination
- Hazardous Waste Control Act – hazardous waste management
- Safe Drinking Water and Toxic Enforcement Act of 1986 – releases of and exposure to carcinogenic chemicals

Department of Toxic Substances Control

The responsibility for implementation of RCRA was given to California Environmental Protection Agency's (Cal EPA) DTSC in August 1992. The DTSC is also responsible for implementing and enforcing California's own hazardous waste laws, which are known collectively as the Hazardous Waste Control Law. Although similar to RCRA, the California Hazardous Waste Control Law and its associated regulations define hazardous waste more broadly and regulate a larger number of chemicals. Hazardous wastes regulated by California, but not by EPA, are called "non-RCRA hazardous wastes."

State Water Resources Control Board

Brownfields are underutilized properties where reuse is hindered by the actual or suspected presence of pollution or contamination. The goals of the State Water Resources Control Board's (SWRCB) Brownfield Program are to:

- Expedite and facilitate site cleanups and closures for Brownfields sites to support reuse of those sites;
- Preserve open space and greenfields;
- Protect groundwater and surface water resources, safeguard public health, and promote environmental justice; and
- Streamline site assessment, clean up, monitoring, and closure requirements and procedures within the various SWRCB site cleanup programs.

Site clean-up responsibilities for brownfields primarily reside within four main programs at the SWRCB: the Underground Storage Tank Program, the Site Cleanup Program, the Department of Defense Program, and the Land Disposal Program. These SWRCB cleanup programs are charged with ensuring sites are remediated to protect the State of California's surface and groundwater and return it to beneficial use.

California Air Resources Board

One of the California Air Resources Board's (CARB) major goals is to protect the public from exposure to toxic air contaminants. The California Air Toxics Program establishes the process for the identification and control of toxic air contaminants and includes provisions to make the public aware of significant toxic exposures and for reducing risk.

The Toxic Air Contaminant Identification and Control Act (AB 1807, Tanner 1983) created California's program to reduce exposure to air toxics. The Air Toxics "Hot Spots" Information and Assessment Act (AB 2588, Connelly 1987) supplements the AB 1807 program by requiring a Statewide air toxics inventory, notification of people exposed to a significant health risk, and facility plans to reduce these risks.

Under AB 1807, CARB is required to use certain criteria in the prioritization for the identification and control of air toxics. In selecting substances for review, CARB must consider criteria relating to "the risk of harm to public health, amount or potential amount of emissions, manner of, and exposure to, usage of the substance in California, persistence in the atmosphere, and ambient concentrations in the community." AB 1807 also requires CARB to use available information gathered from the AB 2588 program to include in the prioritization of compounds. This report includes available information on each of the above factors required under the mandates of the AB 1807 program. AB 2588 air toxics "Hot Spots" program requires facilities to report their air toxics emissions, ascertain health risks, and to notify nearby residents of significant risks. In September 1992, the "Hot Spots" Act was amended by Senate Bill 1731 which required facilities that pose a significant health risk to the community to reduce their risk through a risk management plan.

Accidental Release Prevention Law

The State's Accidental Release Prevention Law provides for consistency with Federal laws (i.e., the Emergency Preparedness and Community Right-to-Know Act and the Clean Air Act) regarding accidental chemical releases and allows local oversight of both the State and Federal programs. State and Federal laws are similar in their requirements; however, the California threshold planning quantities for regulated substances are lower than the Federal quantities. Local agencies may set lower reporting thresholds or add additional chemicals to the program. The Accidental Release Prevention Law is implemented by the Certified Unified Program Agencies (CUPAs) and requires that any business, where the maximum quantity of a regulated substance exceeds the specified threshold quantity, register with the responsible CUPA as a manager of regulated substances and prepare a Risk Management Plan. A Risk Management Plan must contain an off-site consequence analysis, a five-year accident history, an accident prevention program, an emergency response program, and a certification of the truth and accuracy of the submitted information. Businesses submit their plans to the CUPA, which makes the plans available to emergency response personnel. The Business Plan must identify the type of business, location, emergency contacts, emergency procedures, mitigation plans, and chemical inventory at each location.

Transportation of Hazardous Materials/Wastes

Transportation of hazardous materials/wastes is regulated by *California Code of Regulations* (*CCR*) Title 26. The United States Department of Transportation (DOT) is the primary regulatory authority for the interstate transport of hazardous materials. The DOT establishes regulations for safe handling procedures (i.e., packaging, marking, labeling, and routing). The CHP and Caltrans enforce Federal and State regulations and respond to hazardous materials transportation emergencies. Emergency responses are coordinated as necessary between Federal, State, and local governmental authorities and private persons through a State mandated Emergency Management Plan.

Worker and Workplace Hazardous Materials Safety

Occupational safety standards exist to minimize worker safety risks from both physical and chemical hazards in the workplace. The California Division of Occupational Safety and Health (Cal/OSHA) is responsible for developing and enforcing workplace safety standards and assuring worker safety in the handling and use of hazardous materials. Among other requirements, Cal/OSHA requires many businesses to prepare Injury and Illness Prevention Plans and Chemical Hygiene Plans. The Hazard Communication Standard requires that workers be informed of the hazards associated with the materials they handle.

REGIONAL

Los Angeles Regional Water Quality Control Board

The Los Angeles RWQCB is the enforcing agency for the protection and restoration of water resources, including remediation of unauthorized releases of hazardous substances in soil and groundwater. The Underground Storage Tank (UST) Section directs environmental cleanup activities at leaking underground storage tank sites. Such sites include active and inactive gasoline stations, agricultural sites, brownfield redevelopment sites, airports, bulk petrochemical storage terminals, pipeline facilities, and various chemical and industrial facilities. The Site Cleanup Section oversees activities at non-UST sites where soil or groundwater contamination have occurred. Many of these sites are former industrial facilities and dry cleaners, where chlorinated solvents were spilled, or have leaked into the soil or groundwater.

South Coast Air Quality Management District

The South Coast Air Quality Management District (SCAQMD) works with CARB and is responsible for developing and implementing rules and regulations regarding air toxics on a local level. The SCAQMD establishes permitting requirements, inspects emission sources, and enforces measures through educational programs and/or fines.

COUNTY OF LOS ANGELES

Los Angeles County Fire Department

In May 1982, the Los Angeles County Board of Supervisors established the Hazardous Materials Control Program within the Department of Health Services. Originally, the Program focused on the inspection of businesses that generate hazardous waste, but has since expanded to include hazardous materials inspections, criminal investigations, site mitigation oversight, and emergency response operations. On July 1, 1991, the Program was transferred to the Los Angeles County Fire Department (LACFD) and its name changed to the Health Hazardous Materials Division (HHMD).

The HHMD's mission is to protect the public health and the environment throughout Los Angeles County from accidental releases and improper handling, storage, transportation, and disposal of hazardous materials and wastes through coordinated efforts of inspections, emergency response, enforcement, and site mitigation oversight. The Hazardous Materials Specialists are environmental health professionals dedicated to preventing pollution by serving both the public and business communities in Los Angeles County.

The Los Angeles County Fire Department is also the designated CUPA serving the City of Duarte.

Household Hazardous and E-Waste Program

The Los Angeles County Sanitation District, in cooperation with the Los Angeles County Department of Health Services, has established the Household Hazardous and E-Waste (electronic waste) Roundup Program. The Household Hazardous Waste Collection Program provides Los Angeles County residents a legal and cost-free way to dispose of unwanted household chemicals that cannot be disposed of in the regular trash.

CITY OF DUARTE

City of Duarte General Plan

The intent of the *Duarte General Plan* Safety Element (*General Plan*) is to reduce the potential risk of death, injuries, property damage, and economic and social dislocation resulting from fires, floods, earthquakes, landslides, and other hazards. Other locally relevant safety issues, such as emergency response, hazardous materials spills, and crime reduction, are also included.

SAFETY/HAZARDOUS MITIGATION POLICIES

Safe 6.1.1 Monitor to the greatest extent possible the location of hazardous materials that could adversely impact Duarte residents, and businesses.

Safe 6.1.2 Regulate the delivery, use, and storage of hazardous materials within the city limits according to regulations and guidelines set forth by the Los Angeles County Fire Department.

Duarte Municipal Code

The intent of *Duarte Municipal Code* Section 19.50.030, Hazardous Materials, is to protect local health, safety, and general welfare by ensuring that the design and operational characteristics of a property does not adversely impact neighboring property owners, neighboring property users, or the general public through the accidental or intentional release or use of hazardous materials.

5.8.2 ENVIRONMENTAL SETTING

The project site (Plan Area) is comprised of three parcels each developed with a single industrial/warehouse structure and associated surface parking. Parcel 1 is located adjacent to Duarte Road within the southern portion of the project site. This parcel is developed a single-story warehouse building (approximately 128,466 square feet) on approximately 6.60 acres. Parcel 2 is located south of Business Center Drive within the central portion of the project site. This parcel is developed a two-story office building and attached single-story warehouse building (totaling an approximate 114,599-square feet on approximately 9.16 acres). Parcel 3 (totaling approximately 3.32 acres) is located adjacent to Evergreen Street within the northern portion of the project site. This parcel is developed with a single-story, tilt-up building (approximately 70,890 square feet).

The following is a detailed description of surrounding land uses:

- *North:* Evergreen Street and the Foothill Freeway (Interstate 210) are located to the north of the northernmost portion of the project site. Single-family residential uses are located to the north across Business Center Drive and to the west of the northern portion of the project site.

- *West:* An approximately 204-unit single-family residential neighborhood (south of Evergreen Street, west of Buena Vista Street, and north of Duarte Road) is located to the west of the project site.

- *South:* The Los Angeles County Metropolitan Transportation Authority (Metro)-owned railroad right-of-way bounds the project site to the south. The City of Hope campus and the Santa Fe Dam Recreational Area, owned by the U.S. Army Corps of Engineers (USACE) and operated by Los Angeles County Department of Parks and Recreation, are located further south of the project site.

- *East:* The Duarte/Lewis Business Center occupies approximately 40 acres and is located to the east across Highland Avenue, south of the Interstate 210, and west of the San Gabriel Freeway (Interstate 605).

CURRENT OPERATIONS

The project site is currently occupied by warehouse/industrial uses. *Table 5.8-1*, *Current On-Site Properties*, describes these on-site properties.

Parcel 1 is developed with the Highland Industrial Center, occupied by several industrial uses including Joshua Tree Imports, Grand Value Inc., Quest Diagnostics, Hamlet Paper Co., Ltd Enterprises, San Gabriel Insulation, and Therapak. Other uses that have been reported in association with this on-site structure include, but are not limited to, Tri Star Electronics (2006-2007); Menie Inc. (2007); The People Movers Inc. (1995-2007); Floorscapes Ltd Co (1999-2007); Everfocus Electronics Corp (2007); Goodman Manufaturing Inc. (2007); American Distributors Inc. (2007); Electronics (2006); Amer Tai Trade (1999); Gibson Inc. (1999); Unitd Suntech Craft Inc. (1999); Cal Liquid Corp Production Facility (1995); Holmes Body Shop Inc. (1995); STK Auto Center (1995); Pioneer (1980-1985); Ronson Packaging Corp (1975); and Ellis Geo E Painter Hrear (1924). Of these uses, Holmes Body Shop Inc. and Pioneer have reported the handling/storage of hazardous materials.

Parcel 2 consists of office and warehouse uses, including Woodward-Duarte (formerly GE Aviation) . Other uses that have been reported in association with this on-site structure include, but are not limited to, Smiths Aerospace Actuation Systems (2007); Hydraulic Units Inc (1985-2007); Aerospace Unt (2006); Dowty (1995-2006). Of these uses, Hydraulic Units, Inc. and Woodward-Duarte (formerly GE Aviation) have reported the handling/storage of hazardous materials.

Parcel 3 is developed with industrial/warehousing suites. Reported uses at this property include Mutiny Crossfit, Studio Lilica, Costal Composites, Armstrong Engineering, Plain Truth Ministries, Sprint Telephony PCS LP, EAI Holdings LLC, MPK Co. (food distributor), BIOTAB Nutraceuticals, Inc., Grant Products, and Power Adapter Co. Other uses that have been reported in 2007 in association with this on-site structure include, but are not limited to, Beauty

Plus, Element Six, and Armstrong Engineering. No facilities at Parcel 3 have reported the handling/storage or transport of hazardous materials.

Table 5.8-1
Current On-Site Properties

Parcel Reference	Parcel Address[1] Assessor's Parcel Number[1]	Acreage	Number of On-Site Structures Total Square Footage	Reported On-Site Uses[2,3]
1	1801 Highland Avenue 8528-011-21	6.60	1 128,466	Joshua Tree Imports Grand Value Inc. Quest Diagnostics Hamlet Paper Co Ltd Enterprises San Gabriel Insulation Therapak Famous Brands Inc. Everfocus Electronics Corp.
2	1700 Business Center Drive 8528-011-20	9.16	1 114,599	**Woodward-Duarte (formerly GE Aviation)[4]** UAW Local
3	1716 Evergreen Street 8528-011-22	3.32	1 70,890	Mutiny Crossfit Studio Lilica Costal Composites Armstrong Engineering Plain Truth Ministries Sprint Telephony PCS LP EAI Holdings LLC MPK Co. (food distributor) BIOTAB Nutraceuticals, Inc. Grant Products Power Adapter Co.

Source: Refer to Appendix G, Hazardous Materials Documentation, for sources cited.

Notes:
[1] First American Real Estate Solutions, *Realquest Property Data*, accessed June 19, 2013.
[2] Environmental Data Resources, Inc., *EDR City Directory Abstract*, dated May 7, 2013.
[3] Correspondence with the City of Duarte, July 8, 2013.
[4] **Bold** denotes that this use has reported the handling, storage, and/or transport of hazardous substances.

HISTORICAL USES

The structure on Parcel 2 was constructed on-site in 1964 and the structure on Parcel 1 was constructed in 1966. The structure on Parcel 2 also included an addition of a warehouse onto the two-story structure between 1968 and 1976. The on-site structure located on Parcel 3 was constructed in 1978. Prior to development of these on-site structures, the project site consisted of rural residential and agricultural/grazing-related uses since prior to the 1930s.

CORTESE DATABASE

Government Code Section 65962.5 requires the DTSC and SWRCB to compile and update a regulatory sites listing (per the criteria of the Section). The State Department of Health Services is also required to compile and update, as appropriate, a list of all public drinking water wells that contain detectable levels of organic contaminants and that are subject to water analysis pursuant to *Health and Safety Code* Section 116395. *Government Code* Section 65962.5 requires the local enforcement agency, as designated pursuant to Section 18051 of Title 14 of the *California Code of Regulations* (*CCR*), to compile, as appropriate, a list of all solid waste disposal facilities from which there is a known migration of hazardous waste. The project site is not listed in a list of hazardous materials sites compiled pursuant to *Government Code* Section 65962.5.[1]

ON-SITE REGULATORY PROPERTIES

Based on the EDR Database Search obtained by RBF Consulting for the project site, dated May 7, 2013, the project site has been reported in the following regulatory databases associated with hazardous materials.

- *AST* – The Aboveground Storage Tank database contains a listing of Petroleum Storage Tank Facilities Registered Aboveground Storage Tanks.

- *CA FID UST* – The Facility Inventory Database (FID) contains a historical listing of active and inactive UST locations from the SWRCB.

- *ENVIROSTOR* – The DTSC's Site Mitigation and Brownfields Reuse Program's (SMBRP's) EnviroStor database identifies sites that have known contamination or sites for which there may be reasons to investigate further. The database includes the following site types: Federal Superfund sites (National Priorities List [NPL]); State Response, including Military Facilities and State Superfund; Voluntary Cleanup; and School sites. EnviroStor provides similar information to the information that was available in CalSites, and provides additional site information, including, but not limited to, identification of formerly-contaminated properties that have been released for reuse, properties where environmental deed restrictions have been recorded to prevent inappropriate land uses, and risk characterization information that is used to assess potential impacts to public health and the environment at contaminated sites.

- *FINDS* – The Facility Index System/Facility Registry System (FINDS) database contains both facility information and 'pointers' to other sources that contain more detail. EDR includes the following FINDS databases in their report: PCS (Permit Compliance System), AIRS (Aerometric Information Retrieval System), DOCKET (Enforcement Docket used to manage and track information on civil judicial enforcement cases for all environmental statutes), FURS (Federal Underground Injection Control), C-DOCKET (Criminal Docket System used to track criminal enforcement actions for all environmental statutes), FFIS (Federal Facilities Information System), STATE (State Environmental Laws and Statutes), and PADS (PCB Activity Data System).

[1] Department of Toxic Substances Control, http://www.envirostor.dtsc.ca.gov/public/mandated_reports.asp, accessed on June 20, 2013.

- *HIST UST* – The HIST UST database contains information on sites where historical underground storage tanks are located.

- *LOS ANGELES CO. HMS* – The Street Number List (HMS) includes industrial waste and underground storage tank sites in Los Angeles County.

- *NPDES* – National Pollutant Discharge Elimination System (NPDES) Permits Listing is a listing of NPDES permits, including storm water.

- *RCRA LQG* – The RCRA – Large Quantity Generator (LQG) database contains selective information on sites which generate, transport, store, treat, and/or dispose of hazardous waste as defined by RCRA. Large quantity generators generate over 1,000 kilograms (kg) of hazardous waste, or over one kg of acutely hazardous waste per month.

- *RCRA SQG* – The RCRA – Small Quantity Generator (SQG) database contains selective information on sites which generate, transport, store, treat, and/or dispose of hazardous waste as defined by RCRA. Small quantity generators generate less than 1,000 kilograms (kg) of hazardous waste, or over less than one kg of acutely hazardous waste per month. SQGs generate between 100 kg and 1,000 kg of hazardous waste per month.

- *SWEEPS UST* – The SWEEPS-UST database maintains information on properties where an underground storage tank is located, however, this database is no longer updated.

- *TRIS* – The Toxic Release Inventory System (TRIS) identifies facilities which release toxic chemicals to the air, water, and land in reportable quantities under SARA Title III Section 313.

- *WDS* – The Waste Discharge System (WDS) database is a listing of sites which have been issued waste discharge requirements.

- *WIP* – The Well Investigation Program (WIP) includes cases listed in the San Gabriel and San Fernando Valley area.

Holmes Body Shop (Parcel 1). This property has been reported in the RCRA-SQG, FINDS, and LOS ANGELES CO. HMS regulatory databases. This property has reported the generation of hazardous materials at the project site in 1985 and 1996. No violations are reported in association with these handling activities. This property is listed as an industrial waste and underground storage tank site with the County of Los Angeles.

Pioneer (Parcel 1). This property has been reported in the HIST UST, CA FID UST, SWEEPS UST, and LOS ANGELES CO. HMS regulatory databases. This on-site use has reported the presence of USTs used for waste and product in 1966. This property is also listed as an industrial waste and underground storage tank site with the County of Los Angeles.

Hydraulic Units, Inc. (Parcel 2). This property has been reported in the NPDES, HIST UST, ENVIROSTOR, CA FID UST, SWEEPS UST, WIP, and WDS regulatory databases. This on-site use has reported the presence of USTs used for waste and product associated with

machine shop activities in 1966 and 1987. This property is listed in the WIP and has reported to discharge waste per regulatory requirements.

Woodward-Duarte (formerly GE Aviation) (Parcel 2). This property has been reported in the RCRA-LQG, TRIS, FINDS, and AST regulatory databases. Woodward-Duarte (formerly GE Aviation) has reported the generation of hazardous materials at the project site. No violations are reported in association with these handling activities. This facility is also reported to release toxic chemicals to the air, water, and/or land in reportable quantities under SARA Title III Section 313. An aboveground storage tank (AST) with a capacity of 3,701 gallons is also reported at this location.

POTENTIAL ON-SITE GROUNDWATER CONTAMINATION AS A RESULT OF OFF-SITE PROPERTIES

Off-Site Dry Cleaner Sites

According to the U.S. EPA, dry cleaners are known to use a significant amount of chemicals, such as perchloroethylne (perc), which pose environmental concerns. At the end of the dry cleaning process, the cleaning fluid is separated from waste water by distillation. In the past, the waste water was often poured down floor drains. Perc can seep through the ground and contaminate surface water, groundwater, and potentially drinking water. Since a small amount of perc can contaminate a large amount of water, properties within a close proximately to dry cleaners or past dry cleaner sites have been found to potentially have subsurface contamination.

Persian Rug Services (1512 Highland Avenue). Based on the EDR Database Search, this facility is associated with dry-cleaning related services and adjoins the project site (Parcel 3) to the east (approximately 120 feet up-gradient of the project site). As discussed above, this facility has a moderate likelihood to impact groundwater underlying the project site.

5.8.3 SIGNIFICANCE THRESHOLD CRITERIA

The issues presented in the Initial Study Environmental Checklist (*CEQA Guidelines* Appendix G) have been utilized as thresholds of significance in this Section. Accordingly, a project may create a significant environmental impact if it causes one or more of the following to occur:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school (refer to 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 it create a significant hazard to the public or the environment;

- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working the in the project area (refer to Section 8.0, Effects Found Not To Be Significant);

- For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working the project area (refer to 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 (refer to Section 8.0, Effects Found Not To Be Significant); and/or

- 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 (refer to Section 8.0, Effects Found Not To Be Significant).

Based on these standards, the effects of the proposed project have been categorized as either a "less than significant impact" or a "potentially significant impact." Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a significant unavoidable impact.

5.8.4 PROJECT IMPACTS AND MITIGATION MEASURES

CONSTRUCTION-RELATED ACCIDENTAL RELEASE OF HAZARDOUS MATERIALS

■ **SHORT-TERM CONSTRUCTION ACTIVITIES ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT COULD CREATE A SIGNIFICANT HAZARD TO THE PUBLIC OR ENVIRONMENT THROUGH ACCIDENT CONDITIONS INVOLVING THE RELEASE OF HAZARDOUS MATERIALS.**

Impact Analysis: One of the means through which human exposure to hazardous substances could occur is through accidental release. Incidents that result in an accidental release of hazardous substances into the environment can cause contamination of soil, surface water, and/or groundwater, in addition to any toxic fumes that might be generated. Human exposure of contaminated soil or water can have potential health effects based on a variety of factors, such as the nature of the contaminant and the degree of exposure. Construction activities associated with development of the proposed project could release hazardous materials into the environment through reasonably foreseeable upset and accident conditions.

Implementation of the proposed project is anticipated to result in the demolition of the three existing on-site structures and the construction of new residential and non-residential uses.

Thus, development within the Plan Area may result in the disturbance of existing contaminated building materials, soil, and/or groundwater associated with existing and past on-site uses. Site disturbance, demolition/renovation, and/or construction within these areas could result in the disturbance of existing hazardous materials associated with structures, soil, and/or groundwater.

Structures

The existing on-site structures were constructed between 1964 and 1978. Thus, the potential for asbestos-containing materials (ACMs) or lead-based paints (LBPs) to be present in association with on-site building materials is likely. Demolition of on-site structures could expose construction personnel and the public to ACMs or LBPs. Federal and State regulations govern the renovation and demolition of structures where ACMs and LBPs are present. All demolition that could result in the release of ACMs or LBPs must be conducted according to Federal and State standards.

The National Emission Standards for Hazardous Air Pollutants (NESHAP) mandates that building owners conduct an asbestos survey to determine the presence of ACMs before the commencement of any remedial work, including demolition (included as Mitigation Measure HAZ-1). If ACM material is found, abatement of asbestos would be required before any demolition activities. If paint is separated from building materials (chemically or physically) during demolition of the structures, the paint waste would be required to be evaluated independently from the building material by a qualified Environmental Professional (included as Mitigation Measure HAZ-2). If LBP is found, abatement would be required to be completed by a qualified Lead Specialist before any demolition activities. Compliance with Mitigation Measures HAZ-1 and HAZ-2, as well as SCAQMD Rule 1403, would reduce these potential impacts to less than significant levels.

Other hazardous substances could also be encountered during demolition/renovation activities in association with on-site building materials. Existing operations within the Plan Area include the use, handling, and storage of hazardous substances. These substances could have contaminated existing drains, flooring, walls, ceiling tiles, etc., and could impact construction worker safety during building disturbance activities. An environmental professional with Phase II/site characterization experience would be required to conduct an inspection of existing structures prior to site disturbance activities in order to determine whether or not hazardous substances and/or heavy metals have the potential to be present in on-site building materials (i.e., sinks, drains, piping, walls, ceiling tiles, etc.) (included as Mitigation Measure HAZ-3). Should the potential exist, prior to disturbance of on-site buildings, a Phase II/site characterization specialist would be required to conduct testing of building materials that have the potential to contain hazardous substances, both currently and historically. Should contamination be present in on-site building materials, those materials would be required to be disposed of at an approved landfill facility. Compliance with Mitigation Measure HAZ-3 would reduce these potential impacts to less than significant levels.

Underground Storage Tanks

Multiple USTs are reported to exist on-site. Future development associated with implementation of the Specific Plan would be required to comply with the Los Angeles County Fire Department Health Hazard Management Division's (HHMD) Underground Storage Tank Program, including obtaining the appropriate permit(s) for UST removal (included as Mitigation

Measure HAZ-4). When a UST is closed, the owner must submit soil/groundwater testing results to rule out the presence of regulated hazardous materials with a closure letter. Upon implementation of Mitigation Measure HAZ-4, the applicant(s) would also be required to confirm that the removed USTs have not contaminated groundwater. If groundwater contamination, as a result of the removed USTs, is present above regulatory thresholds, then the applicant would be required to remediate the groundwater appropriately, as required by the HHMD. Therefore, with implementation of Mitigation Measure HAZ-4, potential accidental conditions during construction, as a result of the removal of on-site USTs, would be reduced to less than significant levels.

Historical Agricultural Activities

The project site has been historically utilized for agricultural purposes. Therefore, a combination of several commonly-used pesticides (i.e., DDD, DDT and DDE), which are now banned, may have been used throughout the project site, particularly from the 1940s through the 1960s. The historical use of agricultural pesticides may have resulted in pesticide residues of certain persistence in soil at concentrations that are considered to be hazardous based on established federal regulatory levels. The primary concern with historical pesticide residues is human health risk from inadvertent ingestion of contaminated soil, particularly by children. The presence of moderately elevated pesticide residuals in soil presents potential health and marketplace concerns.

Development within the Plan Area could expose construction workers during site disturbance activities, and the public during operations to hazardous materials. Future development associated with implementation of the Specific Plan would be required to conduct soil sampling, as determined by a qualified Phase II/site characterization specialist (included as Mitigation Measure HAZ-5). The sampling would determine if pesticide concentrations exceed established regulatory requirements and would identify further site characterization and remedial activities, if necessary. Should further site characterization/remedial activities be required, these activities would be required to be conducted per the applicable regulatory agency requirements, as directed by the HHMD. With implementation of Mitigation Measure HAZ-5, impacts pertaining to historical agricultural uses would be reduced to less than significant levels.

Potential Groundwater Contamination

The existing groundwater underlying the Plan Area has the potential to be contaminated as a result of both on-site and off-site activities. On-site activities that may have compromised on-site groundwater include, but are not limited to, current and past spills, hazardous materials storage area(s), ASTs, and/or USTs. In addition, off-site uses that may have compromised groundwater underlying the Plan Area include the off-site dry cleaning operation (Persian Rug Services located at 1512 Highland Avenue) that adjoins the project site to the east/northeast.

Construction workers could be exposed to hazardous substances during grading/excavation activities, should groundwater be encountered. A Phase II/site characterization specialist would be required to conduct appropriate sampling in order to determine whether or not contaminated groundwater is present. Should contaminated groundwater be present, preparation of a worker safety plan would be required to ensure construction worker safety during grading/excavation activities (included as Mitigation Measure HAZ-6). Compliance with Mitigation Measure HAZ-6 would reduce potential impacts in this regard to less than significant levels.

Transport of Hazardous Materials

Excavation/grading activities and/or site disturbance of existing building materials may result in the off-site transport and disposal of hazardous substances, in the event that these substances are encountered. Off-site transport and disposal of hazardous substances would be short-term in nature, only occurring during demolition/renovation or grading/excavation activities, and would be subject to Federal, State, and local health and safety regulations that protect public safety. Handling, transport, and disposal of these substances are regulated by the DTSC, CalEPA, CalOSHA, and HHMD. Future construction contractors would also be subject to the requirements of the CalOSHA and HHMD governing removal actions. DTSC regulations require specific hazardous materials handling methods, truck haul routes, and schedules to minimize potential exposure during hazardous materials removal actions. With adherence to the requirements of affected regulatory agencies regarding the handling, transport, and disposal of hazardous materials, implementation of the proposed project would not create a significant hazard to the public or the environment. As such, impacts related to the temporary off-site hauling and disposal of hazardous building materials during demolition would be less than significant.

Railroad Right-of-Way

Parcel 1 adjoins the Metro-owned railroad right-of-way, which trends along the southern boundary of the Plan Area. Active and inactive railroad beds frequently have concentrations of petroleum products and lead elevated above natural background conditions. Petroleum product concentrations and lead concentrations are derived from drippings from rail vehicles and flaked paint, respectively. Wooden railroad ties may contain preservatives (i.e., creosote), some of which may contain hazardous constituents. Track switch locations often have elevated levels of petroleum hydrocarbons. Inorganic and organic herbicides, along with diesel fuel, may have been used for vegetation control. As the proposed project would not involve the disturbance of existing or historical railroad rights-of-way, it is unlikely that the proposed project would involve the disturbance of potential hazardous materials in the soil as a result of off-site railroad activities. However, in order to ensure that no hazardous substances associated with the railroad are located on-site, a Phase II/site characterization specialist would be required to conduct appropriate sampling along the southern boundary of the Plan Area for Parcel 2 in order to determine whether or not contaminated soil is present (included as Mitigation Measure HAZ-7). Should contaminated soil be present, the Phase II/site characterization specialist shall recommend appropriate remediation/safety measures in order to ensure worker safety during construction and public health during proposed project operations. With the implementation of Mitigation Measure HAZ-7, impacts in this regard would be reduced to less than significant levels.

Other Construction Related Impacts

Other means by which accidental spills could result during construction of future development include proposed construction equipment. Construction equipment may involve petroleum-based fuel spills. The level of risk associated with this type of spill is not considered significant due to the small volume and low concentration of hazardous materials utilized during the construction phases. The proposed project contractor would be required to use standard construction controls and safety procedures that would avoid and minimize the potential for accidental release of such substances into the environment in the event of a spill. Standard construction practices would be observed such that any materials released would be

appropriately contained and remediated as required by local, State, and Federal law. Impacts in this regard would be less than significant.

Impact Conclusion

Site disturbance/demolition activities could expose workers to a variety of potentially hazardous materials. Implementation of Mitigation Measures HAZ-1 through HAZ-7 would reduce potential impacts from site disturbance/demolition activities that would result in accidental conditions at the project site. If unknown wastes or suspect materials are discovered during construction by the contractor, which he/she believes may involve hazardous wastes/materials, the contractor would be required to complete the following (included as Mitigation Measure HAZ-8):

- Immediately stop work in the vicinity of the suspected contaminant, removing workers and the public from the area;
- Notify the City Engineer of the City of Duarte;
- Secure the areas as directed by the City Engineer; and
- Notify the Los Angeles County Fire Department Health Hazard Management Division's (HHMD) Hazardous Waste/Materials Coordinator.

With implementation of Mitigation Measures HAZ-1 through HAZ-8 and compliance with applicable Federal, State, and local regulatory requirements pertaining to hazardous materials, potential impacts would be reduced to less than significant levels.

Mitigation Measures:

HAZ-1 Prior to demolition activities, an asbestos survey shall be conducted by an Asbestos Hazard Emergency Response Act (AHERA) and Cal OSHA certified building inspector to determine the presence or absence of asbestos containing-materials (ACMs). If ACMs are located, abatement of asbestos shall be completed before any activities that would disturb ACMs or create an airborne asbestos hazard. Asbestos removal shall be performed by a State certified asbestos containment contractor in accordance with the South Coast Air Quality Management District (SCAQMD) Rule 1403.

HAZ-2 If paint is separated from building materials, chemically or physically, during demolition of the structures, the paint waste shall be evaluated independently from the building material by a qualified Environmental Professional. If lead-based paint is found, abatement shall be completed by a qualified Lead Specialist before any activities that would create lead dust or fume hazard. Lead-based paint removal and disposal shall be performed in accordance with California Code of Regulation Title 8, Section 1532.1, which specifies exposure limits, exposure monitoring and respiratory protection, and mandates good worker practices by workers exposed to lead. Contractors performing lead-based paint removal shall provide evidence of abatement activities to the City's Building Department.

HAZ-3 An environmental professional with Phase II/site characterization experience shall conduct an inspection of existing on-site structures before building renovation/ demolition activities. The inspection shall determine whether or not testing is required to confirm the presence or absence of hazardous substances in building materials (i.e., sinks, drains, piping, flooring, walls, ceiling tiles, etc.). Should testing

be required and results determine that hazardous substances are present in on-site building materials, the Phase II/site characterization specialist shall determine appropriate prevention/remediation measures that are required and/or the methods for proper disposal of hazardous waste at an approved landfill facility, if required.

HAZ-4 As applicable, each project applicant shall obtain appropriate permits from the Los Angeles County Fire Department Health Hazard Management Division (HHMD), before removing any existing USTs, per the Underground Storage Tank Program. The applicant shall conduct soil/groundwater testing, as requested by the HHMD. Should contamination be present above regulatory thresholds, then the project applicant shall remediate appropriately, as required by the HHMD. Should the HHMD refer the case to any other regulatory agency (e.g., the Department of Toxic Substances Control, or Regional Water Quality Control Board, etc), then the applicant shall comply with that said agency as well.

HAZ-5 Prior to issuance of a grading permit, soil sampling shall occur within the portions of the project site that have historically been utilized for agricultural purposes and may contain pesticide residues in the soil, as determined by a qualified Phase II/site characterization specialist. The sampling shall determine if pesticide concentrations exceed established regulatory requirements and shall identify further site characterization and remedial activities, if necessary. Should further site characterization/remedial activities be required, these activities shall be conducted per the applicable regulatory agency requirements, as directed by the Los Angeles County Fire Department Health Hazard Management Division (HHMD).

HAZ-6 Prior to issuance of a grading permit, an environmental consultant with Phase II/site characterization experience shall conduct sampling in order to confirm whether or not contaminated soil/groundwater underlies the project site. Should contamination above established regulatory levels be identified, the environmental consultant shall recommend remedial activities appropriate for the proposed future development at the site, in consultation with the Los Angeles County Fire Department Health Hazard Management Division (HHMD) and/or other applicable agencies.

HAZ-7 Prior to issuance of a grading permit, a Phase II/site characterization specialist shall conduct appropriate sampling along the southern boundary of the project site (Parcel 1) in order to determine whether or not contaminated soil is present. Should contaminated soil be present, the Phase II/site characterization specialist shall recommend appropriate remediation/safety measures in order to ensure worker safety during construction and public health during proposed project operations.

HAZ-8 Prior to issuance of a grading permit, the project applicant shall submit a Worker Safety Plan for site disturbance/construction activities, in consultation with California Division of Occupational Safety and Health (Cal/OSHA) and Los Angeles County Fire Department Health Hazard Management Division (HHMD). The Worker Safety Plan shall include safety precautions (e.g., personal protective equipment or other precautions to be taken to minimize exposure to hazardous materials) to be taken by personnel when encountering potential hazardous materials, including potential contaminated groundwater.

HAZ-9 If unknown wastes or suspect materials are discovered during construction by the contractor that are believed to involve hazardous waste or materials, the contractor shall comply with the following:

- Immediately cease work in the vicinity of the suspected contaminant, and remove workers and the public from the area;
- Notify the City Engineer of the City of Duarte;
- Secure the area as directed by the City Engineer; and
- Notify the Los Angeles County Fire Department Health Hazard Management Division's (HHMD) Hazardous Waste/Materials Coordinator (or other appropriate agency specified by the City Engineer). The Hazardous Waste/Materials Coordinator shall advise the responsible party of further actions that shall be taken, if required.

Level of Significance: Less Than Significant With Mitigation Incorporated.

OPERATIONAL-RELATED IMPACTS

■ **IMPLEMENTATION OF THE PROPOSED PROJECT COULD CREATE A SIGNIFICANT HAZARD DURING USE OPERATIONS TO THE PUBLIC OR ENVIRONMENT THROUGH THE HANDLING, STORAGE, AND/OR USE OF HAZARDOUS MATERIALS, AS WELL AS ACCIDENT CONDITIONS INVOLVING THE RELEASE OF HAZARDOUS MATERIALS.**

Impact Analysis: The Duarte Station Specific Plan proposes the future development of residential, mixed-use retail, office, and park/open space land uses, and would not involve the routine transport, use, or disposal of substantial quantities of hazardous materials. Although herbicides, pesticides, and fertilizers would be utilized on-site for landscape maintenance, they would only be utilized periodically and in small quantities. Future commercial uses that may store, handle, and/or transport hazardous materials would be required to procure business plans and adhere to strict procedures enforced by agencies with jurisdiction over businesses or areas that routinely use or handle hazardous materials. During operations, it is anticipated that strict standards established by the U.S. EPA, DTSC, and HHMD would be implemented. Thus, compliance with existing Federal, State, and local standards and regulations would reduce potential impacts associated with implementation of the proposed project to a less than significant level in this regard.

Vapor Intrusion

The intrusion of subsurface vapors into buildings is one of many exposure pathways that must be considered in assessing the risk posed by releases of hazardous chemicals into the environment. Based on the moderate potential for contaminated groundwater underlying the project site, vapor intrusion into proposed structures as a result of these contamination plumes could occur.

With implementation of Mitigation Measure HAZ-6, a qualified site characterization specialist would be required to conduct updated site characterization at the project site prior to issuance of building permits, in consultation with the HHMD, with regard to potential on-site contaminated groundwater. Upon completion of site characterization activities, remedial activities, if necessary, would be recommended in consultation with HHMD and/or other applicable

agencies. Also, prior to issuance of building permits, vapor intrusion investigations would be required to be conducted by a qualified Environmental Professional, in consultation with the HHMD (included as Mitigation Measure HAZ-10). Should the Environmental Professional determine that proposed buildings could be impacted by vapor intrusion, the Environmental Professional, in consultation with HHMD, would recommend specific design measures to be incorporated into the buildings' design that would reduce these indoor air quality concentrations to below regulatory thresholds, as directed by HHMD. With implementation of Mitigation Measures HAZ-6 and HAZ-10, impacts to persons at the project site as a result of potential vapor intrusion would be reduced to less than significant levels.

Mitigation Measures:

HAZ-10 Prior to issuance of building permits, vapor intrusion investigations shall be conducted by a qualified Environmental Professional, in consultation with the Los Angeles County Fire Department Health Hazard Management Division (HHMD). Should the Environmental Professional determine that proposed buildings could be impacted by vapor intrusion, the Environmental Professional, in consultation with the HHMD and/or other applicable regulatory agencies, shall recommend specific design measures to be incorporated into the buildings' design that would reduce these indoor air quality concentrations to below regulatory thresholds.

Level of Significance: Less Than Significant With Mitigation Incorporated.

HAZARDOUS MATERIALS SITES

■ **DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT SITE COULD BE LOCATED ON A HAZARDOUS MATERIALS SITE PER GOVERNMENT CODE SECTION 65962.5 AND COULD CREATE A SIGNIFICANT HAZARD TO THE PUBLIC OR THE ENVIRONMENT.**

Impact Analysis: The Plan Area is not listed in a list of hazardous materials sites compiled pursuant to *Government Code* Section 65962.5[2]. Thus, no impact would result in this regard.

Mitigation Measures: No mitigation measures are required.

Level of Significance: No Impact.

5.8.5 CUMULATIVE IMPACTS AND MITIGATION MEASURES

■ **DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT AND OTHER RELATED CUMULATIVE PROJECTS COULD INCREASE THE EXPOSURE OF HAZARDOUS SUBSTANCES TO THE PUBLIC OR THE ENVIRONMENT.**

Impact Analysis: Cumulative projects may result in a cumulatively considerable hazardous materials impact, as other projects in proximity to the project site, including those associated

[2] Department of Toxic Substances Control, http://www.envirostor.dtsc.ca.gov/public/mandated_reports.asp, accessed on June 20, 2013.

with the City of Hope, propose the handling/storage/transport of hazardous substances. However, future on-site residential structures would be located greater than 500 feet up-gradient from these uses. Future residential projects proposed in the Plan Area and in the surrounding area could be exposed to contaminated groundwater resulting from the existing project site. With implementation of the recommended Mitigation Measures HAZ-4, HAZ-6 and HAZ-10, impacts in this regard would be reduced to less than significant levels.

The proposed project could also contribute cumulatively, although not significantly, to a hazard involving the transport of hazardous materials during construction and operation. Handling, transport, and disposal of these materials are regulated by the DTSC, CalEPA, CalOSHA, and HHMD. The construction contractor, on a project-by-project basis, would be subject to the requirements of the DTSC governing removal actions. DTSC regulations require specific hazardous materials handling methods, truck haul routes, and schedules to minimize potential exposure during hazardous materials removal actions. Compliance with all applicable Federal and State laws related to the handling/storage/transportation of hazardous materials would reduce the likelihood and severity of accidents during transit, thereby ensuring that a less than significant cumulatively considerable impact would occur as a result of implementation of the proposed project.

Mitigation Measures: Refer to Mitigation Measures HAZ-4, HAZ-6, and HAZ-10. No additional mitigation measures are required.

Level of Significance: Less Than Significant With Mitigation Incorporated.

5.8.6 SIGNIFICANT UNAVOIDABLE IMPACTS

Implementation of the proposed project would result in less than significant project and cumulative impacts related to hazards or hazardous materials during both construction and operation with adherence to the identified mitigation measures and compliance with the applicable Federal, State, and local regulatory requirements. As such, no significant unavoidable impacts would result from implementation of the Duarte Station Specific Plan.

5.8.7 SOURCES CITED

Correspondence with the City of Duarte, July 8, 2013.

Department of Conservation, Division of Oil, Gas & Geothermal Resources, Version 2.1 of the Online Mapping System (DOMS), http://maps.conservation.ca.gov/doms/index.html, accessed on June 27, 2013.

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Environmental Data Resources, Inc., *EDR City Directory Abstract*, dated May 7, 2013.

Environmental Data Resources, Inc., *The EDR Radius Map Report with GeoCheck*, dated May 7, 2013.

Environmental Data Resources, Inc., *The EDR Aerial Photo Decade Package*, dated May 10, 2013.

Environmental Data Resources, Inc., *EDR Historical Topographic Map Report*, dated May 7, 2013.

Environmental Data Resources, Inc., *Certified Sanborn Map Report*, dated May 7, 2013.

First American Real Estate Solutions, *Realquest Property Data*, accessed June 19, 2013.

USGS Topographic Quadrangle, *Azusa, California Quadrangle*, dated 1966, photo revised 1972.

5.9 HYDROLOGY, DRAINAGE, AND WATER QUALITY

This section analyzes potential project impacts on existing drainage patterns, surface hydrology, and flood control facilities and water quality conditions in the project area. The discussion in this section is based on information and conclusions contained in the *Duarte Gold Line Station Project EIR Hydrology and Water Quality Technical Appendix*, prepared by RBF Consulting (May 2013); refer to Appendix H, Hydrology and Water Quality.

5.9.1 REGULATORY SETTING

FEDERAL

Federal Clean Water Act

The Clean Water Act (CWA) Section 404 requires that the discharge of pollutants to "Waters of the U.S." from any point source be effectively prohibited, unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) Permit. Under the NPDES permit program, the EPA established regulations for discharging storm water by municipal and industrial facilities and construction activities.

The NPDES permit is broken up into two Phases: I and II. Phase I requires medium and large cities, or certain counties with populations of 100,000 or more to obtain NPDES permit coverage for their storm water discharges. Phase II requires regulated small Municipal Separate Storm Sewer Systems (MS4s) in urbanized areas, as well as small MS4s outside the urbanized areas that are designated by the permitting authority, to obtain NPDES permit coverage for their storm water discharges. Polluted storm water run-off is commonly transported through MS4s. This run-off is often untreated and discharged into local water bodies.

National Flood Insurance Program

The National Flood Insurance Program (NFIP) was created by Congress in 1968. It provided a means for property owners to financially protect themselves from flood damage. The NFIP offers flood insurance to homeowners, renters, and business owners if their community participates in the program. Participating communities agree to adopt and enforce ordinances that meet or exceed Federal Emergency Management Agency (FEMA) requirements to reduce the risk of flooding. The City of Duarte is a participating community and must adhere to the NFIP.

STATE

California Porter-Cologne Act

The CWA places the primary responsibility for the control of surface water pollution and for planning the development and use of water resources with the states, although it does establish certain guidelines for the states to follow in developing their programs and allows the EPA to withdraw control from states with inadequate implementation mechanisms.

California's primary statute governing water quality and water pollution issues with respect to both surface waters and groundwater is the Porter-Cologne Water Quality Control Act of 1970 (Porter-Cologne Act). The Porter-Cologne Act grants the State Water Resources Control Board (SWRCB) and the Regional Water Quality Control Boards (RWQCBs) authority and responsibility to adopt plans and policies, to regulate discharges to surface and groundwater, to regulate waste disposal sites, and to require cleanup of discharges of hazardous materials and other pollutants. The Porter-Cologne Act also establishes reporting requirements for unintended discharges of any hazardous substance, sewage, or oil or petroleum product.

Each RWQCB must formulate and adopt a water quality control plan for its region. The regional plans are to conform to the policies set forth in the Porter-Cologne Act and established by the SWRCB in its state water policy. The Porter-Cologne Act also provides that a RWQCB may include within its regional plan water discharge prohibitions applicable to particular conditions, areas, or types of waste.

State Water Resources Control Board

The SWRCB administers water rights, water pollution control, and water quality functions throughout the State, while the RWQCBs conduct planning, permitting, and enforcement activities. For development projects, the NPDES permit is divided into two parts: construction and post-construction. The construction permitting is administered by the SWRCB, while the post-construction permitting is administered by the RWQCB.

Development projects typically result in the disturbance of soil that requires compliance with the NPDES General Permit, Waste Discharge Requirements for Discharges of Storm Water Runoff Associated with Construction Activities (Order No. 2009-0009-DWQ, NPDES Number CAS000002). This Statewide General Construction permit regulates discharges from construction sites that disturb one or more acres of soil. By law, all storm water discharges associated with construction activity where clearing, grading, and excavation results in soil disturbance of at least one acre of total land area must comply with the provisions of this NPDES Permit, and develop and implement an effective Storm Water Pollution Prevention Plan (SWPPP). The SWPPP is required to contain a site map(s), which shows the construction site perimeter, existing and proposed buildings, lots, roadways, storm water collection and discharge points, general topography both before and after construction, and drainage patterns across the project. The SWPPP is required to list Best Management Practices (BMPs) the discharger will use to protect storm water runoff and the placement of those BMPs. Additionally, the SWPPP must contain a visual monitoring program; a chemical monitoring program for "non-visible" pollutants to be implemented if there is a failure of BMPs; and a sediment monitoring plan if the site discharges directly to a water body listed on the 303(d) list for sediment. Section A of the Construction General Permit describes the elements that must be contained in a SWPPP. A project applicant must submit a Notice of Intent (NOI) to the SWRCB, to be covered by the NPDES General Permit, and prepare the SWPPP before beginning construction. Implementation of the plan starts with the commencement of construction and continues through the completion of the project. Upon completion of the project, the applicant must submit a Notice of Termination (NOT) to the SWRCB to indicate that construction is completed.

Groundwater Management Act

Assembly Bill (AB) 3030, the Groundwater Management Act, is *California Water Code* Section 10750 et seq. AB 3030 provides local water agencies with procedures to develop a

groundwater management plan so those agencies can manage their groundwater resources efficiently and safely while protecting the quality of supplies. Under AB 3030, the development of a groundwater management plan by a local water agency is voluntary. Once a plan is adopted, the rules and regulations contained therein must also be adopted to implement the program outlined in the plan.

REGIONAL/LOCAL

Los Angeles Regional Water Quality Control Board

The SWRCB oversees the nine RWQCBs in the state of California. The City of Duarte is within the jurisdiction of the Los Angeles RWQCB (LARWQCB).

The Municipal Storm Water Permitting Program regulates storm water discharges from municipal separate storm sewer (drain) systems (MS4s). Most of these permits are issued to a group of co-permittees encompassing an entire metropolitan area. The MS4 permits require the discharger to develop and implement a Storm Water Management Plan/Program with the goal of reducing the discharge of pollutants to the maximum extent practicable (MEP). MEP is the performance standard specified in *Clean Water Act* Section 402(p). The management programs specify what BMPs will be used to address certain program areas. The program areas include public education and outreach; illicit discharge detection and elimination; construction and post-construction; and good housekeeping for municipal operations.

In order to address the requirements of the *Clean Water Act*, the LARWQCB issued a NPDES Permit (Order No. R4-2012-0175, NPDES Permit No. CAS004001, Waste Discharge Requirements for Municipal Separate Storm Sewer System [MS4] Discharges Within the Coastal Watersheds of Los Angeles County, Except Discharges Originating from the City of Long Beach [MS4]) to the Los Angeles County Flood Control District, the County of Los Angeles, and the 84 incorporated cities (including the City of Duarte) within the coastal watersheds of Los Angeles County. The new requirements of the Municipal NPDES permit require that proposed projects include a plan (i.e., Standard Urban Storm Water Mitigation Plan [SUSMP], or functional equivalent document) to address potential water quality impacts on-site using Low Impact Development (LID), and that its potential impact on downstream waterbodies (i.e., hydromodification) is evaluated. Since the NPDES permit was adopted November 8, 2012, the County of Los Angeles has not yet updated guidance to address the new permit requirements. The plan (SUSMP or functional equivalent document) created for the proposed project would be required to comply with the future guidance that is currently in development.

The MS4 Permit Order requires development and implementation of a Planning and Land Development Program for all “New Development” and “Redevelopment” projects subject to the Order. The Program is intended to accomplish the following objectives:

- Lessen the water quality impacts of development by using smart growth practices such as compact development, directing development towards existing communities via infill or redevelopment, and safeguarding of environmentally sensitive areas;

- Minimize the adverse impacts from storm water runoff on the biological integrity of Natural Drainage Systems and the beneficial uses of water bodies in accordance with requirements under CEQA;

- Minimize the percentage of impervious surfaces on land developments by minimizing soil compaction during construction, designing projects to minimize the impervious area footprint, and employing Low Impact Development (LID) design principles to mimic predevelopment water balance hydrology through infiltration, evapotranspiration and rainfall harvest and use;

- Maintain existing riparian buffers and enhance riparian buffers when possible;

- Minimize pollutant loadings from impervious surfaces such as roof tops, parking lots, and roadways through the use of properly designed, technically appropriate BMPs (including Source Control BMPs such as good housekeeping practices), LID Strategies, and Treatment Control BMPs;

- Properly select, design and maintain LID and Hydromodification Control BMPs to address pollutants that are likely to be generated, reduce changes to pre-development hydrology, assure long-term function, and avoid the breeding of vectors; and

- Prioritize the selection of BMPs to remove storm water pollutants, reduce storm water runoff volume, and beneficially use storm water to support an integrated approach to protecting water quality and managing water resources.

The MS4 Permit Order specifies the criteria or thresholds for determining "New Development" and "Redevelopment Projects." The Redevelopment Projects that are subject to Permittee conditioning and approval for the design and implementation of post-construction controls to mitigate storm water pollution, before completion of a project, include the following, among others:

- Land-disturbing activity that results in the creation or addition or replacement of 5,000 square feet or more of impervious surface area on an already developed site.

- Where Redevelopment results in an alteration to more than fifty percent of impervious surfaces of a previously existing development, and the existing development was not subject to post-construction storm water quality control requirements, the entire project must be mitigated.

- Where Redevelopment results in an alteration of less than fifty percent of impervious surfaces of a previously existing development, and the existing development was not subject to post-construction storm water quality control requirements, only the alteration must be mitigated, and not the entire development.

The New Development/Redevelopment Project Performance Criteria for commercial and residential activities include:

- Control pollutants, pollutant loads, and runoff volume from the project by minimizing the impervious surface area and controlling runoff from impervious surfaces through infiltration, bioretention and/or rainfall harvest and use.

- Retain on-site the Stormwater Quality Design Volume (SWQDv) from the 0.75-inch, 24-hour rain event or the 85th percentile, 24-hour rain event, as determined from the Los Angeles County 85th percentile precipitation isohyetal map, whichever is greater.

- Bioretention and biofiltration systems shall meet the design specifications provided in NPDES Permit Attachment H unless approved otherwise by the Regional Water Board Executive Officer.

- When evaluating the potential for on-site retention, the maximum potential for evapotranspiration from green roofs and rainfall harvest and use shall be considered.

- If on-site retention, bioretention, and biofiltration systems are infeasible, opportunities for regional ground water replenishment offsite may be permissible.

- Implement hydrologic control measures to prevent accelerated downstream erosion and to protect stream habitat in natural drainage systems (Hydromodification), including one, or a combination of on-site, regional or sub-regional hydromodification control BMPs, LID strategies, or stream and riparian buffer restoration measures.

- Meet the Hydromodification Control Criteria by:

    - Retaining on-site the runoff volume from the 95th percentile, 24-hour storm, or
    - Post-development conditions should not exceed the pre-development conditions for the 2-year, 24-hour rainfall event, or
    - The Erosion Potential (Ep) in the receiving water channel will be approximately one, as determined by a Hydromodification Analysis Study and the equation presented in NPDES Permit Attachment J.

- If the proposed project cannot meet the previously mentioned Hydromodification Control Criteria, then it may satisfy this requirement by implementing the hydromodification requirements in the County of Los Angeles Low Impact Development Manual (2009) for all projects disturbing an area greater than one acre within natural drainage systems, or meet the watershed specific Hydromodification Control Plan, if one is developed for the Los Angeles River.

Low Impact Development

Permittees that elect to prepare a Watershed Management Program or an Enhanced Watershed Management Program under the MS4 Permit are required to establish a Low Impact Development (LID) Ordinance to lessen the impacts of development by using smart growth principles and to integrate LID practices and standards for stormwater pollution mitigation through means of infiltration, evapotranspiration, biofiltration, and rainfall harvest and use for new development and redevelopment projects. The City of Duarte is a Permittee and must adopt an LID Ordinance by June 30, 2014. The LID Ordinance will require stormwater mitigation for a larger number of development and redevelopment projects that previously required under SUSMP.

LID is a stormwater management strategy that seeks to mitigate the impacts of runoff and stormwater pollution as close to its source as possible. LID comprises a set of site design approaches and best management practices (BMPs) to address runoff and pollution at the source. The LID practices can effectively remove nutrients, bacteria, and metals while reducing the volume and intensity of stormwater flows.

City of Duarte Municipal Code

Duarte Municipal Code Chapter 6.15, Stormwater and Urban Runoff Pollution Control, was adopted for the purpose of protecting the health and safety of the residents of the city and county by protecting the beneficial uses, marine and river habitats and ecosystems of receiving waters within the county from pollutants carried by stormwater and non-stormwater discharges. The provisions of Chapter 6.15 apply to the discharge, deposit, or disposal of any stormwater and/or urban runoff to the storm drain system and/or receiving waters within any incorporated areas of the City of Duarte covered by an NPDES municipal stormwater permit.

Activities requiring a NPDES construction permit are subject to *Duarte Municipal Code* Section 6.15.021, Control of Pollutants from Construction Activities Requiring General Construction Activity Storm Water Permit. In accordance with Section 6.15.021, the following are required to be retained at the construction site: 1) a copy of the Notice of Intent to Comply with Terms of the General Permit to Discharge Water Associated with Construction Activity; 2) a waste discharge identification number issued by the SWRCB; 3) a Storm Water Pollution Prevention Plan and Monitoring Program Plan for the construction activity requiring the construction permit; and 4) records of all inspections, compliance and noncompliance reports, evidence of self-inspection and good housekeeping practices.

Duarte Municipal Code Section 6.15.023, *Control of Pollutants from New Developments*, requires new develop projects to be evaluated by the City for its potential to discharge pollutants based on its intended land use. BMPs would be required to be implemented during construction and following project completion.

5.9.2 ENVIRONMENTAL SETTING

EXISTING HYDROLOGY AND DRAINAGE CONDITIONS

Currently, there is one storm drain in Highland Avenue adjacent to the project site. Drainage for the project site consists of surface runoff flowing in a southwesterly direction; refer to *Exhibit 5.9-1*, *Existing Conditions Hydrology*. The surface runoff enters an aboveground swale located in the parking area of the most southern building. The runoff is collected through drainage grates in the swale and then outlets into an existing 30-inch storm drain pipe, which traverses the project site from the east (Highland Avenue) towards Three Ranch Road west of the project site; refer to *Exhibit 5.9-2*, *Existing Storm Drain*. Los Angeles County Flood Control District has an easement over the existing storm drain. The existing storm drain eventually discharges into Rio Hondo/Sawpit Wash, which is located west of the project site and is ultimately tributary to the Los Angeles River.

Table 5.9-1, *Existing Conditions Flowrates*, provides a summary of existing conditions for the 2-year, 10-year, and 50-year storm events for the project site. Flows for the 10-year storm are used to determine local drain sizing. The 50-year analysis is used for larger master plan facilities and floodplain mapping.

NOT TO SCALE

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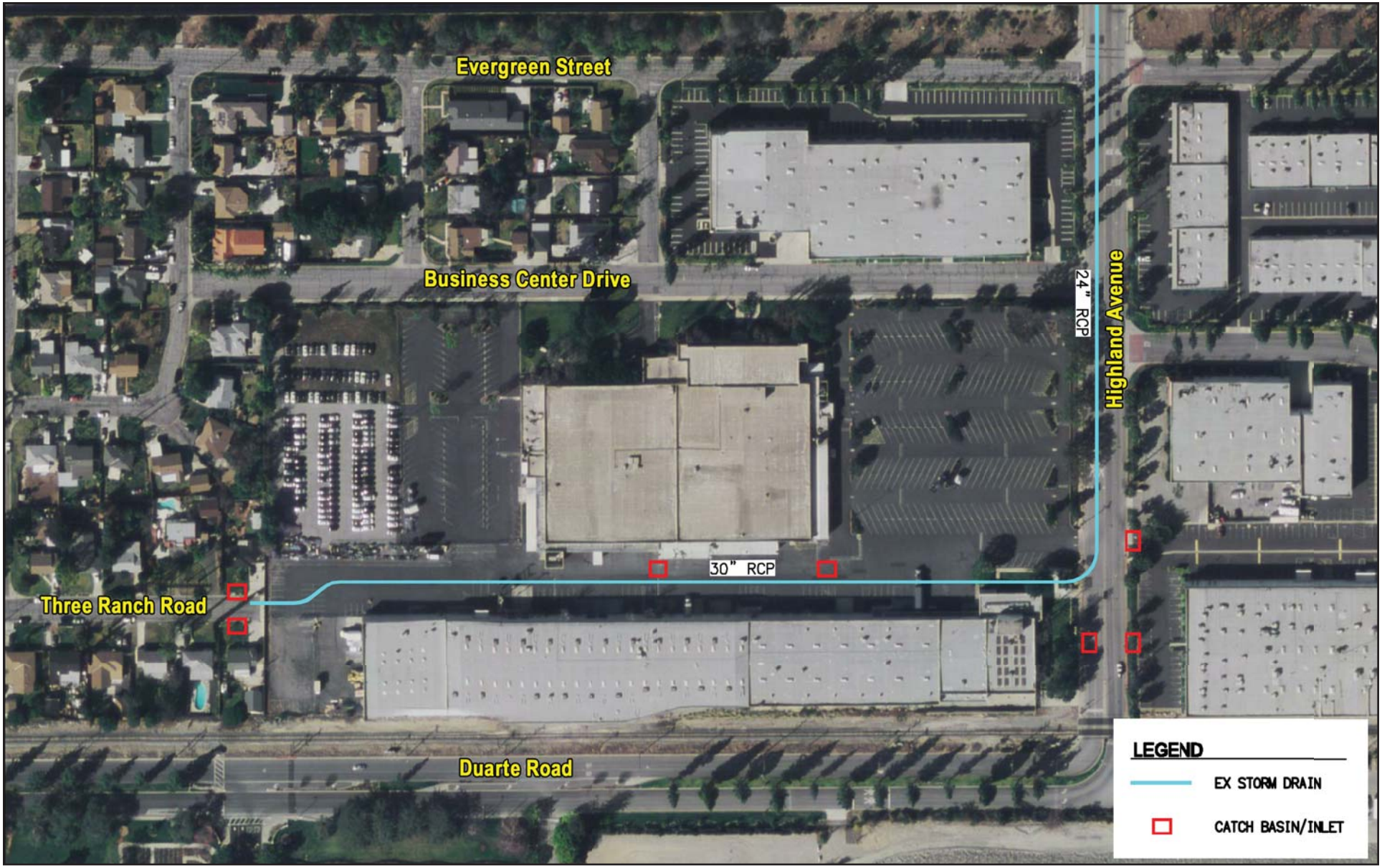
DUARTE STATION SPECIFIC PLAN
ENVIRONMENTAL IMPACT REPORT

Existing Conditions Hydrology

Exhibit 5.9-1



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DUARTE STATION SPECIFIC PLAN
ENVIRONMENTAL IMPACT REPORT

Existing Storm Drain

Exhibit 5.9-2

Table 5.9-1
Existing Conditions Flowrates

Watershed	Acreage	Existing Flow (cfs)		
		2-Year	10-Year	50-Year
A (Parcels 1 & 2)	15.8	12.2	29.2	44.8
B (Parcel 3)	3.3	3.3	7.5	12.1
Total	**19.1**	**15.5**	**36.7**	**56.9**

Source: *Duarte Gold Line Station Project EIR Hydrology and Water Quality Technical Appendix*, prepared by RBF Consulting, dated May 2013.
cfs = cubic feet per second

FLOODPLAIN MAPPING

The City of Duarte is a participant in the National Flood Insurance Program (NFIP). Communities participating in the NFIP must adopt and enforce minimum floodplain management standards, including identification of flood hazards and flooding risks. Participation in the NFIP allows communities to purchase low cost insurance protection against losses from flooding. According to the Flood Insurance Rate Map, the project site is located within "Zone X", as shown on Flood Insurance Rate Map (FIRM) No. 06037C1415F, effective September 26, 2008. Zone X is defined as areas determined to be outside the 0.2 percent change floodplain.

EXISTING STORMWATER QUALITY

The following describes the pollutants typically found in storm water runoff and the contaminants that may be found in existing storm water runoff from the project site.

Nonpoint Source Pollutants

The net effect of urbanization could be an increase in pollutant discharge over naturally occurring conditions. The higher discharge could impact adjacent streams and downstream receiving waters. However, an important consideration in evaluating storm water quality from the proposed project is to assess if it impairs the beneficial uses of the receiving waters. Nonpoint source pollutants have been characterized by the following major categories to assist with determining the pertinent data and its use. Receiving waters can assimilate a limited quantity of various constituents, but there are thresholds beyond which the measured amount becomes a pollutant and results in an undesirable impact. The descriptions of these standard water quality categories provide insight into their impacts on downstream receiving waters.

- *Sediment*. Sediment is made up of tiny soil particles that are washed or blown into surface waters. It is the major pollutant by volume in surface water. Suspended soil particles can cause the water to look cloudy or turbid. The fine sediment particles also act as a vehicle to transport other pollutants including nutrients, trace metals, and hydrocarbons. Construction sites are the largest source of sediment for urban areas under development. Another major source of sediment is streambank erosion, which may be accelerated by increases in peak rates and volumes of runoff due to urbanization.

- *Nutrients*. Nutrients are a major concern for surface water quality, especially phosphorous and nitrogen, which can cause algal blooms and excessive vegetative growth. Of the two, phosphorus is usually the limiting nutrient that controls the growth of algae in lakes. When phosphorus is in its orthophosphorus form, it is readily available for plant growth. The ammonium form of nitrogen can also have severe effects on surface water quality, when it is converted to the nitrate and nitrite forms of nitrogen in a process called nitrification. This process consumes large amounts of oxygen, which can impair the dissolved oxygen levels in water. The nitrate form of nitrogen is very soluble and is found naturally at low levels in water. When nitrogen fertilizer is applied to lawns or other vegetation in excess of plant needs, nitrates can leach below the root zone, eventually reaching ground water. Orthophosphate from auto emissions also contributes phosphorus in areas with heavy automobile traffic. As a general rule of thumb, nutrient discharge is greatest from development sites with the most impervious areas. Other problems resulting from excess nutrients are 1) surface algal scums, 2) water discoloration, 3) odors, 4) toxic releases, and 5) overgrowth of plants. The common chemical measures for nutrients are total nitrogen, organic nitrogen, total Kjeldahl nitrogen (TKN), nitrate, ammonia, total phosphate, and total organic carbon (TOC).

- *Trace Metals*. Trace metals are primarily a concern because of their toxic effects on aquatic life, and their potential to contaminate drinking water supplies. The most common trace metals found in urban runoff are lead, zinc, and copper. Fallout from automobile emissions is also a major source of lead in urban areas. A large fraction of the trace metals in urban runoff are attached to sediment and this effectively reduces the level that is immediately available for biological uptake and subsequent bioaccumulation. Metals associated with the sediment settle out rapidly and accumulate in the soils. Also, urban runoff events typically occur over a shorter duration, which reduces the amount of exposure, but could be toxic to the aquatic environment. The toxicity of trace metals in runoff varies with the hardness of the receiving water. As total hardness of the water increases, the threshold concentration levels for adverse effects increases.

- *Oxygen-Demanding Substances*. Aquatic life is dependent on the dissolved oxygen in the water, and when organic matter is consumed by microorganisms then dissolved oxygen is consumed in the process. A rainfall event can deposit large quantities of oxygen demanding substances in lakes and streams. The biochemical oxygen demand of typical urban runoff is on the same order of magnitude as the effluent from an effective secondary wastewater treatment plant. A problem from low dissolved oxygen results when the rate of oxygen-demanding material exceeds the rate of replenishment. Oxygen demand is estimated by direct measure of dissolved oxygen and indirect measures such as biochemical oxygen demand (BOD), chemical oxygen demand (COD), oil and grease, and total organic carbon (TOC).

- *Bacteria*. Bacteria levels in undiluted urban runoff exceed public health standards for water contact recreation almost without exception. Studies have found that total coliform counts exceeded EPA water quality criteria at almost every site and almost every time it rained. The coliform bacteria that are detected may not be a health risk, but are often associated with human pathogens.

- *Oil and Grease*. Oil and grease contain a wide variety of hydrocarbons, some of which could be toxic to aquatic life in low concentrations. These constituents initially float on water and create the familiar rainbow-colored film. Hydrocarbons have a strong affinity

for sediment and quickly become absorbed in it. The major source of hydrocarbons, primarily crankcase oil and other lubricating agents, in urban runoff is from leaking automobile engines. Hydrocarbon levels are highest in the runoff from parking lots, roads, and service stations. Residential land uses typically have a lower discharge of hydrocarbons; however the illegal disposal of waste oil into storm drains and urban runoff can be a local problem.

- *Other Toxic Chemicals*. Priority pollutants are generally related to hazardous wastes or toxic chemicals and can sometimes be detected in storm water. Priority pollutant test have been conducted in previous studies of urban runoff, which evaluated the presence of over 120 toxic chemicals and compounds. The scans rarely revealed toxins that exceeded the current safety criteria, and were primarily conducted in suburban areas not expected to have many sources of toxic pollutants (with the possible exception of illegally disposed or applied household hazardous wastes). Measures of priority pollutants in storm water include - 1) phthalate (plasticizer compound), 2) phenols and creosols (wood preservatives), 3) pesticides and herbicides, 4) oils and greases, and 5) metals.

Physical Characteristics of Surface Water Quality

The quantity of a material in the environment and its characteristics determine the degree of availability as a pollutant in surface runoff. Standard parameters have been developed to assess the quality of storm water. In an urban environment, the quantity of certain pollutants in the environment is a result of the land use intensity. For instance, a high density of automobile traffic makes a number of potential pollutants, such as lead and hydrocarbons, more available. The availability of a material, such as fertilizer, is a function of the quantity and the manner in which it is applied. Applying fertilizer in quantities that exceed plant needs leaves the excess nutrients available for loss to surface or ground water.

The physical properties and chemical constituents of water have traditionally served as the primary means for monitoring and evaluating water quality. Evaluating the condition of water through a water quality standard refers to its physical, chemical, or biological characteristics. The lengthy list of storm water quality parameters are classified in multiple ways. Typically, the concentration of an urban pollutant, rather than the annual load of that pollutant, is needed to assess a water quality problem. Some of the physical, chemical, or biological characteristics typically used to evaluate the quality of surface runoff are listed below.

- *Dissolved Oxygen*. Dissolved oxygen in the water has a pronounced effect on the aquatic organisms and the chemical reactions that occur. It is one of the most important biological water quality characteristics in the aquatic environment. The dissolved oxygen concentration of a water body is determined by the solubility of oxygen, which is inversely related to water temperature, pressure, and biological activity. Dissolved oxygen is a transient property that can fluctuate rapidly in time and space, and represents the status of the water system at a particular point and time of sampling. The decomposition of organic debris in water is a slow process and the resulting changes in oxygen concentrations also respond slowly. The oxygen demand is an indication of the pollutant load and includes measurements of biochemical oxygen demand or chemical oxygen demand.

- *Biochemical Oxygen Demand (BOD)*. The biochemical oxygen demand (BOD) is a measurement of the oxygen-demanding properties of the biodegradable material in the water. Samples are taken from the field and incubated in the laboratory at 20°C, after which the residual dissolved oxygen is measured. The BOD value commonly referenced is the standard five-day values. These values are useful in assessing stream pollution loads and for comparison purposes.

- *Chemical Oxygen Demand*. The chemical oxygen demand (COD) is a measure of the pollutant loading in terms of complete chemical oxidation using strong oxidizing agents. It can be determined quickly because it does not rely on bacteriological actions as with BOD. COD does not necessarily provide a good index of oxygen demanding properties in natural waters.

- *Total Dissolved Solids (TDS)*. TDS concentration is determined by evaporation of a filtered sample to obtain residue whose weight is divided by the sample volume. The TDS of natural waters varies widely. It is an important indicator of water quality because it affects the ionic bonding strength related to other pollutants such as metals in the water. TDS is also a major determinant of aquatic habitat, affects the saturation concentration of dissolved oxygen, and influences the ability of a water body to assimilate wastes. Eutrophication rates depend on total dissolved solids.

- *pH*. The pH of water is the negative log, base 10, of the hydrogen ion (H+) activity. A pH of 7 is neutral, a pH greater than 7 indicates alkaline water, and a pH less than 7 represents acidic water. In natural water, carbon dioxide reactions are some of the most important in establishing pH. The pH at any one time is an indication of the balance of chemical equilibrium in water and affects the availability of certain chemicals or nutrients in water for uptake by plants. The pH of water directly affects fish and other aquatic life and generally toxic limits are pH values less than 4.8 and greater than 9.2.

- *Alkalinity*. Alkalinity is the opposite of acidity, representing the capacity of water to neutralize acid. Alkalinity is also linked to pH and is caused by the presence of carbonate, bicarbonate, and hydroxide, which are formed when carbon dioxide is dissolved. A high alkalinity is associated with a high pH and excessive solids. Most streams have an alkalinity concentration of less than 200 mg/l and ranges of 100-200 mg/l seem to support well-diversified aquatic life.

- *Specific Conductance*. The measurement of water's specific conductivity, or its ability to conduct an electric current, is related to the total dissolved ionic solids concentration. Long term monitoring of a water body may show a relationship between specific conductivity and TDS. Its measurement is quick and inexpensive and can be used to approximate TDS. A specific conductivity measurement in excess of 2,000 µohms/cm indicates a TDS level too high for most freshwater fish.

- *Turbidity*. The clarity of water is an important indicator of water quality that relates to the alkalinity of photosynthetic light to penetrate the fluid. Turbidity is also a measure of light that is scattered or absorbed, and is caused by suspended clays and other organic particles. It can be used as an indicator of certain water quality constituents such as predicting the sediment concentrations.

- *Nitrogen (N)*. Sources of nitrogen in storm water include organic matter in water bodies or chemical discharges, and occur in many forms. Ammonia and nitrate are important nutrients for the growth of algae and other plants. Excessive nitrogen can lead to eutrophication since nitrification consumes dissolved oxygen in the water. Organic Nitrogen breaks down into ammonia, which eventually becomes oxidized to nitrate-nitrogen, a form available for plants. High concentrations of nitrate-nitrogen (N/N) in water can stimulate the growth of algae and other aquatic plants, but if phosphorus (P) is present, only about 0.30 mg/l of nitrate-nitrogen is needed for algal blooms. Some fish life can be affected when nitrate-nitrogen exceeds 4.2 mg/l. There are a number of ways to measure the various forms of aquatic nitrogen. Typical measurements of nitrogen include Kjeldahl nitrogen (organic nitrogen plus ammonia), ammonia, nitrite plus nitrate, nitrite, and nitrogen in plants. The principal water quality criteria for nitrogen focus on nitrate and ammonia.

- *Phosphorus (P)*. Phosphorus is an important component of organic matter. In many water bodies, phosphorus is the limiting nutrient that prevents additional biological activity from occurring. The origin of this constituent in urban storm water discharge is generally from fertilizers and other industrial products. Orthophosphate is soluble and is considered to be the only biologically available form of phosphorus. Since phosphorus is typically found in solid particles and is a significant part of organic material, the concentration of sediment in water is an important component of the phosphorus cycle in streams. The key measurements of phosphorus include detecting orthophosphate and total phosphorus.

EXISTING STORM WATER QUALITY CONDITIONS

There is no available data regarding storm water runoff quality from the project site. Thus, in the absence of site-specific data, expected storm water quality can be qualitatively discussed by relating typical pollutants to specific land uses. The project site includes three buildings, asphalt parking lots, a dirt parking lot, and partially vegetated soil areas. The existing on-site uses are assumed to generate pollutants, such as suspended solids/sediment, nutrients, heavy metals, pathogens (bacteria/virus), pesticides, oil and grease, toxic organic compounds, and trash and debris.

The project site does not contain any structural Best Management Practices (BMPs), which would potentially decrease the pollutant concentrations in storm water runoff. Conveying flows over land through vegetation affords some infiltration and biofiltration of runoff and thus, potential pollutant removal. However, a disadvantage to conveying flows over land is that it causes erosion of the soil and thus increases suspended solids in the runoff.

Beneficial Uses, Impairments, and TMDLs

The LARWQCB defined the beneficial uses of its waterbodies in the *Water Quality Control Plan, Los Angeles Region, Basin Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (June 13, 1994). Beneficial uses are the uses of water necessary for the survival or well-being of humans, plants, and wildlife. If pollutant concentrations in waterbodies cause impairments to their beneficial uses, then the waterbody is placed on the State of California's list of impaired waterbodies (303(d) List) until a TMDL is established for the waterbody (maximum discharge of pollutants). The following beneficial uses have been identified for the Sawpit Wash/Rio Hondo:

- Municipal and Domestic Supply (MUN);
- Ground Water Recharge (GWR);
- Water Contact Recreation (REC1);
- Non-Contact Water Recreation (REC2);
- Warm Freshwater Habitat (WARM); and
- Wildlife Habitat (WILD).

The Sawpit Wash/Rio Hondo are impaired for Bis(2ethylhexyl)phthalate (DEHP), Coliform Bacteria, Copper, Fecal Coliform, Lead, pH, Toxicity, Trash, and Zinc. The Rio Hondo confluences with the Los Angeles River approximately 18 miles southwest of the project site, which is on the 2010 303(d) List for Ammonia, Cyanide, and Coliform.

GROUNDWATER[1]

Duarte receives its water from California American Water (Cal-Am). Groundwater is the primary source of supply for the City of Duarte. The Duarte service area overlies the Main San Gabriel Groundwater Basin (Basin). Duarte is classified as an "Integrated Producer", which provides for two types of water allocation rights. Duarte has an adjudicated right to 1.84634 percent of the annual safe yield of the Basin as well as a fixed surface water allocation of 1,672 acre-feet per year.

Groundwater producers in the Basin are allowed to exceed their safe yield allocation provided they pay an assessed replenishment fee to the Basin Watermaster. Most years the Basin is over pumped because total demand from the various producers, including Cal-Am, exceeds the available safe yield established by the Watermaster. The Watermaster uses the funds generated from the replenishment fees to purchase replacement water from wholesale agencies that have access to imported water. This replacement water is then delivered to spreading grounds to replenish the aquifer. Imported water has historically been available for this purpose. Water quality issues within Duarte are addressed by treating or blending water in order to meet water quality standards.

5.9.3 SIGNIFICANCE THRESHOLD CRITERIA

The issues presented in the Initial Study Environmental Checklist (*CEQA Guidelines* Appendix G) have been utilized as thresholds of significance in this Section. Accordingly, a project may create a significant environmental impact if it causes one or more of the following to occur:

- Violate any water quality standards or waste discharge requirements;

- Substantially deplete groundwater supplies or substantially interfere with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (i.e., the production rate of pre-existing nearby wells would drop to a level that would not support existing land uses or planned uses for which permits have been granted);

[1] California American Water, *Final Draft 2010 Urban Water Management Plan for the Southern Division-Los Angeles County District*, July 12, 2011.

- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner that would result in substantial erosion or siltation on- or off-site;

- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface run-off in a manner that would result in flooding on- or off-site;

- Create or contribute to run-off water that would exceed the capacity of existing or planned storm water drainage systems or provision of substantial additional sources of polluted run-off;

- Otherwise substantially degrade water quality;

- Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map (refer to Section 8.0, Effects Found Not to be Significant);

- Place a structure within a 100-year flood hazard area that would impede or redirect flood flows (refer to Section 8.0, Effects Found Not to be Significant);

- 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 (refer to Section 8.0, Effects Found Not to be Significant); and/or

- Result in inundation by seiche, tsunami, or mudflow (refer to Section 8.0, Effects Found Not to be Significant).

Based on these standards, the proposed project's effects have been categorized as either a "less than significant impact" or a "potentially significant impact." Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a significant unavoidable impact.

5.9.4 PROJECT IMPACTS AND MITIGATION MEASURES

WATER QUALITY – SHORT-TERM IMPACTS

■ **GRADING, EXCAVATION, AND CONSTRUCTION ACTIVITIES ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT COULD SIGNIFICANTLY IMPACT WATER QUALITY.**

Impact Analysis: There are three sources of short-term construction-related storm water pollution associated with the proposed project that could impact the beneficial uses of downstream water bodies:

- Handling, storage, and disposal of construction materials containing pollutants;
- Maintenance and operation of construction equipment; and
- Earthmoving activities.

These sources, if not controlled, can generate soil erosion and on- and off-site transport via storm run-off or mechanical equipment. Poorly maintained vehicles and heavy equipment leaking fuel, oil, antifreeze, or other vehicle-related fluids on the project site are also common sources of storm water pollution and soil contamination. Implementation of the proposed project has the potential to produce typical pollutants such as nutrients, heavy metals, pesticides and herbicides, toxic chemicals related to construction and cleaning, waste materials including wash water, paints, wood, paper, concrete, food containers, and sanitary wastes, fuel, and lubricants. Generally, standard safety precautions for handling and storing construction materials can adequately reduce the potential pollution of storm water by these materials. These types of standard procedures can be extended to non-hazardous storm water pollutants such as sawdust, concrete washout, and other wastes.

In addition, grading activities can greatly increase erosion processes, leading to impacts on storm drains and sediment loading to storm runoff flows. Two general strategies are recommended to prevent soil materials from entering local storm drains. First, erosion control procedures should be implemented for those areas that must be exposed, and secondly, the project site should be secured to control off-site transport of pollutants.

In order to reduce the amount of on-site exposed soil, grading would be limited to the extent feasible, and any graded areas would be protected against erosion once they are brought to final grade. Furthermore, development associated with implementation of the proposed project would be required to comply with the Construction General NPDES Permit. Prior to construction, the General Permit requires the following:

- Electronic submittal of the Permit Registration Documents (PRD) to the SWRCB at least 30 days before the start of construction, which includes submittal of a Notice of Intent (NOI), risk assessment, site map, Storm Water Pollution Prevention Plan (SWPPP), annual fee, and a signed certification statement;
- Preparation and implementation of a SWPPP; and
- Electronic submittal of a Notice of Termination (NOT) to the SWRCB upon completion of construction and stabilization of the site.

Construction activities for development associated with implementation of the proposed project would be subject to inspection by the City Public Works/Engineering Department. The General Permit requires that non-storm water discharges from construction sites be eliminated or reduced to the maximum extent practicable, that a SWPPP be developed governing construction activities for the proposed project, and that routine inspections be performed of all storm water pollution prevention measures and control practices being used at the site, including inspections before and after storm events. Thus, potential water quality impacts associated with construction activities would be reduced to a less than significant level.

Mitigation Measures:

HYD-1 Prior to issuance of any grading or building permit, each project applicant shall enroll electronically through the SMARTS program to comply with the State of California General Construction Permit. Proof of enrollment must be submitted to the City of Duarte before issuance of grading or building permits. Also, a Stormwater Pollution Prevention Plan (SWPPP) or functional equivalent required at that time shall be reviewed and approved by the Public Works Manager and the City Engineer for water quality construction activities on-site. A copy of the SWPPP or functional

equivalent required at that time shall be available and implemented at the construction site at all times. The SWPPP or functional equivalent required at that time shall outline the source control and/or treatment control Best Management Practices to avoid or mitigate runoff pollutants at the construction site to the "maximum extent practicable."

Level of Significance After Mitigation: Less Than Significant Impact With Mitigation Incorporated.

LONG-TERM OPERATIONAL IMPACTS

■ **IMPLEMENTATION OF THE PROPOSED PROJECT COULD RESULT IN SIGNIFICANT IMPACTS RELATED TO INCREASED RUN-OFF AMOUNTS AND DEGRADED WATER QUALITY.**

Impact Analysis: This section analyzes the proposed project conditions and compares them to the existing conditions to determine resultant impacts on drainage, run-off, and water quality.

Proposed Storm Water Drainage

The proposed project would decrease the impervious area from 91 percent to 85 percent when compared to existing conditions. As indicated on *Exhibit 5.9-3*, *Proposed Conditions Hydrology*, the watershed delineation for the proposed project condition would be consistent with the existing condition. Stormwater flows would be conveyed in existing and proposed streets towards the existing 30-inch storm drain; refer to *Exhibit 5.9-4*, *Proposed Drainage Plan*.

Table 5.9-2, *Proposed Conditions Flowrates*, provides a summary of existing and proposed conditions for the 2-year, 10-year, and 50-year storm event runoff for the project site.

Table 5.9-2
Proposed Conditions Flowrates

Watershed	2-Year		10-Year		50-Year	
	Existing (cfs)	Proposed (cfs)	Existing (cfs)	Proposed (cfs)	Existing (cfs)	Proposed (cfs)
A (Parcels 1 & 2)	12.2	11.4	29.2	28.5	44.8	44.3
B (Parcel 3)	3.3	3.0	7.5	7.4	12.1	12.0
Total	**15.5**	**14.4**	**36.7**	**35.9**	**56.9**	**56.3**

Source: *Duarte Gold Line Station Project EIR Hydrology and Water Quality Technical Appendix*, prepared by RBF Consulting, dated May 2013.
cfs = cubic feet per second.

As indicated in *Table 5.9-2*, post-development discharges from the project site would be less than pre-development discharges for the 2-year, 10-year, and 50-year storm events. The proposed project would not result in increased runoff from the site and new drainage facilities would not be required. Thus, potential run-off impacts would be less than significant.

Source: Dahlin Group, May 2013.
Note: The base for this exhibit is Exhibit 3-5, Development Scenario, which identifies the mix of land uses proposed. Refer to the legend on Exhibit 3-5.

NOT TO SCALE

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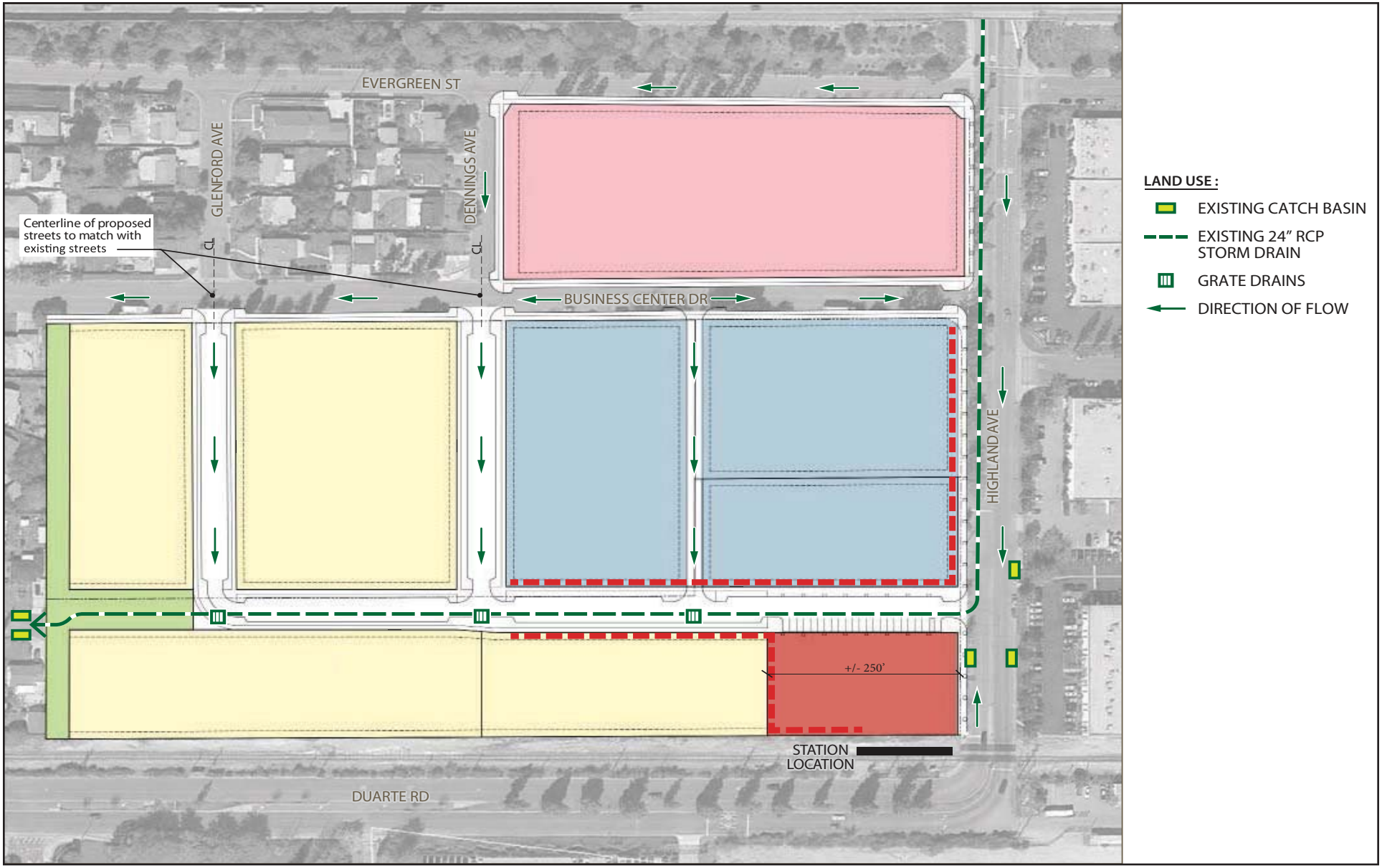
DUARTE STATION SPECIFIC PLAN
ENVIRONMENTAL IMPACT REPORT

Proposed Conditions Hydrology

Exhibit 5.9-3



Source: Dahlin Group, May 2013.
Note: The base for this exhibit is Exhibit 3-5, Development Scenario, which identifies the mix of land uses proposed. Refer to the legend on Exhibit 3-5.

NOT TO SCALE

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DUARTE STATION SPECIFIC PLAN
ENVIRONMENTAL IMPACT REPORT

Proposed Drainage Plan

Exhibit 5.9-4

Water Quality

The long-term operation and maintenance of the proposed project would be a source of pollutants, including suspended solids/sediment, nutrients, heavy metals, pathogens (bacteria/virus), pesticides, oil and grease, toxic organic compounds, trash and debris, and household hazardous wastes. The vegetated areas are likely to produce suspended solids/sediment, nutrients, and pesticides. The beneficial uses of downstream water bodies could be significantly impacted due to development within the Plan Area. Therefore, development associated with implementation of the proposed project would be required to prepare and implement a plan (i.e., SUSMP or functional equivalent document) in accordance with the guidance to be developed by the NPDES Permit permittees, that includes post-construction BMPs (such as LID, if feasible) to reduce pollutant loading. This plan, included as Mitigation Measure HYD-1, would be required prior to issuance of a grading permit. The post-construction BMPs may include, but are not limited to:

- Bioretention
- Rainfall Harvest and Use (i.e., cisterns, rain barrels, planter areas, permeable surfaces, drywells, French drains, etc.)
- Vegetated Swales
- Vegetated Filter Strips
- Green Roofs
- Infiltration Trenches
- Media Filtration
- Porous Pavement
- Permeable Surfaces (i.e., porous concrete/asphalt, Hollywood driveways, block pavers, open cell concrete, plastic grid systems, reinforced turf, etc.)
- Other BMPs that may be approved by the City of Duarte or the county-wide program in the future to address the NPDES Permit requirements

Since the Sawpit Wash/Rio Hondo is a hardened channel, the proposed project would not have to include hydromodification controls. Based on the information currently available, the plan should include non-structural and structural BMPs to mitigate the estimated 85th percentile, 24 hour rain event (Office of Water Programs, California State University, Sacramento, 2007) of 1.10 acre-feet in Subarea A and 0.23 acre-feet in Subarea B. Preparation and compliance with the plan reduce potential water quality impacts to a less than significant level.

Mitigation Measures:

HYD-2 Concurrent with Site Plan Review or issuance of a grading permit, whichever comes first, a hydrology review shall be conducted by a Registered Civil Engineer for each development phase to ensure that runoff values for each phase remain at or below the runoff values shown in Table 5.9-2, and in compliance with current State law or other applicable statutes.

HYD-3 Prior to the issuance of grading permit, each project applicant shall prepare a plan (i.e., Standard Urban Storm Water Management Plan [SUSMP] or functional equivalent document per current State law or other applicable statutes) in accordance with the guidance to be developed by the NPDES Permit permittees, that includes Low Impact Development and other post-construction Best Management Practices to reduce pollutant loading. The plan shall be reviewed and

approved by the Duarte Public Works Manager and City Engineer. The applicant shall be responsible for implement the measures identified in the SUSMP or functional equivalent document.

Level of Significance: Less Than Significant Impact With Mitigation Incorporated.

GROUNDWATER

■ **IMPLEMENTATION OF THE PROPOSED PROJECT COULD RESULT IN THE DEPLETION OF GROUNDWATER SUPPLIES OR INTERFERENCE WITH GROUNDWATER RECHARGE.**

Impact Analysis: The project site is primarily developed with 91 percent of the area being impervious. Future development associated with implementation of the proposed project would result in decreased impervious area (85 percent), allowing for increased groundwater recharge when compared to existing conditions. Thus, impacts would be less than significant in this regard.

Although impacts to natural groundwater recharge are not anticipated, impacts to groundwater supplies as a result of increased development could occur. As stated, the City of Duarte receives local groundwater from the Main San Gabriel Water Basin (Basin) through Cal-Am. Groundwater producers in the Basin are allowed to exceed their safe yield allocation provided they pay an assessed replenishment fee to the Basin Watermaster. Most years the Basin is over pumped because total demand from the various producers, including Cal-Am, exceeds the available safe yield established by the Watermaster. Increased water demand at the project site would contribute to the over pumping of the Basin that currently occurs. However, Cal-Am would be required to pay replenishment fees to the Watermaster, which would in turn purchase replacement water to replenish the aquifer. Thus, groundwater supplies would not be significantly depleted, as the aquifer would continue to be replenished. Thus, impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.9.5 CUMULATIVE IMPACTS AND MITIGATION MEASURES

■ **IMPLEMENTATION OF THE PROPOSED PROJECT ALONG WITH OTHER RELATED CUMULATIVE PROJECTS COULD RESULT IN CUMULATIVELY CONSIDERABLE IMPACTS RELATED TO INCREASED RUNOFF AND DEGRADED WATER QUALITY.**

Impact Analysis: Implementation of the proposed project along with other related cumulative projects would have the potential to increase runoff and affect water quality during construction and long-term operations.

Higher flows resulting from future development in the watershed would result in drainage and runoff impacts. Runoff from some of the cumulative projects could drain into the conveyance systems used by the proposed project. Although runoff from some of the cumulative projects may not interact with runoff from future development within the Plan Area, interaction could

occur downstream. Future development would be required to account for higher flows within the watershed on a project-by-project basis.

Each individual project would be required to submit individual analyses to their respective jurisdictions for review and approval prior to issuance of grading or building permits. Each analysis must illustrate how peak flows generated from each related project site would be accommodated by the existing and/or proposed storm drainage facilities. The proposed project would result in decreased runoff when compared to existing conditions. Thus, the proposed project would not result in cumulatively considerable impacts associated with drainage and runoff. Impacts would be less than significant.

Cumulative projects have the potential to affect water quality during the construction phase and long-term operations, and would contribute storm water flows to the local and regional drainage facilities. Development of the proposed project, along with related cumulative projects, would result in increased potential for short- and long-term operational water quality impacts within the area. However, the project and cumulative development must adhere to NPDES requirements and implement a SWPPP with specific BMPs during construction activities. Additionally, the proposed project and cumulative development must adhere to NPDES requirements and implement a SUSMP with specific BMPs for post-construction conditions. Each project would also be required to comply with existing water quality standards at the time of development review and include BMPs, as necessary. Therefore, the short- and long-term impacts on surface water quality associated with cumulative development would not be cumulatively considerable with adherence to NPDES and Municipal Code requirements. Less than significant impacts are anticipated in this regard.

Proposed project and cumulative project impacts to groundwater recharge would be less than significant, as the average percent imperviousness of the project site would be reduced when compared to existing conditions. Additionally, project implementation, in conjunction with related cumulative projects, would not significantly deplete groundwater supplies, as water producers would be required to pay replenishment fees to the Watermaster in the event the annual safe yield of the Basin is exceeded. The fees would be used to purchase replacement water to replenish the aquifer. Therefore, the proposed project impacts would not be cumulatively considerable, and impacts in this regard are less than significant with the application of Mitigation Measures HYD-1 and HYD-3 for individual development projects.

Mitigation Measures: Refer to Mitigation Measures HYD-1 and HYD-3. No additional mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.9.6 SIGNIFICANT UNAVOIDABLE IMPACTS

Implementation of the proposed project would result in less than significant project and cumulative impacts related to hydrology and water quality during both construction and operation with adherence to the identified mitigation measure and compliance with and compliance with the applicable Federal, State, and local regulatory requirements. As such, no significant unavoidable impacts would result from implementation of the Duarte Station Specific Plan.

5.9.7 SOURCES CITED

California American Water, *Final Draft 2010 Urban Water Management Plan for the Southern Division-Los Angeles County District*, July 12, 2011.

RBF Consulting, *Duarte Gold Line Station Project EIR Hydrology and Water Quality Technical Appendix*, May 2013.

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5.10 FIRE PROTECTION

This section provides an analysis of fire services, which is based on information provided by the Los Angeles County Fire Department (LACFD). The LACFD maintains ultimate review and approval authority over aspects of the proposed project that relate to fire protection, and may identify further recommendations and/or requirements.

5.10.1 REGULATORY SETTING

FIRE HAZARD SEVERITY ZONES

The California Department of Forestry and Fire Protection (CAL FIRE) created Fire Hazard Severity Zones using a computer model that factor in the fire history, existing and potential fuel (natural vegetation), flame length, blowing embers, terrain, and typical weather for an area. The severity of the hazard is based on the likelihood that an area will burn over a 30- to 50-year period without fuel-reduction efforts. Given the results of the modeling, the State identifies an area as a "moderate," "high," or "very high" fire hazard severity zone.

WILDLAND-URBAN INTERFACE FIRE AREA BUILDING STANDARDS

Title 24, Part 2 of *California Code of Regulations* (*CCR*), also known as the *2010 California Building Standards Code* (*CBSC*), addresses building standards for new structures constructed in or near a designated fire hazard severity zone. New buildings located in any fire hazard severity zone must comply with all sections of the current *CBSC*. Specifically, minimum standards are established for materials and to provide a reasonable level of protection from wildfire exposure for buildings in Wildland-Urban Interface (WUI) Fire Areas. Ignition-resistant materials and design are required to reduce the risk from flame or burning embers projected by a vegetation fire.

CALIFORNIA FIRE PLAN

CAL FIRE and the State Board of Forestry (Board) regulate wildland fire protection in California through the *2010 Strategic Fire Plan* (*Fire Plan*), June 2010. The mission of the Board is to lead California in developing policies and programs that serve the public interest in environmentally, economically, socially sustainable forest and rangeland management, and a fire protection system that protects and serves the people of the state. In concert with the mission of the Board, the mission of CAL FIRE is to serve and safeguard the people and protect the property and resources of California. The central goals of the Fire Plan that are critical to reducing and preventing the impacts of fire revolve around both suppression efforts and fire prevention efforts.

DUARTE FIRE CODE

Duarte Municipal Code Chapter 15.04, Fire Prevention Code, adopts as its Fire Code the fire code adopted by Title 32 of the County of Los Angeles, entitled "*2008 Los Angeles County Fire Code,"* referred to as the "*California Fire Code*".

5.10.2 ENVIRONMENTAL SETTING

FIRE PROTECTION

Fire protection and emergency medical services in the City of Duarte are provided by the LACFD. The primary response station for the City is Fire Station 44, Battalion 16, located at 1105 S. Highland Avenue. Fire Station 44 is located less than one-half mile from the project area.

The Insurance Services Office (ISO) collects and analyzes information on a community's public fire protection and assigns a Public Protection Classification from 1 to 10. Class 1 represents the best public protection and Class 10 indicates no recognized protection. The ratings are based on a variety of factors, including water supply, which are not within the authority of LACFD to regulate. Duarte's current published ISO rating is 3.

FIRE HAZARDS

The City of Duarte *General Plan* includes a Safety Element, which identifies potential safety hazards, including fires, and establishes goals, objectives, and policies to protect life and property from these hazards. The element provides recommendations to minimize the risk to lives and property due to fire hazards and ensures that adequate emergency response can be provided when needed.

Duarte's location at the base of the San Gabriel Mountains creates an urban/wildland interface that makes Duarte more susceptible to wildfires. The project site is not located adjacent to the San Gabriel Mountains or wildland areas. The *General Plan* identifies the project site as located within a low fire hazard area.

FIRE PREVENTION

Development within the City is subject to compliance with all relevant LACFD requirements, which include ingress and egress access for emergency response, access, and fire and life safety requirements during construction, water mains, fire flows and hydrants, access roadways to fire department apparatus and maintenance of access roads and fire sprinkler systems. Specific fire and life safety requirements for construction are addressed at building fire plan check.

5.10.3 SIGNIFICANCE THRESHOLD CRITERIA

The issues presented in the Initial Study Environmental Checklist (*CEQA Guidelines* Appendix G) have been utilized as thresholds of significance in this Section. Accordingly, a project may create a significant environmental impact if it causes one or more of the following to occur:

- 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.

Based on these standards, the effects of the proposed project have been categorized as either a "less than significant impact" or a "potentially significant impact." Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a significant unavoidable impact.

5.10.4 PROJECT IMPACTS AND MITIGATION MEASURES

FIRE SERVICES

■ **IMPLEMENTATION OF THE PROPOSED PROJECT COULD RESULT IN IMPACTS TO FIRE SERVICES.**

Impact Analysis: Implementation of the proposed project would allow for increased development within the Plan Area, including hotel, office, retail, and residential uses. The increased development could result in an increased demand for fire protection services to the project area. While an increased demand for services may occur, the LACFD has confirmed that project implementation would not result in the need for new or physically altered fire facilities in order to serve the proposed project.[1] The LACFD anticipates that property tax revenue generated by the proposed project would mitigate any impact the proposed project may have on fire department services. Additionally, future development associated with the proposed project would occur in phases over multiple years, based on market demand; thus, any increase in demand for fire protection services would occur gradually as additional development occurs within the area.

Future development associated with the proposed project would be reviewed on a project-by-project basis and would be required to comply with *Duarte Municipal Code* Chapter 15.04, Fire Prevention Code and fire department requirements such as emergency response access and water requirements. Adherence to the recommended mitigation measures and conditions of approval identified by the LACFD, and compliance with the City's *Municipal Code* would ensure project implementation would result in a less than significant impact to fire protection services.

Refer to Section 5.8, Hazards and Hazardous Materials, for a discussion of potential hazardous materials.

Mitigation Measures:

FP-1 Adequate access to all buildings on the project site shall be provided and properly maintained for emergency vehicles during the building construction process to the satisfaction of the Los Angeles County Fire Department.

FP-2 Adequate water availability shall be provided to service construction activities.

FP-3 Prior to issuance of building permits, a will-serve letter from the California American Water Company shall be obtained by the project applicant, which states that the Water Company can adequately meet water flow requirements.

[1] County of Los Angeles Fire Department, Frank Vidales, Acting Chief, Forestry Division, Prevention Services Bureau, June 12, 2013.

FP-4 The Los Angeles County Fire Department shall review and comment on each individual site plan submitted, prior to approval by the City of Duarte. Any conditions required by the Los Angeles County Fire Department shall be complied with by the project applicant.

FP5 Prior to the issuance of building permits, the project applicant shall provide verification that the project complies with all fire prevention provisions required by the Los Angeles County Fire Department.

FS-6 All new structures shall have automatic fire sprinkler systems.

FS-7 A supervised fire alarm system that meets requirements of the California Fire Code shall be placed in an accessible location with an annunciator.

FS-8 Access to and around structures shall meet Los Angeles County Fire Department and California Fire Code requirements.

FS-9 A water supply system shall be in place to supply fire hydrants and automatic fire sprinkler systems.

FS-10 All traffic signals on public access ways shall include the installation of optical preemption devices.

FS-11 All electric gates within the project shall install emergency opening devices approved by the Los Angeles County Fire Department.

Level of Significance: Less Than Significant Impact With Mitigation Incorporated.

5.10.5 CUMULATIVE IMPACTS AND MITIGATION MEASURES

■ **DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT AND OTHER RELATED CUMULATIVE PROJECTS COULD RESULT IN CUMULATIVELY CONSIDERABLE IMPACTS TO FIRE SERVICES.**

Impact Analysis: The Cities of Irwindale and Azusa also receive fire protection services from the LACFD. Implementation of the proposed project and related cumulative projects could increase demand on fire protection services provided by the LACFD. Individual cities have standards for reviewing new development projects to ensure that adequate fire protection services would be available and that fire codes and requirements are met. Each cumulative project would be reviewed on a project-by-project basis for compliance with minimum standards and if necessary, would be required to mitigate to the extent feasible potential impacts to fire protection services associated with the proposed development. As stated, the proposed project would result in less than significant impacts to fire protection services. Therefore, development of the proposed project would not result in significant cumulative impacts in regards to fire protection services.

Mitigation Measures: Refer to Mitigation Measures FP-1 through FP-11. No additional mitigation measures are required.

Level of Significance: Less Than Significant Impact With Mitigation Incorporated.

5.10.6 SIGNIFICANT UNAVOIDABLE IMPACTS

Implementation of the proposed project would result in less than significant project and cumulative impacts related to fire protection services and facilities during both construction and operation with adherence to the identified mitigation measures and compliance with the City's Municipal Code and LACFD conditions of approval for individual development projects. As such, no significant unavoidable impacts would result from implementation of the Duarte Station Specific Plan.

5.10.7 SOURCES CITED

City of Duarte, *City of Duarte Comprehensive General Plan 2005-2020*, August 14, 2007.

County of Los Angeles Fire Department, Frank Vidales, Acting Chief, Forestry Division, Prevention Services Bureau, written correspondence, June 12, 2013.

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5.11 POLICE PROTECTION

This section provides an analysis of police services, which is based on information provided by the Los Angeles County Sheriff's Department (LACSD). The LACSD maintains ultimate review and approval authority over aspects of proposed development that relate to police protection, and may identify further recommendations and/or requirements.

5.11.1 REGULATORY SETTING

CALIFORNIA PENAL CODE

The *California Penal Code* establishes the basis for the application of criminal law in California.

5.11.2 ENVIRONMENTAL SETTING

The LACSD provides law enforcement services to the City of Duarte. The Duarte Satellite Station, located at 1042 Huntington Drive, is approximately 1.3 miles northwest of the project site. The Satellite Station serves as a launching center for officers to begin and end their shift. However, the station does not have dispatch or booking ability. These services are provided through the Temple Station, located at 8838 Las Tunas Drive in Temple City.

LACSD's targets for response times are 60 minutes for routine calls; 20 minutes for priority calls; and 10 minutes for emergency calls. Current response times are 35.4 minutes for routine calls, 6.8 minutes for priority calls and 5.9 minutes for emergency calls.[1]

Staffing is determined by the City in combination with an agreement that there are sufficient units to handle workload. According to the LACSD, current staff levels are sufficient.[2]

5.11.3 SIGNIFICANCE THRESHOLD CRITERIA

The issues presented in the Initial Study Environmental Checklist (*CEQA Guidelines* Appendix G) have been utilized as thresholds of significance in this Section. Accordingly, a project may create a significant environmental impact if it causes one or more of the following to occur:

- 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.

Based on these standards, the effects of the proposed project have been categorized as either a "less than significant impact" or a "potentially significant impact." Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a significant unavoidable impact.

[1] Los Angeles County Sheriff's Department, Sgt. John L. Carter, Duarte Liaison Sergeant, email correspondence, July 2, 2013.

[2] Ibid.

5.11.4 PROJECT IMPACTS AND MITIGATION MEASURES

POLICE SERVICES

■ **IMPLEMENTATION OF THE PROPOSED PROJECT COULD RESULT IN IMPACTS TO POLICE SERVICES.**

Impact Analysis: Implementation of the proposed project would allow for increased development within the Plan Area, including hotel, office, retail, and residential uses. The increased development could result in an increased demand for police protection services to the project area. While an increased demand for services may occur, the LACSD has confirmed that project implementation would not result in a significant impact and additional calls for service are not anticipated to require any additional units.[3] Further, the LACSD does not anticipate the need for any new construction of facilities as a result of the proposed project. However, the LACSD may make suggestions to the City for increased services once the proposed project is complete and if any unanticipated problems arise.[4] Future development associated with the proposed project would occur in phases over multiple years, based on market demand; thus, any increase in demand for police protection services would occur gradually as additional development occurs within the area. Through contractual agreements, the City and LACSD would ensure that adequate law enforcement services are available to serve the City. Impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

Level of Impact Significance: Less Than Significant Impact.

5.11.5 CUMULATIVE IMPACTS AND MITIGATION MEASURES

■ **DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT AND OTHER RELATED CUMULATIVE PROJECTS COULD RESULT IN CUMULATIVELY CONSIDERABLE IMPACTS TO POLICE SERVICES.**

Impact Analysis: The cities wherein cumulative development projects would occur are served by their own police departments. Thus, development associated with the proposed project and related cumulative projects within neighboring jurisdictions would not result in cumulatively considerable impacts on law enforcement services. Development of the proposed project and cumulative projects within the City of Duarte could result in increased demand on police protection services provided by LACSD. Individual development projects would be reviewed on a project-by-project basis to determine potential impacts to law enforcement services as a result of the proposed development. The City would continue to coordinate with the LACSD through their contractual agreement to ensure that adequate personnel and facilities are available to serve the City. Cumulative impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

[3] Ibid.
[4] Ibid.

5.11.6 SIGNIFICANT UNAVOIDABLE IMPACTS

Implementation of the proposed project would result in less than significant project and cumulative impacts related to police protection services and facilities during both construction and operation. As such, no significant unavoidable impacts would result from implementation of the Duarte Station Specific Plan.

5.11.7 SOURCES CITED

Los Angeles County Sheriff's Department, Sgt. John L. Carter, Duarte Liaison Sergeant, email correspondence, July 2, 2013.

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5.12 SCHOOLS

This section evaluates impacts of the proposed project on schools within the Duarte Unified School District (DUSD), which serves the Duarte Station Specific Plan Area. Information in this section is based upon information from DUSD.

5.12.1 REGULATORY SETTING

ASSEMBLY BILL 2926

The State of California 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 (AB 2926) in 1986. This bill allowed school districts to collect impact fees from developers of new residential and commercial/industrial building space. Development impact fees were also referenced in the 1987 Leroy Greene Lease-Purchase Act, which required school districts to contribute a matching share of project costs for construction, modernization, or reconstruction.

SENATE BILL 50

Senate Bill 50 (SB 50) and Proposition 1A, both of which passed in 1998, provided a comprehensive school facilities financing and reform program, in part by authorizing a $9.2 billion school facilities bond issue, school construction cost containment provisions and an eight-year suspension of the Mira, Hart and Murrieta court cases. Specifically, the bond funds are to provide $2.9 billion for new construction and $2.1 billion for reconstruction/modernization needs. The provisions of SB 50 prohibit local agencies from denying either legislative or adjudicative land use approvals on the basis that school facilities are inadequate, and reinstates the school facility fee cap for legislative actions (e.g., General Plan amendments, specific plan adoption, zoning plan amendments) as was allowed under the Mira, Hart and Murrieta court cases. According to *Government Code* Section 65996, the development fees authorized by SB 50 are deemed to be "full and complete school facilities mitigation." These provisions are in effect until 2006 and will remain in place as long as subsequent State bonds are approved and available.

SB 50 establishes three levels of Developer Fees that may be imposed upon new development by the governing board of a school district depending upon certain conditions within a district. Level One Fees are the statutory fees, which can be adjusted for inflation every two years. Level Two Fees allow school districts to impose fees beyond the base statutory cap, under specific circumstances. Level Three Fees come into effect if the State runs out of bond funds after 2006, which would allow school districts to impose 100 percent of the cost of the school facility or mitigation minus any local dedicated school monies. The school fee amounts provided for in *Government Code* Sections 65995, 65995.5 and 65995.7 would constitute full and complete mitigation for school facilities.

In order to accommodate students from new development projects, school districts may alternatively finance new schools through special school construction funding resolutions and/or agreements between developers, the affected school districts, and occasionally, other local governmental agencies. These special resolutions and agreements often allow school districts to realize school mitigation funds in excess of the developer fees allowed under SB 50.

5.12.2 ENVIRONMENTAL SETTING

Students residing within the City attend schools within the DUSD. *Table 5.12-1*, *School Information*, indicates the name, location, and distance from the project site for the schools currently serving the project area.

Table 5.12-1
School Information

School	Location	Distance From Project Site (miles)
Andres Duarte Elementary	1433 Crestfield Drive	0.75
Northview Intermediate	1401 Highland Avenue	0.25
Duarte High School	1565 E Central Avenue	0.35
Source: Brad Patterson, Senior Director of Facilities, Duarte Unified School District, June 21, 2013.		

Table 5.12-2, *School Capacity and Enrollment (2012-2013)*, identifies the capacities and enrollment for the schools that serve the project area.

Table 5.12-2
School Capacity and Enrollment (2012-2013)

School	School Capacity	Current Enrollment	Excess Capacity
Andres Duarte Elementary	550	333	217
Northview Intermediate School	700	512	188
Duarte High School	1,400	1,008	392
Source: Brad Patterson, Senior Director of Facilities, Duarte Unified School District, June 21, 2013.			

As indicated in *Table 5.12-2*, the schools serving the project area currently have excess capacity. According to DUSD, student enrollment has been declining every year for the last seven years.[1] The DUSD's master plan includes the modernization and construction of new facilities at existing schools; however, there are no plans to construct new facilities at this time.

5.12.3 SIGNIFICANCE THRESHOLD CRITERIA

The issues presented in the Initial Study Environmental Checklist (*CEQA Guidelines* Appendix G) have been utilized as thresholds of significance in this Section. Accordingly, a project may create a significant environmental impact if it causes one or more of the following to occur:

- Substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities,

[1] Duarte Unified School District, Brad Patterson, Senior Director of Facilities, June 21, 2013.

the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives.

Based on these standards, the effects of the proposed project have been categorized as either a "less than significant impact" or a "potentially significant impact." Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a significant unavoidable impact.

5.12.4 PROJECT IMPACTS AND MITIGATION MEASURES

SCHOOLS

■ **IMPLEMENTATION OF THE PROPOSED PROJECT COULD RESULT IN IMPACTS TO EXISTING SCHOOL FACILITIES WITHIN THE DUARTE UNIFIED SCHOOL DISTRICT.**

Impact Analysis: Development associated with implementation of the proposed project would allow for up to 475 new multi-family residential units. The development of these new residential units could result in an associated increase in students attending schools within the DUSD. Generation rates are the most common method used by a school district to project future enrollment. *Table 5.12-3*, *Estimated Student Generation*, provides the estimated number of students that could potentially be generated as a result of the proposed project.

Table 5.12-3
Estimated Student Generation

Dwelling Unit Type	Student Generation Factor[1]	Residential Units	Students Generated
Multiple-Family	0.55	475	261

[1] Duarte General Plan Final EIR, August 2007.

As indicated in *Table 5.12-3*, the proposed project could add 261 new students to the DUSD. As indicated in *Table 5.12-2*, DUSD has adequate capacity to serve additional students within the project area. Additionally, development of the Specific Plan Area is anticipated to occur in phases over multiple years, based on market demand; thus, any increase in demand for school services would occur gradually as additional development is added to the area.

In order to maintain adequate classroom seating and facilities standards, individual development projects would be required to pay statutory fees in place at the time to DUSD in order to compensate for the impacts of development on school capacities. The DUSD currently assesses developer fees of $2.97 per square feet of living space for residential development and $0.47 per square feet for non-residential development.

Pursuant to SB 50, payment of fees to the School Districts is considered full mitigation for project impacts, including impacts related to 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, or other performance objectives for schools. Therefore, project applicants would be required to pay the statutory fees, so that space can be constructed, if

necessary, at the nearest sites to accommodate the impact of project-generated students, reducing impacts to a less than significant level.

Mitigation Measures:

SCH-1 Individual project applicants shall pay all applicable Development Impact Fees to the Duarte Unified School District prior to issuance of building permits. Proof of fee payment shall be provided to the City of Duarte.

Level of Significance: Less Than Significant Impact With Mitigation Incorporated.

5.12.5 CUMULATIVE IMPACTS AND MITIGATION MEASURES

■ **DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT AND OTHER RELATED CUMULATIVE PROJECTS COULD RESULT IN CUMULATIVELY CONSIDERABLE IMPACTS TO SCHOOL FACILITIES WITHIN THE DUARTE UNIFIED SCHOOL DISTRICT.**

Impact Analysis: DUSD serves students residing within the cities of Duarte and Bradbury. As indicated in *Table 4-1*, *Cumulative Projects*, new residential development is anticipated within Duarte. Development of the proposed project and related cumulative projects served by DUSD would potentially generate new students to the District. Currently, DUSD has available capacity at schools within the district. Individual development projects would be required to pay school impact fees based on the type and size of development proposed. Pursuant to SB 50, payment of fees to DUSD is considered full mitigation for project impacts, including impacts related to 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, or other performance objectives for schools. Therefore, individual project applicants would be required to pay the statutory fees, so that space can be constructed, if necessary, at the nearest sites to accommodate the impact of project-generated students. Development associated with implementation of the proposed project would not result in significant cumulative impacts in regards to school services and facilities.

Mitigation Measures: Refer to Mitigation Measure SCH-1. No additional mitigation measures are required.

Level of Significance: Less Than Significant Impact With Mitigation Incorporated.

5.12.6 SIGNIFICANT UNAVOIDABLE IMPACTS

Implementation of the proposed project would result in less than significant project and cumulative impacts related to police protection services and facilities during both construction and operation with adherence to the identified mitigation measure. As such, no significant unavoidable impacts would result from implementation of the Duarte Station Specific Plan.

5.12.7 SOURCES CITED

City of Duarte, *Duarte General Plan Update Final Environmental Impact Report*, August 2007.

Duarte Unified School District, Brad Patterson, Senior Director of Facilities, written correspondence, June 21, 2013.

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5.13 PARKS

The section identifies potential impacts to parks and recreation facilities that could result from implementation of the proposed project. Information in this section is primarily based upon information received from the City of Duarte Parks and Recreation Department.

5.13.1 REGULATORY SETTING

DUARTE MUNICIPAL CODE

Duarte Municipal Code Chapter 19.82, Dedication of Land for Park and Recreational Purposes, requires the dedication of land, payment of a fee, or both for the purposes of providing park and recreational facilities to residential developments. According to *Duarte Municipal Code* Section 19.82.030, the Council has found and determined that the public convenience, health, interest, safety, and welfare require that two and one-half acres of property, for each 1,000 persons residing within this City, shall be devoted to park and recreational purposes.

5.13.2 ENVIRONMENTAL SETTING

RECREATION PROGRAMS

The City of Duarte offers a variety of recreation programs for all ages. Programs include family events, healthy choices education, recreation classes, share mentoring, sports, and youth activities. Program offerings are year-round and seasonal.

PARKS AND RECREATION FACILITIES

Table 5.13-1, *Parks and Recreation Facilities*, identifies the closest parks and recreation facilities to the project site. Northview Park, located approximately one-quarter mile north of the project site, is the nearest park for use by residents within the area.

Table 5.13-1
Parks and Recreation Facilities

Park/Facility	Location	Size
Sports Park	1401 Central Avenue	12.25 acres
Northview Park	1433 Highland Avenue	2.02 acres
Duarte Park	1344 Bloomdale Street	2.96 acres
Source: Cesar Monsalve, Parks and Recreation Director, City of Duarte, May 28, 2013. City of Duarte, Parks & Recreation, http://www.accessduarte.com/index.php?option=com_content&view=article&id=62&Itemid=72, accessed June 10, 2013.		
s.f. = square feet.		

PARKS AND RECREATION DEMAND

The City has an established parkland-to-population requirement of 2.5 acres of parkland per 1,000 persons. The City's current (2013) population is 21,554 persons[1]. In order to meet the City's parkland-to-population ratio, the City would need 53.9 acres of parkland. The City currently has 52.31 acres of parkland within its jurisdictional boundaries.[2] According to the *General Plan*, the City also leases 26.54 acres from the Duarte Unified School District for recreational purposes, which is used to meet the City's parkland-to-population ratio. Thus, the City is currently exceeding its parkland-to-population ratio. Additional recreational opportunities are provided in wilderness areas, utility and floodway easements, bike, equestrian, and hiking trails, and a golf course.

5.13.3 SIGNIFICANCE THRESHOLD CRITERIA

The issues presented in the Initial Study Environmental Checklist (Appendix G of the *CEQA Guidelines*) have been utilized as thresholds of significance in this Section. Accordingly, a project may create a significant environmental impact if it causes one or more of the following to occur:

- 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; and/or

- Affect existing recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment.

Based on these standards, the effects of the proposed project have been categorized as either a "less than significant impact" or a "potentially significant impact." Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a significant unavoidable impact.

5.13.4 PROJECT IMPACTS AND MITIGATION MEASURES

OVERVIEW OF THE DUARTE STATION SPECIFIC PLAN (PROPOSED PROJECT)

The proposed Duarte Station Specific Plan includes a Recreation/Open Space land use designation, which includes 0.80 acres of passive open space in the form of a greenbelt. This greenbelt serves as a buffer between the high density residential development located along the Specific Plan's western edge and the adjacent single-family neighborhood to the west. The eastern-most extension of the green space may be narrowed or broken up into smaller open spaces throughout the Specific Plan Area to provide an area for residents, employees, or visitors to relax, enjoy a picnic, or throw a frisbee or a ball. Outdoor open space amenities such

[1] State of California Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties, and the State, January 2011-2013, With 2010 Benchmark*. Sacramento, California, May 2013.

[2] City of Duarte website, Parks, http://www.accessduarte.com/index.php?option=com_content&view=article&id=63&Itemid=231, accessed June 18, 2013.

as swings, a splash pad, or a jungle gym could also be provided. However, a minimum of 0.80 acres of open space must be included for open space and buffering purposes.

PARKS AND RECREATION FACILITIES

■ **IMPLEMENTATION OF THE PROPOSED PROJECT COULD INCREASE THE USE OF EXISTING PARKS AND RECREATIONAL FACILITIES CREATING THE POTENTIAL FOR PHYSICAL DETERIORATION OF FACILITIES.**

Impact Analysis: Potential development associated with implementation of the proposed project would create additional demand on existing parks and recreation facilities within the City. Development of 475 residential dwelling units could result in a potential population increase of 1,430 persons.[3] Based upon the City's parkland to population requirement of 2.5 acres of parkland per 1,000 persons, implementation of the proposed project would result in a need for approximately 3.6 acres of parkland. The proposed Specific Plan would require a minimum of 0.80 acres of open space be provided within the Plan Area to provide open space and a buffer between existing and proposed residential uses.

Development of the proposed Specific Plan would occur in phases over multiple years, based on market demand; thus, any increase in demand for parks and recreation facilities would occur gradually as additional development is added to the area. Given that the City's current parkland and leases with Duarte Unified School District, implementation of the proposed project would not create significant impacts regarding the need for additional parkland or recreational facilities.

Future residential development within the Specific Plan Area would be required to dedicate land and/or pay fees for the purposes of providing park and recreational facilities in accordance with *Duarte Municipal Code* Chapter 19.82. Dedication and/or payment of the applicable fees and the provision of open space as required in the Specific Plan would further reduce impacts to a less than significant level.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.13.5 CUMULATIVE IMPACTS AND MITIGATION MEASURES

■ **DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT AND OTHER RELATED CUMULATIVE PROJECTS COULD RESULT IN CUMULATIVELY CONSIDERABLE IMPACTS TO PARKS AND RECREATION FACILITIES IN THE CITY.**

Impact Analysis: Development associated with implementation of the proposed project and related cumulative projects within the City would increase demand on City parks and recreation facilities. The Specific Plan requires a minimum of 0.80 acres of open space be provided within the area. Additionally, residential development would be required to dedicate land and/or pay fees for the purpose of providing park and recreational facilities consistent with the applicable

[3] Based on 3.01 persons per household per State of California Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties, and the State, January 2011-2013, With 2010 Benchmark*. Sacramento, California, May 2013.

City's *Municipal Code* requirements. The inclusion of recreational amenities into the development of related cumulative projects would be assessed on a project-by-project basis. However, all applicable projects would be required to dedicate land and/or pay fees for parkland in accordance with the applicable City's Municipal Code. Thus, cumulative impacts related to the demand for parks and recreation services would be less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.13.6 SIGNIFICANT UNAVOIDABLE IMPACTS

Implementation of the proposed project would result in less than significant project and cumulative impacts related to parks and recreational facilities. As such, no significant unavoidable impacts would result from implementation of the Duarte Station Specific Plan.

5.13.7 SOURCES CITED

City of Duarte, Cesar Monsalve, Duarte Parks and Recreation Director, written correspondence, May 28, 2013.

City of Duarte, *Parks*, http://www.accessduarte.com/index.php?option=com_content&view=article&id=63&Itemid=231, accessed June 18, 2013.

City of Duarte, *City of Duarte Comprehensive General Plan 2005-2020*, August 14, 2007.

City of Duarte, *City of Duarte Municipal Code*, current through Ordinance 838, passed July 31, 2012.

State of California Department of Finance, *E-5 Population and Housing Estimates for Cities, Counties, and the State, January 2011-2013, With 2010 Benchmark*, Sacramento, California, May 2013.

5.14 WATER

This section analyzes projected impacts to water supplies and distribution systems that may result from the implementation of the proposed Specific Plan. The purpose of this analysis is to document and describe the existing water supply, water consumption, and distribution infrastructure in the vicinity of the project, and to evaluate impacts associated with the buildout of the proposed Specific Plan. Information for this section is based on the *Draft Water Supply Assessment* (Appendix I) prepared by RBF Consulting (September 2013), and the *2010 Urban Water Management Plan for the Southern Division – Los Angeles County District* (February 6, 2012) prepared for California American Water, as well as other available data gathered from California American Water.

5.14.1 REGULATORY SETTING

STATE

Urban Water Management Plan Act

The Urban Water Management Plan (UWMP) Act was passed in 1983 and codified as *California Water Code* Sections 10610 through 10657. Since its passage in 1983, the Act has been amended on several occasions. In 2004, the UWMP Act was amended to require additional discussion of transfer and exchange opportunities, non-implemented demand management measures, and planned water supply projects. Most recently, in 2005, the UWMP Act was amended to require water use projections (required by *California Water Code* Section 10631) to include projected water use for single-family and multi-family residential housing needed for lower income households. In addition, *Government Code* Section 65589.7 was amended to require local governments to provide a copy of the adopted housing element to water and sewer providers. The UWMP Act requires "every urban water supplier providing water for municipal purposes to more than 3,000 customers or supplying more than 3,000 acre-feet of water annually, to prepare and adopt, in accordance with prescribed requirements, an urban water management plan." Urban water suppliers must file these plans with the California Department of Water Resources every five years describing and evaluating reasonable and practical efficient water uses, reclamation, and conservation activities. As required by the Memorandum of Understanding Regarding Urban Water Conservation in California and Assembly Bill 11X (1991), the 2005 UWMP Act, incorporated water conservation initiatives, and a Water Shortage Contingency Plan.

Water Conservation Act of 2009

Senate Bill X7-7, the Water Conservation Act of 2009 (WCA) creates a framework for future planning and actions by urban (and agricultural) water suppliers to reduce California's water use. The law requires urban water suppliers to reduce statewide per capita water consumption by 20 percent by 2020. Additionally, the State is required to make incremental progress towards this goal by reducing per capita water use by at least 10 percent by 2015. Each urban retail water supplier was required to develop water use targets and an interim water use target by July 1, 2011. Each urban retail water supplier was required, by July 2011, to include in their water management plan the baseline daily per capita water use, water use target, interim water use target, and compliance daily per capita water use.

Senate Bill 610

Water Code Sections 10610 to 10656 require water suppliers to prepare an UWMP to promote water demand management and efficient use in their service areas. UWMPs are included with the environmental document for specified projects.

In regard to water supply, the Water Code (commonly referred to as SB 610, according to the enacting legislation) requires preparation of a Water Supply Assessment (WSA) for certain projects.[1] The Water Code requires that a WSA be prepared for any "project" which would consist of one or more of the following:[2]

- A proposed residential development of more than 500 dwelling units;
- A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space;
- A proposed shopping center or business establishment employing more than 1,000 persons or having more than 500,000 square feet of floor space;
- A proposed commercial office building employing more than 1,000 persons or having more than 250,000 square feet of floor space;
- A mixed-use project that includes one or more of the projects specified above; or
- A project that would demand an amount of water equivalent to, or greater than, the amount of water required by a 500 dwelling unit project.

The project proposes the development of approximately 19.08 acres in Duarte consisting of up to 475 residential dwelling units, up to 412,000 square feet of office and retail space, and up to 250 hotel rooms. As a result, the combination of uses proposed by the project meets the triggering criterion set forth in *Water Code* Section 10912(a)(6) for a mixed use project. Therefore, a WSA has been prepared for the proposed project (refer to Appendix I, Water Supply Assessment).

Senate Bill 221

Senate Bill 221 (SB 221)[3] amended state law to improve the link between information on water supply availability and land use at the tentative map preparation phase of a project. SB 610 and SB 221 are companion measures which seek to:

- Promote more collaborative planning between local water suppliers and cities and counties;
- Require that detailed information regarding water availability be provided to city and county decision-makers prior to approval of specific large development projects;

[1] Water Code Sections 10910–10915.
[2] Water Code Section 10910(b).
[3] Business and Professions Code Section 11010 and Government Code Section 66473.4.

- Require that this detailed information be included in the administrative record that serves as the evidentiary basis for an approval action by the city or county on such projects; and

- Recognize local control and decision making regarding the availability of water for projects and the approval of projects.

SB 221 pertains only to residential projects and establishes the relationship between the WSA prepared for a project and the project approval under the Subdivision Map Act.

Efficiency Standards

Title 24 of the *California Administrative Code* contains the California Building Standards, including the California Plumbing Code (Part 5), which promotes water conservation. Title 20 addresses Public Utilities and Energy and includes appliance efficiency standards that promote water conservation. In addition, a number of State laws listed below require water-efficient plumbing fixtures in structures:

- Title 20, *California Administrative Code* Section 1604(g), establishes efficiency standards that give the maximum flow rate of all new showerheads, lavatory faucets, sink faucets, and tub spout diverters.

- Title 20, *California Administrative Code* Section 1606, prohibits the sale of fixtures that do not comply with established efficiency regulations.

- Title 24, *California Administrative Code* Sections 25352(i) and (j), address pipe insulation requirements, which can reduce water used before hot water reaches equipment or fixtures. Insulation of water-heating systems is also required.

- *Health and Safety Code* Section 17921.3 requires low-flush toilets and urinals in virtually all buildings.

REGIONAL

2010 Urban Water Management Plan for the Southern Division – Los Angeles County District

The City of Duarte receives water from California American Water. California American Water operates three Division Offices. The City of Duarte is located under the Southern Division which incorporates the Los Angeles County District. This District consists of Baldwin Hills, Duarte, and San Marino service areas. In compliance with the WMP Act, California American Water prepared the *2010 Urban Water Management Plan for the Southern Division – Los Angeles County District* (*2010 UWMP*), dated February 2012. The *2010 UWMP* was prepared in accordance with Division 6, Part 2.6, of the *California Water Code*, Sections 10608 through 10657 as last amended by Senate Bill No. 7 (SBx7-7), which became law in November 2009.

CITY OF DUARTE

Duarte Municipal Code

Duarte Municipal Code Chapter 19.40, Landscaping, requires water conservation measures be addressed through landscape and irrigation design. Projects are required to comply with applicable provisions of the Water-Efficient Landscape Worksheet and Landscape Irrigation and Maintenance.

5.14.2 ENVIRONMENTAL SETTING

URBAN WATER MANAGEMENT PLAN

The project site is located in the City of Duarte and within the water service area of the California American Water Company's Los Angeles County District. The Los Angeles County District is comprised of three service areas. The Duarte service area serves parts of the cities of Azusa, Bradbury, Duarte, Irwindale, and Monrovia. The Duarte service area served an estimated population of 29,643 in 2010. This population is expected to reach 32,538 by 2035. This projection is based on the Southern California Association of Governments (SCAG) population projections by census tract.

Water Sources

California American Water obtains its water supply for the Duarte service area within the Los Angeles County District from: 1) Upper San Gabriel Valley Municipal Water District (USGVMWD) imported water, 2) Main San Gabriel Basin (MSGB) groundwater, and 3) MSGB surface water from the San Gabriel River. USGVMWD obtains its water supply from the Metropolitan Water District of Southern California (Metropolitan). The amount of demand not supplied by groundwater allocations is met by purchasing supplemental water from a wholesaler for direct potable use or untreated raw water as replacement water for the groundwater basin due to over-pumping. Untreated raw surface water is used to meet irrigation demands or to replenish the groundwater basin. *Table 5.14-1*, *Duarte System Water Supplies (Acre-Feet Per Year)*, shows the current and projected supplies for the Duarte system.

Table 5.14-1
Duarte System Water Supplies (Acre-Feet Per Year)

Source	2010	2015	2020	2025	2030	2035[1]
MSGB	4,158	4,062	4,062	4,062	4,062	4,062
MSGB Surface Water	1,672	1,672	1,672	1,672	1,672	1,672
USGVMWD	309	1,648	1,307	1,471	1,628	1,514
Total	**6,139**	**7,382**	**7,041**	**7,205**	**7,382**	**7,248**

Notes:
1. Based on California American Water correspondence and September 13, 2013 correspondence letter provided by staff, and assumes MSGG remains constant.
Source: California American Water Company Los Angeles County District 2010 UWMP, Table 4-1

California American Water has adjudicated rights to the Main San Gabriel Basin (MSGB). The MSGB is managed by the MSGB Watermaster. Management includes regulating the amount of water pumped from the Basin for all pumpers while responsibly managing the groundwater supply, and sets limits on surface water allocation from the San Gabriel River. Groundwater producers in the MSGB are allowed to exceed their safe yield allocation provided they pay an assessed replenishment fee to the MSGB Watermaster. Most years the MSGB is over pumped because total demand from the various producers, including California American Water, exceeds the available safe yield established by the Watermaster. The Watermaster uses the funds generated from the replenishment fees to purchase replacement water from wholesale agencies that have access to imported water. The authorized wholesaler of imported water for California American Water's Duarte system is the USGVMWD.

The Duarte system service area is classified as an "Integrated Producer", which includes an adjudicated right to 1.8634 percent of the annual safe yield of MSGB, and a fixed surface water allocation of 1,672 acre feet per year. From 2006 to 2010, groundwater has comprised between 83 and 94 percent of total water supply for California American Water's Los Angeles County District, with the remainder supplied by surface water and imported water. California American Water's active wells in the MSGB pumped 18,475 acre-feet per year (AFY) in 2010, and 8,424 AFY was allocated in the Duarte service area. Between 2006 and 2010 production averaged 16,227 AFY, and 7,275 AFY was allocated in the Duarte service area on average.

The projected increase in water demands would be met by purchasing additional water from USGVMWD. With the advent of the mandated conservation measures outline in the 2010 UWMP, California American Water's supply is expected to be highly reliable through 2035. This reliability is a result of the projected reliability of USGVMWD's reliance on Metropolitan for its imported water supplies, and the planning initiatives undertaken by Metropolitan in the last several years.

Metropolitan's planning initiatives were a result of the inherent uncertainty in Colorado River and SWP supplies given various hydrologic, environmental, and legal considerations, Metropolitan has undertaken several planning initiatives to broaden its water resources reliability. Metropolitan has documented that, consistent with Section 4202 of its Administrative Code, the agency is prepared to provide its member agencies including USGVMWD with adequate supplies of water to meet expanding and increasing needs in the years ahead. When additional water resources are required to meet increasing needs, Metropolitan has stated that it will be prepared to deliver such supplies. In its 2010 Regional Urban Water Management Plan, Section II.4, Metropolitan also states that as a result of investments made in supply and storage, it has identified a resource management plan that should result in 100 percent reliability for non-discounted non-interruptible demands through 2035.

Normal and Dry-Year Supply

Under normal conditions, California American Water meets its customer demands with a combination of imported water, pumping groundwater from the MSGB and surface water from the San Gabriel River. The MSGB Watermaster evaluates groundwater conditions in the MSGB and sets the annual safe yield given adjudicated rights to production. Groundwater producers in the MSGB are allowed to exceed their safe yield allocation provided they pay an assessed replenishment fee to the MSGB Watermaster.

According to the 2010 UWMP, USGVMWD will meet projected water demands under all anticipated hydrologic conditions in the Duarte service area. During single-dry and multiple-dry years, USGVMWD MSGB Replacement purchases are expected to increase to use more imported water to make up for the decrease in local supplies. Metropolitan, USGVMWD and the MSGB Watermaster have implemented, and will continue to implement, projects to ensure that imported water and groundwater demands can be met under normal, single-dry year, and multiple-dry years. Metropolitan plans on 100 percent supply reliability to USGVMWD, providing the same supply reliability to the Los Angeles County District Duarte service area.

Water Shortage Contingency Plan

California American Water must obtain CPUC approval for any water conservation programs, including voluntary and/or mandatory measures. California American Water implements Rule 14.1 (on file with CPUC) to obtain CPUC approval for a staged water conservation plan for the LACD, which complies with UWMP Act requirements for a Water Shortage Contingency Plan. Conditions that require stages of action are defined within the Rule. In the event of a 50 percent reduction in supply, California American Water would implement the mandatory conservation measures described (Section H) as Stage 3 Mandatory Conservation to achieve a 50 percent reduction in demand.

Future Water Supply Projects/Programs

Other than existing infrastructure maintenance and replacement, there are no future supply projects to bring in new sources of water planned. However, opportunities for use of recycled water exist for the Duarte service area through County Sanitation Districts of Los Angeles County (Districts).

California American Water does not collect or treat any of the wastewater generated within its Los Angeles County District (LACD) boundaries, nor does it use recycled water within the LACD. The Districts collects and treats the wastewater within the Districts' service areas. According to the Districts, an estimate of gross wastewater production from LACD's customers was calculated using a wastewater generation factor of 83 gallons per capita per day (gpcd). The Districts recycled about 36 percent of its wastewater in fiscal year 2007-08, with 44 percent of that actually reused for beneficial purposes. Based on these figures, the 2010 UWMP estimates that, at current treatment capacity and the per-capita generation estimates, LACD could be entitled to 102 to 107 AFY for landscape irrigation (UWMP Table 4-9). However, California American Water has no current plan to implement a recycled water program within the current UWMP planning horizon.

Desalinated Water Opportunities

California American Water is currently participating in a regional dialogue regarding a desalination study being conducted by WBMWD. WBMWD is exploring the possibility of seawater desalination with a pilot program. A portion of the Los Angeles County wholesale supply could eventually come from desalinated seawater.

Transfer Opportunities

California American Water leases unused portions of other purveyor's allocations in the Central Basin when available. Typically, these opportunities are available when other purveyors

experience well contamination or other production interruptions. While this supply is available sometimes, it is not considered a reliable source and is not quantifiable as a projected future supply source.

Water Supply Reliability

Historically, California American Water has been able to supply 100% of its demand through groundwater production, surface water diversion, and wholesale purchases. It is assumed that projected availability of groundwater and surface water allocations will be 100 percent of average year (2000) allocations. Wholesale purchases are assumed to equal 100 percent of the amount required to replace water pumped in excess of each of California American Water's groundwater basin allocations.

Primary factors that affect the supply reliability of the Los Angeles County District include legal, environmental, water quality and climatic factors. The legal factors affecting supply include groundwater adjudications and replacement water purchases for excess pumping. Environmental factors related to wholesale supply reliability are reduced deliveries of State Water Project (SWP) due to reduced pumping in the Sacramento Delta. Water quality factors influence groundwater production capacity and efficiency, and supplies are always subject to reduction given climatic factors.

The MSGB has legal factors affecting its reliability due to its adjudication and pumpers excessively pumping requiring replacement water purchases. Some areas of the MSGB have water quality issues limiting production. However, the Duarte system treats its groundwater supplies and, thus, is not affected by the groundwater quality. Climatic factors, such as drought, may reduce available groundwater supplies. In turn, the USGVMWD, as wholesaler, faces the same legal limits as the basin pumpers. As an ultimate user of Metropolitan imported water, the Duarte system can sustain reduced imported water supplies. Climatic factors, such as extended regional drought conditions, may also limit USGVMWD's ability to deliver imported water to the Duarte service area.

With these factors in mind, California American Water will be able to supply enough water to the Duarte service area given any anticipated hydrological condition. *Table 5.14-2*, *Los Angeles County District Supply Reliability – Duarte Service Area*, shows the Duarte service area's supply reliability in an average, single dry year, and multiple dry years.

Table 5.14-2
Los Angeles County District Supply Reliability – Duarte Service Area

Water Supply Sources	Average/ Normal Water Year	Single Dry Water Year	Multiple Dry Water Years		
			Year 1	Year 2	Year 3
MSGB Groundwater Allocation	4,062	4,431	4,431	3,877	3,323
MSGB Surface Water Allocation	1,672	1,672	1,672	1,672	1,672
USGVMWD MSGB Replacement Purchases	1,629	2,274	2,274	3,478	2,422
Total Water Supply	*7,363*	*8,377*	*8,377*	*9,027*	*7,417*
% of Normal	100%	114%	114%	123%	101%

Source: California American Water Los Angeles County District 2010 UWMP, Table 5-3

In response to multiple group affiliations, statutory requirements, and concern for the region's water supply sustainability, California American Water employs multiple tactics to conserve water and reduce groundwater production. The major tactics currently being implemented by California American Water include: 1) Metering, 2) Tiered Water Rates, 3) Plumbing Retrofits, 4) Public Education, 5) Large Landscape Conservation Incentives, 6) High-Efficiency Washing Machine Rebates, and 7) High-Efficiency Toilet Replacement Rebates, and 8) CUWCC Best Management Practices (BMPs) implementation. All of these tactics are currently being implemented or are in the process of being implemented in the near future. Detailed information on the programs can be found in Section 6 of the 2010 UWMP.

WATER FACILITIES

According to California American Water, 12-inch water mains are located in Evergreen Street and Highland Avenue. A 12-inch water main is also located in Business Center Drive west of Highland Avenue. Smaller diameter lines (4-inch) are located in Denning Avenue and Glenford Avenue; refer to *Exhibit 5.14-1*, *Water Plan*.

The project area is located within the Scott Pressure Zone, which has a hydraulic gradient line (HGL) of 691 feet. The level is typically the pad elevation of the water reservoir that supplies water storage for the pressure zone. The HGL immediate at the project area is approximately 684 feet due to the pressure losses within the piping distribution system from the reservoir or booster pump station to the project area. The elevations of the site range from 496 to 479 feet. Therefore, pressure ranges between 81 to 88 pounds per square inch (psi).

California American Water's Capital Improvement Program (CIP) includes two upgrades to the Scott Zone in the immediate future. These upgrades will provide additional redundancy and water supply to the Scott Zone system. These upgrades include:

- Rehabilitation and re-drilling of an existing well at Crown Haven. This will have a direct link to the Scott Pressure Zone.
- Additional proposed new well (site to be determined).

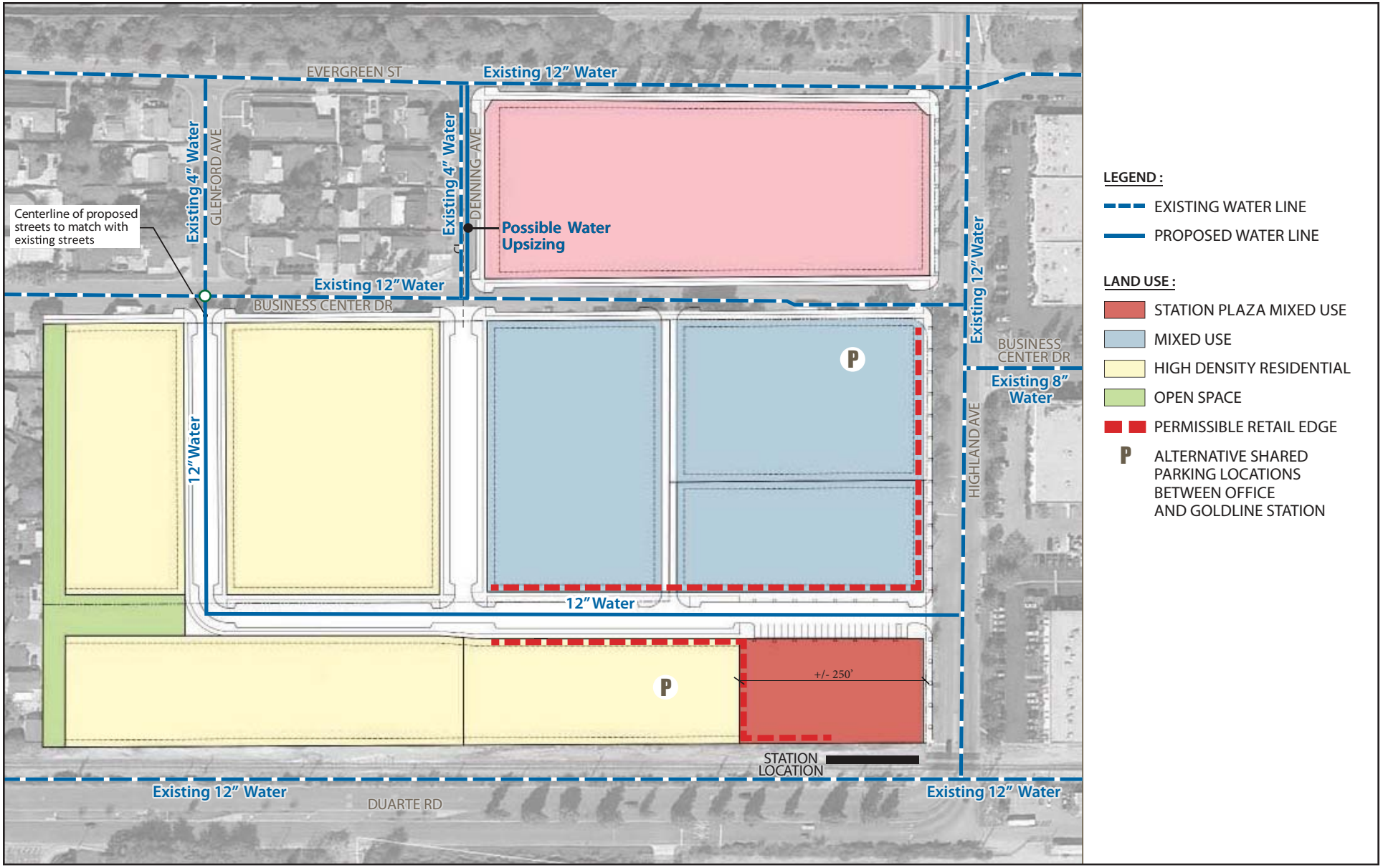
5.14.3 SIGNIFICANCE THRESHOLD CRITERIA

The issues presented in the Initial Study Environmental Checklist (*CEQA Guidelines* Appendix G) have been utilized as thresholds of significance in this Section. Accordingly, a project may create a significant environmental impact if it causes one or more of the following to occur:

- 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; and/or

- Have sufficient water supplies available to serve the project from existing entitlements and resources, or require new or expanded entitlements.

Based on these significance thresholds and criteria, the proposed project's effects have been categorized as either "no impact," a "less than significant impact," or a "potentially significant impact." Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a significant unavoidable impact.



Source: Dahlin Group, May 2013.

NOT TO SCALE

RBF CONSULTING A Baker Company

09/13 • JN 10-108568 (130318)

DUARTE STATION SPECIFIC PLAN
ENVIRONMENTAL IMPACT REPORT

Water Plan

Exhibit 5.14-1

5.14.4 PROJECT IMPACTS AND MITIGATION MEASURES

WATER DEMAND AND FACILITIES

■ **IMPLEMENTATION OF THE PROPOSED PROJECT COULD REQUIRE OR RESULT IN THE CONSTRUCTION OF NEW WATER FACILITIES OR EXPANSION OF EXISTING FACILITIES, THE CONSTRUCTION OF WHICH COULD CAUSE SIGNIFICANT ENVIRONMENTAL EFFECTS.**

Impact Analysis: Implementation of the proposed project would result in increased water demand when compared to existing conditions. *Table 5.14-3*, *Existing and Estimated Project Water Demand*, quantifies both the existing uses and the proposed project's estimated water demand.

As indicated in *Table 5.14-3*, the proposed project is anticipated to demand 210,537 gallons per day (gpd) of water, or 169,992 additional gpd of water when compared to existing conditions.

Table 5.14-3
Existing and Estimated Project Water Demand

Use	Acres	Building (SF)	Rooms	Dwelling Units	Factor	GPD	AFY
Existing							
Manufacturing/Warehouse	19.08				2125 gpd/acre	40,545	45.4
Proposed Project							
Retail		12,000			642 gpd/ksf	7,704	8.6
Office		400,000			17 gpd/emp	45,333	50.8
Hotel			250		60 gpd/guest	15,000	16.8
Residential				475	300 gpd/unit	142,500	159.6
Proposed Total						***210,537***	***235.8***
Net Change						**+169,992**	**+190.6**

Notes: sf = square feet; gpd = gallons per day; ksf = 1,000 square feet; emp = employee; AFY = acre-feet per year.

New streets within the Specific Plan Area are anticipated to include a minimum 12-inch water main, which would connect to the existing off-site system; refer to *Exhibit 5.14-1*. Additionally, the existing pipe within Denning Avenue may require upsizing depending on the usage and fire flow requirements of the adjacent parcel. Private meters and backflow devices would be required for domestic water service and/or separate fire lines. Site-specific hydraulic analysis would be required in order to determine water system requirements to serve the proposed development (Mitigation Measure WAT-1). Project applicants would be required to implement the improvements required to serve the proposed development in accordance with California American Water requirements. With implementation of mitigation, impacts associated with water distribution facilities would be reduced to a less than significant level.

Current fire regulations require all buildings to be equipped with a fire sprinkler system, including residential homes. Fire flow requirements are based upon building size and building construction type. Future site plans would be required to be submitted to the Los Angeles

County Fire Department in order to obtain fire flow and storage volume requirements based upon the tenant type, building size, and building type. Once the flows and durations are determined, verification from California American Water would be required to ensure pumping or storage capacity is available to achieve the authority's requirements. If fire flow and storage capacity is inadequate, the project applicant would be required to implement the improvements (Mitigation Measure WAT-2). With implementation of mitigation, potential fire flow impacts would be reduced to a less than significant level.

Mitigation Measures:

WAT-1 Prior to approval of building permits, individual project applicants shall conduct hydraulic analysis in coordination with California American Water to determine water system requirements to serve the proposed development. The project applicant shall implement the improvements in accordance with California American Water requirements prior to issuance of building permits and complete all necessary improvements prior to final inspection.

WAT-2 Prior to approval of building permits, individual project applicants shall submit site plans to the Los Angeles County Fire Department in order to obtain fire flow and storage volume requirements for the proposed development. The project applicant shall submit the fire flow and storage volume requirements to California American Water to determine if adequate fire flow and storage capacity exists to serve the proposed development. If fire flow and storage capacity is found to be inadequate, the project applicant shall design and bond for necessary improvements prior to the issuance of building permits and complete all necessary improvements prior to final inspection.

Level of Significance: Less Than Significant Impact With Mitigation Incorporated.

WATER SUPPLIES

■ **IMPLEMENTATION OF THE PROPOSED PROJECT COULD CREATE DEMAND FOR WATER THAT EXCEEDS AVAILABLE WATER SUPPLIES FROM EXISTING ENTITLEMENTS AND RESOURCES.**

Impact Analysis: In compliance with SB 610 and SB 221, a WSA has been conducted to verify that sufficient water supply is available to the water provider during normal, single dry, and multiple dry years that will meet the project's projected demand, in addition to existing and planned future uses.

As previously noted in *Table 5.14-3*, the proposed project is anticipated to demand 210,537 gpd of water, or 169,992 additional gpd of water when compared to existing conditions. The water supply needs for California American Water's Duarte service area required 6,139 AF for 2010 and are projected to increase to 7,362 in 2030; on average by 1,223 AF. The estimated annual demand of the proposed project is 235.8 AFY, which represents approximately 21 percent of this total growth.

The WSA has concluded that California American Water has sufficient supply now and in 2035 for the proposed project, based upon the following assessments and conclusions:

- The California American Water Company has been identified as the public water supplier for the proposed project.

- The proposed Duarte Station Specific Plan is not specifically identified in the 2010 UWMP; however, growth in the area through year 2035 has been projected either through the 2010 UWMP or follow-up correspondence with California American Water staff specifically for the preparation of this WSA. The estimated increased water demand is planned to be met through additional imported water and increased groundwater extraction.

- The estimated average annual water demand of the proposed project is approximately 236 AFY, which is equivalent to approximately 21 percent of the expected water demand growth for the Duarte service area through Year 2035.

- In general, California American Water's supply is expected to be 100 percent reliable through 2030. Metropolitan plans on 100 percent supply reliability to USGVMWD as a result of initiatives Metropolitan has undertaken in recent years on behalf of its member agencies.

- MSGB Watermaster continues to coordinate and manage the Main San Gabriel Basin to provide adequate groundwater supply to meet individual and cumulative development within respective service areas and demonstrate a shared responsibility to maintaining groundwater basin balance.

In conclusion, the California American Water has sufficient supply now and those supplies would be available for the proposed project through 2035; resulting in less than significant impacts.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.14.5 CUMULATIVE IMPACTS AND MITIGATION MEASURES

■ **DEVELOPMENT ASSOCIATED WITH THE PROPOSED PROJECT AND OTHER RELATED CUMULATIVE PROJECTS COULD RESULT IN CUMULATIVELY CONSIDERABLE IMPACTS TO WATER SUPPLIES AND FACILITIES.**

Impact Analysis: Increased water demand associated with the proposed project and other related cumulative projects could result in significant cumulative impacts to water supplies and facilities.

Implementation of the proposed project would likely require new water facilities to serve the proposed development. Mitigation has been identified that would reduce these impacts to a less than significant level. The proposed project and cumulative projects would be reviewed on a project-by-project basis to determine if adequate facilities are available within the area to serve the proposed development. Individual development projects would be required to make necessary improvements or make a fair share contribution toward the improvements prior to

development. Therefore, cumulative impacts to water facilities would be less than significant in this regard.

Development of the proposed project could result in impacts to fire flow and water storage. Mitigation has been identified that would reduce these impacts to a less than significant level. The proposed project and cumulative projects served by the Los Angeles County Fire Department would be reviewed on a project-by-project basis to determine the fire flow and storage capacity requirements of the proposed development. Individual development projects would be required to make necessary improvements or make a fair share contribution toward the improvements prior to development. Therefore, cumulative impacts to fire flow and storage capacity would be less than significant in this regard.

California American Water's 2010 UWMP provides a long-range assessment of water supply for the cities of Azusa, Bradbury, Duarte, Irwindale, and Monrovia, which includes its own 2030 service area population projection derived from housing projections, SCAG projections, and persons per household data. The 2010 UWMP assesses water supply to forecast year 2030 taking into consideration groundwater, imported, and surface water supplies. The water supply needs for California American Water's Duarte service area required 6,139 AF for 2010 and are projected to increase to 7,362 in 2030; on average by 1,223 AF. The estimated annual demand of the proposed project is 235.8 AFY, which represents approximately 21 percent of this total growth.

Future development projects in Duarte and the surrounding cities would be evaluated by the applicable City and California American Water on a project-by-project basis to determine impacts to water supplies and infrastructure. The continued assessment of individual projects for impacts to the water supply system would assure projects would only be approved if adequate water supplies exist at the time of their implementation. New development would be required to pay its share of the costs of infrastructure improvements necessary to accommodate the project. California American Water would need to ensure their water reclamation facilities and pipeline infrastructure are planned and installed according to their UWMP projections. Additionally, coordination between the cities and California American would be essential as further development is planned. Therefore, implementation of the proposed project would not result in cumulatively considerable water supply impacts.

Mitigation Measures: Refer to Mitigation Measures WAT-1 and WAT-2. No additional mitigation measures are required.

Level of Significance: Less Than Significant Impact With Mitigation Incorporated.

5.14.6 SIGNIFICANT UNAVOIDABLE IMPACTS

Implementation of the proposed project would result in less than significant project and cumulative impacts related to water demand and facilities, and water supply. As such, no significant unavoidable impacts would result from implementation of the Duarte Station Specific Plan.

5.14.7 SOURCES CITED

California American Water, *2010 Urban Water Management Plan for the Southern Division – Los Angeles County District*, February 6, 2012.

RBF Consulting, *Draft Water Supply Assessment*, September 2013.

5.15 WASTEWATER

This section evaluates impacts of the proposed project on wastewater facilities within the City. Information in this section is based upon information from the City of Duarte and County Sanitation Districts of Los Angeles County.

5.15.1 REGULATORY SETTING

FEDERAL

National Pollutant Discharge Elimination System

As authorized by the Clean Water Act (CWA), the National Pollutant Discharge Elimination System (NPDES) Permit Program controls water pollution by regulating point sources that discharge pollutants into waters of the United States. Point sources are discrete conveyances such as pipes or man-made ditches. Industrial, municipal, and other facilities must obtain permits if their discharges go directly to surface waters. In California, the State Water Resources Control Board (SWRCB) administers the NPDES permitting program and is responsible for developing NPDES permitting requirements. The SWRCB works in coordination with the Regional Water Quality Control Boards (RWQCB) to preserve, protect, enhance, and restore water quality. The City is within the jurisdiction of the Los Angeles RWQCB (LARWQCB).

The Municipal Storm Water Permitting Program regulates storm water discharges from municipal separate storm sewer (drain) systems (MS4s). Most of these permits are issued to a group of co-permittees encompassing an entire metropolitan area. The Los Angeles County Flood Control District, the County of Los Angeles, and the City of Duarte along with 83 other incorporated cities therein (Permittees) discharge pollutants from their MS4s. Storm water and non-storm water enter and are conveyed through the MS4 and discharged to surface water bodies of the Los Angeles Region. These discharges are regulated under countywide waste discharge requirements contained in Order No. R4-2012-0175 (NPDES Permit No. CAS004001, Waste Discharge Requirements for Municipal Separate Storm Sewer System (MS4) Discharges Within the Coastal Watersheds of Los Angeles County, Except Discharges Originating from the City of Long Beach MS4), which was adopted November 8, 2012. The MS4 Permit Order provides the revised waste discharge requirements for MS4 discharges within the Los Angeles County watersheds, which includes the City of Duarte. The MS4 Permit Order became effective December 28, 2012.

Water reclamation plants (WRP) must comply with their current NPDES Permit, which regulates its discharges. The LARWQCB adopted the Waste Discharge Requirements for the Joint Outfall System, San Jose Creek Water Reclamation Plant (Order No. R4-2009-0078 and NPDES No. CA0053911) and the Waste Discharge Requirements for the Joint Outfall System Whittier Narrows Water Reclamation Plan (Order No. R4-2009-0077 and NPDES No. CA0053716) on June 4, 2009.

Clean Air Act

In 1990, the Clean Air Act (CAA) was dramatically revised and expanded to give the Environmental Protection Agency (EPA) even broader authority to implement and enforce

regulations reducing air pollutant emissions. The CAA also gives the EPA authority to limit emissions of air pollutants coming from such as utilities, among others.

Wastewater originating from the project site is treated at the Districts' San Jose Creek WRP, and the Whittier Narrows WRP, which have design capacities of 100 million gallons per day (mgd) and 15 mgd, respectively. In order for the Districts to conform to CAA requirements, the design capacities are based on the regional growth forecast adopted by the Southern California Association of Governments (SCAG); refer to Section 7.1, Growth-Inducing Impacts. Specific SCAG regional growth forecast policies are incorporated into the Clean Air Plans prepared by Air Quality Management Districts. The project site is located within jurisdiction of the South Coast Air Quality Management District (SCAQMD), which prepared the 2012 Air Quality Management Plan (2012 AQMP) to improve air quality in the South Coast Air Basin. Any expansion of the Districts' facilities must be sized and service phased in a manner that will be consistent with SCAG's regional growth forecast for the County of Los Angeles, among the others. The available capacity of the Districts' treatment facility is, therefore, limited to levels associated with the approved growth identified by SCAG.

REGIONAL

County Sanitation Districts of Los Angeles County

The County Sanitation Districts of Los Angeles County (Districts) are authorized by the *California Health and Safety Code* to charge a fee for the privilege of connecting (directly or indirectly) to the Districts' sewerage system or increasing the strength or quantity of wastewater attributable to a particular parcel or operation already connected. This connection fee is a capital facilities fee that is imposed in an amount sufficient to construct an incremental expansion of the sewerage system to accommodate a proposed project. Payment of a connection fee is required before a permit to connect to the sewer is issued.

In order for the Districts to conform to the requirements of the Federal Clean Air Act (CAA), the design capacities of the Districts' wastewater treatment facilities are based on the regional growth forecast adopted by the Southern California Association of Governments (SCAG). Specific policies included in the development of the SCAG regional growth forecast are incorporated into clean air plans, which are prepared by the South Coast and Antelope Valley Air Quality Management Districts in order to improve air quality in the South Coast and Mojave Desert Air Basins as mandated by the CAA. All expansions of Districts' facilities must be sized and service phased in a manner that will be consistent with the SCAG regional growth forecast for the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. The available capacity of the Districts' treatment facilities will, therefore, be limited to levels associated with the approved growth identified by SCAG.

LOCAL

City of Duarte Municipal Code

Pursuant to *Duarte Municipal Code* Section 6.12.010, Adoption of County Ordinance, the City has adopted by reference the Los Angeles County Code, Title 20, Utilities, Division 2, Sanitary Sewers and Industrial Waste ordinance, as amended, as a sanitary sewer and industrial waste ordinance of the City of Duarte, except as it is amended.

Pursuant to *Duarte Municipal Code* Section 16.04.015, Adoption of California Green Building Standards Code, the City has adopted by reference the *2010 California Green Building Standards Code* as set forth in Title 24 Part II of the *California Building Standards Code* of the *California Code of Regulations*.

5.15.2 ENVIRONMENTAL SETTING

WASTEWATER FACILITIES

County Sanitation Districts of Los Angeles County[1]

The project site is located within the jurisdictional boundaries of District No. 22 of the County Sanitation Districts of Los Angeles County.

Wastewater flow originating from the project site discharges to local sewers before it is conveyed to the Districts' trunk sewers. The trunk sewers that serve the project area include the Buena Vista Trunk Sewer, located in Three Ranch Road west of Duncannon Avenue, and the Duarte Trunk Sewer, located in Highland Avenue between the I-210 Freeway and Duarte Road. The sewers are 12-inches in diameter with a design capacity of 1.7 mgd. The Buena Vista Trunk Sewer has a peak flow of 0.5 mgd (last measured in 2010). The Duarte Trunk Sewer has a peak flow of 1.0 mgd (last measured in 2009).

Wastewater originating from the project site is treated at the Districts' San Jose Creek WRP, or the Whittier Narrows WRP. San Jose Creek WRP, located at 1965 Workman Mill Road in unincorporated Los Angeles County, provides primary, secondary, and tertiary treatment for 100 mgd of wastewater. Currently, the San Jose Creek WRP processes an average flow of 76.6 mgd. Whittier Narrows WRP, located at 301 N. Rosemead Boulevard in the City of El Monte, provides primary, secondary, and tertiary treatment for 15 mgd of wastewater. Currently, the Whittier Narrows WRP processes an average flow of 8.0 mgd.

City of Duarte and County of Los Angeles Department of Public Works Consolidated Sewer Maintenance District

Local sewer lines are owned by the City. The County of Los Angeles Department of Public Works (LACDPW) Consolidated Sewer Maintenance District is responsible for the operation and maintenance of the local sewers within the City of Duarte.

The following sewer lines are adjacent to the project site, and are accepting flows:

- An 8-inch vitrified clay pipe (VCP) sewer occurs along Evergreen Street (formerly Central Avenue) and south along Glenford Avenue. This line has a minimum slope of 0.4 percent east to west from Highland Avenue to Glenford Avenue. The 8-inch sewer along Evergreen Avenue receives flows from the north via an 8-inch line.

[1] Adriana Raza, Customer Service Specialist, Facilities Planning Department, County Sanitation Districts of Los Angeles County, May 9, 2013, and County Sanitation Districts of Los Angeles County, *Wastewater Facilities*, http://www.lacsd.org/wastewater/wwfacilities/default.asp, accessed May 30, 2013.

- An 8-inch VCP sewer occurs within Business Center Drive. This line has a minimum slope of 0.64 percent. It picks up lines from the north along Denning Avenue, Glenford Avenue, and Fairdale Avenue.

- A 12-inch sewer occurs along Highland Avenue and appears to receive flows from the development to the east along Business Center Drive and from the north from across the 210 freeway. The line has a minimum slope of 0.6 percent. The 12-inch sewer line continues south to the trunk sewer in Duarte Road where it flows westerly with a slope of 1.208 percent. The sewer along East Duarte Road is on the south side of the Metro railroad right-of-way.

WASTEWATER GENERATION

Based on a wastewater generation factor of 1,700 gallons per day per acre (gpd/acre) for industrial uses, the existing average wastewater flow from the on-site uses is estimated at 32,436 gpd.

To determine peaking rates,, a conservative value of 2.5 was multiplied to the average flow rate of 32,436 gpd for a result of 81,090 gpd or 56.3 gallons per minute (gpm).

5.15.3 SIGNIFICANCE THRESHOLD CRITERIA

The issues presented in the Initial Study Environmental Checklist (Appendix G of the *CEQA Guidelines*) have been utilized as thresholds of significance in this Section. Accordingly, a project may create a significant environmental impact if it causes one or more of the following to occur:

- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;

- Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects; and/or

- Result in a determination by the wastewater treatment provider that serves or may serve the project that it does not have adequate capacity to serve the project's projected demand in addition to the provider's existing commitments.

Based on these standards, the effects of the proposed project have been categorized as either a "less than significant impact" or a "potentially significant impact." Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a significant unavoidable impact.

5.15.4 PROJECT IMPACTS AND MITIGATION MEASURES

WASTEWATER CONVEYANCE AND TREATMENT FACILITIES

■ **IMPLEMENTATION OF THE PROPOSED PROJECT COULD GENERATE WASTEWATER THAT EXCEEDS THE CAPACITY OF CONVEYANCE AND TREATMENT FACILITIES SERVING THE PROJECT AREA.**

Impact Analysis: Implementation of the proposed project would result in increased wastewater generation requiring conveyance and treatment. *Table 5.15-1*, *Estimated Project Wastewater Generation*, quantifies the proposed project's estimated wastewater generation using typical generation factors.

Table 5.15-1
Estimated Project Wastewater Generation

Facility Description	Acres	Building Area (SF)	Rooms	Dwelling Units	Flow Factor	Units	Average Flow (gpd)
Existing							
Manufacturing/Warehouse	19.08				1,700	gpd/acre	32,436
Proposed							
Retail		12,000			578	gpd/ksf	6,936
Office		400,000			15.3	gpd/emp	40,800
Hotel			250		54	gpd/guest	13,500
Residential				475	270	gpd/unit	128,250
Proposed Total							***189,486***
Net Change							**+157,050**

Notes: sf = square feet; gpd = gallons per day; ksf = 1,000 square feet; emp = employee.

As indicated in *Table 5.15-1*, the proposed project is estimated to generate 189,486 gpd of wastewater or 157,050 additional gpd of wastewater when compared to existing conditions.

To determine peaking rates, a conservative value of 2.5 was multiplied to the 189,486 gpd of wastewater for a result of 473,715 gpd or 329 gallons per minute (gpm). The peak rate for the additional average flow rate of 157,050 gpd results in 392,625 gpd or 272.7 gpm.

Sanitary Sewer Procedural Manual and the Standard Plans

Wastewater Conveyance

New sewer lines within the Specific Plan Area would be constructed to serve the proposed development, and would be constructed at the minimum slopes identified in the LACDPW *Sanitary Sewer Procedural Manual* and *Standard Plans.*

Sewer generated within the Plan Area would be transferred to existing sewer pipelines that surround the Plan Area. The existing on-site sewer lines currently connect to the off-site local and regional lines in Evergreen Street, Business Center Drive, Highland Avenue, and Duarte

Road. As future development occurs within the Plan Area, it can utilize existing connection points to off-site lines, as well as modify or add connection points, depending upon the site plan. *Exhibit 5.15-1*, *Sewer Plan*, provides a preliminary sewer plan; however, refined sewer layouts would be submitted as part of site plan submittals for individual development projects.

Development of the proposed Specific Plan would occur in phases, based on market demand; thus, any increase in demand for wastewater services would occur gradually as additional development is added to the area. However, the increase in flows associated with the proposed project has the potential to require upsizing of both the local and regional lines surrounding the site along Business Center Drive, Highland Avenue, and Duarte Road.

All new development within the Specific Plan Area would be reviewed on a project-by-project basis by the City of Duarte, LACDPW, and the Districts, at which time an "area study" is conducted to determine the available capacity of local and regional sewer lines and the Districts' facilities to accommodate effluent from new development (refer to Mitigation Measure WW-1). Construction of any new sewers would be required to comply with the LACDPW *Sanitary Sewer Procedural Manual* and *Standard Plans* prior to acceptance into the Consolidated Sewer Maintenance District (refer to Mitigation Measure WW-2).

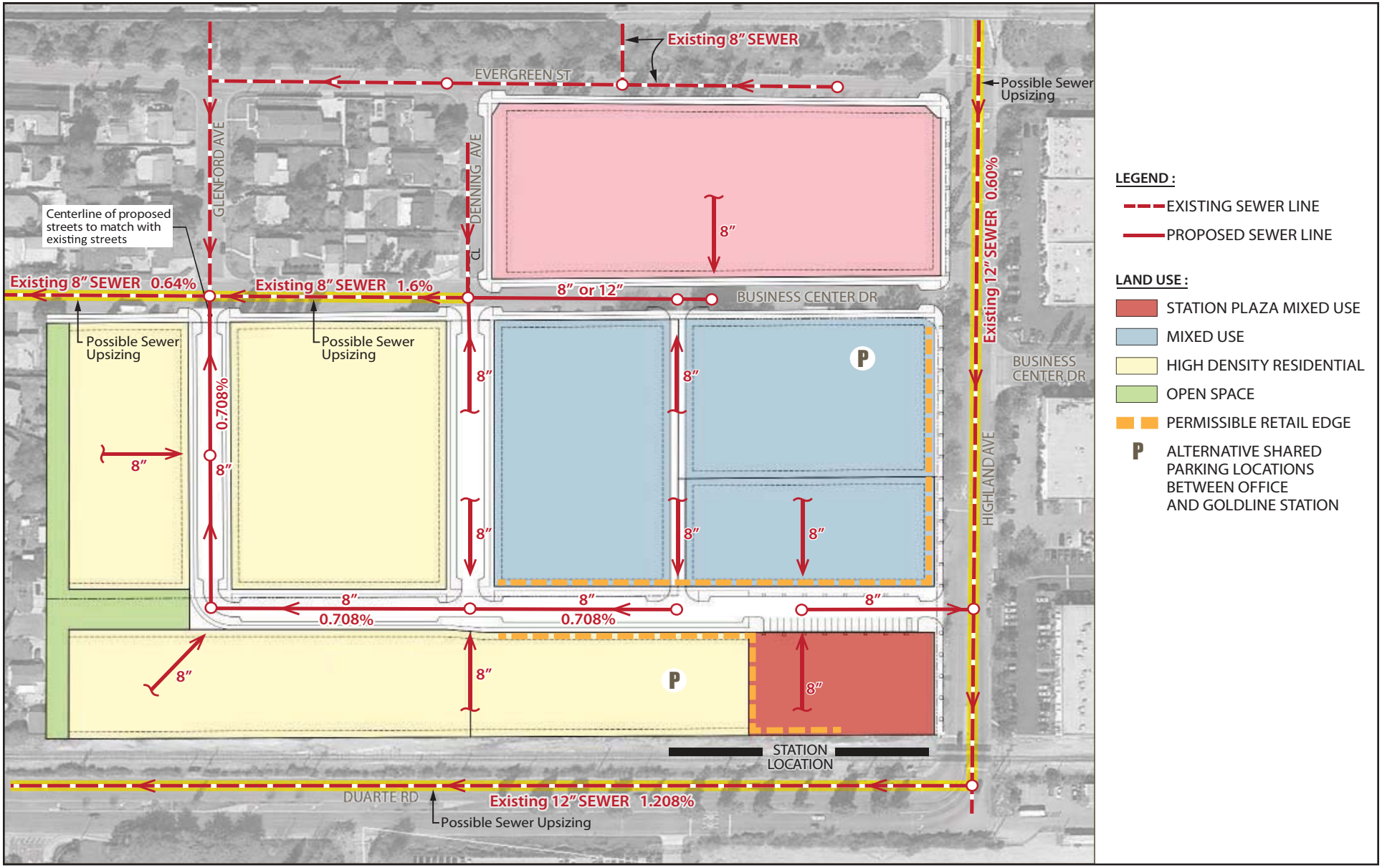
The City charges new developments a fee to upgrade or extend local sewer lines which would be necessary to accommodate new developments. Additionally, the LACDPW reviews new developments and assesses fees based on the maintenance of local sewer lines, which would also be necessary to accommodate new development.

The Districts are authorized by the *California Health and Safety Code* to charge a fee for the privilege of connecting (directly or indirectly) to the Districts' sewerage system or increasing the strength or quantity of wastewater attributable to a particular parcel or operation already connected. The connection fee is a capital facilities fee that is imposed in an amount sufficient to construct an incremental expansion of the sewerage system to accommodate the proposed project. Individual development projects would be required to pay the connection fee before a permit to connect to the sewer is issued.

Therefore, implementation of Mitigation Measures WW-1 and WW-2, along with payment of applicable fees to the City, LACDPW and the Districts' would reduce impacts to a less than significant level.

Wastewater Treatment

Development associated with the implementation of the proposed project would generate increased wastewater flows, placing greater demands on wastewater treatment facilities. The wastewater generated by the proposed project would be collected by the Districts and conveyed for treatment to the Districts' San Jose Creek WRP or the Whittier Narrows WRP. In order for the Districts to conform to the requirements of the Federal Clean Air Act (CAA), the design capacities of the Districts' wastewater treatment facilities are based on the regional growth forecast adopted by the Southern California Association of Governments (SCAG). All expansions of Districts' facilities must be sized and service phased in a manner that will be consistent with the SCAG regional growth forecast for the Los Angeles County, among others.



Source: Dahlin Group, May 2013.

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DUARTE STATION SPECIFIC PLAN
ENVIRONMENTAL IMPACT REPORT

Sewer Plan

Exhibit 5.15-1

The available capacity of the Districts' treatment facilities would, therefore, be limited to levels associated with the approved growth identified by SCAG. The Districts have expressed their intent to provide service up to the levels that are legally permitted. As indicated in Section 7.1, Growth-Inducing Impacts, although the proposed project would contribute to the growth anticipated by SCAG, project implementation would not cause SCAG's 2035 household and population forecasts for the City to be exceeded. Thus, the proposed project would not conflict with SCAG's population and household forecasts for the City. As previously noted, the Districts would review development projects on a project-by-project basis, in order to determine if adequate capacity exists within the Districts' wastewater treatment facilities to serve the development and if Districts' facilities would be impacted. Therefore, project implementation would result in a less than significant impact regarding wastewater treatment facilities.

Mitigation Measures:

WW-1 Each development project shall conduct a sewer flow monitoring study and submit to the City Engineer for review and approval prior to approval of building permits. The study shall review flows at selected off-site manholes, both upstream and downstream of the point of connection, to determine the capacity of the local and regional system to accept project-related flows. The project applicant shall be responsible to implement the recommendations in the study to ensure that off-site systems operate in accordance with the Los Angeles County Department of Public Works and County Sanitation Districts of Los Angeles County standards.

WW-2 Each development project shall design and construct on-site and off-site sewer lines in compliance with the Los Angeles County Public Works Department and County Sanitation Districts of Los Angeles County standards.

Level of Significance: Less Than Significant Impact With Mitigation Incorporated.

5.15.5 CUMULATIVE IMPACTS AND MITIGATION MEASURES

■ **DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT AND OTHER RELATED CUMULATIVE PROJECTS COULD RESULT IN CUMULATIVELY CONSIDERABLE IMPACTS TO WASTEWATER CONVEYANCE AND TREATMENT FACILITIES.**

Impact Analysis: Increased demand for wastewater conveyance and treatment resulting from development of the proposed project and other related cumulative projects could result in significant cumulative impacts. The degree of significance would depend upon the scale and location of the project, and timing of connection to the sewerage system. All future residential and non-residential development within the City would be reviewed on a project-by-project basis by the individual City and the Districts to determine the availability of adequate treatment capacity along with the continuous assessment of capacity flows. Individual development projects would be required to verify that existing capacity exists to convey and treat the potential wastewater generated with the new development. Development projects would be subject to payment of fees prior to connecting to the City's or Districts' facilities. Similarly, future cumulative development served by the Districts, would be reviewed to ensure adequate conveyance and treatment capacity exists to serve the proposed development. Review through the Districts' and City's development review process, would reduce potential cumulative impacts

to wastewater facilities to a less than significant level. It is also noted that implementation of the proposed project would not cause SCAG's 2035 household and population forecasts for the City to be exceeded. Thus, the project would not conflict with SCAG's population and household forecasts for the City. The proposed project would not result in a significant cumulative impact to wastewater conveyance and treatment facilities. Impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.15.6 SIGNIFICANT UNAVOIDABLE IMPACTS

Implementation of the proposed project would result in less than significant project and cumulative impacts related to wastewater conveyance and treatment during both construction and operation. As such, no significant unavoidable impacts would result from implementation of the Duarte Station Specific Plan.

5.15.7 SOURCES CITED

County Sanitation Districts of Los Angeles County, Adriana Raza, Customer Service Specialist, Facilities Planning Department, written correspondence, May 9, 2013.

County Sanitation Districts of Los Angeles County, *Wastewater Facilities*, http://www.lacsd.org/wastewater/wwfacilities/default.asp, accessed May 30, 2013.

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5.16 SOLID WASTE

This section analyzes the solid waste impacts of the project and recommends mitigation measures to reduce the amount of solid waste going into landfills. Specifically, this section compares the solid waste generation of the proposed project with the capacity of the existing landfills that accept waste from municipalities and unincorporated areas within the County.

5.16.1 REGULATORY SETTING

STATE PLANS AND POLICIES

California Integrated Waste Management Act

The California Integrated Waste Management Act of 1989 (AB 939) requires every city and county in the state to prepare a Source Reduction and Recycling Element (SRRE) to its Solid Waste Management Plan, that identifies how each jurisdiction will meet the mandatory state waste diversion goal of 50 percent by and after the year 2000. Subsequent legislation changed the reporting requirements and threshold, but restated source reduction as a priority. The purpose of AB 939 is to "reduce, recycle, and re-use solid waste generated in the state to the maximum extent feasible."

The term "integrated waste management" refers to the use of a variety of waste management practices to safely and effectively handle the municipal solid waste stream with the least adverse impact on human health and the environment. AB 939 established a waste management hierarchy as follows:

- Source Reduction
- Recycling
- Composting
- Transformation
- Disposal

Per Capita Disposal Measurement Act

With the passage of Senate Bill 1016 (the Per Capita Disposal Measurement System), per capita disposal rates are measured by California's Department of Resources Recycling and Recovery (CalRecycle). The new per capita disposal and goal measurement system moves the emphasis from an estimated diversion measurement number to using an actual disposal measurement number as a factor, along with evaluating program implementation efforts. These two factors will help determine each jurisdiction's progress toward achieving its AB 939 diversion goals. The 50 percent diversion requirement will now be measured in terms of per-capita disposal expressed as pounds per person per day. The focus will be on program implementation, actual recycling, and other diversion programs instead of estimated numbers.

Mandatory Commercial Recycling

With the passage of Assembly Bill 341, businesses and public entities that generate four cubic yards or more of waste per week and multifamily units of five or more are required to recycle. The purpose of this law is to reduce greenhouse gas emissions by diverting commercial solid

waste from landfills and expand opportunities for recycling in California. Businesses and public entities producing four cubic yards or more of solid waste per week or multifamily residents producing five cubic yards or more of solid waste must arrange for recycling services. Each jurisdiction is required to implement a commercial solid waste recycling program that consists of education, outreach, and monitoring of businesses that is designed to divert commercial solid waste from businesses. CalRecycle will review each jurisdictions program as part of its AB 939 review conducted every two to four years. Beginning in August 2013, each jurisdiction is required to submit a report on the progress of implementing its commercial recycling program.

CITY OF DUARTE

City of Duarte Municipal Code

Solid waste disposal within the City is subject to the requirements established in *Duarte Municipal Code* Chapter 6.14, Solid Waste Disposal. *Municipal Code* Chapter 6.14 adopts Ordinance 11,886 of the County of Los Angeles, entitled "An ordinance establishing the Solid Waste Ordinance of the County of Los Angeles and amending the Administrative Code and Business License Ordinance relating to the regulation of solid waste handling and disposal." *Los Angeles County Municipal Code* Division 4, Solid Waste, enforces regulations pertaining to the minimum standards for solid waste handling and disposal and creates a fee structure for solid waste facilities, waste collectors, waste recovery operations and waste collection trucks.

City of Duarte Source Reduction and Recycling Element

To meet the requirements of the California Integrated Waste Management Act, the City of Duarte adopted a Source Reduction and Recycling Element (SRRE). The SRRE describes policies and programs that will be implemented by the City to achieve waste disposal reductions. Citizens of Duarte are encouraged to attend composting classes, recycle regularly using their blue 60-gallon trash barrels, recycle green waste using their green 60-gallon barrels, and dispose of household hazardous waste products properly. Some of the services provided are curbside collection, senior discounts, free senior/disabled pull-out service, street sweeping, and Christmas tree recycling.

5.16.2 ENVIRONMENTAL SETTING

Burrtec Waste Industries, Inc. provides solid waste collection service to the City of Duarte, including the project site. Residential refuse collection, including recyclables and green waste, is automated and provided once a week. Burrtec provides all residential customers with containers for refuse, recyclables, and green waste. Commercial refuse bins and collection vary depending upon the size of bins needed and frequency of collection.

In 2003 the City became a member of the Los Angeles Area Integrated Waste Management Authority (LAAIWMA) regional agency, which allows the City to measure solid waste diversion jointly with the other 13 members of the regional agency. Jointly reporting disposal and diversion rates averages the diversion among the participating jurisdictions. Regional agencies can report diversion and disposal rates as one entity instead of by jurisdiction.

Waste collected from the LAAIWMA is disposed of at a variety of facilities; refer to *Table 5.16-1*, *Disposal Facilities*, which shows the amount of solid waste disposed, permitted throughput, permitted and remaining capacities and anticipated closure dates for each disposal facility serving the LAAIWMA region. The particular facility used for waste disposal depends upon the nature of the waste stream and limitations on daily disposal tonnage at each facility. In 2012, LAAIWMA disposed of approximately 3,637,638 tons of solid waste. Solid waste collected from the LAAIWMA is primarily disposed of at Sunshine Canyon City/County Landfill (1,507,353 tons), Puente Hills Landfill (568,840 tons), Chiquita Canyon Sanitary Landfill (549,894 tons), and El Sobrante Landfill (364,367 tons); refer to *Table 5.16-1*.

Table 5.16-1
Disposal Facilities

Facility	Amount Disposed from LAAIWMA (tons)[1]	Permitted Throughput (tons/day)[2]	Permitted Capacity (cubic yards)[2]	Remaining Capacity (cubic yards)[2]	Anticipated Closure Date[2]
American Avenue Disposal Site	29	2,200	32,700,000	29,358,535	8/31/2031
Antelope Valley Public Landfill I and II	93,360	3,564	0	20,400,000	1/1/2042
Avenal Regional Landfill	2,006	6,000	26,000,000	26,000,000	12/31/2020
Azusa Land Reclamation Co. Landfill	22,579	6,500	66,670,000	34,100,000	1/1/2025
Bakersfield Metropolitan (Bena) SLF	69	4,500	53,000,000	34,994,127	12/31/2038
Calabasas Sanitary Landfill	108,785	3,500	69,300,000	18,100,000	9/30/2025
California Street Landfill	24	829	10,000,000	6,800,000	1/1/2042
Chiquita Canyon Sanitary Landfill	549,894	6,000	63,900,000	29,300,000	11/24/2019
Colton Sanitary Landfill	N/A	3,100	15,497,000	2,700,000	1/1/2017
Commerce Refuse-To-Energy Facility	N/A	1,000	N/A	N/A	N/A
CWMI, KHF (MSW Landfill B-19)	5,466	2,000	4,200,000	1,901,860	12/31/2010
El Sobrante Landfill	364,367	16,054	184,930,000	145,530,000	N/A
Foothill Sanitary Landfill	1	1,500	138,000,000	125,000,000	12/31/2082
Frank R. Bowerman Sanitary LF	244	11,500	266,000,000	205,000,000	12/31/2053
Guadalupe Sanitary Landfill	N/A	1,300	28,600,000	11,055,000	1/1/2048
Kettleman Hills – B18 Nonhaz Codisposal	37	8,000	10,700,000	6,000,000	N/A
Lancaster Landfill and Recycling Center	86,045	5,100	27,700,000	14,514,648	3/1/2044
McKittrick Waste Treatment Site	14,502	1,180	2,091,800	841,498	12/31/2029
Mid-Valley Sanitary Landfill	48	7,500	101,300,000	67,520,000	4/1/2033
Olinda Alpha Sanitary Landfill	134,891	8,000	74,900,000	38,578,383	12/31/2021
Prima Deshecha Sanitary Landfill	9,883	4,000	172,900,000	87,384,799	12/31/2067
Puente Hills Landfill	568,840	13,200	74,000,000	35,200,000	10/31/2013
San Timoteo Sanitary Landfill	16,937	1,000	20,400,000	11,360,000	5/1/2016
Scholl Canyon Landfill	2,572	3,400	58,900,000	9,900,000	4/1/2030
Simi Valley Landfill & Recycling Center	149,701	9,250	119,600,000	119,600,000	1/31/2052
Southeast Resource Recovery Facility	N/A	2,240	N/A	N/A	N/A
Sunshine Canyon City / County Landfill	1,507,353	12,100	140,900,000	112,300,000	12/31/2037
Toland Road Landfill	N/A	1,500	30,000,000	21,983,000	5/31/2027
Vasco Road Sanitary Landfill	2	2,250	32,970,000	9,870,704	8/31/2019
Victorville Sanitary Landfill	3	3,000	83,200,000	81,510,000	10/1/2047
Total	**3,637,638**	**148,267**	**1,825,158,800**	**1,225,292,554**	N/A

1. CalRecyle, *Jurisdiction Disposal by Facility*, http://www.calrecycle.ca.gov/LGCentral/Reports/Viewer.aspx?P=OriginJurisdictionIDs%3d621%26ReportYear%3d2012%26ReportName%3dReportEDRSJurisDisposalByFacility, accessed June 19, 2013.
2. CalRecycle, *Facility/Site Search*, http://www.calrecycle.ca.gov/SWFacilities/Directory/Search.aspx, accessed June 24-25, 2013.

As indicated in *Table 5.16-1*, there is approximately 67 percent remaining capacity at the disposal facilities currently receiving waste generated from the region.

According to CalRecycle, in 2011 the LAAIWMA disposed of approximately 3,716,916 tons of solid waste.[1] This represents 4.2 pounds per resident per day and 10.9 pounds per employee per day, which is less than the target of 7.1 pounds per resident per day and 17.5 pounds per employee per day.[2] For 2011, the LAAIWMA implemented 55 jurisdiction waste diversion programs within the categories of Composting, Facility Recovery, Household Hazardous Waste, Policy Incentives, Public Education, Recycling, Source Reduction, Special Waste Materials, and Transformation.[3]

Table 5.16-2, *Existing Solid Waste Generation,* shows the estimated solid waste generation associated with the existing development on the project site.

Table 5.16-2
Existing Solid Waste Generation

Land Use	Existing Development	Generation Rate[1]	Solid Waste Generation (pounds/day)
Industrial	114,599 SF	62.5 lbs/1,000 sf/day	7,162
Warehouse	199,356 SF	1.42/100 sf/day	2,831
Total			**9,993**

DU = dwelling unit; SF= square feet; lbs = pounds

1. Generation rates obtained from the CalRecycle official website, http://www.calrecycle.ca.gov/wastechar/wastegenrates, accessed July 1, 2013.

As shown in *Table 5.16-2*, existing development within the project site currently generates 9,993 pounds per day of solid waste before recycling and other waste diversion activities. This represents 6.7 percent of the total permitted throughput of solid waste for the LAAIWMA regional area in 2012 (148,267 tons/day).

5.16.3 SIGNIFICANCE THRESHOLD CRITERIA

The issues presented in the Initial Study Environmental Checklist (*CEQA Guidelines* Appendix G) have been utilized as thresholds of significance in this Section. Accordingly, a project may create a significant environmental impact if it causes one or more of the following to occur:

- Would be served by a landfill with insufficient capacity to accommodate the project's solid waste disposal needs; and/or

[1] CalRecycle, *Jurisdiction Diversion/Disposal Rate Detail, Los Angeles Area Integrated Waste Management Authority*, http://www.calrecycle.ca.gov/LGCentral/reports/diversionprogram/JurisdictionDiversionPost2006.aspx, accessed June 19, 2013.

[2] CalRecycle, *Jurisdiction Diversion/Disposal Rate Summary (2007-Current), Los Angeles Area Integrated Waste Management Authority*, http://www.calrecycle.ca.gov/LGCentral/reports/diversionprogram/JurisdictionDiversionPost2006.aspx, accessed June 19, 2013.

[3] CalRecycle, *Diversion Program System, Jurisdiction Waste Diversion Program Summary, 2011, Los Angeles Area Integrated Waste Management Authority*, http://www.calrecycle.ca.gov/LGCentral/reports/diversionprogram/JurisdictionDiversionPrograms.aspx?JurisdictionID=621&Year=2011, accessed June 19, 2013.

- Would not comply with federal, state, and local statutes and regulations related to solid waste.

Based on these standards, the effects of the proposed project have been categorized as either a "less than significant impact" or a "potentially significant impact." Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a significant unavoidable impact.

5.16.4 PROJECT IMPACTS AND MITIGATION MEASURES

SOLID WASTE

■ **IMPLEMENTATION OF THE PROPOSED PROJECT WOULD GENERATE SOLID WASTE THAT COULD INCREMENTALLY DECREASE THE CAPACITY AND LIFESPAN OF LANDFILLS.**

Impact Analysis: Implementation of the proposed project would involve the development of residential and non-residential uses within the Plan Area. *Table 5.16-3*, *Estimated Net Change in Solid Waste Generation*, shows the estimated net increase in solid waste generation associated with proposed future development.

Table 5.16-3
Estimated Net Change in Solid Waste Generation

Land Use	Proposed Development	Generation Rate[1]	Solid Waste Generation (pounds/day)
Existing			
Industrial	114,599 SF	62.5 lbs/1,000 sf/day	7,162
Warehouse	199,356 SF	1.42/100 sf/day	2,831
		Total	***9,993***
Proposed			
Residential	475 DU	8.6 lbs/du/day	4,085
Hotel	250 Rooms	4 lbs/room/day	1,000
Office	400,000 SF	0.006 lbs/sf/day	2,400
Retail	12,000 SF	0.046 lbs/sf/day	552
		Total	***8,037***
		Net Change (Proposed less Existing)	**-1,956**

DU = dwelling unit; SF= square feet; lbs = pounds

1. CalRecycle, Waste Characterization, Estimated Solid Waste Generation and Disposal Rates, http://www.calrecycle.ca.gov/WasteChar/WasteGenRates/default.htm, accessed June 19, 2013.

As shown in *Table 5.16-3*, development associated with implementation of the proposed project would generate 1,956 fewer pounds per day of solid waste, or 357 fewer tons per year, before recycling and other waste diversion activities. This represents a 19.6 percent daily decrease when compared to existing conditions. Thus, impacts associated with solid waste generation would be less than significant. Future development within the Specific Plan Area would be

required to comply with applicable State and local regulations, requiring the amount of waste disposed at landfills to be reduced by at least by at least 50 percent, further reducing potential impacts.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.16.5 CUMULATIVE IMPACTS AND MITIGATION MEASURES

■ **DEVELOPMENT ASSOCIATED WITH IMPLEMENTATION OF THE PROPOSED PROJECT AND OTHER RELATED CUMULATIVE DEVELOPMENT COULD RESULT IN CUMULATIVELY CONSIDERABLE IMPACTS RELATED TO SOLID WASTE DISPOSAL SERVICES AND LANDFILL CAPACITY.**

Impact Analysis: Development associated with the cumulative projects would result in an overall increase in solid waste generation requiring disposal at landfill facilities. However, individual development projects would be required to comply with State and local regulations requiring the amount of solid waste disposed of at landfills to be reduced by at least 50 percent. The proposed project would not cumulatively contribute to potential solid waste impacts, as development associated with the proposed project would reduce the amount of solid waste requiring disposal at landfill facilities when compared to existing conditions. Thus, impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.16.6 SIGNIFICANT UNAVOIDABLE IMPACTS

Implementation of the proposed project would result in less than significant project and cumulative impacts related to solid waste. As such, no significant unavoidable impacts would result from implementation of the Duarte Station Specific Plan.

5.16.7 SOURCES CITED

CalRecycle, *Diversion Program System, Jurisdiction Waste Diversion Program Summary, 2011, Los Angeles Area Integrated Waste Management Authority*, http://www.calrecycle.ca.gov/LGCentral/reports/diversionprogram/JurisdictionDiversionPrograms.aspx?JurisdictionID=621&Year=2011, accessed June 19, 2013.

CalRecycle, *Facility/Site Search*, http://www.calrecycle.ca.gov/SWFacilities/Directory/Search.aspx, accessed June 7, 2013.

CalRecyle, *Jurisdiction Disposal by Facility*, http://www.calrecycle.ca.gov/LGCentral/Reports/Viewer.aspx?P=OriginJurisdictionIDs%3d621%26ReportYear%3d2012%26ReportName%3dReportEDRSJurisDisposalByFacility, accessed June 19, 2013.

CalRecycle, *Jurisdiction Diversion/Disposal Rate Detail, Los Angeles Area Integrated Waste Management Authority*, http://www.calrecycle.ca.gov/LGCentral/reports/diversionprogram/JurisdictionDiversionPost2006.aspx, accessed June 19, 2013.

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5.17 ELECTRICITY AND NATURAL GAS

This section addresses the potential impacts of the proposed project with regard to electricity and natural gas consumption. The analysis identifies the utilities that provide electricity and natural gas services to the City, describes the existing consumption of electricity and natural gas, indicates the nature and location of related infrastructure in the local area, and estimates the electricity demands of the proposed project.

5.17.1 REGULATORY SETTING

FEDERAL

State and Federal governments extensively regulate corporate utilities. The Federal government has limited power to regulate municipal utilities. Municipal utilities are parties to certain contracts that must be filed with the Federal Energy Regulatory Commission (FERC).

STATE

The California Public Utilities Commission (CPUC) regulates privately owned electric, natural gas, telecommunications, water, railroad, rail transit, and passenger transportation companies. Assembly Bill 1890, enacted in 1996, deregulated the power generation industry, allowing customers to purchase electricity on the open market. Under deregulation, the production and distribution of power that was under the control of investor-owned utilities was decoupled. Deregulation allowed other providers the ability to supply electricity to consumers.

The California Energy Commission is California's primary energy policy and planning agency. The Energy Commission is required to create and periodically update *Building Energy Efficiency Standards* for the State. The Standards address newly constructed buildings and additions and alterations to existing buildings. The *2008 Building Energy Efficiency Standards for Residential and Nonresidential Buildings* went into effect January 1, 2010. The 2013 Standards will go into effect on January 1, 2014 following approval of the California Building Standards Commission. The energy building regulations are contained in Title 2, Part 6 of the *California Code of Regulations*.

The *Green Building Standards Code* first published in July 2008 and updated for publication in 2010, codifies voluntary "reach" standards for energy efficiency, as compared with the mandatory Standards, for newly constructed residential and nonresidential buildings. The Green Building Standards Code established tiered energy performance levels of 15 percent and 30 percent more stringent than the mandatory 2008 Standards. Local jurisdictions may adopt the *Green Building Standards Code* as mandatory at the local level.

LOCAL

Duarte Municipal Code Chapter 19.52, Sustainable Development Practices, are established to encourage conservation of natural resources, increased energy efficiency, and use of sustainable practices in the development process, and to implement State laws regarding reduction in greenhouse gas emissions, water conservation, and other resource conservation directives. All new construction in the City is required to apply sustainable development practices as identified in Chapter 19.52. Prior to implementing the standards, the level of

development (project size) and the corresponding required sustainable development practices must be identified and incorporated into the project design and building plans.

5.17.2 ENVIRONMENTAL SETTING

The project site is currently developed with a mix of industrial uses. The 19.08-acre site is comprised of three parcels, each containing a single building on-site. The three buildings are served by existing infrastructure, including electricity and natural gas.

ELECTRICITY

Electrical Supply

Southern California Edison (SCE) currently provides electricity service in the City of Duarte, including the project site. SCE provides electricity to approximately 13 million people within 430 cities and communities through its 50,000 square miles of service area.[1] SCE provides electricity to its users through the operation and maintenance of transmission and distribution infrastructure. According to the California Energy Commission (CEC), SCE is projected to deliver 105,527 gigawatt-hours (GWh) to its customers during 2013.[2] By 2020, SCE's demand is expected to increase to 114,872 GWh.

SCE obtains its electricity from a variety of sources, including natural gas, nuclear, renewables (solar, wind) and hydroelectric plants throughout the Western United States.

SCE facilities have included hydropower and nuclear power facilities and one coal-powered facility: the Big Creek Hydroelectric Plant, the San Onofre Nuclear Generating Station, and the Mojave Generating Station. The San Onofre nuclear plant has been permanently retired, requiring SCE to increase the ability to import power as well as stabilize and protect the existing grid. Various transmission projects have been completed, or are currently under construction in order to meet electrical demand.[3]

SCE currently has existing facilities throughout the City of Duarte, including within the project area. Electricity service is provided through SCE's 12 kilovolt (KV) electrical system via overhead and underground facilities. In 2010, SCE added a new circuit to the Duarte Substation that serves the City of Duarte and portions of Monrovia. The new circuit provides load relief and improved switching capabilities to the City of Duarte. The upgrades include the installation of 23 underground structures, two miles of underground cable, and several miles of new and reconditioned overhead lines.[4]

[1] City of Duarte, *Utilities,* 2013, http://www.accessduarte.com/?option=com_content&view=article&id=91&Itemid=134, accessed July 26, 2013.

[2] Kavalec, Chris and Tom Gorin. 2009. *California Energy Demand 2010-2020, Staff Draft Forecast,* California Energy Commission. CEC-200-2009-012SD, http://www.energy.ca.gov/ 2009publications/CEC-200-2009-012/CEC-200-2009-012-SD.PDF, accessed July 26, 2013.

[3] Southern California Edison, *Preparing for a California Summer*, https://www.sce.com/wps/wcm/connect/9aa08bc2-dea6-4b74-915d-28a488b960ec/SummerReadiness06072013.pdf?MOD=AJPERES, accessed August 1, 2013.

[4] Southern California Edison, *Southern California Edison Upgrades Duarte Distribution Substation to Enhance Reliability in the Region, 2010,* http://www.edison.com/files/090710_news2.pdf, accessed July 29, 2013.

Table 5.17-1, *Existing Estimated Electricity Demand*, provides an estimate of the electricity demand currently generated by existing uses within the Specific Plan Area. As indicated in *Table 5.17-1*, electricity demand for existing uses within the Specific Plan Area is estimated to be 3.1 million kilowatt-hours per year.

Table 5.17-1
Existing Estimated Electricity Demand

Land Use	Building Area	Consumption Factor[1]	Electricity Demand (kWh/year)
Industrial	313,955 SF	9.83 kWh/SF/year	3,086,177
Total			**3,086,177**
1. Consumption factor obtained from California Emissions Estimator Model (CalEEMod), 2011.			
kWh = kilowatt-hour SF = square feet			

NATURAL GAS

The City of Duarte, including the project site, receives gas service from the Southern California Gas Company (SCGC). SCGC is the nation's largest natural gas distribution utility, providing energy to 20.9 million consumers through 5.8 million meters in more than 500 communities across the United States.[5]

The City of Duarte lies entirely within the SCGC utility service territory. SCGC facilities located within the City of Duarte include medium pressure mains (pipelines) that feed from high pressure lines through pressure regulating stations. Medium pressure mains and services in the public streets feed private residents and business. The majority of public streets in the City have existing steel or plastic medium pressure distribution mains that feed individual service lines. Gas consumption of private residents and businesses are considered proprietary.

Table 5.17-2, *Existing Estimated Natural Gas Demand*, provides an estimate of the natural gas demand currently generated by existing uses within the Specific Plan Area. As indicated in Table 5.17-2, natural gas demand for existing uses within the Specific Plan Area is estimated to be 5.9 million cubic feet per year.

Table 5.17-2
Existing Estimated Natural Gas Demand

Land Use	Building Area	Consumption Factor	Natural Gas Demand (cf/year)
Industrial	313,955 SF	18.81 cf/sf/year	5,905,494
Total			**5,905,494 cf/year**
Source: Consumption factors obtained from California Emissions Estimator Model (CalEEMod), 2011.			
cf = cubic feet sf = square feet du = dwelling unit yr = year			

[5] Southern California Gas Company, *Company Profile*, 2013, http://www.socalgas.com/about-us/company-info.shtml, accessed July 26 2013.

5.17.3 SIGNIFICANCE THRESHOLD CRITERIA

The issues presented in the Initial Study Environmental Checklist (Appendix G of the *CEQA Guidelines*) have been utilized as thresholds of significance in this Section. Accordingly, a project may create a significant environmental impact if it causes one or more of the following to occur:

- The project would create demands on electricity or natural gas supply and/or infrastructure which exceed the capacity of the utility serving the project area.

Based on these significance thresholds and criteria, the proposed project's effects have been categorized as either "no impact," a "less than significant impact," or a "potentially significant impact." Mitigation measures are recommended for potentially significant impacts. If a potentially significant impact cannot be reduced to a less than significant level through the application of mitigation, it is categorized as a significant unavoidable impact.

5.17.4 PROJECT IMPACTS AND MITIGATION MEASURES

ELECTRICITY

■ **IMPLEMENTATION OF THE PROPOSED PROJECT COULD INCREASE THE DEMAND FOR ELECTRICAL SERVICE OR COULD REQUIRE THE EXPANSION OF EXISTING FACILITIES.**

Impact Analysis: Implementation of the proposed project would result in an increase in demand for electrical power and service to the Specific Plan Area. *Table 5.17-3, Estimated Net Change in Electricity Consumption*, estimates the potential net change in electricity consumption associated with implementation of the proposed project.

Table 5.17-3
Estimated Net Change in Electricity Consumption

Land Use	Building Area	Consumption Factor	Electricity Demand (kWh/year)
Residential	475 DU	3,437.8 kWh/du/year	1,632,955
Hotel	250 Rooms	12,342 kWh/hotel room/year	3,085,500
Office	400,000 SF	14.53 kWh/sf/year	5,812,000
Retail	12,000 SF	15.17 kWh/sf/year	182,040
Proposed Project Demand			*10,712,495*
Existing Demand			*-3,086,177*
Net Change			**7,626,318**

Source: Consumption factors obtained from California Emissions Estimator Model (CalEEMod), 2011.
kWh = kilowatt-hour sf = square feet du = dwelling unit

As indicated in *Table 5.17-3*, the proposed project could consume an additional 7.6 million kWh of electricity per year when compared to existing conditions. According to the California Energy Demand 2010-2020 Adopted Forecast (CEC-200-2009-012-CMF) it is anticipated that by 2020, electricity demand for the SCE Planning Area would be 112,964 gigawatt hours (GWh) and SCE is forecasted to provide a net energy load of 114,872 GWh to its customers.[6] It should be noted that electricity demand provided by the CEC is for year 2020, as 2030 projections are not currently available. However, the 7.63 GWh electricity demand associated with the proposed project represents 0.00007 percent of the quantity of energy that SCE is estimated to supply in 2020. Thus, sufficient supplies are anticipated to be available to serve development associated with the proposed project. Future development projects within the Specific Plan Area would be required to provide a load schedule as part of the project submittal to determine more accurately the each individual project's electrical demand.

The proposed project includes a Specific Plan for mixed-use transit-oriented development with residential, office, and hotel uses on an existing 19.08-acre industrial area in the City. Although the project area is primarily urbanized and currently served by infrastructure providing electricity to existing uses, the location of SCE facilities may create the need for transmission and/or service infrastructure to be relocated prior to site excavation and project construction. SCE would update existing facilities or add new facilities in the City based upon specific requests for service from end users. Financial responsibility for any updates or additional facilities would be in accordance with SCE's rules and tariffs. All new development that requires new electricity lines to be installed would be required to pay applicable fees assessed by SCE to extend electricity lines to serve the specific project site. SCE would not provide service to new development if there were not adequate electricity supplies and infrastructure to maintain existing service levels and meet the anticipated electricity demands of the specific development requesting service. Individual development projects would be required to coordinate with SCE to ensure conflicts are reduced and that service interruptions would be minimized. Impacts would be less than significant in this regard.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

NATURAL GAS

■ **IMPLEMENTATION OF THE PROPOSED PROJECT COULD INCREASE THE DEMAND FOR NATURAL GAS OR COULD REQUIRE THE EXPANSION OF EXISTING FACILITIES.**

Impact Analysis: Implementation of the proposed project would result in a net increase in demand for natural gas service to the Specific Plan Area. *Table 5.17-4*, *Estimated Net Change in Natural Gas Consumption*, estimates the potential net change in natural gas associated with implementation of the proposed project.

[6] Kavalec, Chris and Tom Gorin. 2009. *California Energy Demand 2010-2020, Staff Draft Forecast,* California Energy Commission. CEC-200-2009-012SD, http://www.energy.ca.gov/2009publications/CEC-200-2009-012/CEC-200-2009-012-SD.PDF, accessed July 26, 2013.

Table 5.17-4
Estimated Increase in Natural Gas Consumption

Land Use	Building Area	Consumption Factor	Natural Gas Demand (cf/year)
Residential	475 DU	13,263 cf/du/year	6,299,840
Hotel	250 Rooms	36,329 cf/hotel room/year	9,082,250
Office	400,000 SF	10.93 cf/sf/year	4,372,000
Retail	12,000 SF	1.7 cf/sf/year	20,400
Proposed Project Demand			19,774,490
Existing Demand			-5,905,494
Net Change			**13,868,996 cf/year**

Source: Consumption factors obtained from California Emissions Estimator Model (CalEEMod), 2011.
cf = cubic feet sf = square feet kcf = thousand cubic feet du = dwelling unit yr = year
* In order to provide a conservative analysis a retail consumption factor was used for Public Uses.

As indicated in *Table 5.17-4*, the proposed project could consume an additional 13.9 million cf of natural gas per year when compared to existing conditions.

According to the CEC, SCGC customers within the SCGC planning area demanded roughly 746 billion cubic feet (b.c.f.) of natural gas during 2011[7], and by 2020, it is anticipated that annual natural gas demand to SCGC customers would increase to 782.9 b.c.f. per year.[8] The 13,868,996 cf increase in natural gas demand associated with the proposed project represents 0.000002 percent of the quantity of natural gas that SCGC is estimated to supply in the year 2020. Thus, sufficient supplies are anticipated to be available to serve natural gas demand associated with the proposed project.

The proposed project includes a Specific Plan for mixed-use transit-oriented development with residential, office, and hotel uses on an existing 19.08-acre industrial area in the City. The project site is located within an urbanized area of the City currently served by SCGC through existing natural gas infrastructure. Any future development within the Specific Plan Area that requires new infrastructure/gas main extensions would be required to pay any applicable fees assessed by SCGC necessary to accommodate the specific project.

Natural gas service provided would be required to comply with all policies and extension rules of SCGC when contractual arrangements are made with the development applicant. SCGC would not allow new development projects to connect to existing gas mains unless the system could maintain adequate service and supply to existing customers and meet the anticipated demands of the project requesting service. Individual development projects would be analyzed to identify project-specific impacts to utility infrastructure on a project-by-project basis. Individual development projects would coordinate with SCGC to ensure conflicts are reduced and that service interruptions would be minimized. Impacts would be less than significant in this regard.

[7] California Energy Commission, *Gas Consumption by Planning Area*, 2011, http://www.ecdms.energy.ca.gov/gasbyplan.aspx, accessed July 29, 2013.
[8] Kavalec, Chris and Tom Gorin. 2009. *California Energy Demand 2010-2020, Staff Draft Forecast,* California Energy Commission. CEC-200-2009-012SD, http://www.energy.ca.gov/2009publications/CEC-200-2009-012/CEC-200-2009-012-SD.PDF, accessed July 26, 2013.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.17.5 CUMULATIVE IMPACTS AND MITIGATION MEASURES

■ **IMPLEMENTATION OF THE PROPOSED PROJECT AND OTHER RELATED CUMULATIVE PROJECTS COULD RESULT IN CUMULATIVELY CONSIDERABLE IMPACTS RELATED TO ELECTRICAL AND/OR NATURAL GAS SERVICES AND FACILITIES.**

Impact Analysis:

Electricity

Electrical loads associated with the proposed project and related cumulative projects would increase the demand for electricity service beyond existing conditions. All electrical lines and other system improvements would be installed, in whole or in part, at the expense of development project applicants, and would serve to avoid adverse impacts to the electricity distribution system. Although the proposed project and related cumulative projects would create additional demands on electricity supplies and distribution infrastructure, these demands are within the parameters of projected load growth and the service capabilities of SCE. Individual projects would be reviewed on a project-by-project basis to ensure adequate facilities are in place to serve the proposed development. Thus, cumulative impacts would be less than significant.

Natural Gas

Implementation of the proposed project and related cumulative projects would result in increased natural gas demand. It is anticipated that SCGC has sufficient capacity and the necessary infrastructure to serve development associated with the proposed project. Therefore, the proposed project and related cumulative projects would not result in cumulatively considerable impacts on natural gas service. Although development of the proposed project and related cumulative projects would result in additional demand for natural gas, that demand would be within existing capacity. Where necessary, natural gas distribution pipelines would be installed or upsized to serve development associated with related cumulative projects at the expense of the project applicants. Thus, cumulative impacts would be less than significant.

Mitigation Measures: No mitigation measures are required.

Level of Significance: Less Than Significant Impact.

5.17.6 SIGNIFICANT UNAVOIDABLE IMPACTS

Implementation of the proposed project would result in less than significant project and cumulative impacts related to electricity and natural gas supply and facilities. As such, no significant unavoidable impacts would result from implementation of the Duarte Station Specific Plan.

5.17.7 SOURCES CITED

California Energy Commission, *Gas Consumption by Planning Area*, 2011, http://www.ecdms.energy.ca.gov/gasbyplan.aspx, accessed July 29, 2013.

City of Duarte, *Utilities,* 2013, http://www.accessduarte.com/?option=com_content&view=article&id=91&Itemid=134, accessed July 26, 2013.

Kavalec, Chris and Tom Gorin, 2009. California Energy Demand 2010-2020, Staff Draft Forecast, California Energy Commission. CEC-200-2009-012SD, http://www.energy.ca.gov/2009publications/CEC-200-2009-012/CEC-200-2009-012-SD.PDF, accessed July 26, 2013.

Southern California Edison, *Preparing for a California Summer*, https://www.sce.com/wps/wcm/connect/9aa08bc2-dea6-4b74-915d28a488b960ec/SummerReadiness06072013.pdf?MOD=AJPERES, accessed August 1, 2013.

Southern California Edison, *Southern California Edison Upgrades Duarte Distribution Substation to Enhance Reliability in the Region, 2010,* http://www.edison.com/files/090710_news2.pdf, accessed July 29, 2013.

Southern California Gas Company, *Company Profile*, 2013, http://www.socalgas.com/about-us/company-info.shtml, accessed July 26 2013.

SECTION 6.0
Alternatives

6.0 ALTERNATIVES

6.1 INTRODUCTION

CEQA requires that an EIR include an analysis of a range of project alternatives that could feasibly attain most of the basic project objectives, while avoiding or substantially lessening any of the significant effects identified for the proposed project. The Lead Agency must disclose its reasoning for selecting each alternative. The Lead Agency must also identify any alternatives that were considered, but rejected as infeasible during the scoping process, and disclose the reasons for the exclusion. The range of alternatives is governed by a "rule of reason, which requires the EIR to set forth only those alternatives necessary to permit a reasoned choice. Specifically, *CEQA Guidelines* Section 15126.6(a) requires that:

> *"An EIR shall describe a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. An EIR need not consider every conceivable alternative to a project. Rather it must consider a reasonable range of potentially feasible alternatives that will foster informed decision making and public participation. An EIR is not required to consider alternatives which are infeasible. The lead agency is responsible for selection of a range of project alternatives for examination and must publicly disclose its reasoning for selecting those alternatives. There is no ironclad rule governing the nature or scope of the alternatives to be discussed other than the rule of reason."*

CEQA Guidelines Section 15126.6(f)(1) provides the following information regarding the "feasibility" of a project alternative:

> *"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, other plans or regulatory limitations, jurisdictional boundaries (projects with a regionally significant impact should consider the regional context), and whether the proponent can reasonably acquire, control, or otherwise have access to the alternative site (or the site is already owned by the proponent). No one of these factors establishes a fixed limit on the scope of reasonable alternatives."*

Within every EIR, the *CEQA Guidelines* require that a "No Project" Alternative is analyzed. The "No Project" Alternative allows decision makers to compare the impacts of approving the proposed project with the impacts of not approving the proposed project. In addition, the identification of an "Environmentally Superior" Alternative is required. The "No Project" Alternative may be the "Environmentally Superior" Alternative to the proposed project based on the minimization or avoidance of physical environmental impacts. However, the "No Project" Alternative must also achieve most of the basic objectives of the projects in order to be considered the "Environmentally Superior" Alternative. Thus, the *CEQA Guidelines* require that if the "Environmentally Superior" Alternative is the "No Project" Alternative, the EIR shall identify a superior alternative from the remaining alternatives analyzed.

In order to provide background regarding the selection or rejection of a project alternative, the discussion below provides a summary of project objectives, in addition to a description of the significant and unavoidable impacts found to occur upon project implementation.

Throughout the following analysis, impacts of the alternatives are analyzed for each of the issue areas examined in Section 5.0 of this EIR. In this manner, each alternative can be compared to the proposed action on an issue-by-issue basis.

6.2 ALTERNATIVES TO BE ANALYZED

This analysis focuses on alternatives capable of eliminating significant adverse environmental effects or reducing them to less than significant levels, even if these alternatives would impede, to some degree, the attainment of the proposed project objectives. The alternatives to the proposed project under consideration within this EIR consist of:

- Existing Zoning Alternative
- All Residential Alternative
- Reduced Density Alternative 1
- Reduced Density Alternative 2

A comparison of the proposed project with the alternatives is provided in *Table 6-1*, *Comparison of Proposed Project and Alternatives*.

Table 6-1
Comparison of Proposed Project and Alternatives

Land Use	Proposed Project Development Scenario	Alternative One: Existing Zoning Alternative	Alternative Two: All Residential Alternative	Alternative Three: Reduced Density Alternative 1	Alternative Four: Reduced Density Alternative 2
Retail (SF)	12,000			12,000	12,000
Office (SF)	400,000			295,000	160,000
Hotel (Rooms)	250			150	150
High Density Residential (DU)	475		600	240	150
Warehouse/Industrial (SF)		313,955			
TOTAL	**475 DU 412,000 SF 250 Rooms**	**313,955 SF**	**600 DU**	**240 DU 307,000 SF 150 Rooms**	**150 DU 172,000 SF 150 Rooms**
SF = Square Feet; DU = Dwelling Unit					

6.3 SUMMARY OF PROJECT GOALS AND OBJECTIVES

As stated above, an EIR must only discuss in detail an alternative that is capable of feasibly attaining most of the basic objectives associated with the action, while at the same time avoiding or substantially lessening any of the significant effects associated with the proposed project. Thus, a summary of the goals and objectives as provided within Section 3.0, Project Description, is restated below.

1. **GOAL: A MIXTURE OF LAND USES**

   a. *Objective*: Develop a flexible mixed-use land use pattern that incorporates retail, office, hospitality, and residential opportunities that will effectively complement each other and provide maximum land use efficiency, while providing economic and social benefits to all users.

   b. *Objective*: Program retail uses that are neighborhood- and transit-station serving.

2. **GOAL: AN ECONOMICALLY FEASIBLE DEVELOPMENT**

   a. *Objective*: Provide flexible non-residential spaces that can be adjusted to respond to shifts in market demand and allow options throughout various economic cycles and scenarios.

   b. *Objective*: Create a range of residential unit types that will be accessible to residents of all income levels.

   c. *Objective*: Provide residential opportunities to assist the City of Duarte in meeting their Regional Housing Needs Allocation (RHNA) objectives.

   d. *Objective*: Encourage the development of a hotel to create local jobs, support City of Hope lodging needs, provide community meeting space, and increase tax revenues within the community.

3. **GOAL: TRADITIONAL PEDESTRIAN-ORIENTED STREET PATTERN**

   a. *Objective*: Create a “grid-like” block pattern that effectively provides for compact development with reduced road widths to provide connectivity throughout the site.

   b. *Objective*: Give precedence to pedestrians while keeping streets narrow to foster multimodal transportation with bicycle, pedestrian, and transit access.

4. **GOAL: SUPERIOR URBAN DESIGN**

   a. *Objective*: Allow for building types that will achieve desired density ranges to establish a critical mass of residents and employees to support the transit station, maximize transit ridership, and support retail spaces and local employment centers.

   b. *Objective*: Minimize setbacks to allow buildings to frame and activate the street.

   c. *Objective*: Use trees, shrubs and other landscape and hardscape materials along streets to provide shading, screening, and human scale.

   d. *Objective*: Promote quality architectural design to establish a consistent contemporary design character that creates an identity in the Duarte Station Specific Plan area.

5. GOAL: OUTDOOR SPACES

a. *Objective*: Provide singular or multiple outdoor spaces, such as an urban green space or public plaza that provides a transition between the station and the surrounding transit village uses in order to provide a public gathering space.

b. *Objective*: Program outdoor space(s) to accommodate the needs of various user groups, such as residents, employees, commuters, and visitors.

6. GOAL: AWARENESS OF SURROUNDING DEVELOPMENT

a. *Objective*: Create a center that provides desired goods and services to surrounding residents, students, and employees within and surrounding the Duarte Station Specific Plan area.

b. *Objective*: Provide specific setbacks, height limitations, upper story step-backs, and landscape requirements to afford adjacent residences privacy and separation from larger buildings.

c. *Objective*: Consider the future needs of the City of Hope as part of land use planning.

7. GOAL: SUSTAINABLE DEVELOPMENT PRACTICES

a. *Objective*: Identify the level of development proposed within the Specific Plan area, and adhere to Levels of Sustainable Development Practices as prescribed in Chapter 19.52 of the City's Development Code.

b. *Objective*: Ensure that construction and demolition waste is disposed of in accordance with all City regulations and standards.

c. *Objective*: Consider building layout, siting, and building design to not preclude alternative energy production on-site.

d. *Objective*: Maximize energy efficiency through local and state standards, indoor environmental quality, energy-efficient lighting, building orientation, shading, and implementation of LEED principles and/or attaining LEED Certification.

e. *Objective*: Reduce heat island effect through site planning and selection of landscape and hardscape materials.

f. *Objective*: Incorporate water-efficient design features such as permeable surfaces, collection devices, biofiltration devices, green rooftops, cisterns, berms and swales, and/or green rooftops.

g. *Objective*: Include climate-adapted landscape within the Specific Plan area.

6.4 SUMMARY OF SIGNIFICANT UNAVOIDABLE IMPACTS

Pursuant to *CEQA Guidelines* Section 15126.6(a), an EIR shall describe a range of reasonable alternatives to the project which would feasibly attain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project, and evaluate the comparative merits of the alternatives. Only those impacts found significant and unavoidable are relevant in making the final determination of whether an alternative is environmentally superior or inferior to the proposed project.

Based on the analysis provided within Section 5.0, Environmental Analysis of this EIR, the proposed project would result in significant unavoidable impacts in four environmental issue areas:

Aesthetics
- Project shade and shadow impacts on adjacent existing residential uses

Traffic
- Project and cumulative project impacts at the following intersections:
- Buena Vista Street/Three Ranch Road
- Highland Avenue/Evergreen Street

Air Quality
- Project- and cumulative project-related operational emissions for ROG
- Project impacts - plan consistency with respect to exceedance of operational ROG thresholds

Noise
- Project short-term construction noise impacts

6.5 ALTERNATIVE ONE: EXISTING ZONING ALTERNATIVE

DESCRIPTION OF ALTERNATIVE

Pursuant to *CEQA Guidelines* Section 15126.6(e)(2), a No Project Alternative must be analyzed within the EIR. The No Project Alternative should discuss what would be reasonably expected to occur in the foreseeable future if the proposed project were not approved, based on current plans and consistent with available infrastructure and community services. In the context of this EIR, the Existing Zoning Alternative is the No Project Alternative in compliance with *CEQA Guidelines* Section 15126.6(e)(2), and assumes that the proposed Duarte Station Specific Plan would not be implemented.

The project site would remain unaltered and the existing on-site industrial uses would continue to operate as they do currently. In addition, it is assumed that this Alternative would provide 125-250 parking spaces for the Gold Line Station.

IMPACT COMPARISON TO THE PROPOSED PROJECT

Land Use

The Existing Zoning Alternative would not involve any new development within the Specific Plan Area, and therefore would not require an amendment to the General Plan or Zoning for the site, as with the proposed project. However, since no new development would occur, this Alternative would not be consistent with the *General Plan* Land Use for the site, which designates the project site as GL Specific Plan. Additionally, this Alternative would not be consistent with the *General Plan* Land Use Element, which describes the intent for development of the project area, identified as the Gold Line Station Area Development Specific Plan. The Existing Zoning Alternative would not create a Specific Plan for future development of the site, nor would it provide a flexible mixed use area with unique parking standards, sufficient residential densities, housing types and appropriate pedestrian friendly design to encourage usage of the Gold Line as a primary mode of travel, as identified in the Land Use Element. Thus, this Alternative would be inconsistent with the Land Use Element in this regard. The Existing Zoning Alternative is considered environmentally inferior to the proposed project in this regard.

Aesthetics

The Existing Zoning Alternative would not involve any new development within the Specific Plan Area, and therefore would not alter the existing visual character/quality of the site. Aesthetic improvements, such as development consistent with development regulations and design standards/guidelines would not occur, as the proposed Duarte Station Specific Plan would not be implemented. The Existing Zoning Alternative would not introduce new landscaping and visual improvements associated with new development consistent in architectural character. This Alternative would not involve short-term impacts associated with construction activities, nor would it introduce new sources of light and glare to the area. Further, this Alternative would not result in significant unavoidable shade/shadow impacts to existing residential uses, as new development would not occur. Since this Alternative would eliminate the significant and unavoidable aesthetic impacts, this Alternative is considered environmentally superior to the proposed project in this regard.

Population and Housing

The Existing Zoning Alternative would not involve any new development and therefore, would not result in new population, employment, or housing growth within the City. This Alternative would conflict with the City's ability to meet its Regional Housing Needs Assessment (RHNA), as the City's 2008-2014 Housing Element identifies the potential for 120 housing units within the Specific Plan Area. Under this Alternative, no additional housing would be developed. Further, this Alternative would not allow for additional non-residential development; thus, new employment opportunities would not be provided within the City. Since this Alternative would conflict with the City's Housing Element, this Alternative is considered environmentally inferior to the proposed project in this regard.

Traffic

Under this Alternative, no development would occur, and therefore no additional traffic would be added to the local roadway network. The Existing Zoning Alternative would not increase traffic

levels, or affect levels of service or overall traffic system function. The significant unavoidable impact at the Buena Vista Street/Three Ranch Road and Highland Avenue/Evergreen Street intersections that would occur with the proposed project would not occur with this Alternative. Since this Alternative would eliminate the significant unavoidable intersection impacts, the Existing Zoning Alternative is considered environmentally superior to the proposed project in this regard.

Air Quality

Grading and construction activities associated with the proposed project would not occur with this Alternative. Construction and most of the operational emissions associated with the proposed project are considered less than significant; however, without development of the Specific Plan, additional emissions would also not occur. The exception is for project and cumulative project-related operational emissions for ROG and project plan consistency impacts with respect to the exceedance of operational ROG thresholds, which were determined to be significant unavoidable impacts for the proposed project. These impacts would be eliminated under this Alternative as existing on-site development would remain, and no new development would occur. Implementation of the Existing Zoning Alternative would be consistent with the regional air quality plan, similar to the proposed project. Since this Alternative would eliminate the significant unavoidable emissions and plan consistency impacts, this Alternative is considered environmentally superior to the proposed project in this regard.

Greenhouse Gas Emissions

Greenhouse gas emissions from construction and operational activities would not occur with the Existing Zoning Alternative. Comparatively, less than significant short-term and operational greenhouse gas emission impacts would occur with the proposed project, while no impacts would occur with this Alternative. The proposed project's combined construction and operational greenhouse gas emissions would result in a less than significant cumulatively considerable impact, whereas, this Alternative would result in no greenhouse gas emissions. The Existing Zoning Alternative would be environmentally superior to the proposed project regarding greenhouse gas emissions as no new greenhouse gas emissions would result from construction or operation.

Noise

The Existing Zoning Alternative would not involve any new development within the Specific Plan Area. Nearby sensitive receptors would not be subjected to noise associated with project-related construction activities, or additional project-generated vehicular activity. New stationary and mobile noise sources would not occur and ambient noise levels would not increase. Since this Alternative would eliminate the significant unavoidable short-term construction noise impacts, the Existing Zoning Alternative is considered environmentally superior to the proposed project in this regard.

Hazards and Hazardous Materials

Short-term construction-related impacts involving the potential for accidental release of hazardous materials (i.e., asbestos containing materials (ACMs), lead-based paints (LBPs), underground storage tanks (USTs) would not occur with the Existing Zoning Alternative, since buildings/improvements would not be demolished/removed and ground-disturbing activities

would not occur. Long-term impacts involving accidental release of hazardous materials from spills during storage or transport could occur with the Existing Zoning Alternative, since industrial and manufacturing uses operate on-site today. All potential impacts associated with the proposed project were concluded to be either less than significant or less than significant with mitigation, and the proposed project includes residential, commercial, and office uses, which generally use or produce less hazardous materials than industrial uses. Therefore, the Existing Zoning Alternative would be considered environmentally inferior to the proposed project in this regard.

Hydrology, Drainage, and Water Quality

With this Alternative, the short-term impacts on water quality associated with grading, excavation, and construction activities in the Specific Plan Area would not occur. Further, local groundwater supplies would not be impacted as new development requiring additional water supplies would not occur. However, existing quality of storm water and urban runoff would not change, as this Alternative would result in similar impervious area than with the proposed project and would not implement water quality features. Overall, the Existing Zoning Alternative is considered environmentally inferior to the proposed project in this regard.

Public Services and Utilities

An increased demand for public services and utilities would not occur with the Existing Zoning Alternative, as no additional land uses would be developed within the project site. The Existing Zoning Alternative would be considered environmentally superior to the proposed project in this regard.

ABILITY TO MEET PROJECT GOALS

Under the Existing Zoning Alternative, the proposed residential, commercial, office, and hospitality uses would not be developed. The exception is the 125 to 250 parking spaces for the Gold Line Station. Therefore, none of the project goals or objectives would be met under the Existing Zoning Alternative.

6.6 ALTERNATIVE TWO: ALL RESIDENTIAL ALTERNATIVE

DESCRIPTION OF ALTERNATIVE

Alternative Two would include only high density residential at a density of up to 40 dwelling units per acre for a total of 600 dwelling units. It is assumed that this Alternative would have similar acreages for recreation/open space and roads as the proposed project (0.80 and 2.86, respectively), and provide 125-250 parking spaces for the Gold Line Station.

IMPACT COMPARISON TO THE PROPOSED PROJECT

Land Use

The All Residential Alternative would involve new development within the Specific Plan Area, and therefore would require an amendment to the General Plan and Zoning for the site, similar

to the proposed project. However, this Alternative would not be consistent with the *General Plan* Land Use for the site, which designates the project site as GL Specific Plan with the intent to provide a mixed use area with residential, commercial, and office uses. The All Residential Alternative would create a Specific Plan for future development of the site and would provide for appropriate pedestrian-friendly design to encourage usage of the Gold Line as a primary mode of travel, as identified in the Land Use Element. However, this Alternative would not provide for a flexible mix of land uses within the Plan Area as identified in the Land Use Element. Thus, this Alternative would be inconsistent with the Land Use Element. The All Residential Alternative is considered environmentally inferior to the proposed project in this regard.

Aesthetics

The All Residential Alternative would involve new development within the Specific Plan Area, and therefore would alter the existing visual character/quality of the site. Aesthetic improvements, such as development consistent with development regulations and design standards/guidelines would occur, as a Specific Plan would be implemented. The All Residential Alternative would introduce new landscaping and visual improvements associated with new development consistent in architectural character. This Alternative would involve short-term impacts associated with construction activities, and would introduce new sources of light and glare to the area. However, this Alternative would not result in significant unavoidable shade and shadow impacts to existing residential uses, as the height for the residential buildings would be less than the heights of the office and hotel uses for the proposed project. All other aesthetic impacts for this Alternative are similar to those of the proposed project. Since this Alternative would eliminate the significant unavoidable shade/shadow impacts, the All Residential Alternative is considered environmentally superior to the proposed project in this regard.

Population and Housing

The All Residential Alternative would involve new development and therefore, would result in new population and housing growth within the City. This Alternative would not conflict with the City's ability to meet its Regional Housing Needs Assessment (RHNA), as the City's 2008-2014 Housing Element identifies the potential for 120 housing units within the Specific Plan Area. Under this Alternative, 600 additional housing units would be developed. However, this Alternative would not allow for additional non-residential development; thus, new employment opportunities would not be provided within the City. Under the proposed project, more than 1,400 new net jobs are projected. Under this Alternative, no new jobs would be created and the existing 400+ jobs would be removed. Thus, the All Residential Alternative is considered environmentally inferior to the proposed project in this regard.

Traffic

Under this Alternative, a total of 3,591 daily trips are estimated assuming a 10 percent discount near transit centers/light rail stations as compared to 7,152 net total trips for the proposed project, which includes discounts for on-site trip capture, location near transit centers/light rail stations, and pass-by reductions for retail. However, there is the potential that the distribution of project-related trips would vary slightly from the proposed project, given that only residential is proposed. The All Residential Alternative would result in approximately 50 percent less daily trips than the proposed project. With the reduction in daily trips, it is estimated that the significant unavoidable impacts at Buena Vista Street/Three Ranch Road and Highland

Avenue/Evergreen Street would be reduced. Mitigation measures would still be required to reduce impacts to less than significant, as with the proposed project. Thus, the All Residential Alternative would be considered environmentally superior to the proposed project in this regard.

Air Quality

Short-term construction and long-term operational (stationary source) impacts would be similar to the proposed project under this Alternative, given that the entire Plan Area would remove existing uses and develop the entire area with new uses. Long-term operational (mobile source) impacts would be less given that this Alternative generates only 50 percent of the daily trips as compared to the proposed project.

Most air quality impacts were identified as less than significant or less than significant with the imposition of mitigation measures for the proposed project, with the exception of project-related operational emissions for ROG and plan consistency with respect to exceedance of ROG operational thresholds, which were concluded to be significant unavoidable impacts. This Alternative would reduce but not eliminate the ROG-related significant unavoidable impacts. Therefore, the All Residential Alternative would be considered neither environmentally superior nor inferior to the proposed project in this regard.

Greenhouse Gas Emissions

Greenhouse gas emissions from construction and operational activities would occur with the All Residential Alternative, although to a lesser degree than the proposed project due to the approximately 50 percent reduction in daily trips. This Alternative's combined construction and operational greenhouse gas emissions would also result in less than significant impacts from a cumulative perspective, similar to the proposed project. Therefore, the All Residential Alternative would be environmentally superior to the proposed project regarding greenhouse gas emissions due to decreased mobile emissions.

Noise

Short-term construction and long-term operational (stationary source) impacts would be similar to the proposed project under this Alternative, given that the entire Plan Area would remove existing uses and develop the entire area with new uses. Long-term operational (mobile source) impacts would be less given that this Alternative generates only 50 percent of the daily trips as compared to the proposed project.

Most noise impacts were identified as less than significant or less than significant with the imposition of mitigation measures for the proposed project, with the exception of short-term construction impacts, which were concluded to be significant unavoidable impacts. This Alternative has the potential to reduce but not eliminate the construction noise impacts. Therefore, the All Residential Alternative would be considered neither environmentally superior nor inferior to the proposed project in this regard.

Hazards and Hazardous Materials

Short-term construction-related impacts involving the potential for accidental release of hazardous materials (i.e., asbestos containing materials (ACMs), lead-based paints (LBPs), underground storage tanks (USTs) would occur with the All Residential Alternative, as

buildings/improvements would be demolished/removed and ground-disturbing activities would occur. Long-term impacts involving accidental release of hazardous materials from spills during storage or transport would not occur with the All Residential Alternative, since the existing industrial and manufacturing uses would be removed. All potential impacts associated with the proposed project were concluded to be either less than significant or less than significant with mitigation, and the proposed project includes residential, commercial, and office uses, which generally use or produce less hazardous materials than industrial uses. Given that only residential uses are included, the All Residential Alternative is considered environmentally superior to the proposed project in this regard.

Hydrology, Drainage, and Water Quality

This Alternative would result in similar amounts of impervious surface area on-site. As such, impacts regarding drainage, hydrology, floodplains, and water quality are anticipated to be comparable to the proposed project. Therefore, hydrology and drainage impacts would remain less than significant, as under the proposed project, while mitigation measures would still be required to reduce water quality impacts to a less than significant level, in compliance with NPDES permit requirements. Thus, the All Residential Alternative would be considered neither environmentally superior nor inferior to the proposed project in this regard.

Public Services and Utilities

Relative to the proposed project, this Alternative would result in a less demand for fire and police protection services, water and wastewater facilities, electricity and natural gas, and the amount of solid waste requiring disposal at local and regional landfills. As is the case with the proposed project, all public service and utility impacts would be less than significant with implementation of applicable mitigation measures, including payment of fees to affected agencies. Thus, the All Residential Alternative would be considered environmentally superior to the proposed project in this regard.

ABILITY TO MEET PROJECT GOALS

1. **GOAL: A MIXTURE OF LAND USES**

    a. *Objective*: Develop a flexible mixed-use land use pattern that incorporates retail, office, hospitality, and residential opportunities that will effectively complement each other and provide maximum land use efficiency, while providing economic and social benefits to all users.

    b. *Objective*: Program retail uses that are neighborhood- and transit-station serving.

The All Residential Alternative does not meet this goal, as only one land use type would be provided – High Density Residential. With only High Density Residential, there would be no provision for retail uses to support either the surrounding neighborhood or the Gold Line Station; thus not meeting Objective a. In addition, there is no flexibility in the land use mix or the inclusion of complementary land uses, thus not meeting Objective b.

2. GOAL: AN ECONOMICALLY FEASIBLE DEVELOPMENT

a. *Objective*: Provide flexible non-residential spaces that can be adjusted to respond to shifts in market demand and allow options throughout various economic cycles and scenarios.

b. *Objective*: Create a range of residential unit types that will be accessible to residents of all income levels.

c. *Objective*: Provide residential opportunities to assist the City of Duarte in meeting their Regional Housing Needs Allocation (RHNA) objectives.

d. *Objective*: Encourage the development of a hotel to create local jobs, support City of Hope lodging needs, provide community meeting space, and increase tax revenues within the community.

The All Residential Alternative partially meets this goal. A range of residential types would be provided for in the Specific Plan, along with providing the 120 units identified in the Housing Element. Thus, the All Residential Alternative meets Objectives b and c. However, the All Residential Alternative would not provide for flexible non-residential spaces or a hotel. Thus, Thus, the All Residential Alternative does not meet Objectives a and d.

3. GOAL: TRADITIONAL PEDESTRIAN-ORIENTED STREET PATTERN

a. *Objective*: Create a "grid-like" block pattern that effectively provides for compact development with reduced road widths to provide connectivity throughout the site.

b. *Objective*: Give precedence to pedestrians while keeping streets narrow to foster multimodal transportation with bicycle, pedestrian, and transit access.

The All Residential Alternative meets the goal. A Specific Plan would be prepared for this Alternative and would include provisions for the grid-like block pattern, connectivity to and throughout the site, and multimodal transportation options.

4. GOAL: SUPERIOR URBAN DESIGN

a. *Objective*: Allow for building types that will achieve desired density ranges to establish a critical mass of residents and employees to support the transit station, maximize transit ridership, and support retail spaces and local employment centers.

b. *Objective*: Minimize setbacks to allow buildings to frame and activate the street.

c. *Objective*: Use trees, shrubs and other landscape and hardscape materials along streets to provide shading, screening, and human scale.

d. *Objective*: Promote quality architectural design to establish a consistent contemporary design character that creates an identity in the Duarte Station Specific Plan area.

The All Residential Alternative partially meets the goal. A Specific Plan would be prepared for this Alternative and would include provisions to comply with Objectives b, c, and d. However, the All Residential Alternative does not include employment-generating land uses. It does, however, include residential units to support the transit station and maximize transit ridership. However, this Alternative is not intended to be a local employment center or providing retail opportunities, thus partially meeting Objective a.

5. GOAL: OUTDOOR SPACES

a. *Objective*: Provide singular or multiple outdoor spaces, such as an urban green space or public plaza that provides a transition between the station and the surrounding transit village uses in order to provide a public gathering space.

b. *Objective*: Program outdoor space(s) to accommodate the needs of various user groups, such as residents, employees, commuters, and visitors.

The All Residential Alternative partially meets this goal. A Specific Plan would be prepared for this Alternative and would include provisions to generally comply with Objectives a and b. However, since no retail or employment generating uses are included with this Alternative, it is unlikely that a public plaza between the station and residential uses would be provided. This Alternative would only program outdoor spaces for residents. Thus, the All Residential Alternative partially meets Objectives a and b.

6. GOAL: AWARENESS OF SURROUNDING DEVELOPMENT

a. *Objective*: Create a center that provides desired goods and services to surrounding residents, students, and employees within and surrounding the Duarte Station Specific Plan area.

b. *Objective*: Provide specific setbacks, height limitations, upper story step-backs, and landscape requirements to afford adjacent residences privacy and separation from larger buildings.

c. *Objective*: Consider the future needs of the City of Hope as part of land use planning.

The All Residential Alternative partially meets this goal. A Specific Plan would be prepared for this Alternative and would include provisions to generally comply with Objective b. The All Residential Alternative would not create a center that provides a mix of good and services available to on-site residents or surrounding residents, students, or employees. The All Residential Alternative would provide for future housing available to City of Hope employees, but does not consider other future needs of the City of Hope, such as office or hotel space. Thus, the All Residential Alternative does not meet Objectives a and c.

7. GOAL: SUSTAINABLE DEVELOPMENT PRACTICES

a. *Objective*: Identify the level of development proposed within the Specific Plan area, and adhere to Levels of Sustainable Development Practices as prescribed in Chapter 19.52 of the City's Development Code.

b. *Objective*: Ensure that construction and demolition waste is disposed of in accordance with all City regulations and standards.

c. *Objective*: Consider building layout, siting, and building design to not preclude alternative energy production on-site.

d. *Objective*: Maximize energy efficiency through local and state standards, indoor environmental quality, energy-efficient lighting, building orientation, shading, and implementation of LEED principles and/or attaining LEED Certification.

e. *Objective*: Reduce heat island effect through site planning and selection of landscape and hardscape materials.

f. *Objective*: Incorporate water-efficient design features such as permeable surfaces, collection devices, biofiltration devices, green rooftops, cisterns, berms and swales, and/or green rooftops.

g. *Objective*: Include climate-adapted landscape within the Specific Plan area.

The All Residential Alternative meets this goal. A Specific Plan would be prepared for this Alternative and would include provisions to comply with Objectives a through g.

6.7 ALTERNATIVE THREE: REDUCED DENSITY ALTERNATIVE 1

DESCRIPTION OF ALTERNATIVE

Alternative Three would be similar to the proposed project in terms of land use types, but at reduced residential densities and non-residential intensities. It is assumed that this Alternative would have similar acreages for recreation/open space and roads as the proposed project (0.80 and 2.86, respectively), and provide 125-250 parking spaces for the Gold Line Station. Alternative Three includes:

- 12,000 SF of Retail
- 295,000 SF of Office
- 150 Hotel Rooms
- 240 Dwelling Units
- Parking for Gold Line

Building heights would be similar or reduced compared to the proposed project:

- Residential - four to five stories
- Office – six to seven stories
- Hotel – five to six stories

IMPACT COMPARISON TO THE PROPOSED PROJECT

Land Use

The Reduced Density Alternative 1 would involve new development within the Specific Plan Area, and therefore would require an amendment to the General Plan and Zoning for the site, similar to the proposed project. This Alternative would be consistent with the *General Plan* Land Use for the site, which designates the project site as GL Specific Plan with the intent to provide a mixed use area with residential, commercial, and office uses. Additionally, this Alternative would be consistent with the *General Plan* Land Use Element, which describes the intent for development of the project area, identified as the Gold Line Station Area Development Specific Plan. This Alternative would create a Specific Plan for future development of the site, and provide for a flexible mixed use area with unique parking standards, sufficient residential densities, housing types and appropriate pedestrian friendly design to encourage usage of the Gold Line as a primary mode of travel, as identified in the Land Use Element. Thus, this Alternative would be consistent with the Land Use Element in this regard. Therefore, the Reduced Intensity Alternative 1 is considered neither environmentally superior nor inferior to the proposed project in this regard.

Aesthetics

The Reduced Density Alternative 1 would involve new development within the Specific Plan Area, and therefore would alter the existing visual character/quality of the site similar to the proposed project. Aesthetic improvements, such as development consistent with development regulations and design standards/guidelines would occur, as a Specific Plan would be implemented. This Alternative would introduce new landscaping and visual improvements associated with new development consistent in architectural character. This Alternative would involve short-term impacts associated with construction activities, and would introduce new sources of light and glare to the area. However, this Alternative would also result in significant unavoidable shade/shadow impacts to existing residential uses. While the heights for the office and hotel uses would be reduced by one-to three stories, the reduction in height slightly reduces, but does not eliminate the shade/shadow impacts. Al other aesthetic impacts for this Alternative are similar to those of the proposed project. Since this Alternative would not eliminate the significant and unavoidable shade/shadow impacts, the Reduced Density Alternative 1 is considered neither environmentally superior nor inferior to the proposed project in this regard.

Population and Housing

The Reduced Density Alternative 1 would involve new development and therefore, would result in new population and housing growth within the City. This Alternative would not conflict with the City's ability to meet its Regional Housing Needs Assessment (RHNA), as the City's 2008-2014 Housing Element identifies the potential for 120 housing units within the Specific Plan Area. Under this Alternative, 240 additional housing units would be developed for a total population of 722. In addition, this Alternative would allow for additional non-residential development; thus, a total of 908 net new employment opportunities would be provided within the City. This Alternative would add 50 percent fewer people and 36 percent fewer employment opportunities to the City than the proposed project; however, it does help to improve the City's job to housing ratio, especially near a transit station. Thus, the Reduced Residential Alternative

1 is considered neither environmentally superior nor inferior to the proposed project in this regard.

Traffic

Under this Alternative, a total of 4,008 daily trips are estimated as compared to 7,152 net total trips for the proposed project. The same discounts for on-site trip capture, location near transit centers/light rail stations, and pass-by reductions for retail were taken for both. Given that similar uses are proposed, it is anticipated the distribution of project-related trips would be similar to that of the proposed project. The Reduced Density Alternative 1 would result in approximately 44 percent less daily trips than the proposed project. With the reduction in daily trips, it is likely that the significant unavoidable impacts at Buena Vista Street/Three Ranch Road and Highland Avenue/Evergreen Street would be reduced. Mitigation measures would still be required to reduce impacts to less than significant, as with the proposed project. Thus, the Reduced Density Alternative 1 would be considered environmentally superior to the proposed project in this regard.

Air Quality

Short-term construction and long-term operational (stationary source) impacts would be similar to the proposed project under this Alternative, given that the entire Plan Area would remove existing uses and develop the entire area with new uses. Long-term operational (mobile source) impacts would be less given that this Alternative generates only 44 percent of the daily trips as compared to the proposed project.

Most air quality impacts were identified as less than significant or less than significant with the imposition of mitigation measures for the proposed project, with the exception of project-related operational emissions for ROG and plan consistency with respect to exceedance of ROG operational thresholds, which were concluded to be significant unavoidable impacts. This Alternative would reduce but not eliminate the ROG-related significant unavoidable impacts. Therefore, the Reduced Density Alternative 1 would be considered neither environmentally superior nor inferior to the proposed project in this regard.

Greenhouse Gas Emissions

Greenhouse gas emissions from construction and operational activities would occur with the Reduced Density Alternative 1, although to a lesser degree than the proposed project due to the approximately 44 percent reduction in daily trips. This Alternative's combined construction and operational greenhouse gas emissions would also result in less than significant impacts from a cumulative perspective, similar to the proposed project. Therefore, the Reduced Density Alternative 1 would be environmentally superior to the proposed project regarding greenhouse gas emissions due to decreased mobile emissions.

Noise

Short-term construction and long-term operational (stationary source) impacts would be similar to the proposed project under this Alternative, given that the entire Plan Area would remove existing uses and develop the entire area with new uses. Long-term operational (mobile source) impacts would be less given that this Alternative generates only 44 percent of the daily trips as compared to the proposed project.

Most noise impacts were identified as less than significant or less than significant with the imposition of mitigation measures for the proposed project, with the exception of short-term construction impacts, which were concluded to be significant unavoidable impacts. This Alternative has the potential to reduce but not eliminate the construction noise impacts. Therefore, the Reduced Density Alternative 1 would be considered neither environmentally superior nor inferior to the proposed project in this regard.

Hazards and Hazardous Materials

Short-term construction-related impacts involving the potential for accidental release of hazardous materials (i.e., asbestos containing materials (ACMs), lead-based paints (LBPs), underground storage tanks (USTs) would occur with the Reduced Density Alternative, as buildings/improvements would be demolished/removed and ground-disturbing activities would occur. Long-term impacts involving accidental release of hazardous materials from spills during storage or transport would be similar to those for the proposed project. All potential impacts associated with the proposed project were concluded to be either less than significant or less than significant with mitigation, and the proposed project includes residential, commercial, and office uses, which generally use or produce less hazardous materials than industrial uses. Given that similar types of uses are proposed, the Reduced Density Alternative 1 is considered neither environmentally superior nor inferior to the proposed project in this regard.

Hydrology, Drainage, and Water Quality

This Alternative would result in similar amounts of impervious surface area on-site. As such, impacts regarding drainage, hydrology, floodplains, and water quality are anticipated to be comparable to the proposed project. Therefore, hydrology and drainage impacts would remain less than significant, as under the proposed project, while mitigation measures would still be required to reduce water quality impacts to a less than significant level, in compliance with NPDES permit requirements. Thus, the Reduced Density Alternative 1 would be considered neither environmentally superior nor inferior to the proposed project in this regard.

Public Services and Utilities

Relative to the proposed project, this Alternative would result in slightly less demand for fire and police protection services, water and wastewater facilities, electricity and natural gas, and the amount of solid waste requiring disposal at local and regional landfills. As is the case with the proposed project, all public service and utility impacts would be less than significant with implementation of applicable mitigation measures, including payment of fees to affected agencies. Thus, this Alternative would be considered environmentally superior to the proposed project in this regard.

ABILITY TO MEET PROJECT GOALS

1. **GOAL: A MIXTURE OF LAND USES**

    a. *Objective*: Develop a flexible mixed-use land use pattern that incorporates retail, office, hospitality, and residential opportunities that will effectively complement each other and provide maximum land use efficiency, while providing economic and social benefits to all users.

b. *Objective*: Program retail uses that are neighborhood- and transit-station serving.

The Reduced Density Alternative 1 meets this goal. The development anticipated under this Alternative is the same mix of land uses anticipated in the proposed Duarte Station Specific Plan. The design standards and design guidelines in the proposed Duarte Station Specific Plan are applicable to this Alternative, and thus provide for retail uses to support either the surrounding neighborhood or the Gold Line Station. In addition, the flexibility related to the land use mix and the inclusion of complementary land uses would be applicable to this Alternative. Thus, the Reduced Intensity Alternative 1 meets Objectives a and b.

2. GOAL: AN ECONOMICALLY FEASIBLE DEVELOPMENT

a. *Objective*: Provide flexible non-residential spaces that can be adjusted to respond to shifts in market demand and allow options throughout various economic cycles and scenarios.

b. *Objective*: Create a range of residential unit types that will be accessible to residents of all income levels.

c. *Objective*: Provide residential opportunities to assist the City of Duarte in meeting their Regional Housing Needs Allocation (RHNA) objectives.

d. *Objective*: Encourage the development of a hotel to create local jobs, support City of Hope lodging needs, provide community meeting space, and increase tax revenues within the community.

The Reduced Density Alternative 1 meets this goal. The development anticipated under this Alternative is the same mix of land uses anticipated in the proposed Duarte Station Specific Plan, albeit with less residential units and non-residential square footage. A range of residential types would be provided for in the Specific Plan, along with providing the 120 units identified in the Housing Element. In addition, the Specific Plan for this Alternative would provide for flexible non-residential spaces and a hotel. Thus, the Reduced Density Alternative 1 meets Objectives a through d.

3. GOAL: TRADITIONAL PEDESTRIAN-ORIENTED STREET PATTERN

a. *Objective*: Create a “grid-like” block pattern that effectively provides for compact development with reduced road widths to provide connectivity throughout the site.

b. *Objective*: Give precedence to pedestrians while keeping streets narrow to foster multimodal transportation with bicycle, pedestrian, and transit access.

The Reduced Density Alternative 1 meets this goal. The development anticipated under this Alternative is the same mix of land uses anticipated in the proposed Duarte Station Specific Plan. The design standards and design guidelines in the proposed Duarte Station Specific Plan are applicable to this Alternative, and would provide for the grid-like block pattern, connectivity to and throughout the site, and multimodal transportation options. Thus, the Reduced Density Alternative 1 meets Objectives a and b.

4. GOAL: SUPERIOR URBAN DESIGN

a. *Objective*: Allow for building types that will achieve desired density ranges to establish a critical mass of residents and employees to support the transit station, maximize transit ridership, and support retail spaces and local employment centers.

b. *Objective*: Minimize setbacks to allow buildings to frame and activate the street.

c. *Objective*: Use trees, shrubs and other landscape and hardscape materials along streets to provide shading, screening, and human scale.

d. *Objective*: Promote quality architectural design to establish a consistent contemporary design character that creates an identity in the Duarte Station Specific Plan area.

The Reduced Density Alternative 1 meets this goal. Many of the development standards and design guidelines in the proposed Duarte Station Specific Plan would be applicable to this Alternative, and would be carried forward in the Specific Plan for this Alternative. Thus, the Reduced Density Alternative 1 meets Objectives a through d.

5. GOAL: OUTDOOR SPACES

a. *Objective*: Provide singular or multiple outdoor spaces, such as an urban green space or public plaza that provides a transition between the station and the surrounding transit village uses in order to provide a public gathering space.

b. *Objective*: Program outdoor space(s) to accommodate the needs of various user groups, such as residents, employees, commuters, and visitors.

The Reduced Density Alternative 1 meets this goal. The development anticipated under this Alternative is the same mix of land uses anticipated in the proposed Duarte Station Specific Plan. Thus, the Reduced Density Alternative 1 would provide for outdoor spaces, including urban green space or a public plaza, to serve as transition areas between the Gold Line Station and the uses within and adjacent to the Plan Area. These outdoor spaces are intended to accommodate the various users of the Plan Area. Thus, the Reduced Density Alternative 1 meets Objectives a and b.

6. GOAL: AWARENESS OF SURROUNDING DEVELOPMENT

a. *Objective*: Create a center that provides desired goods and services to surrounding residents, students, and employees within and surrounding the Duarte Station Specific Plan area.

b. *Objective*: Provide specific setbacks, height limitations, upper story step-backs, and landscape requirements to afford adjacent residences privacy and separation from larger buildings.

c. *Objective*: Consider the future needs of the City of Hope as part of land use planning.

The Reduced Density Alternative 1 meets this goal. The development anticipated under this Alternative is the same mix of land uses anticipated in the proposed Duarte Station Specific Plan. The design standards and design guidelines in the proposed Duarte Station Specific Plan are applicable to this Alternative to address setbacks, height limitations, upper story step-backs, and landscape requirements with respect to adjacent residences. In addition, this Alternative does create a center that provides a mix of good and services available to on-site residents or surrounding residents, students, or employees, along with providing housing, office, or hotel space to meet the City of Hope's future needs. Thus, the Reduced Density Alternative 1 meets Objectives a through c.

7. GOAL: SUSTAINABLE DEVELOPMENT PRACTICES

a. *Objective*: Identify the level of development proposed within the Specific Plan area, and adhere to Levels of Sustainable Development Practices as prescribed in Chapter 19.52 of the City's Development Code.

b. *Objective*: Ensure that construction and demolition waste is disposed of in accordance with all City regulations and standards.

c. *Objective*: Consider building layout, siting, and building design to not preclude alternative energy production on-site.

d. *Objective*: Maximize energy efficiency through local and state standards, indoor environmental quality, energy-efficient lighting, building orientation, shading, and implementation of LEED principles and/or attaining LEED Certification.

e. *Objective*: Reduce heat island effect through site planning and selection of landscape and hardscape materials.

f. *Objective*: Incorporate water-efficient design features such as permeable surfaces, collection devices, biofiltration devices, green rooftops, cisterns, berms and swales, and/or green rooftops.

g. *Objective*: Include climate-adapted landscape within the Specific Plan area.

The Reduced Density Alternative 1 meets this goal. A Specific Plan would be prepared for this Alternative and would include provisions to comply with Objectives a through g.

6.8 ALTERNATIVE FOUR: REDUCED DENSITY ALTERNATIVE 2

DESCRIPTION OF ALTERNATIVE

Alternative Four would be similar to the proposed project in terms of land use types, but at reduced residential densities and non-residential intensities. It is assumed that this Alternative would have similar acreages for recreation/open space and roads as the proposed project (0.80 and 2.86, respectively), and provide 125-250 parking spaces for the Gold Line Station. Alternative Four includes:

- 12,000 SF of Retail
- 160,000 SF of Office
- 150 Hotel Rooms
- 150 Dwelling Units
- Parking for Gold Line

Building heights would be reduced compared to the proposed project:

- Residential – three to four stories
- Office – six to seven stories
- Hotel – five to six stories

IMPACT COMPARISON TO THE PROPOSED PROJECT

Land Use

The Reduced Density Alternative 2 would involve new development within the Specific Plan Area, and therefore would require an amendment to the General Plan and Zoning for the site, similar to the proposed project. This Alternative would be consistent with the *General Plan* Land Use for the site, which designates the project site as GL Specific Plan with the intent to provide a mixed use area with residential, commercial, and office uses. Additionally, this Alternative would be consistent with the *General Plan* Land Use Element, which describes the intent for development of the project area, identified as the Gold Line Station Area Development Specific Plan. This Alternative would create a Specific Plan for future development of the site, and provide for a flexible mixed use area with unique parking standards, sufficient residential densities, housing types and appropriate pedestrian friendly design to encourage usage of the Gold Line as a primary mode of travel, as identified in the Land Use Element. Thus, this Alternative would be consistent with the Land Use Element in this regard. Therefore, the Reduced Intensity Alternative 2 is considered neither environmentally superior nor inferior to the proposed project in this regard.

Aesthetics

The Reduced Density Alternative 2 would involve new development within the Specific Plan Area, and therefore would alter the existing visual character/quality of the site similar to the proposed project. Aesthetic improvements, such as development consistent with development regulations and design standards/guidelines would occur, as a Specific Plan would be implemented. This Alternative would introduce new landscaping and visual improvements associated with new development consistent in architectural character. This Alternative would involve short-term impacts associated with construction activities, and would introduce new sources of light and glare to the area. However, this Alternative would also result in significant unavoidable shade/shadow impacts to existing residential uses. While the heights for the office and hotel uses would be reduced by one-to three stories, the reduction in height slightly reduces, but does not eliminate the shade/shadow impacts. All other aesthetic impacts for this Alternative are similar to those of the proposed project. Since this Alternative would not eliminate the significant and unavoidable shade/shadow impacts, the Reduced Density Alternative 2 is considered neither environmentally superior nor inferior to the proposed project in this regard.

Population and Housing

The Reduced Density Alternative 2 would involve new development and therefore, would result in new population and housing growth within the City. This Alternative would not conflict with the City's ability to meet its Regional Housing Needs Assessment (RHNA), as the City's 2008-2014 Housing Element identifies the potential for 120 housing units within the Specific Plan Area. Under this Alternative, 150 additional housing units would be developed for a total population of 452. In addition, this Alternative would allow for additional non-residential development; thus, a total of 368 net new employment opportunities would be provided within the City. This Alternative would add 74 percent fewer people and 36 percent fewer employment opportunities to the City than the proposed project; however, it does help to improve the City's job to housing ratio, especially near a transit station. Thus, the Reduced Residential Alternative 2 is considered neither environmentally superior nor inferior to the proposed project in this regard.

Traffic

Under this Alternative, a total of 2,240 daily trips are estimated as compared to 7,152 net total trips for the proposed project. The same discounts for on-site trip capture, location near transit centers/light rail stations, and pass-by reductions for retail were taken for both. Given that similar uses are proposed, it is anticipated the distribution of project-related trips would be similar to that of the proposed project. The Reduced Density Alternative 2 would result in approximately 68 percent less daily trips than the proposed project. With the reduction in daily trips, it is likely that the significant unavoidable impacts at Buena Vista Street/Three Ranch Road and Highland Avenue/Evergreen Street would be eliminated. Mitigation measures would still be required to reduce impacts to less than significant, as with the proposed project. Thus, the Reduced Density Alternative 2 would be considered environmentally superior to the proposed project in this regard.

Air Quality

Short-term construction and long-term operational (stationary source) impacts would be similar to the proposed project under this Alternative, given that the entire Plan Area would remove existing uses and develop the entire area with new uses. Long-term operational (mobile source) impacts would be less given that this Alternative generates only 68 percent of the daily trips as compared to the proposed project.

Most air quality impacts were identified as less than significant or less than significant with the imposition of mitigation measures for the proposed project, with the exception of project-related operational emissions for ROG and plan consistency with respect to exceedance of ROG operational thresholds, which were concluded to be significant unavoidable impacts. This Alternative would reduce but not eliminate the ROG-related significant unavoidable impacts. Therefore, the Reduced Density Alternative 2 would be considered neither environmentally superior nor inferior to the proposed project in this regard.

Greenhouse Gas Emissions

Greenhouse gas emissions from construction and operational activities would occur with the Reduced Density Alternative 2, although to a lesser degree than the proposed project due to the approximately 68 percent reduction in daily trips. This Alternative's combined construction and

operational greenhouse gas emissions would also result in less than significant impacts from a cumulative perspective, similar to the proposed project. Therefore, the Reduced Density Alternative 2 would be environmentally superior to the proposed project regarding greenhouse gas emissions due to decreased mobile emissions.

Noise

Short-term construction and long-term operational (stationary source) impacts would be similar to the proposed project under this Alternative, given that the entire Plan Area would remove existing uses and develop the entire area with new uses. Long-term operational (mobile source) impacts would be less given that this Alternative generates only 68 percent of the daily trips as compared to the proposed project.

Most noise impacts were identified as less than significant or less than significant with the imposition of mitigation measures for the proposed project, with the exception of short-term construction impacts, which were concluded to be significant unavoidable impacts. This Alternative is proposing substantially less development than the proposed project, and as such less construction would be necessary. Thus, this Alternative would reduce and eliminate the construction noise impacts. Therefore, the Reduced Density Alternative 2 would be considered environmentally superior to the proposed project in this regard.

Hazards and Hazardous Materials

Short-term construction-related impacts involving the potential for accidental release of hazardous materials (i.e., asbestos containing materials (ACMs), lead-based paints (LBPs), underground storage tanks (USTs) would occur with the Reduced Density Alternative, as buildings/improvements would be demolished/removed and ground-disturbing activities would occur. Long-term impacts involving accidental release of hazardous materials from spills during storage or transport would be similar to those for the proposed project. All potential impacts associated with the proposed project were concluded to be either less than significant or less than significant with mitigation, and the proposed project includes residential, commercial, and office uses, which generally use or produce less hazardous materials than industrial uses. Given that similar types of uses are proposed, the Reduced Density Alternative 2 is considered neither environmentally superior nor inferior to the proposed project in this regard.

Hydrology, Drainage, and Water Quality

This Alternative would result in similar amounts of impervious surface area on-site. As such, impacts regarding drainage, hydrology, floodplains, and water quality are anticipated to be comparable to the proposed project. Therefore, hydrology and drainage impacts would remain less than significant, as under the proposed project, while mitigation measures would still be required to reduce water quality impacts to a less than significant level, in compliance with NPDES permit requirements. Thus, the Reduced Density Alternative 2 would be considered neither environmentally superior nor inferior to the proposed project in this regard.

Public Services and Utilities

Relative to the proposed project, this Alternative would result in far less demand for fire and police protection services, water and wastewater facilities, electricity and natural gas, and the amount of solid waste requiring disposal at local and regional landfills. As is the case with the

proposed project, all public service and utility impacts would be less than significant with implementation of applicable mitigation measures, including payment of fees to affected agencies. Thus, this Alternative would be considered environmentally superior to the proposed project in this regard.

ABILITY TO MEET PROJECT GOALS

1. GOAL: A MIXTURE OF LAND USES

a. *Objective*: Develop a flexible mixed-use land use pattern that incorporates retail, office, hospitality, and residential opportunities that will effectively complement each other and provide maximum land use efficiency, while providing economic and social benefits to all users.

b. *Objective*: Program retail uses that are neighborhood- and transit-station serving.

The Reduced Density Alternative 2 generally meets this goal. The development anticipated under this Alternative is the same mix of land uses anticipated in the proposed Duarte Station Specific Plan, although at a much reduced scale, which could result in less economic and social benefits to all users. The design standards and design guidelines in the proposed Duarte Station Specific Plan are applicable to this Alternative, and thus provide for retail uses to support either the surrounding neighborhood or the Gold Line Station. In addition, the flexibility related to the land use mix and the inclusion of complementary land uses would be applicable to this Alternative. Thus, the Reduced Intensity Alternative 2 meets Objectives a and b.

2. GOAL: AN ECONOMICALLY FEASIBLE DEVELOPMENT

a. *Objective*: Provide flexible non-residential spaces that can be adjusted to respond to shifts in market demand and allow options throughout various economic cycles and scenarios.

b. *Objective*: Create a range of residential unit types that will be accessible to residents of all income levels.

c. *Objective*: Provide residential opportunities to assist the City of Duarte in meeting their Regional Housing Needs Allocation (RHNA) objectives.

d. *Objective*: Encourage the development of a hotel to create local jobs, support City of Hope lodging needs, provide community meeting space, and increase tax revenues within the community.

The Reduced Density Alternative 2 generally meets this goal. The development anticipated under this Alternative is the same mix of land uses anticipated in the proposed Duarte Station Specific Plan, albeit with less residential units and non-residential square footage. A range of residential types would be provided for in the Specific Plan, along with providing the 120 units identified in the Housing Element. In addition, the Specific Plan for this Alternative would provide for flexible non-residential spaces and a hotel. Thus, the Reduced Density Alternative 2 meets Objectives a through d.

3. GOAL: TRADITIONAL PEDESTRIAN-ORIENTED STREET PATTERN

a. *Objective*: Create a "grid-like" block pattern that effectively provides for compact development with reduced road widths to provide connectivity throughout the site.

b. *Objective*: Give precedence to pedestrians while keeping streets narrow to foster multimodal transportation with bicycle, pedestrian, and transit access.

The Reduced Density Alternative 2 meets this goal. The development anticipated under this Alternative is the same mix of land uses anticipated in the proposed Duarte Station Specific Plan. The design standards and design guidelines in the proposed Duarte Station Specific Plan are applicable to this Alternative, and would provide for the grid-like block pattern, connectivity to and throughout the site, and multimodal transportation options. Thus, the Reduced Density Alternative 2 meets Objectives a and b.

4. GOAL: SUPERIOR URBAN DESIGN

a. *Objective*: Allow for building types that will achieve desired density ranges to establish a critical mass of residents and employees to support the transit station, maximize transit ridership, and support retail spaces and local employment centers.

b. *Objective*: Minimize setbacks to allow buildings to frame and activate the street.

c. *Objective*: Use trees, shrubs and other landscape and hardscape materials along streets to provide shading, screening, and human scale.

d. *Objective*: Promote quality architectural design to establish a consistent contemporary design character that creates an identity in the Duarte Station Specific Plan area.

The Reduced Density Alternative 2 meets this goal. As noted previously, the development anticipated under this Alternative is the same mix of land uses anticipated in the proposed Duarte Station Specific Plan, although at a much reduced scale. Many of the development standards and design guidelines in the proposed Duarte Station Specific Plan would be applicable to this Alternative, and would be carried forward in the Specific Plan for this Alternative. Thus, the Reduced Density Alternative 2 meets Objectives a through d.

5. GOAL: OUTDOOR SPACES

a. *Objective*: Provide singular or multiple outdoor spaces, such as an urban green space or public plaza that provides a transition between the station and the surrounding transit village uses in order to provide a public gathering space.

b. *Objective*: Program outdoor space(s) to accommodate the needs of various user groups, such as residents, employees, commuters, and visitors.

The Reduced Density Alternative 2 meets this goal. The development anticipated under this Alternative is the same mix of land uses anticipated in the proposed Duarte Station Specific Plan, although at a much reduced scale. Thus, the Reduced Density Alternative 2 would provide for outdoor spaces, including urban green space or a public plaza, to serve as transition

areas between the Gold Line Station and the uses within and adjacent to the Plan Area. These outdoor spaces are intended to accommodate the various users of the Plan Area. Given that less development is anticipated, this Alternative has the potential to be creative in providing additional outdoor spaces than considered under the proposed Duarte Station Specific Plan. Thus, the Reduced Density Alternative 2 meets Objectives a and b.

6. GOAL: AWARENESS OF SURROUNDING DEVELOPMENT

a. *Objective*: Create a center that provides desired goods and services to surrounding residents, students, and employees within and surrounding the Duarte Station Specific Plan area.

b. *Objective*: Provide specific setbacks, height limitations, upper story step-backs, and landscape requirements to afford adjacent residences privacy and separation from larger buildings.

c. *Objective*: Consider the future needs of the City of Hope as part of land use planning.

The Reduced Density Alternative 2 meets this goal. The development anticipated under this Alternative is the same mix of land uses anticipated in the proposed Duarte Station Specific Plan, although at a much reduced scale. The design standards and design guidelines in the proposed Duarte Station Specific Plan are applicable to this Alternative to address setbacks, height limitations, upper story step-backs, and landscape requirements with respect to adjacent residences. In addition, this Alternative does create a center that provides a mix of good and services available to on-site residents or surrounding residents, students, or employees, along with providing housing, office, or hotel space to meet the City of Hope's future needs. Thus, the Reduced Density Alternative 2 meets Objectives a through c.

7. GOAL: SUSTAINABLE DEVELOPMENT PRACTICES

a. *Objective*: Identify the level of development proposed within the Specific Plan area, and adhere to Levels of Sustainable Development Practices as prescribed in Chapter 19.52 of the City's Development Code.

b. *Objective*: Ensure that construction and demolition waste is disposed of in accordance with all City regulations and standards.

c. *Objective*: Consider building layout, siting, and building design to not preclude alternative energy production on-site.

d. *Objective*: Maximize energy efficiency through local and state standards, indoor environmental quality, energy-efficient lighting, building orientation, shading, and implementation of LEED principles and/or attaining LEED Certification.

e. *Objective*: Reduce heat island effect through site planning and selection of landscape and hardscape materials.

f. *Objective*: Incorporate water-efficient design features such as permeable surfaces, collection devices, biofiltration devices, green rooftops, cisterns, berms and swales, and/or green rooftops.

g. *Objective*: Include climate-adapted landscape within the Specific Plan area.

The Reduced Density Alternative 2 meets this goal. A Specific Plan would be prepared for this Alternative and would include provisions to comply with Objectives a through g.

6.9 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

CEQA Guidelines Section 15126.6 requires that an EIR must identify an "environmentally superior" alternative and where the No Project Alternative is identified as environmentally superior, the EIR is then required to identify as environmentally superior an alternative from among the others evaluated.

As noted above, the determination of an environmentally superior alternative is based on the consideration of how the alternative fulfills the project objectives and how the alternative either reduces significant, unavoidable impacts or substantially reduces the impacts to the surrounding environment.

6.9.1 ALTERNATIVE ONE: EXISTING ZONING ALTERNATIVE

In comparison to the proposed project, the Existing Zoning Alternative results in fewer impacts relative to aesthetics, traffic, air quality, greenhouse gas emissions, noise, and public services and utilities. Greater impacts would be anticipated for land use, population and housing, and hydrology, drainage, and water quality. All significant unavoidable impacts related to shade/shadow, traffic, air quality, and noise impacts would be eliminated with this Alternative.

The Existing Zoning would not implement the overarching goals of the proposed project to provide a mixture of land use, an economically feasible development, traditional pedestrian-oriented street pattern, superior urban design, outdoor spaces, awareness of surrounding development, or sustainable development practices. Therefore, none of the project goals and objectives would be met under the Existing Zoning Alternative.

6.9.2 ALTERNATIVE TWO: ALL RESIDENTIAL ALTERNATIVE

In comparison to the proposed project, the All Residential Alternative would result in similar impacts relative to air quality; noise; and hydrology, drainage, and water quality. The All Residential Alternative results in fewer impacts to aesthetics, traffic, greenhouse gas emissions, hazardous materials; and public services and utilities. Greater impacts would be anticipated for land use and population and housing. All significant unavoidable impacts related to shade/shadow impacts would be eliminated with this Alternative, while significant unavoidable impacts related to traffic, air quality, and nose would be reduced.

The All Residential Alternative meets Goals 3, 5, and 7; partially meets Goals 2, 4, and 6, and does not meet Goal 1.

6.9.3 ALTERNATIVE THREE: REDUCED DENSITY ALTERNATIVE 1

In comparison to the proposed project, the Reduced Density Alternative 1 would result in similar impacts relative to land use; aesthetics; population and housing; air quality; noise; hazardous materials; hydrology, drainage, and water quality; and public services and utilities. The Reduced Density Alternative 1 results in fewer impacts to traffic and greenhouse gas emissions. All significant unavoidable impacts related to shade/shadow, traffic, air quality, and noise would be reduced, but not eliminated.

The development anticipated under the Reduced Density Alternative 1 is the same mix of land uses anticipated in the proposed Duarte Station Specific Plan, although with less residential units and non-residential square footage. The Reduced Density Alternative 1 meets Goals 1 through 7.

6.9.4 ALTERNATIVE FOUR: REDUCED DENSITY ALTERNATIVE 2

In comparison to the proposed project, the Reduced Density Alternative 2 would result in similar impacts relative to land use; aesthetics; population and housing; air quality; hazardous materials; and hydrology, drainage, and water quality. The Reduced Density Alternative 2 results in fewer impacts to traffic, greenhouse gas emissions, noise, and public services and utilities. All significant unavoidable impacts related to shade/shadow, air quality, and noise would be reduced, while significant unavoidable impacts related to traffic would be eliminated.

The development anticipated under the Reduced Density Alternative 2 is the same mix of land uses anticipated in the proposed Duarte Station Specific Plan, although with much less residential units and non-residential square footage. The Reduced Density Alternative 2 meets Goals 3 through 7, and generally meets Goals 1 and 2.

6.9.5 ENVIRONMENTALLY SUPERIOR ALTERNATIVE

As noted above, the determination of an environmentally superior alternative is based on the consideration of how the alternative fulfills the project objectives and how the alternative either reduces significant, unavoidable impacts or substantially reduces the impacts to the surrounding environment. In consideration of these factors, Alternative Four: Reduced Density Alternative 2 is selected as the Environmentally Superior Alternative to the proposed project.

Table 6-2, *Comparison of Alternatives*, provides an overview of the alternatives analyzed and a comparison of each alternative's impact in relation to the proposed action.

Table 6-2
Comparison of Alternatives

Impact Area	Alterative One: Existing Zoning Alternative	Alternative Two: All Residential Alternative	Alternative Three: Reduced Density Alternative 1	Alternative Four: Reduced Density Alternative 2
Land Use	○	○	=	=
Aesthetics	◆	◆	=	=
Reduces Significant Unavoidable Impact?	Yes	Yes	Yes	Yes
Eliminates Significant Unavoidable Impact?	Yes	Yes	No	No
Population and Housing	○	○	=	=
Traffic	◆	◆	◆	◆
Reduces Significant Unavoidable Impact?	Yes	Yes	Yes	Yes
Eliminates Significant Unavoidable Impact?	Yes	No	No	No
Air Quality	◆	=	=	=
Reduces Significant Unavoidable Impact?	Yes	Yes	Yes	Yes
Eliminates Significant Unavoidable Impact?	Yes	No	No	No
Greenhouse Gas Emissions	◆	◆	◆	◆
Noise	◆	=	=	◆
Reduces Significant Unavoidable Impact?	Yes	Yes	Yes	Yes
Eliminates Significant Unavoidable Impact?	Yes	No	No	Yes
Hazardous Materials	○	◆	=	=
Hydrology, Drainage, and Water Quality	○	=	=	=
Public Services and Utilities	◆	◆	=	◆

= Indicates an impact that is equal to the proposed project (neither environmentally superior nor inferior).
○ Indicates an impact that is greater than the proposed project (environmentally inferior).
◆ Indicates an impact that is less than the proposed project (environmentally superior).

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SECTION 7.0
Other CEQA Considerations

7.0 OTHER CEQA CONSIDERATIONS

7.1 GROWTH-INDUCING IMPACTS

CEQA Guidelines Section 15126(d) requires that an EIR "discuss the ways in which the proposed project could foster economic or population growth, or the construction of additional housing, either directly or indirectly, in the surrounding environment." The *CEQA Guidelines* also indicate that it must not be assumed that growth in any area is necessarily beneficial, detrimental, or of little significance to the environment. This section analyzes potential growth-inducing impacts, based on the criteria outlined below, as suggested in the *CEQA Guidelines*. In general terms, a project may foster spatial, economic, or population growth in a geographic area, if it meets any one of the following criteria:

- Removal of an impediment to growth (e.g., establishment of an essential public service and provision of new access to an area);
- Fostering of economic expansion or growth (e.g., changes in revenue base and employment expansion);
- Fostering of population growth (e.g., construction of additional housing or employment-generating land uses), either directly or indirectly;
- Establishment of a precedent-setting action (e.g., an innovation, a change in zoning and general plan amendment approval); or
- Development of or encroachment on an isolated or adjacent area of open space (being distinct from an in-fill project).

Should a project meet any one of the above-listed criteria, it may be considered growth inducing. The proposed project's potential growth-inducing impacts are evaluated below against these criteria.

It is noted that the *CEQA Guidelines* require an EIR to "discuss the ways" a project could be growth-inducing and to "discuss the characteristics of some projects that may encourage…activities that could significantly affect the environment." However, the *CEQA Guidelines* do not require that an EIR predict (or speculate) specifically where such growth would occur, in what form it would occur, or when it would occur. The answers to such questions require speculation, which CEQA discourages; refer to *CEQA Guidelines* Section 15145, Speculation.

IMPACT ANALYSIS

The project proposes a Specific Plan to allow for the development of Mixed Use, Station Plaza Mixed Use, High Density Residential, and Recreation/Open Space uses within the project site.

Removal of an Impediment to Growth

The new land uses anticipated by the proposed project would occur as infill development on a currently developed property. The proposed project does not involve development that would

establish a new essential public service or utility/service system. The proposed Specific Plan area is already served by essential public services (i.e., fire and police protection, parks and recreational facilities, schools, and solid waste disposal); an extensive network of utility/service systems (i.e., water, wastewater, electricity, and natural gas); and other infrastructure necessary to accommodate or allow the existing conditions and planned growth. The existing public services and utility/service systems can be readily upgraded and/or extended into the Specific Plan area. The increased demands for public services and utility/service systems would not significantly reduce or impair any existing or future levels of services, either locally or regionally, as concluded in Sections 5.10 through 5.17. Project implementation would not require substantial development of unplanned or unforeseen public services and utility/service systems. Therefore, project implementation would not remove an impediment to growth/foster spatial growth through establishment of an essential public service or expansion to a new area.

Although, project implementation would facilitate the installation and construction of transportation improvements necessary to carry out the Specific Plan, as discussed in detail in Section 5.4, Traffic, these improvements would not provide new access to an area, since access is already provided by an existing roadway network. Therefore, project implementation would not remove an impediment to growth/foster spatial growth through the provision of new access to an area.

Economic Expansion/Growth

As indicated in *Table 5.3-9*, *Project Compared to Existing Conditions* in Section 5.3, Population and Housing, the proposed project could increase the City's existing population by approximately 6.6 percent or 1,430 persons. The projected population growth is anticipated to increase sales taxes, with resultant increases in the City's revenue base. Additionally, the proposed project would increase the City's existing non-residential floor area by approximately 98,045 square feet and employment by approximately 25.4 percent (1,640 new jobs); refer to *Tables 5.3-8* and *5.3-9*. The projected growth in non-residential floor area and employment would foster economic expansion and increase the City's revenue base through increases the City's business license tax, utility user taxes, property taxes, and sales taxes. Therefore, the proposed project is considered growth inducing with respect to economic expansion.

Population, Housing, and Employment Growth

Section 5.3, Population and Housing, identifies the existing population, housing, and employment for the County of Los Angeles (County) and City of Duarte (City), and provides an analysis of potential housing and population impacts that may result from project implementation.

A project could induce 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). The proposed project's employment growth could result in population growth within the City, as the potential exists that future employees (and their families) would choose to relocate to the City. As concluded in Section 5.3, project implementation could increase the City's population by approximately 722 persons through new employment, or approximately 3.4 percent over existing conditions; refer to *Table 5.3-9*, *Project Compared to Existing Conditions*. This potential population growth is considered less than significant in a local context, since it is anticipated that significantly fewer than 240 of the proposed project's future employees would chose to relocate to Duarte, based upon the housing opportunities that exist in surrounding

communities that would be available to the future employees; the approximately 700 unemployed persons who already reside locally and who can (in part) fill the jobs created by the proposed project; and 100 percent occupancy of the City's housing is not likely; refer to Section 5.3 for a detailed discussion. The forecast population growth would occur over an approximately 20-year period, allowing for development of necessary services and infrastructure commensurate with the anticipated growth. Finally, as concluded above, the substantial development of unplanned or unforeseen public services and utility/service systems would not be required.

Potential growth inducing impacts are also assessed based on a project's consistency with regional growth forecasts. SCAG is the responsible agency for developing and adopting regional growth forecasts for Los Angeles County governments, among others. SCAG provides forecasts for 2020 and 2035. Buildout of the proposed project is anticipated to occur by 2035. *Table 7-1*, *Project Comparison to SCAG Growth Forecasts*, includes SCAG's population, household, and employment forecasts for the City for 2035.

Table 7-1
Project Comparison to SCAG Growth Forecasts

Description	Housing (Dwelling Units)	Households (Occupied Dwelling Units)	Population (Persons)	Employment (Jobs)
Project				
Existing + Project Conditions[1]	7,746	7,505	22,984	8,094
SCAG Growth Forecasts For Duarte				
2035 Forecasts	8,170	7,900	23,400	7,300
Existing + Project /SCAG 2035 Difference	*-424*	*-395*	*-416*	*+794*
Existing + Project /SCAG 2035 % Difference	*-5.5%*	*-5.3%*	*-1.8%*	*+9.8%*

Notes:
1. Refer to Table 5.3-9, *Project Compared to Existing Conditions*.
2. Southern California Association of Governments, *Adopted 2012 RTP Growth Forecast*, http://www.scag.ca.gov/forecast/index.htm, accessed May 17, 2013.

As indicated in *Table 7-1*, the City's households are forecast to total 7,900 by 2035, with a resultant population of approximately 23,400 persons. *Table 7-1* also compares the population and households under Existing Plus Project conditions with SCAG's 2035 growth forecasts for the City. Although the proposed project would contribute to the growth anticipated by SCAG, project implementation would not cause SCAG's 2035 household and population forecasts for the City to be exceeded. Thus, the proposed project would not conflict with SCAG's population and household forecasts for the City.

As indicated in *Table 7-1*, the City's employment is forecast to total 7,300 by 2035. *Table 7-1* also compares the employment under Existing Plus Project conditions with SCAG's 2035 growth forecasts for the City. Project implementation could potentially cause SCAG's 2035 employment forecasts for the City to be exceeded by approximately 10 percent.

At the regional level, the emphasis has been placed primarily on achieving a balance of employment and housing opportunities within the subregions. This regional concept, referred to as jobs/housing balance, encourages the designation and zoning of sufficient vacant land for

residential uses with appropriate standards to ensure adequate housing is available to serve the needs derived from the local employment base. The jobs/housing ratio can be used as the general measure of balance between a community's employment opportunities and the housing needs of its residents. A rate of 1.0 or greater generally indicates that a City provides adequate employment opportunities, potentially allowing its residents to work within the City. A desirable jobs/housing balance improves regional mobility (traffic), reduces vehicle miles traveled, and improves air quality. Conversely, imbalance between a City's jobs and housing increases commutes, with resultant increases in traffic volumes and air emissions, and overall reduces the quality of life.

The City's current jobs/housing ratio (2012) is approximately 0.90, indicating employment opportunities for residents to work within the City are not readily available. With project implementation, the City's jobs/housing ratio would be approximately 1.04. Therefore, project implementation would improve the jobs/housing balance within the City, providing increased employment opportunities for residents. Thus, the forecast employment growth attributed to the proposed project is not considered significant in a regional context.

Precedent-Setting Action

The proposed project would require a General Plan Amendment (text changes to the Land Use Element relative to the Gold Line Station Area Development) and adoption of a Specific Plan/Zone Change to allow implementation of the proposed Specific Plan. However, given that the Specific Plan's proposed Master Land Use Plan and development regulations would apply only within the Specific Plan area, the proposed project would not be considered growth inducing with respect to a precedent-setting action.

Development or Encroachment of Open Space

The proposed project is considered an infill development, as the site has been previously disturbed and is surrounded by urbanized uses. Therefore, the proposed project would not be growth-inducing with respect to development or encroachment into an isolated or adjacent area of open space.

Overall, project implementation would not be considered growth inducing, as it would not: remove an impediment to growth; foster substantial population or housing growth; establish a precedent-setting action; or develop or encroach on an isolated or adjacent area of open space. The project would be considered growth inducing with respect to fostering employment growth through construction of additional employment-generating land uses. Although project implementation could cause SCAG's 2035 employment forecast for the City to be exceeded, additional employment-generating uses would provide employment opportunities to residents, resulting in an improved jobs/housing balance within the City. Therefore, the employment growth attributed to the proposed project is considered less than significant in a regional context. Additionally, the employment growth attributed to the project is considered beneficial to both the City and region, given the current unemployment rate of 9.3 percent in Los Angeles County.

7.2 ENERGY CONSERVATION

Public Resources Code Section 21100(b)(3) and *CEQA Guidelines* Appendix F require a description, where relevant, of the wasteful, inefficient, and unnecessary consumption of energy caused by a project. In 1975, the California State Legislature adopted Assembly Bill 1575 (AB 1575) in response to the oil crisis of the 1970s. *CEQA Guidelines* Appendix F provides guidance for assessing potential impacts that a project could have on energy supplies, focusing on the goal of conserving energy by ensuring that projects use energy wisely and efficiently. Because Appendix F does not include specific significance criteria, this threshold is based on the goal of Appendix F. Therefore, an energy impact is considered significant if the proposed project would:

> *Develop land uses and patterns that cause wasteful, inefficient, and unnecessary consumption of energy or construct new or retrofitted buildings that would have excessive energy requirements for daily operation.*

7.2.1 PROJECT ENERGY CONSUMPTION

SHORT-TERM CONSTRUCTION

In 1994, the United States Environmental Protection Agency (U.S. EPA) adopted the first set of emission standards (Tier 1) for all new off-road diesel engines greater than 37 kilowatts (kW). The Tier 1 standards were phased in for different engine sizes between 1996 and 2000, reducing NO_X emissions from these engines by 30 percent. The U.S. EPA Tier 2 and Tier 3 standards for off-road diesel engines are projected to further reduce emissions by 60 percent for NO_X and 40 percent for particulate matter from Tier 1 emission levels. In 2004, the U.S. EPA issued the Clean Air Non-road Diesel Rule. This rule will cut emissions from off-road diesel engines by more than 90 percent, and will be fully phased in by 2014.

Based upon market conditions, the proposed project is expected to be constructed in phases generally over several years. *Table 7-2*, *Construction Fuel Consumption*, provides an estimate of construction fuel consumption based on information provided by the CalEEMod air quality computer model; refer to Appendix E, Air Quality/Greenhouse Gas Data. As shown in *Table 7-2*, construction of the proposed project would consume a total amount of approximately 57,388 gallons of fuel. There are no unusual project characteristics that would necessitate the use of construction equipment that would be less energy-efficient than at comparable construction sites in the region or State. Additionally, Mitigation Measure AQ-4 requires the proposed project maintain construction equipment in proper tune to ensure equipment efficiency. Additionally, all diesel-fueled construction vehicles would be required to meet the latest emissions standards. Therefore, it is expected that construction fuel consumption associated with the proposed project would not be any more inefficient, wasteful, or unnecessary than other similar development projects of this nature.

Table 7-2
Construction Fuel Consumption

Equipment	Quantity	Horsepower	Load Factor	Fuel Consumption Rate[1] (gallons per hour)	Duration[2] (total hours)	Total Fuel Consumption[3,4] (gallons)
Air Compressor	1	78	0.48	1.50	960	1,440
Concrete/Industrial Saws	1	81	0.73	2.37	240	569
Crane	1	226	0.29	2.62	3,080	8,070
Excavators	5	162	0.38	2.46	1,440	3,542
Forklifts	3	89	0.20	0.71	10,560	7,498
Generator Set	1	84	0.74	2.49	3,520	8,765
Grader	1	174	0.41	2.85	360	1,026
Pavers	2	125	0.42	2.10	560	1,176
Paving Equipment	2	130	0.36	1.87	560	1,047
Rollers	2	80	0.38	1.22	560	683
Rubber Tired Dozers	6	255	0.40	4.08	1,320	5386
Tractors/Loaders/Backhoes	9	97	0.37	1.44	10,600	15,264
Welder	1	46	0.45	0.83	3,520	2,922
					TOTAL[4]	***57,388***

Notes:
1 – Derived using the following equation:
Fuel Consumption Rate = Horsepower x Load Factor x Fuel Consumption Factor
Where:
Fuel Consumption Factor for a diesel engine is 0.04 gallons per horsepower per hour (gal/hp/hr) and a gasoline engine is 0.06 gal/hp/hr.
2 – Total hours of duration derived from CalEEMod modeling results; refer to Appendix E, *Air Quality/Greenhouse Gas Data*.
3 – Total Fuel Consumption calculated using the following equation:
Total Fuel Consumption = Duration in Hours x Fuel Consumption Rate
4 - Values may be slightly off due to rounding.

Source: Refer to Appendix E, Air Quality/Greenhouse Gas Data, for CalEEMod assumptions used in this analysis.

LONG-TERM OPERATIONS

Transportation Energy Demand

Pursuant to the Federal Energy Policy and Conservation Act of 1975, the National Highway Traffic and Safety Administration (NTSA) is responsible for establishing additional vehicle standards and for revising existing standards. Since 1990, the fuel economy standard for new passenger cars has been 27.5 miles per gallon (mpg). Since 1996, the fuel economy standard for new light trucks (gross vehicle weight of 8,500 pounds or less) has been 20.7 mpg. Heavy-duty vehicles (i.e., vehicles and trucks over 8,500 pounds gross vehicle weight) are not currently subject to fuel economy standards. Compliance with Federal fuel economy standards is not determined for each individual vehicle model. Rather, compliance is determined based on each manufacturer's average fuel economy for the portion of their vehicles produced for sale in the United States.

Trip generation rates and the daily vehicle miles traveled (VMT) provided in Appendix E, Air Quality/Greenhouse Gas Data, were used to estimate vehicle fuel consumption associated with trips generated by the proposed project. Table 7-3, *Project Operational Fuel Consumption*,

provides an estimate of the daily fuel consumed by vehicles traveling to and from the proposed project.

Table 7-3
Operations Fuel Consumption

Vehicle Type	Percent of Vehicle Miles Traveled[1]	Daily Trips[2]	Daily Vehicle Miles Traveled[3]	Average Fuel Economy (miles per gallon)[4]	Total Daily Fuel Consumption (gallons)[5]
Passenger Cars	82	5,953	16,484	21.6	763
Light/Medium Trucks	14	1,016	2,814	17.2	164
Heavy Trucks/Other	4	290	804	6.1	132
Total	***100***	***7,259***	***20,102***	**--**	***1,059***

Notes:
1. Percent of Vehicle Miles Traveled distribution based on trip characteristics within the CalEEMod model.
2. Daily Trips calculated by multiplying the total daily trips by percent vehicle trips (i.e., Daily Trips x percent of Vehicle Trips).
3. Daily Vehicle Miles Traveled (VMT) calculated by multiplying percent vehicle trips by total VMT (i.e., VMT x percent of Vehicle Trips).
4. Average fuel economy derived from the Department of Transportation.
5. Total Daily Fuel Consumption calculated by dividing the daily VMT by the average fuel economy (i.e., VMT/Average Fuel Economy).
6. Values may be slightly off due to rounding.
7. Based upon data within the *Duarte Station Specific Plan Traffic Impact Analysis, prepared by RBF Consulting, dated 29, 2013, dated; refer to* Appendix D, Traffic Impact Analysis.
8. Total VMT are the reduced VMT (from project design features) obtained from the CalEEMod model.

As indicated in Table 7-3, the operation of the proposed project is estimated to consume approximately 1,059 gallons of fuel daily. However, the proposed project would not result in any unusual characteristics that would result in excessive long-term operational fuel consumption. The proposed project is a transit oriented development and includes a light rail station and a mix of commercial, retail, hotel, and residential uses that would inherently reduce vehicle trips, vehicle miles traveled, and related GHG emissions. Fuel consumption associated with vehicle trips generated by the proposed project would not be considered inefficient, wasteful, or unnecessary in comparison to other similar industrial facilities in the region.

Other Non-Motorized Transportation Options

The project site is served by bus transit lines operated by the City, Foothill Transit and Metro, along various roadways surrounding the project site including Huntington Drive, Buena Vista Street, Duarte Road, Highland Avenue, and Evergreen Street. Foothill Transit Line 272 provides service between the cities of Duarte, Baldwin Park, and West Covina and stops at City of Hope Medical Center while traveling along Duarte Road and Highland Avenue within the vicinity of the project site. In addition, Metro Line 264 provides service between the cities of Altadena, Pasadena (Sierra Madre Station), Arcadia and Duarte, including a stop at the City of Hope, traveling along Duarte Road, Highland Avenue, Evergreen Street, Business Center Drive, and Denning Avenue within the project area. The Metro Gold Line Foothill Extension is currently under construction. Upon completion, the Gold Line will extend from Pasadena to Azusa, with a stop at the Duarte Station, located adjacent to the project site. Metro will integrate the Metro Gold Line Foothill Extension into existing Metro Rail service and operate the line upon construction completion. Metro riders will be able to connect with Metro Rail and Bus lines, Metrolink commuter rail lines, and other regional transportation services at Union Station. Therefore, the project site would reduce the number of employee and visitor trips to and from

the project. The proposed project would not result in the inefficient, wasteful, or unnecessary consumption of transportation energy.

Building Energy Demand

The proposed project would be expected to demand approximately 6.2 million net kilowatt hours (kWh) of electricity per year and approximately net 14.75 million British Thermal units (BTU) of natural gas per month. These figures were obtained from Appendix E, Air Quality/Greenhouse Gas Data.

The proposed project would involve operations typical of retail, office, hotel and residential uses, requiring electricity and natural for typical lighting, climate control, and day-to-day activities. Additionally, as stated in Section 5.5, Air Quality, and Section 5.6, Greenhouse Gas Emissions, the proposed Duarte Station Specific Plan incorporates several goals and objectives for sustainable development practices, including adherence to the City's *Development Code* on Levels of Sustainable Development Practices and City regulations and standards on construction and demolition waste disposal. Other objectives include considering building layout, siting and design to not preclude alternative energy production on-site, maximizing energy efficiency through local and state standards and LEED principles. Therefore, the proposed project would not be considered inefficient, wasteful, or unnecessary in comparison to other similar industrial warehousing facilities in the region.

Energy Efficiency Measures

Title 24, California's Energy Efficiency Standards for Residential and Non-residential Buildings, was established by the CEC in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption, and provide energy efficiency standards for residential and non-residential buildings. In 2010, the CEC updated *Title 24* standards with more stringent requirements. The 2010 Standards are expected to substantially reduce the growth in electricity and natural gas use. Additional savings result from the application of the Standards on building alterations. For example, requirements for cool roofs, lighting, and air distribution ducts are expected to save about additional of electricity. These savings are cumulative, doubling as years go by.

In addition to energy efficiency measures required by *Title 24*, the City also adopted an Energy Action Plan on November 13, 2012, created in partnership with the San Gabriel Valley Council of Governments (SGVCOG) and Southern California Edison (SCE). The Plan provides the City guidance in following the California's Long Term Energy Efficiency Strategic Plan (CEESP) by ascertaining existing and future energy use and develops an energy efficiency strategy to meet future energy reduction goals. As the Plan is a part of a unified regional framework, it also assists in identifying a clear path to successfully implementing actions, policies, and goals that will achieve the City's reduction targets. Energy efficiency targets that would be incorporated as part of the Energy Action Plan include, but are not limited to:

- Reduce household electricity consumption 20 percent by 2020
- Reduce electricity use 10 percent by 2020
- Move toward net zero electricity use in new buildings by 2020
- Achieve Platinum Level Status in SCE's Energy Leader Partnership Model

The proposed project would adhere to all Federal, State, and local requirements for energy efficiency. The proposed project would not result in the inefficient, wasteful, or unnecessary consumption of building energy.

7.3 SIGNIFICANT IRREVERSIBLE ENVIRONMENTAL CHANGES THAT WOULD BE INVOLVED IN THE PROPOSED ACTION SHOULD IT BE IMPLEMENTED

According to *CEQA Guidelines* Sections 15126(c) and 15126.2(c), an EIR is required to address any significant irreversible environmental changes that would occur should the proposed Project be implemented. As stated in *CEQA Guidelines* Section 15126.2(c):

> *"[uses of nonrenewable resources during the initial and continued phases of the project may be irreversible since a large commitment of such resources makes removal or nonuse thereafter likely, primary impacts and, particularly, secondary impacts [such as highway improvement which provides access to a previously inaccessible area] generally commit future generations to similar uses. Also, irreversible damage can result from environmental accidents associated with the project. Irretrievable commitments of resources should be evaluated to assure that such current consumption is justified."*

The proposed project would consume limited, slowly renewable and non-renewable resources. This consumption would occur during the proposed project's construction phase and would continue throughout its operational lifetime. Future development associated with implementation of the proposed project would require a commitment of resources that would include: 1) building materials, 2) fuel and operational materials/resources, and 3) the transportation of goods and people to and from the project site. Future construction associated with implementation of the proposed project would require the consumption of resources that are not replenishable or which may renew so slowly as to be considered non-renewable. These resources would include the following construction supplies: lumber and other forest products; aggregate materials used in concrete and asphalt; metals; and water. Fossil fuels such as gasoline and oil would also be consumed to power construction vehicles and equipment.

The resources that would be committed during full operation of the proposed Specific Plan would be similar to those currently consumed within the City of Duarte. These would include energy resources such as electricity and natural gas, petroleum-based fuels required for vehicle-trips, fossil fuels, and water. Fossil fuels would represent the primary energy source associated with both construction and ongoing operation of the project, and the existing, finite supplies of these natural resources would be incrementally reduced. Full operation of the proposed Specific Plan would occur in accordance with *Title 24*, Part 6 of the *California Code of Regulations*, which sets forth conservation practices that would limit the amount of energy consumed by the project. However, the proposed project's energy requirements would, nonetheless, represent a long-term commitment of essentially non-renewable resources.

Limited use of potentially hazardous materials typical of commercial and office uses, including vehicle maintenance materials, could be used and stored on the project site. The use of these materials would be in small quantities and used, handled, stored, and disposed of in accordance

with the manufacturer's instructions and applicable government regulations and standards. Compliance with these regulations and standards would serve to protect against significant and irreversible environmental change resulting from the accidental release of hazardous materials. In addition, demolition activities would comply with regulatory requirements to ensure that asbestos and lead-based paints are not released into the environment. Compliance with such regulations would serve to protect against a significant and irreversible environmental change resulting from the accidental release of hazardous materials.

In summary, development associated with implementation of the proposed project, both construction and operation, would result in the irretrievable commitment of limited, slowly renewable, and nonrenewable resources, which would limit the availability of these particular resource quantities for future generations or for other uses during the life of the project. However, continued use of such resources would be on a relatively small scale in a regional context. As such, although irreversible environmental changes would result from project implementation, such changes would not be considered significant.

SECTION 8.0
Effects Found Not To Be Significant

8.0 EFFECTS FOUND NOT TO BE SIGNIFICANT

The City of Duarte conducted an Initial Study in April 2013 to determine significant effects of the proposed project. In the course of this evaluation, certain impacts of the project were found to be less than significant due to the inability of a project of this scope to create such impacts or the absence of project characteristics producing effects of this type. The effects determined not to be significant are not required to be included in primary analysis sections of the Draft EIR. In accordance with *CEQA Guidelines* Section 15128, the following section identifies those impacts determined to be less than significant in the Initial Study. A copy of the Initial Study and the explanation for the less than significant conclusions of the following environmental issue areas are included in Appendix A, Initial Study/Notice of Preparation. This section also summarizes which impacts were found to be less than significant in the EIR, both with and without the imposition of mitigation measures.

8.1 INITIAL STUDY CONCLUSIONS

AESTHETICS

- 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.

AGRICULTURAL AND FORESTRY RESOURCES

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

BIOLOGICAL RESOURCES

- 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.

- Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations or by the California Department of Fish and Game or U.S. Fish and Wildlife Service.

- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means.

- Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites.

- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

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

CULTURAL RESOURCES

- Cause a substantial adverse change in the significance of a historical resource as defined in CEQA Guidelines §15064.5.

- Cause a substantial adverse change in the significance of an archaeological resource pursuant to CEQA Guidelines §15064.5.

- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature.

- Disturb any human remains, including those interred outside of formal cemeteries.

GEOLOGY AND SOILS

- 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? Refer to Division of Mines and Geology Special Publication 42.

    - Strong seismic ground shaking.

    - Seismic-related ground failure, including liquefaction.

    - Landslides.

- Result in substantial soil erosion or the loss of topsoil.

- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in an on-site or off-site landslide, lateral spreading, subsidence, liquefaction or collapse.

- Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property.

- Have soils incapable of adequately supporting the use of septic tanks or alternative waste water disposal systems where sewers are not available for the disposal of waste water.

HAZARDS AND HAZARDOUS MATERIALS

- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school.

- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area.

- 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 area.

- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan.

- 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.

HYDROLOGY AND WATER QUALITY

- Place housing within a 100-year flood hazard area as mapped on a federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map.

- Place within a 100-year flood hazard area structures which would impede or redirect flood flows.

- Expose people or structures to a significant risk of loss, injury or death involving flooding, including flooding as a result of the failure of a levee or dam.

- Inundation by seiche, tsunami, or mudflow.

LAND USE AND PLANNING

- Physically divide an established community.

- Conflict with any applicable habitat conservation plan or natural community conservation plan.

MINERAL RESOURCES

- 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.

- 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.

NOISE

- For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels.

- 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.

POPULATION AND HOUSING

- Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere.

- Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere.

TRANSPORTATION/TRAFFIC

- 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.

- Result in inadequate emergency access.

MANDATORY FINDINGS OF SIGNIFICANCE

- Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory.

8.2 EIR CONCLUSIONS

8.2.1 NO IMPACTS OR LESS THAN SIGNIFICANT IMPACTS

LAND USE

Implementation of the proposed project could conflict with SCAG'S 2012 RTP/SCS goals and adopted growth forecasts.

Implementation of the proposed project could conflict with a Duarte General Plan land use plan or policy.

Implementation of the proposed project could conflict with the Duarte Municipal Code standards and regulations.

Development associated with implementation of the proposed project and other related cumulative projects could conflict with applicable land use plans, policies, or regulations.

POPULATION AND HOUSING

Implementation of the proposed project could induce substantial population growth in the City.

Development associated with implementation of the proposed project and other related cumulative projects could induce substantial population and housing growth in the area.

TRAFFIC

Implementation of the proposed project could result in a hazardous traffic condition associated with queuing at the State-controlled study intersection off-ramps.

Implementation of the proposed project could result in a decrease of the performance or safety of public transit, bicycle, or pedestrian facilities as a result of a conflict with adopted policies, plans, or programs.

AIR QUALITY

Implementation of the proposed project could facilitate the construction of new land uses that could generate dust and equipment emissions – NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$ emissions.

Development associated with implementation of the proposed project could result in localized emissions impacts or expose sensitive receptors to substantial pollutant concentrations.

Construction and operation associated with the proposed project could create objectional odors affecting a substantial number of people

Development associated with implementation of the proposed project and other related cumulative projects could result in significant impacts pertaining to operational air emissions - NO_X, CO, SO_X, PM_{10}, and $PM_{2.5}$ emissions.

GREENHOUSE GAS EMISSIONS

Greenhouse gas emissions generated by development associated with implementation of the proposed project could have a significant impact on global climate change.

Implementation of the proposed project could conflict with an applicable greenhouse gas reduction plan, policy, or regulation.

Greenhouse gas emissions generated by implementation of the proposed project and other related cumulative projects could have a significant impact on global climate change.

NOISE

Implementation of the proposed project could result in significant vibration impacts to nearby sensitive receptors.

Traffic generated by the proposed project could significantly contribute to existing traffic noise in the area or exceed the City's established standards.

Development associated with implementation of the proposed project and other related cumulative projects could result in cumulatively considerable long-term noise impacts.

HAZARDS AND HAZARDOUS MATERIALS

Development associated with implementation of the proposed project site could be located on a hazardous materials site per Government Code Section 65962.5 and could create a significant hazard to the public or the environment.

HYDROLOGY, DRAINAGE, AND WATER QUALITY

Implementation of the proposed project could result in the depletion of groundwater supplies or interference with groundwater recharge.

POLICE PROTECTION

Implementation of the proposed project could result in impacts to police services.

Development associated with implementation of the proposed project and other related cumulative projects could result in cumulatively considerable impacts to police services.

PARKS

Implementation of the proposed project could increase the use of existing parks and recreational facilities creating the potential for physical deterioration of facilities.

Development associated with implementation of the proposed project and other related cumulative projects could result in cumulatively considerable impacts to parks and recreation facilities in the City.

WATER

Implementation of the proposed project could create demand for water that exceeds available water supplies from existing entitlements and resources.

SOLID WASTE

Implementation of the proposed project would generate solid waste that could incrementally decrease the capacity and lifespan of landfills.

Development associated with implementation of the proposed project and other related cumulative development could result in cumulatively considerable impacts related to solid waste disposal services and landfill capacity.

ELECTRICITY AND NATURAL GAS

Implementation of the proposed project could increase the demand for electrical service or could require the expansion of existing facilities.

Implementation of the proposed project could increase the demand for natural gas or could require the expansion of existing facilities.

Implementation of the proposed project and other related cumulative projects could result in cumulatively considerable impacts related to electrical and/or natural gas services and facilities.

8.2.2 LESS THAN SIGNIFICANT IMPACTS WITH MITIGATION INCORPORATED

AESTHETICS

Construction activities associated with implementation of the proposed project could result in significant impacts related to temporary degradation of the visual character/quality of the site and its surroundings.

Implementation of the proposed project could result in significant impacts related to the long-term degradation of the visual character/quality of the site and its surroundings – visual character/quality.

Implementation of the proposed project could create a new source of light and/or glare, which could affect daytime and/or nighttime views in the area.

Development associated with implementation of the proposed project along with other cumulative projects could result in cumulatively considerable aesthetics impacts.

TRAFFIC

Implementation of the proposed project could cause a significant increase in traffic at local study intersections under forecast year 2020 conditions when compared to the traffic capacity of the

street system – except for Buena Vista Street/Three Ranch Road and Highland Avenue/Evergreen Street.

Implementation of the proposed project could cause a significant increase in traffic at State-controlled study intersections under forecast year 2020 conditions when compared to the traffic capacity of the street system.

Implementation of the proposed project could result in a hazardous traffic condition associated with neighborhood pass-through traffic.

Development associated with implementation of the proposed project and other related cumulative projects could result in cumulatively considerable impacts related to traffic and circulation – except for Buena Vista Street/Three Ranch Road and Highland Avenue/Evergreen Street.

AIR QUALITY

Short-term construction activities associated with implementation of the proposed project could result in air pollutant emission impacts or expose sensitive receptors to substantial pollutant concentrations.

Implementation of the proposed project could facilitate the construction of new land uses that could generate dust and equipment emissions – ROG emissions.

Implementation of the proposed project could conflict with or obstruct implementation of the applicable air quality plan - all other pollutant criterion emissions except ROG.

Short-term construction activities associated with implementation of the proposed project and other related cumulative projects could result in air pollutant emission impacts or expose sensitive receptors to substantial pollutant concentrations.

NOISE

Implementation of the proposed project could result in a significant increase in long-term stationary ambient noise levels.

Development associated with implementation of the proposed project and other related cumulative projects could result in significant short-term noise impacts to nearby noise sensitive receivers.

HAZARDS AND HAZARDOUS MATERIALS

Short-term construction activities associated with implementation of the proposed project could create a significant hazard to the public or environment through accident conditions involving the release of hazardous materials.

Implementation of the proposed project could create a significant hazard during use operations to the public or environment through the handling, storage, and/or use of hazardous materials, as well as accident conditions involving the release of hazardous materials.

Development associated with implementation of the proposed project and other related cumulative projects could increase the exposure of hazardous substances to the public or the environment.

HYDROLOGY, DRAINAGE, AND WATER QUALITY

Grading, excavation, and construction activities associated with implementation of the proposed project could significantly impact water quality.

Implementation of the proposed project could result in significant impacts related to increased run-off amounts and degraded water quality.

Implementation of the proposed project along with other related cumulative projects could result in cumulatively considerable impacts related to increased runoff and degraded water quality.

FIRE PROTECTION

Implementation of the proposed project could result in impacts to fire services.

Development associated with implementation of the proposed project and other related cumulative projects could result in cumulatively considerable impacts to fire services.

SCHOOLS

Implementation Of The Proposed Project Could Result In Impacts To Existing School Facilities Within The Duarte Unified School District.

Development Associated With Implementation Of The Proposed Project And Other Related Cumulative Projects Could Result In Cumulatively Considerable Impacts To School Facilities Within The Duarte Unified School District.

WATER

Implementation of the proposed project could require or result in the construction of new water facilities or expansion of existing facilities, the construction of which could cause significant environmental effects.

Development associated with the proposed project and other related cumulative projects could result in cumulatively considerable impacts to water supplies and facilities.

WASTEWATER

With implementation of the proposed project could generate wastewater that exceeds the capacity of conveyance and treatment facilities serving the project area.

Development associated with implementation of the proposed project and other related cumulative projects could result in cumulatively considerable impacts to wastewater conveyance and treatment facilities.

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SECTION 9.0
Significant Environmental Effects Which Cannot Be Avoided if the Proposed Action Is Implemented

9.0 SIGNIFICANT UNAVOIDABLE EFFECTS WHICH CANNOT BE AVOIDED IF THE PROPOSED ACTION IS IMPLEMENTED

The *California Environmental Quality Act* (*CEQA*) *Guidelines* Section 15126(b) requires an Environmental Impact Report (EIR) to "describe any significant impacts, including those which can be mitigated but not reduced to a level of insignificance. Where there are impacts that cannot be alleviated without imposing an alternative design, their implications, and the reasons why the project is being proposed, notwithstanding their effect, should be described."

Section 5.0 of this EIR provides a description of the potential environmental impacts of the proposed project and recommends mitigation measures to reduce impacts to a less than significant level, where possible. After implementation of mitigation measures, most of the potentially significant impacts associated with the proposed project would be reduced to less than significant levels. However, the impacts listed below could not be feasibly mitigated and would result in a significant unavoidable impact associated with approval of the proposed Duarte Station Specific Plan.

AESTHETICS

- Project shade and shadow impacts on adjacent existing residential uses

TRAFFIC

- Project and cumulative project impacts at the following intersections:
  - Buena Vista Street/Three Ranch Road
  - Highland Avenue/Evergreen Street

AIR QUALITY

- Project- and cumulative project-related operational emissions for ROG
- Project impacts - plan consistency with respect to exceedance of operational ROG thresholds

NOISE

- Project short-term construction noise impacts

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SECTION 10.0
References

10.0 REFERENCES

10.1 LEAD AGENCY AND EIR PREPARER

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SECTION 11.0
Mitigation Monitoring Program

11.0 MITIGATION MONITORING AND REPORTING PROGRAM

Section 1.0 and Section 5.0 of this EIR identify the mitigation measures that will be implemented to reduce the impacts associated with the Duarte Station Specific Plan project. *The California Environmental Quality Act* (*CEQA*) was amended in 1989 to add Section 21081.6, which requires a public agency to adopt a monitoring and reporting program for assessing and ensuring compliance with any required mitigation measures applied to proposed development. As stated in *Public Resources Code* Section 21081.6,

> *. . . the public agency shall adopt a reporting or monitoring program for the changes to the project which it has adopted, or made a condition of project approval, in order to mitigate or avoid significant effects on the environment.*

Public Resources Code Section 21081.6 provides general guidelines for implementing mitigation monitoring programs and indicates that specific reporting and/or monitoring requirements, to be enforced during project implementation, shall be defined prior to final certification of the EIR.

The mitigation monitoring table below lists those mitigation measures that may be included as conditions of approval for the project. These measures correspond to those outlined in Section 1.0 and discussed in Section 5.0. To ensure that the mitigation measures are properly implemented, a monitoring program has been devised which identifies the timing and responsibility for monitoring each measure. The applicant/developer of specific future projects will have the responsibility for implementing the measures, and the various City of Duarte departments will have the primary responsibility for monitoring and reporting the implementation of the mitigation measures.

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AESTHETICS							
AES-1	Prior to the issuance of a building permit, each project applicant shall submit a Construction Management Plan for review and approval by the City of Duarte Community Development Director. The Construction Management Plan shall, at a minimum, indicate the equipment and vehicle staging areas, stockpiling of materials, fencing (i.e., temporary fencing with opaque material), and construction haul route(s). Staging areas shall be screened from view from residential properties. Construction worker parking may be located off-site with prior approval by the City; however on-street parking of construction worker vehicles on residential streets shall be prohibited. Vehicles shall be kept clean and free of mud and dust before leaving the development site. Surrounding streets shall be swept daily and maintained free of dirt and debris.	Prior to Issuance of Building Permit During Construction	Review and Approval of Construction Management Plan Issuance of Building Permit Periodic Site Inspections During Construction	City of Duarte Community Development Department (Public Works and Engineering, Planning and Building and Safety Divisions)			
AES-2	Construction equipment staging areas shall use appropriate screening (i.e., temporary fencing with opaque material) to buffer views of construction equipment and material, when feasible. Staging locations shall be indicated on Final Development Plans and Grading Plans.	Prior to Issuance of Building or Grading Permit	Review and Approval of Building Plan(s) and Grading Plan(s) at Plan Check Periodic Site Inspections During Construction	City of Duarte Community Development Department (Public Works and Engineering, Planning and Building and Safety Divisions)			

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AES-3	All construction-related lighting shall include shielding in order to direct lighting down and away from adjacent hotel and residential uses and consist of the minimal wattage necessary to provide safety at the construction site. A construction safety lighting plan shall be submitted to the City for review concurrent with Grading Permit application.	Concurrent with Grading Permit Application During Construction	Review and Approval of Construction Safety Lighting Plan Periodic Site Inspections During Construction	City of Duarte Community Development Department (Planning Division, Building and Safety Division and Public Works and Engineering Division)			
AES-4	As part of Site Plan and Design Review, site access locations shall be reviewed to ensure that vehicle access locations are not sited in a manner that would result in vehicle headlights directly shining onto residential uses. If siting of vehicle access locations would result in headlights directly shining onto residential uses, the project applicant shall implement screening, consistent with the Duarte Station Specific Plan, to reduce lighting impacts.	Prior to Site Plan Approval	Review and Approval of Site Plan(s) at Plan Check	City of Duarte Community Development Department (Planning Division, Building and Safety Division and Public Works and Engineering Division)			
TRAFFIC							
TRF-1	Village Road/Duarte Road – Install a new traffic signal at the Village Road/Duarte Road intersection. All project applicants within the Duarte Station Specific Area and the City of Hope (Phase 1) shall have a fair-share contribution for signal modification at the Buena Vista Street/Duarte Road intersection. The first development project(s) shall be responsible for the signal modification and	Prior to Issuance of Certificate of Occupancy	Installation of traffic signal by first development project(s) Payment of proportionate share of cost	City of Duarte Community Development Department (Public Works and Engineering Division)			

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	will be reimbursed on a fair share basis by the remainder of the developments in the Duarte Station Specific Area and/or the City of Hope (Phase 1).						
TRF-2	Buena Vista Street/Duarte Road – Modify the traffic signal by implementing a right-turn overlap phase at the westbound Duarte Road approach. All project applicants within the Duarte Station Specific Area and the City of Hope (Phase 1) shall have a fair-share contribution for signal modification at the Buena Vista Street/Duarte Road intersection. The first development project(s) shall be responsible for the signal modification and will be reimbursed on a fair share basis by the remainder of the developments in the Duarte Station Specific Area and/or the City of Hope (Phase 1).	Prior to Issuance of Certificate of Occupancy	Modification of traffic signal by first development project(s) Payment of proportionate share of cost	City of Duarte Community Development Department (Public Works and Engineering Division)			
TRF-3	Buena Vista Street/Three Ranch Road – Install "KEEP CLEAR" or "DO NOT BLOCK" signing and striping in both directions of travel on Buena Vista Street at the Buena Vista Street/Three Ranch Road intersection. The City shall install the signage and striping and will be reimbursed on a fair-share basis by all development within the Duarte Station Specific Area and the City of Hope (Phase 1).	Prior to Issuance of Certificate of Occupancy	Installation of signage and striping by City Payment of proportionate share of cost	City of Duarte Community Development Department (Public Works and Engineering Division)			
TRF-4	All project applicants within the Duarte Station Specific Plan shall prepare and submit at their time of their development application to the Community Development Department a traffic study that: 1) documents the project-related trips and	Concurrent with Development Application	Review and Approval of Traffic Study	City of Duarte Community Development Department			

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	provides a comparative review with the analysis in this EIR, and 2) uses the Highway Capacity Manual (HCM) intersection analysis methodology to determine whether the individual project increases the average delay per vehicle intersections having an existing unacceptable level of service without project traffic. The thresholds to be used for the delay analysis are: a. Signalized Intersections: The project increases the average delay by more than 5 seconds per vehicle at an intersection having an unacceptable LOS without project traffic. b. All-Way Stop Intersections: The project increases the overall average delay by more than 5 seconds per vehicle at an intersection that has an unacceptable LOS without the project and the intersection also meets the peak hour volume signal warrant. c. One- and Two-Way Stop Intersections: The project causes the following to occur for the worst-case movement: ▪ The LOS declines to an unacceptable LOS, and ▪ The volume to capacity ratio exceeds 0.75, and ▪ The 95th percentile queue exceeds 75 feet (3 vehicles), or the project causes the worst-case movement's acceptable LOS to decline to an			(Public Works and Engineering Division and Planning Division)			

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	unacceptable LOS and the peak hour volume signal warrant is met, or the project increases the average delay for the worst-case movement by more than 5 seconds per vehicle at an intersection that has an unacceptable LOS without the project and the intersection also meets the peak hour volume signal warrant. The study will need to identify appropriate mitigation and timing, if impacts are identified. The study and mitigation requires review and approval from the City Engineer. Potential improvements to be considered as mitigation include, but are not limited to: ▪ Restrict on-street parking during peak hours ▪ Install "KEEP CLEAR" or "DO NOT BLOCK" signage and striping ▪ Install signalized pedestrian crossing ▪ Install Two-Way Stop ▪ Install Four-Way Stop ▪ Signal timing and coordination ▪ Addition of lanes within existing right-of-way, including restriping ▪ Lengthening of existing turn lanes to accommodate additional vehicles ▪ Widening of right-of-way consistent with Circulation Element Diagram CIR-1, Standard Roadway Cross-Sections, and Diagram CIRC-4, Circulation System, requirements.						

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TRF-5	When deemed necessary by the City Community Development Director and/or City Engineer, the project applicant(s) shall prepare, implement, and fund a Neighborhood Traffic Management Plan (NTMP), which shall include three components: education, enforcement, and enhancement. The educational component of the NTMP shall provide the community with a means of understanding traffic management tools and processes and also increase public awareness of the impact that traffic will have on the neighborhood. Educational efforts that could be implemented as part of the NTMP include, but are not limited to, the following: ▪ Coordination of neighborhood NTMP meetings ▪ Coordination of a speed watch program ▪ Coordination of the placement of temporary NTMP yard signs with volunteers ▪ Design and distribution of NTMP brochures ▪ Coordination of applicant and/or staff presentations to neighborhood groups The enforcement component of the NTMP entails focusing law enforcement efforts to acknowledge areas of concern. Enforcement efforts that could be implemented as part of the NTMP include, but are not limited to, the following: ▪ Increased enforcement ▪ Real-time speed feedback signs	Concurrent with Development Application	Review, Approval, and Implementation of Neighborhood Traffic Management Plan	City of Duarte Community Development Department (Public Works and Engineering Division and Planning Division)			

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	▪ Signage ("Entering residential neighborhood…") The enhancement component of the NTMP consists of non-physical and physical transportation system improvements. Numerous traffic-calming devices may be selected by a neighborhood for placement on a street. Potential improvements that could be implemented by the applicant and/or City of Duarte as part of the NTMP include, but are not limited to, the following: ▪ Pavement marking/lane narrowing ▪ Temporary speed tables ▪ Neckdowns/bulbouts (extensions of curbs/corner sidewalks at an intersection) ▪ Choker/Chicane (chokers are build-outs added to a road to narrow it, while chicanes are sequences of tight serpentine curves designed to slow roadway traffic) ▪ Turn movement restrictions ▪ Diagonal intersection diverters ▪ Median barrier through intersection ▪ Forced turn island						
AIR QUALITY							
AQ-1	Prior to issuance of a Grading Permit, the City Engineer and the Chief Building Official shall confirm that the Grading Plan, Building Plans, and specifications stipulate that, in compliance with SCAQMD Rule 403, excessive fugitive dust emissions shall be controlled by regular watering or other dust prevention measures, as specified in the SCAQMD's	Prior to Issuance of Grading Permit	Periodic Site Inspections During Construction	City of Duarte Community Development Department (Public Works and Engineering,			

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	Rules and Regulations. 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 portions of the construction site shall be watered every three hours during daily construction activities and when dust is observed migrating from the project site to prevent excessive amounts of dust. ▪ Pave or apply water every three hours during daily construction activities or apply non-toxic soil stabilizers on all unpaved access roads, parking areas, and staging areas. More frequent watering shall occur if dust is observed migrating from the site during site disturbance. ▪ Any on-site stockpiles of debris, dirt, or other dusty material shall be enclosed, covered, or watered twice daily, or non-toxic soil binders shall be applied. ▪ All grading and excavation operations shall be suspended when wind speeds exceed 25 miles per hour. ▪ Disturbed areas shall be replaced with ground cover or paved immediately after construction is completed in the affected area. ▪ Track-out devices such as gravel bed track-out aprons (3 inches deep, 25 feet long, 12 feet wide per lane and edged by rock berm or row of stakes) shall be installed to reduce mud/dirt trackout from unpaved truck exit routes. Alternatively a wheel washer shall be used at			Planning, and Building and Safety Divisions)			

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	truck exit routes. ▪ On-site vehicle speed shall be limited to 15 miles per hour. ▪ 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. ▪ Reroute construction trucks away from congested streets or sensitive receptor areas.						
AQ-2	All trucks that are to haul excavated or graded material on-site shall comply with State Vehicle Code Section 23114 (Spilling Loads on Highways), with special attention to Sections 23114(b)(F), (e)(4) as amended, regarding the prevention of such material spilling onto public streets and roads. Prior to the issuance of grading permits, each project applicant shall demonstrate to the City Engineer how the project operations subject to that specification during hauling activities shall comply with the provisions set forth in Sections 23114(b)(F), (e)(4).	Prior to Issuance of Grading Permit During Construction	Periodic Site Inspections During Construction	City of Duarte Community Development Department (Public Works and Engineering Division)			
AQ-3	The following measures shall be implemented by the contractor to reduce ROG emissions resulting from application of architectural coatings: ▪ Use high-pressure-low-volume (HPLV) paint applicators with a minimum transfer efficiency of at least 50 percent; ▪ Use pre-painted construction materials; and ▪ VOC content of architectural coatings shall not exceed 50 grams per liter.	Prior to Issuance of Building Permit During Construction	Periodic Site Inspections During Construction	City of Duarte Community Development Department (Planning Division Building and Safety Division)			

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AQ-4	Prior to issuance of any Grading Permit, the City Engineer and the Chief Building Official shall confirm that the Grading Plan, Building Plans, and specifications stipulate that, in compliance with SCAQMD Rule 403, O_3 precursor emissions from construction equipment vehicles shall be controlled by maintaining equipment engines in good condition and in proper tune per manufacturer's specifications, to the satisfaction of the City Engineer. Maintenance records shall be provided to the City. The City Inspector shall be responsible for ensuring that contractors comply with this measure during construction.	Prior to Issuance of Grading Permit During Construction	Periodic Site Inspections During Construction	City of Duarte Community Development Department (Public Works and Engineering Division, Planning Division and Building and Safety Division)			
NOISE							
N-1	Individual project applicants shall prepare a construction noise management plan that identifies measures to be taken to minimize construction noise on surrounding sensitive receptors (e.g., residential uses and schools) and includes specific noise management measures to be included into project plans and specifications subject to review and approval by the City. These measures shall include, but not be limited to the following: ▪ All construction equipment shall be equipped with mufflers and sound control devices (e.g., intake silencers and noise shrouds) no less effective than those provided on the original equipment and no equipment shall have an un-muffled exhaust. ▪ The City shall require that the contractor maintain and tune-up all construction equipment to minimize noise emissions.	Prior to Issuance of Grading Permit During Construction	Review and Approval of Construction Noise Management Plan Periodic Site Inspections During Grading and Construction	City of Duarte Community Development Department (Public Works and Engineering, Planning, and Building and Safety Divisions) and Public Safety Department (Code Enforcement Division)			

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	▪ Stationary equipment shall be placed so as to maintain the greatest possible distance to the sensitive receptors. ▪ All equipment servicing shall be performed so as to maintain the greatest possible distance to the sensitive receptors. ▪ Impact tools (e.g., jack hammers, pavement breakers, and rock drills) used for project construction shall be hydraulically or electronically powered wherever possible to avoid noise associated with compressed air exhaust from pneumatically powered tools. However, where use of pneumatic tools is unavoidable, an exhaust muffler shall be used; this muffler can lower noise levels from the exhaust by up to about 10 dBA. External jackets on the tools themselves shall be used where feasible, and this could achieve a reduction of 5 dBA. Quieter procedures shall be used, such as drills rather than impact equipment, whenever feasible. ▪ Each project applicant shall provide, to the satisfaction of the City of Duarte Planning Department, a qualified "Noise Disturbance Coordinator." The Disturbance Coordinator shall be responsible for responding to any local complaints about construction noise. When a complaint is received, the Disturbance Coordinator shall notify the City within 24 hours of the complaint and determine the cause of the noise complaint (e.g., starting too early, malfunctioning muffler, etc.) and shall implement reasonable measures to resolve the compliant, as deemed acceptable by the Duarte Planning Department. Notices shall be sent to						

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	residential units immediately surrounding the construction site. The notices that are sent and the signs posted at the construction site shall include the contact name and the telephone number for the Noise Disturbance Coordinator. ▪ Select demolition methods to minimize vibration, where possible (e.g., sawing masonry into sections rather than demolishing it by pavement breakers). ▪ Construction activities shall not take place outside of the allowable hours specified by the City's Municipal Code Section 9.68.120 (7:00 a.m. and 10:00 p.m.).						
N-2	Prior to issuance of building permits, a noise assessment shall be prepared for the hotel and commercial uses to ensure that commercial property loading docks and outdoor mechanical equipment would not exceed the City's noise limits identified in Municipal Code Section 9.68.050. The noise assessment shall identify any noise control measures necessary to comply with the Municipal Code Noise Regulations. Individual project applicants shall implement all noise control measures identified in the assessment.	Prior to Issuance of Building Permit During Construction	Review and Approval of Noise Assessment	City of Duarte Community Development Department (Public Works and Engineering, Planning, and Building and Safety Divisions)			
N-3	Prior to site plan approval, the Community Development Director shall confirm that all applicable building plans and specifications include a closed design (i.e., a solid wall) for the walls of parking structures that are within 150 feet of residences, including the western side of the parking structure that faces Denning Avenue. The closed design is only required for walls that face residences.	Prior to Site Plan Approval	Review and Approval of Building Plans and Specifications	City of Duarte Community Development Department (Public Works and Engineering, Planning, and Building and Safety Divisions)			

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N-4	Prior to the issuance of building permits, any residential development located within 200 feet of the Gold Line railway corridor shall have a Focused Acoustical Analysis prepared to analyze noise from train pass-bys and develop measures, if required, to ensure that the City's exterior land use compatibility standards of 65 dBA for multi-family residential (refer to Duarte General Plan Table N-1) and 45 dBA for residential interiors are achieved.	Prior to Issuance of Building Permit	Review and Approval of Focused Acoustical Analysis	City of Duarte Community Development Department (Public Works and Engineering, Planning, and Building and Safety Divisions)			
N-5	Prior to the issuance of building permits, any residential or hotel development located within 400 feet of the I-210 freeway corridor shall have a Focused Acoustical Analysis prepared to fully analyze acoustical impacts and develop measures, if required, to ensure that the City's exterior land use compatibility standards of 65 dBA for multi-family residential (refer to Duarte General Plan Table N-1) and 45 dBA for residential interiors are achieved.	Prior to Issuance of Building Permit	Review and Approval of Focused Acoustical Analysis	City of Duarte Community Development Department (Public Works and Engineering, Planning, and Building and Safety Divisions)			
HAZARDS AND HAZARDOUS MATERIALS							
HAZ-1	Prior to demolition activities, an asbestos survey shall be conducted by an Asbestos Hazard Emergency Response Act (AHERA) and Cal OSHA certified building inspector to determine the presence or absence of asbestos containing-materials (ACMs). If ACMs are located, abatement of asbestos shall be completed before any activities that would disturb ACMs or create an airborne asbestos hazard. Asbestos removal shall be performed by a State certified asbestos containment contractor in accordance with the South Coast Air Quality Management District (SCAQMD) Rule 1403.	Prior to Issuance of Demolition Permit	Submittal of Asbestos Survey Evidence of Abatement Activities, if applicable	City of Duarte Community Development Department (Planning and Building and Safety Divisions)			

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HAZ-2	If paint is separated from building materials, chemically or physically, during demolition of the structures, the paint waste shall be evaluated independently from the building material by a qualified Environmental Professional. If lead-based paint is found, abatement shall be completed by a qualified Lead Specialist before any activities that would create lead dust or fume hazard. Lead-based paint removal and disposal shall be performed in accordance with California Code of Regulation Title 8, Section 1532.1, which specifies exposure limits, exposure monitoring and respiratory protection, and mandates good worker practices by workers exposed to lead. Contractors performing lead-based paint removal shall provide evidence of abatement activities to the City's Building Department.	During the Demolition Process	Evidence of Abatement Activities, if applicable	City of Duarte Community Development Department (Building and Safety Divisions)			
HAZ-3	An environmental professional with Phase II/site characterization experience shall conduct an inspection of existing on-site structures before building renovation/demolition activities. The inspection shall determine whether or not testing is required to confirm the presence or absence of hazardous substances in building materials (i.e., sinks, drains, piping, flooring, walls, ceiling tiles, etc.). Should testing be required and results determine that hazardous substances are present in on-site building materials, the Phase II/site characterization specialist shall determine appropriate prevention/ remediation measures that are required and/or the methods for proper disposal of hazardous waste at an approved landfill facility, if required.	Prior to Issuance of Demolition Permit	Submittal of Hazardous Materials Survey Report Evidence of Remediation Efforts, if applicable	City of Duarte Community Development Department (Planning and Building and Safety Divisions)			

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HAZ-4	As applicable, each project applicant shall obtain appropriate permits from the Los Angeles County Fire Department Health Hazard Management Division (HHMD), before removing any existing USTs, per the Underground Storage Tank Program. The applicant shall conduct soil/groundwater testing, as requested by the HHMD. Should contamination be present above regulatory thresholds, then the applicant shall remediate appropriately, as required by the HHMD. Should the HHMD refer the case to any other regulatory agency (e.g., the Department of Toxic Substances Control, or Regional Water Quality Control Board, etc.), then the project applicant shall comply with that said agency as well.	Prior to UST Removal	Receipt of Permits from Los Angeles County Fire Department HHMD Evidence of Remediation Efforts, if applicable	City of Duarte Community Development Department (Planning and Building and Safety Divisions)			
HAZ-5	Prior to issuance of a grading permit, soil sampling shall occur within the portions of the project site that have historically been utilized for agricultural purposes and may contain pesticide residues in the soil, as determined by a qualified Phase II/site characterization specialist. The sampling shall determine if pesticide concentrations exceed established regulatory requirements and shall identify further site characterization and remedial activities, if necessary. Should further site characterization/remedial activities be required, these activities shall be conducted per the applicable regulatory agency requirements, as directed by the Los Angeles County Fire Department Health Hazard Management Division (HHMD).	Prior to Issuance of Grading Permit	Submittal of Soil Sampling Report Evidence of Remediation Efforts, if applicable	City of Duarte Community Development Department (Public Works and Engineering Division, Planning and Building and Safety Divisions)			

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HAZ-6	Prior to issuance of a grading permit, an environmental consultant with Phase II/site characterization experience shall conduct sampling in order to confirm whether or not contaminated soil/groundwater underlies the project site. Should contamination above established regulatory levels be identified, the environmental consultant shall recommend remedial activities appropriate for the proposed future development at the site, in consultation with the Los Angeles County Fire Department Health Hazard Management Division (HHMD) and/or other applicable agencies.	Prior to Issuance of Grading Permit	Submittal of Soil Sampling Report Evidence of Remediation Efforts, if applicable	City of Duarte Community Development Department (Public Works and Engineering Division, Planning and Building and Safety Divisions)			
HAZ-7	Prior to issuance of a grading permit, a Phase II/site characterization specialist shall conduct appropriate sampling along the southern boundary of the project site (Parcel 1) in order to determine whether or not contaminated soil is present. Should contaminated soil be present, the Phase II/site characterization specialist shall recommend appropriate remediation/safety measures in order to ensure worker safety during construction and public health during proposed project operations.	Prior to Issuance of Grading Permit	Submittal of Soil Sampling Report Evidence of Remediation Efforts, if applicable	City of Duarte Community Development Department (Public Works and Engineering Division, Planning and Building and Safety Divisions)			
HAZ-8	Prior to issuance of a grading permit, the project applicant shall submit a Worker Safety Plan for site disturbance/ construction activities, in consultation with California Division of Occupational Safety and Health (Cal/OSHA) and Los Angeles County Fire Department Health Hazard Management Division (HHMD). The Worker Safety Plan shall include safety precautions (e.g., personal protective equipment or other precautions to be taken to minimize exposure to hazardous materials) to be taken by personnel when encountering potential hazardous materials, including potential contaminated groundwater.	Prior to Issuance of Grading Permit	Submittal of Worker Safety Plan	City of Duarte Community Development Department (Planning and Building and Safety Divisions)			

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HAZ-9	If unknown wastes or suspect materials are discovered during construction by the contractor that are believed to involve hazardous waste or materials, the contractor shall comply with the following: ▪ Immediately cease work in the vicinity of the suspected contaminant, and remove workers and the public from the area; ▪ Notify the City Engineer of the City of Duarte; ▪ Secure the area as directed by the City Engineer; and ▪ Notify the Los Angeles County Fire Department Health Hazard Management Division's (HHMD) Hazardous Waste/Materials Coordinator (or other appropriate agency specified by the City Engineer). The Hazardous Waste/Materials Coordinator shall advise the responsible party of further actions that shall be taken, if required.	During the Construction Process	Evidence of Abatement Activities, if applicable	City of Duarte Community Development Department (Building and Safety Divisions and Public Works and Engineering Division,)			
HAZ-10	Prior to issuance of building permits, vapor intrusion investigations shall be conducted by a qualified Environmental Professional, in consultation with the Los Angeles County Fire Department Health Hazard Management Division (HHMD). Should the Environmental Professional determine that proposed buildings could be impacted by vapor intrusion, the Environmental Professional, in consultation with the HHMD and/or other applicable regulatory agencies, shall recommend specific design measures to be incorporated into the buildings' design that would reduce these indoor air quality concentrations to below regulatory thresholds.	Prior to Issuance of Building Permit	Submittal of Vapor Intrusion Investigation Report Incorporation of Design Measures, as applicable	City of Duarte Community Development Department (Building and Safety Divisions)			

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HYDROLOGY, DRAINAGE, AND WATER QUALITY							
HYD-1	Prior to issuance of any grading or building permit, each project applicant shall enroll electronically through the SMARTS program to comply with the State of California General Construction Permit. Proof of enrollment must be submitted to the City of Duarte before issuance of grading or building permits. Also, a Stormwater Pollution Prevention Plan (SWPPP) or functional equivalent required at that time shall be reviewed and approved by the Public Works Manager and the City Engineer for water quality construction activities on-site. A copy of the SWPPP or functional equivalent required at that time shall be available and implemented at the construction site at all times. The SWPPP or functional equivalent required at that time shall outline the source control and/or treatment control Best Management Practices to avoid or mitigate runoff pollutants at the construction site to the "maximum extent practicable."	Prior to Issuance of Grading or Building Permit During the Construction Process	Electronic submittal of the Notice of Intent (NOI) Review and Approval of the Storm Water Pollution Prevention Plan (SWPPP) at Plan Check	City of Duarte Community Development Department (Public Works and Engineering Division and Building and Safety Division)			
HYD-2	Concurrent with Site Plan Review or issuance of a grading permit, whichever comes first, a hydrology review shall be conducted by a Registered Civil Engineer for each development phase to ensure that runoff values for each phase remain at or below the runoff values shown in Table 5.9-2, and in compliance with current State law or other applicable statutes.	Concurrent with Site Plan Review or Prior to Issuance of Grading Permit	Review and Approval of Hydrology Report	City of Duarte Community Development Department (Public Works and Engineering Division)			

DUARTE STATION SPECIFIC PLAN
ENVIRONMENTAL IMPACT REPORT
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Action Indicating Compliance	Monitoring Agency	Verification of Compliance		
					Initials	Date	Remarks
HYD-3	Prior to the issuance of grading permit, each project applicant shall prepare a plan (i.e., Standard Urban Storm Water Management Plan [SUSMP] or functional equivalent document per current State law or other applicable statutes) in accordance with the guidance to be developed by the NPDES Permit permittees, that includes Low Impact Development and other post-construction Best Management Practices to reduce pollutant loading. The plan shall be reviewed and approved by the Duarte Public Works Manager and City Engineer. The applicant shall be responsible for implement the measures identified in the SUSMP or functional equivalent document.	Prior to Issuance of Grading Permit	Review and Approval of the Standard Urban Stormwater Mitigation Plan (SUSMP) or functional equivalent at Plan Check	City of Duarte Community Development Department (Public Works and Engineering Division and Planning Division)			
FIRE PROTECTION							
FP-1	Adequate access to all buildings on the project site shall be provided and properly maintained for emergency vehicles during the building construction process to the satisfaction of the Los Angeles County Fire Department.	Prior to and During Construction	Review and Approval of Site Plan(s) at Plan Check During Construction	Los Angeles County Fire Department			
FP-2	Adequate water availability shall be provided to service construction activities.	During Construction Activities	Proof of receipt of will-serve letter from California American Water Company	Los Angeles County Fire Department			

DUARTE STATION SPECIFIC PLAN
ENVIRONMENTAL IMPACT REPORT
MITIGATION MONITORING AND REPORTING PROGRAM

Mitigation Measure		Monitoring Timing/Frequency	Action Indicating Compliance	Monitoring Agency	Verification of Compliance		
					Initials	Date	Remarks
FP-3	Prior to issuance of building permits, a will-serve letter from the California American Water Company shall be obtained by the project applicant, which states that the Water Company can adequately meet water flow requirements.	Prior to Issuance of Building Permits	Proof of receipt of will-serve letter from California American Water Company	Los Angeles County Fire Department			
FP-4	The Los Angeles County Fire Department shall review and comment on each individual site plan submitted, prior to approval by the City of Duarte. Any conditions required by the Los Angeles County Fire Department shall be complied with by the project applicant.	Prior to Site Plan Approval	Review by Los Angeles County Fire Department Review and Approval of Site Plan(s) at Plan Check	City of Duarte Community Development Department (Building and Safety Division)			
FP-5	Prior to the issuance of building permits, the project applicant shall provide verification that the project complies with all fire prevention provisions required by the Los Angeles County Fire Department.	Prior to Issuance of Building Permits	Review and Approval of Site Plan(s) at Plan Check	City of Duarte Community Development Department (Building and Safety Division)			
FP-6	All new structures shall have automatic fire sprinkler systems.	Prior to Issuance of Building Permit During Operations	Review and Approval of Site Plan(s) at Plan Check	Los Angeles County Fire Department City of Duarte Community Development Department (Building and Safety Division			

DUARTE STATION SPECIFIC PLAN ENVIRONMENTAL IMPACT REPORT MITIGATION MONITORING AND REPORTING PROGRAM							
Mitigation Measure		Monitoring Timing/Frequency	Action Indicating Compliance	Monitoring Agency	Verification of Compliance		
					Initials	Date	Remarks
FP-7	A supervised fire alarm system that meets requirements of the California Fire Code shall be placed in an accessible location with an annunciator.	Prior to Issuance of Building Permit During Operations	Review and Approval of Site Plan(s) at Plan Check	Los Angeles County Fire Department			
FP-8	Access to and around structures shall meet Los Angeles County Fire Department and California Fire Code requirements.	Prior to Issuance of Building Permit During Operations	Review and Approval of Site Plan(s) at Plan Check	Los Angeles County Fire Department			
FP-9	A water supply system shall be in place to supply fire hydrants and automatic fire sprinkler systems.	Prior to Issuance of Building Permit During Operations	Review and Approval of Site Plan(s) at Plan Check	Los Angeles County Fire Department			
FP-10	All traffic signals on public access ways shall include the installation of optical preemption devices.	Prior to Issuance of Building Permit During Operations	Review and Approval of Site Plan(s) at Plan Check	Los Angeles County Fire Department City of Duarte Community Development Department (Public Works and Engineering Division)			
FP-11	All electric gates within the project shall install emergency opening devices approved by the Los Angeles County Fire Department.	Prior to Issuance of Building Permit During Operations	Review and Approval of Site Plan(s) at Plan Check	Los Angeles County Fire Department			

DUARTE STATION SPECIFIC PLAN
ENVIRONMENTAL IMPACT REPORT
MITIGATION MONITORING AND REPORTING PROGRAM

	Mitigation Measure	Monitoring Timing/Frequency	Action Indicating Compliance	Monitoring Agency	Verification of Compliance		
					Initials	Date	Remarks
SCHOOLS							
SCH-1	Individual project applicants shall pay all applicable Development Impact Fees to the Duarte Unified School District prior to issuance of building permits. Proof of fee payment shall be provided to the City of Duarte.	Prior to Issuance of Building Permit	Proof of Payment of Development Impact Fees to DUSD	City of Duarte Community Development Department (Building and Safety Division)			
WATER							
WAT-1	Prior to approval of building permits, individual project applicants shall conduct hydraulic analysis in coordination with California American Water to determine water system requirements to serve the proposed development. The project applicant shall implement the improvements in accordance with California American Water requirements prior to issuance of building permits and complete all necessary improvements prior to final inspection.	Prior to Issuance of Building Permit	Review and Approval of Hydraulic Analysis Implementation of Improvements, if applicable	City of Duarte Community Development Department (Public Works and Engineering Division)			
WAT-2	Prior to approval of building permits, individual project applicants shall submit site plans to the Los Angeles County Fire Department in order to obtain fire flow and storage volume requirements for the proposed development. The project applicant shall submit the fire flow and storage volume requirements to California American Water to determine if adequate fire flow and storage capacity exists to serve the proposed development. If fire flow and storage capacity is found to be inadequate, the project applicant shall design and bond for necessary improvements prior to the issuance of building permits and complete all necessary improvements prior to final inspection.	Prior to Issuance of Building Permit	Verification of Fire Flow and Storage Volume Requirements Implementation of Improvements, if applicable	Los Angeles County Fire Department City of Duarte Community Development Department (Public Works and Engineering Division)			

DUARTE STATION SPECIFIC PLAN
ENVIRONMENTAL IMPACT REPORT

MITIGATION MONITORING AND REPORTING PROGRAM

	Mitigation Measure	Monitoring Timing/Frequency	Action Indicating Compliance	Monitoring Agency	Verification of Compliance		
					Initials	Date	Remarks
WASTEWATER							
WW-1	Each development project shall conduct a sewer flow monitoring study and submit to the City Engineer for review and approval prior to approval of building permits. The study shall review flows at selected off-site manholes, both upstream and downstream of the point of connection, to determine the capacity of the local and regional system to accept project-related flows. The project applicant shall be responsible to implement the recommendations in the study to ensure that off-site systems operate in accordance with the Los Angeles County Department of Public Works and County Sanitation Districts of Los Angeles County standards.	Prior to Issuance of Building Permit	Review and Approval of Sewer Flow Monitoring Study	City of Duarte Community Development Department (Public Works and Engineering Division)			
WW-2	Each development project shall design and construct on-site and off-site sewer lines in compliance with the Los Angeles County Public Works Department and County Sanitation Districts of Los Angeles County standards.	Prior to Issuance of Wastewater Permit and Building Permit	Review and Approval of Site Plan(s) at Plan Check	City of Duarte Community Development Department (Public Works and Engineering Division)			

SECTION 12.0
Comments and Responses

12.0 COMMENTS AND RESPONSES

12.1 CEQA REQUIREMENTS

Before approving a project, the *California Environmental Quality Act* (*CEQA*) requires the Lead Agency to prepare and certify a Final Environmental Impact Report (EIR).

In accordance with *CEQA Guidelines* Sections 15120 through 15132 and Section 15161, the City of Duarte has prepared an EIR for the Duarte Station Specific Plan (SCH #2013041032). The Comments and Responses section, combined with the Draft EIR and Mitigation Monitoring Program, comprise the Final EIR.

The following is an excerpt from the *CEQA Guidelines* Section 15132, Contents of Final Environmental Impact Report:

The Final EIR shall consist of:

(a) The Draft EIR or a version of the draft.

(b) Comments and recommendations received on the Draft EIR either verbatim or in summary.

(c) A list of persons, organizations, and public agencies commenting on the Draft EIR.

(d) The responses of the Lead Agency to significant environmental points raised in the review and consultation process.

(e) Any other information added by the Lead Agency.

This Comments and Responses section includes all of the above-required components and shall be included in the Final EIR. As noted above, the Final EIR will be a revised document that incorporates all of the changes made to the Draft EIR following the 45-day public review period.

12.2 PUBLIC REVIEW PROCESS – DRAFT EIR

The Draft EIR was circulated for review and comment to the public, agencies, and organizations. The Draft EIR was also circulated to State agencies for review through the State Clearinghouse, Office of Planning and Research. The 45-day public review period ran from September 19, 2013 to November 4, 2013. Comments received in writing during the 45-day public review period from the public and local and State agencies on the Draft EIR have been incorporated into this section.

12.3 FINAL EIR

The Final EIR allows the public and Lead Agency an opportunity to review revisions to the Draft EIR, the comments and response, and other components of the EIR, such as the Mitigation Monitoring Program, prior to approval of the project. The Final EIR serves as the environmental document to support a decision on the proposed project.

After completing the Final EIR, and before approving the project, the Lead Agency must make the following three certifications as required by *CEQA Guidelines* Section 15090:

- That the Final EIR has been completed in compliance with CEQA;
- That the Final EIR was presented to the decision-making body of the Lead Agency, and that the decision-making body reviewed and considered the information in the Final EIR prior to approving the Project; and
- That the Final EIR reflects the Lead Agency's independent judgment and analysis.

Additionally, pursuant to *CEQA Guidelines* Section 15093(b), when a Lead Agency approves a project that would result in significant unavoidable impacts that are disclosed in the Final EIR, the Lead Agency must submit in writing its reasons for supporting the approved action. This Statement of Overriding Considerations is supported by substantial information in the record, which includes the Final EIR. Since the proposed project would result in significant, unavoidable impacts as to one category of review, the Lead Agency would be required to adopt a Statement of Overriding Considerations if it approves the proposed project.

These certifications, the Findings of Fact, and the Statement of Overriding Considerations are included in a separate Findings document. Both the Final EIR and the Findings will be submitted to the Lead Agency for consideration of the proposed project.

12.4 WRITTEN COMMENT LETTERS AND RESPONSES

All written correspondence from those agencies or individuals commenting on the Draft EIR is reproduced on the following pages. The individual comments on each letter have been consecutively numbered for ease of reference. Following each comment letter are responses to each numbered comment. A response is provided for each comment raising substantive environmental issues. Added or modified text is underlined (example), while deleted text will have a strike out (~~example~~) through the text, and is included in a box, as the example below shows.

"Text from EIR" ~~Text from EIR~~

COMMENT LETTERS

A total of eight written comment letters were received.

A. Andy Salas, Chairman of Gabrienleno Band of Mission Indians/Kizh Nation of the Los Angeles Basin, Orange County and the Channel islands, dated September 25, 2013.

B. Dave Singleton, Program Analyst, State of California Native American Heritage Commission, dated September 24, 2013.

C. Ken Chiang, P.E., Utilities Engineer, State of California Public Utilities Commission, dated October 15, 2013.

D. Dianna Watson, IGR/CEQA Branch Chief, State of California Department of Transportation, dated October 21, 2013.

E. Ian MacMillan, Program Supervisor, Inter-Governmental Review, South Coast Air Quality Management District, dated October 29, 2013.

F. Frank Vidales, Chief, Forestry Division, County of Los Angeles Fire Department, dated October 17, 2013.

G. Adriana Raza, Customer Service Specialist, County Sanitation Districts of Los Angeles County, dated November 2, 2013.

H. Bradley D. Pierce, Pierce Law Firm, dated November 4, 2013.

From: Gabrieleno <gabrielenoindians@yahoo.com>
Date: September 25, 2013 10:52:29 PM PDT
To: goldingj@accessduarte.com, Christina Swildall <christinaswindall@yahoo.com>, Tim Mighuel <timmiguel@sbcglobal.net>
Cc: Dave Singleton <ds_nahc@pacbell.net>
Subject: Duarte Station specific Plan EIR SCH NO 2013041032

Dear Jason Golding
Senior Planner

This email is in response to your letter dated Sept 19, 2013 in regards to the above subject project. The proposed project is within a highly culturally sensitive area and in order to protect our resources we're requesting one of our experienced & certified Native American monitors to be on site during all ground disturbances. **A1**

In all cases, when the NAHC states there are "no records of sacred sites" in the subject area; they always refer the contractors back to the Native American Tribes whose tribal territory the project area is in. This is due to the fact, that the NAHC is only aware of general information on each California NA Tribe they are NOT the "experts" on our Tribe. Our Elder Committee & Tribal Historians are the experts and is the reason why the NAHC will always refer contractors to the local tribes. **A2**

Please contact our office regarding this project to coordinate a NA monitor to be present. Thank You **A3**

Sincerely,
Andy Salas
Chairman of Gabrieleno Band of Mission Indians/Kizh Nation of the Los Angeles Basin, Orange County and the Channel islands.
www.gabrielenoindians.org

Duarte named his new holdings "Rancho Azusa de Duarte". The name Azusa was derived from *Asuksa-gna*, the name of the Kizh Gabrieleño settlement on the Foothills of California, on the western side of the alluvial fan where the San Gabriel River exits the San Gabriel Mountains; a portion of this area forms the northeastern-most corner of Duarte. Around 500 B.C., a band of Shoshonean-speaking Indians called the Kizh(kitc) people established settlements in what is now the San Gabriel Valley. These native came to be called the Gabrieleño Indians (after San Gabriel, the local mission) by early Spanish explorers, but now prefer to be called the Kizh Nation . The Kizh Nation did not practice agriculture, but instead relied upon the wild seeds, berries, and plants that grew near the rivers and marshlands. Since the San Gabriel Valley area was home to large numbers of oak trees such as oak and interior live oak, a staple of the Kizh diet was an acorn mush made by boiling acorn flour.

A. RESPONSES TO COMMENTS FROM ANDY SALAS, CHAIRMAN OF GABRIELENO BAND OF MISSION INDIANS/KIZH NATION OF THE LOS ANGELES BASIN, ORANGE COUNTY AND THE CHANNEL ISLANDS, DATED SEPTEMBER 25, 2013.

A1. The comment requests an experienced and certified Native American monitor from the Gabrieleno Band of Mission Indians/Kizh Nation to be on site during all ground disturbance activities. As a Condition of Approval for the proposed project, an experienced and certified Native American monitor will be required to be on-site during all ground disturbing activities.

A2. The comment notes that the Native American Heritage Commission will refer contractors to the Native American Tribes as they are not the experts on tribes and Elder Committee & Tribal Historians are the experts. The comment is acknowledged. No further response is necessary.

A3. The comment requests the Gabrieleno Band of Mission Indians/Kizh Nation office be contacted to coordinate a Native American monitor to be present on site. The comment is acknowledged. No further response is necessary.

STATE OF CALIFORNIA Edmund G. Brown, Jr., *Governor*

NATIVE AMERICAN HERITAGE COMMISSION
1550 Harbor Boulevard
West Sacramento, CA 95691
(916) 373-3715
(916) 373-5471 – FAX
e-mail: ds_nahc@pacbell.net

RECEIVED
OCT 07 2013
CITY OF DUARTE

September 24, 2013

Mr. Jason Golding
City of Duarte
1800 Huntington Drive
Duarte, CA 91010

RE: SCH#2013041032 CEQA Notice of Completion; draft Environmental Impact Report (DEIR) for the **"Duarte Station Specific Plan Project; "** located in the City of Duarte; Los Angeles County, California

Dear Mr.Golding:

The Native American Heritage Commission (NAHC) has reviewed the Court decision (170 Cal App 3rd 604), the court held that the NAHC has jurisdiction and special expertise, as a state agency, over affected Native American resources impacted by proposed projects, including archaeological places of religious significance to Native Americans, and to Native American burial sites. **B1**

This project is also subject to California Government Code Sections 65040.2, *et seq.*

The California Environmental Quality Act (CEQA) states that any project which includes archeological resources, is a significant effect requiring the preparation of an EIR (CEQA guidelines 15064.5(b). To adequately comply with this provision and mitigate project-related impacts on archaeological resources, the Commission recommends the following actions be required:

Contact the appropriate Information Center for a record search to determine :If a part or all of the area of project effect (APE) has been previously surveyed for cultural places(s), The NAHC recommends that known traditional cultural resources recorded on or adjacent to the APE be listed in the draft Environmental Impact Report (DEIR). **B2**

If an additional archaeological inventory survey is required, the final stage is the preparation of a professional report detailing the findings and recommendations of the records search and field survey. We suggest that this be coordinated with the NAHC, if possible. The final report containing site forms, site significance, and mitigation measurers should be submitted immediately to

the planning department. All information regarding site locations, Native American human remains, and associated funerary objects should be in a separate confidential addendum, and not be made available for pubic disclosure pursuant to California Government Code Section 6254.10. B2

A list of appropriate Native American Contacts for consultation concerning the project site has been provided and is attached to this letter to determine if the proposed active might impinge on any cultural resources. Lack of surface evidence of archeological resources does not preclude their subsurface existence. B3

Lead agencies should include in their mitigation plan provisions for the identification and evaluation of accidentally discovered archeological resources, pursuant to California Health & Safety Code Section 7050.5 and California Environmental Quality Act (CEQA) §15064.5(f). In areas of identified archaeological sensitivity, a certified archaeologist and a culturally affiliated Native American, with knowledge in cultural resources, should monitor all ground-disturbing activities. Also, California Public Resources Code Section 21083.2 require documentation and analysis of archaeological items that meet the standard in Section 15064.5 (a)(b)(f). Lead agencies should include in their mitigation plan provisions for the disposition of recovered artifacts, in consultation with culturally affiliated Native Americans. Lead agencies should include provisions for discovery of Native American human remains in their mitigation plan. Health and Safety Code §7050.5, CEQA §15064.5(e), and Public Resources Code §5097.98 mandates the process to be followed in the event of an accidental discovery of any human remains in a location other than a dedicated cemetery. B4

Sincerely,

Dave Singleton
Program Analyst

CC: State Clearinghouse

Attachment: Native American Contacts list

Native American Contacts
Los Angeles County
September 24, 2013

LA City/County Native American Indian Comm
Ron Andrade, Director
3175 West 6th St, Rm. 403
Los Angeles , CA 90020
randrade@css.lacounty.gov
(213) 351-5324
(213) 386-3995 FAX

Gabrielino Tongva Indians of California Tribal Council
Robert F. Dorame, Tribal Chair/Cultural Resources
P.O. Box 490 Gabrielino Tongva
Bellflower , CA 90707
gtongva@verizon.net
562-761-6417 - voice
562-761-6417- fax

Tongva Ancestral Territorial Tribal Nation
John Tommy Rosas, Tribal Admin.
Private Address Gabrielino Tongva
,
tattnlaw@gmail.com
310-570-6567

Gabrielino-Tongva Tribe
Bernie Acuna, Co-Chairperson
P.O. Box 180 Gabrielino
Bonsall , CA 92003
(619) 294-6660-work
(310) 428-5690 - cell
(760) 636-0854- FAX
bacuna1@gabrielinotribe.org

Gabrieleno/Tongva San Gabriel Band of Mission
Anthony Morales, Chairperson
PO Box 693 .Gabrielino Tongva
San Gabriel , CA 91778
GTTribalcouncil@aol.com
(626) 286-1632
(626) 286-1758 - Home
(626) 286-1262 -FAX

Gabrielino-Tongva Tribe
Linda Candelaria, Co-Chairperson
P.O. Box 180 Gabrielino
Bonsall , CA 92003
palmsprings9@yahoo.com
626-676-1184- cell
(760) 636-0854 - FAX

Gabrielino /Tongva Nation
Sandonne Goad, Chairperson
P.O. Box 86908 Gabrielino Tongva
Los Angeles , CA 90086
sgoad@gabrielino-tongva.com
951-845-0443

Gabrieleno Band of Mission Indians
Andrew Salas, Chairperson
P.O. Box 393 Gabrielino
Covina , CA 91723
gabrielenoindians@yahoo.
(626) 926-4131

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

his list s only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2013041032; CEQA Notice of Completion; draft Environmental Impact Report (DEIR) for the Duarte Station Specific Plan; located in the City of Duarte; Los Angeles County, California.

Native American Contacts
Los Angeles County
September 24, 2013

Gabrielino-Tongva Tribe
Conrad Acuna,
P.O. Box 180 Gabrielino
Bonsall , CA 92003

760-636-0854 - FAX

Gabrielino /Tongva Nation
Sam Dunlap, Cultural Resorces Director
P.O. Box 86908 Gabrielino Tongva
Los Angeles , CA 90086
samdunlap@earthlink.net
909-262-9351

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of the statutory responsibility as defined in Section 7050.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code.

his list s only applicable for contacting local Native Americans with regard to cultural resources for the proposed SCH#2013041032; CEQA Notice of Completion; draft Environmental Impact Report (DEIR) for the Duarte Station Specific Plan; located in the City of Duarte; Los Angeles County, California.

B. RESPONSES TO COMMENTS FROM DAVE SINGLETON, PROGRAM ANALYST, STATE OF CALIFORNIA NATIVE AMERICAN HERITAGE COMMISSION, DATED SEPTEMBER 24, 2013.

B1. The comment states that the Native American Heritage Commission (NAHC) has jurisdiction over affected Native American resources impacted by proposed projects, including archaeological places of religious significance to Native Americans, and to Native American burial sites and the project is subject to California Government Code Sections 65040.2, et seq. The comment is acknowledged. No further response is necessary.

B2. The NAHC recommends actions in order to comply with CEQA and mitigate project-related impacts to archaeological resources including conducting a records search within the area of project effect (APE), identifying resources on or adjacent to the APE in the Draft EIR and preparation of a report if an additional archaeological inventory survey is required. The NAHC requests the report be submitted to the planning department with information regarding site locations, Native American human remains, and associated funerary objects be in a separate confidential addendum, not available for public disclosure. The Initial Study/Environmental Checklist prepared for the proposed project concluded no known archaeological resources occur within the project site and in the event evidence of archaeological or paleontological resources occur during grading and construction, operations would be required to cease and the City is required to be contacted and standard protocol and procedures would be implemented. Thus, further analysis was not required in the Draft EIR.

B3. Refer to Response to Comment B2. Additionally, as noted in Response to Comment A1, as a Condition of Approval for the proposed project, an experienced and certified Native American monitor will be required to be on site during all ground disturbing activities.

B4. Refer to Responses B2 and B3. Additionally, if human remains were found, those remains would require proper treatment, in accordance with applicable laws. State of California Public Resources Health and Safety Code Sections 7050.5-7055 describe the general provisions for human remains. Specifically, Health and Safety Code Section 7050.5 describes the requirements if any human remains are accidentally discovered during excavation of a site. In addition, the requirements and procedures set forth in California Public Resources Code Section 5097.98 would be implemented. If human remains are found during excavation, excavation must stop in the vicinity of the find and any area that is reasonably suspected to overlie adjacent remains until the County coroner has been called out, and the remains have been investigated and appropriate recommendations have been made for the treatment and disposition of the remains.

COMMENT LETTER C

STATE OF CALIFORNIA — EDMUND G. BROWN JR., *Governor*

PUBLIC UTILITIES COMMISSION
320 WEST 4TH STREET, SUITE 500
LOS ANGELES, CA 90013
(213) 576-7083

October 15, 2013

Jason Golding
City of Duarte
1600 Huntington Drive
Duarte, CA 91010

Dear Mr. Golding:

Re: SCH 2013041031 Duarte Station Specific Plan, DEIR

The California Public Utilities Commission (Commission) has jurisdiction over the safety of highway-rail crossings (crossings) in California. The California Public Utilities Code requires Commission approval for the construction or alteration of crossings and grants the Commission exclusive power on the design, alteration, and closure of crossings in California. The Commission Rail Crossings Engineering Section (RCES) is in receipt of the Draft *Environmental Impact Report (DEIR)* for the proposed City of Duarte (City) Duarte Station Specific Plan project. **C1**

The project area includes active railroad tracks. RCES recommends that the City add language to the Specific Plan so that any future development adjacent to or near the railroad/light rail right-of-way (ROW) is planned with the safety of the rail corridor in mind. New developments may increase traffic volumes not only on streets and at intersections, but also at at-grade crossings. This includes considering pedestrian/bike circulation patterns or destinations with respect to railroad ROW and compliance with the Americans with Disabilities Act. Mitigation measures to consider include, but are not limited to, the planning for grade separations for major thoroughfares, improvements to existing at-grade crossings due to increase in traffic volumes and continuous vandal resistant fencing or other appropriate barriers to limit the access of trespassers onto the railroad ROW. **C2**

If you have any questions in this matter, please contact me at (213) 576-7076, ykc@cpuc.ca.gov.

Sincerely,

Ken Chiang, P.E.
Utilities Engineer
Rail Crossings Engineering Section
Safety and Enforcement Division

C: State Clearinghouse

C. RESPONSES TO COMMENTS FROM KEN CHIANG, P.E., UTILITIES ENGINEER, STATE OF CALIFORNIA PUBLIC UTILITIES COMMISSION, DATED OCTOBER 15, 2013.

C1. The comment identifies the California Public Utilities Commission (CPUC) jurisdiction over the safety of highway-rail crossing in California and receipt of the Draft EIR for the proposed Duarte Station Specific Plan project. The comment is acknowledged. No further response is necessary.

C2. The comment requests text be added to the Specific Plan regarding future development be planned with the safety of the rail corridor in mind and consideration of measures such as planning for grade separations, improvements to existing at-grade crossing and continuous vandal resistance fencing or other appropriate barriers to limit access onto the railroad right-of-way (ROW).

The proposed project establishes the regulatory framework for transit-oriented development adjacent to the Duarte Gold Line Station, currently under construction. Future development within the project site would be reviewed with safety of the rail corridor in mind. The project does not propose any modifications to existing roadways within the project area. A new internal circulation system would be provided with implementation of the Specific Plan; however, new roadways would not involve crossings over the existing railroad ROW. Further, as concluded in the *Gold Line Foothill Extension – Pasadena to Montclair Final EIR*, February 2007, compliance with local, state, and/or federal regulatory requirements would reduce potential long-term safety and security impacts associated with the Gold Line to a less than adverse level.

COMMENT LETTER D

DEPARTMENT OF TRANSPORTATION
DISTRICT 7, REGIONAL PLANNING
IGR/CEQA BRANCH
100 MAIN STREET, MS # 16
LOS ANGELES, CA 90012-3606
PHONE: (213) 897-9140
FAX: (213) 897-1337

Flex your power!
Be energy efficient!

October 21, 2013

RECEIVED
OCT 28 2013
CITY OF DUARTE

Mr. Jason Golding
City of Duarte Planning
1600 Huntington Drive
Duarte, CA 90010

Re: IGR/CRQA No. 130421ZJ/DEIR
Duarte Station Specific Plan
Vic. LA-210, PM 35.466 to 57.077
Vic. LA-605, PM 25.76 to 41.479
SCH#2013041032

Dear Mr. Golding:

Thank you for including the California Department of Transportation (Caltrans) in the environmental review process for the Draft Environmental Impact Report (DEIR) for the proposed Duarte Station Specific Plan. The project site is located within the vicinity of the Interstate 210 (I-210) and I-605 interchange in the southwest quadrant, with the I-210 freeway on the north and the I-605 freeway on the east.

D1

The project site is bound by Evergreen Street and I-210 freeway to the north, Highland Avenue to the east, a single-family residential neighborhood to the west, and Los Angeles County Metropolitan Transportation Authority (Metro) railroad right-of-way and Duarte Road to the south.

The project will not have a significant impact on the I-210 West Bound (WB) Central Avenue off-ramp. However, because the off-ramp is a direct exit to the project, Caltrans is concerned that future projects may have a potential cumulative impact to the off-ramp. Caltrans recommends that the City consider developing a funding mechanism that would allow future project developments to contribute a fair-share towards future improvements to the I-210 freeway.

D2

If you have any questions about preparing a traffic study on the State Highway and study locations, you may reach Zeron Jefferson, project coordinator at (213) 897-0219 and please refer IGR number 130935/ZJ.

D3

Sincerely,

DIANNA WATSON
IGR/CEQA Branch Chief

cc: Scott Morgan, State Clearinghouse

D. RESPONSES TO COMMENTS FROM DIANNA WATSON, IGR/CEQA BRANCH CHIEF, STATE OF CALIFORNIA DEPARTMENT OF TRANSPORTATION, DATED OCTOBER 21, 2013.

D1. The comment notes the location of the project. The comment is acknowledged. No further response is necessary.

D2. The comment notes that the project will not have a significant impact on the I-210 westbound Central Avenue off-ramp. Caltrans is concerned the project will have a potential cumulative impact at the off-ramp and recommends the City consider developing a funding mechanism that would allow future project developments to contribute a fair-share towards future improvements to the I-210 freeway.

As indicated in the Draft EIR Section 5.4, Traffic, forecast year 2020 without project traffic volumes were derived by applying an annual growth rate of 0.79 percent per year over a seven year period to existing traffic volumes to account for background and cumulative growth. Additionally, forecast year 2020 without project traffic volumes include the addition of trips associated with cumulative projects that are assumed to be constructed and generating trips by project opening. The analysis concluded the proposed project would not result in considerable traffic or queuing impacts in regards to State-controlled intersections or off-ramps. Impacts were determined to be less than significant. However, as stated in Draft EIR Section 5.4, the City of Duarte wants to ensure that project-related impacts associated with future development within the Plan Area remain consistent with these conclusions, and as such and has included Mitigation Measure TRF-4, which requires project applicants within the Duarte Station Specific Plan Area to prepare a traffic study that 1) documents the project-related trips and provides a comparative review with the analysis in this EIR, and 2) uses the Highway Capacity Manual (HCM) intersection analysis methodology to determine whether the individual project increases the average delay per vehicle intersections having an existing unacceptable level of service without project traffic. The study will need to identify appropriate mitigation and timing, if impacts are identified. The study and mitigation requires review and approval from the City Engineer.

D3. The comment provides a contact person for preparation of traffic study on the State Highway and study locations. The comment is acknowledged. No further response is necessary.

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

SENT VIA USPS AND E-MAIL:
goldingj@accessduarte.com

October 29, 2013

Mr. Jason Golding, Senior Planner
Community Development Department
City of Duarte
1600 Huntington Drive
Duarte, CA 91010

Draft Environmental Impact Report (DEIR) for the Proposed Duarte Station Specific Plan Project (General Plan Amendment 13-1 and Zone Change 13-1)

The South Coast Air Quality Management District (SCAQMD) staff appreciates the opportunity to comment on the above-mentioned document. The following comments are meant as guidance for the Lead Agency and should be incorporated into the Final CEQA document.

The lead agency proposes to demolish the existing 313,955 square feet of warehouse/industrial use buildings located on the 19.08 acre site. Construction of a mixed-use transit village on the site's three parcels would then begin in 2014 and be completed based on market conditions. The development would include a light-rail train station, 400,000 square feet of office uses, 475 high-density residential units, a 250 room hotel, 12,000 square feet of retail and 0.8-acre for recreation/open space uses. **E1**

The proposed project site is also just south of State Route 210 Freeway, which has a peak daily traffic volume of about 266,000 vehicles. The SCAQMD staff is concerned that the proposed sensitive receptor land use at the site is located in a traditionally incompatible setting with the existing freeway adjacent to the project site. Guidance from the California Air Resources Board (CARB) Air Quality and Land Use Handbook[1] recommends avoiding the siting of new sensitive land uses within 500 feet of a freeway to avoid exposing people to substantial pollutant concentrations including carcinogenic diesel particulate matter (DPM). The lead agency should estimate and include in the Final EIR the potential health risks[2] to residents from emissions coming from the adjacent freeway traffic in order to demonstrate that these health risks are less than **E2**

[1] (CARB) Air Quality and Land Use Handbook: http://www.aqmd.gov/ceqa/handbook/other_useful_links/ARBhandbook.pdf .

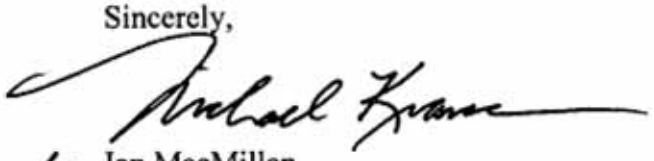
[2] SCAQMD "Health Risk Assessment Guidance for Analyzing Cancer Risks from Mobile Source Diesel Emissions" can be found using the following link: http://www.aqmd.gov/ceqa/handbook/mobile_toxic/diesel_analysis.doc .

significant. The lead agency should incorporate all feasible mitigation into the Final CEQA document if cancer risks are above the recommended thresholds of significance.[3] **E2**

Further, there is concern about the modification of the default load factor values for off-road construction equipment in the air quality modeling. Changing the default load factor values underestimates potentially significant construction air quality impacts. In the air quality modeling, the lead agency used the most current version of the California Emission Estimator Model (CalEEMod), Version 2013.2. Since Version 2013.2 includes the most current load factor values found in OFFROAD2011, construction impacts and related analyses should be revised in the Final EIR using Version 2013.2's default load factor values. Should further analysis determine that these impacts are significant, further mitigation should be included in the Final EIR. Details are included in the attachment. **E3**

Please provide the SCAQMD with written responses to all comments contained herein prior to the adoption of the Final EIR. The SCAQMD staff is available to work with the Lead Agency to address these issues and any other air quality questions that may arise. Please contact Gordon Mize, Air Quality Specialist – CEQA Section, at (909) 396-3302, if you have any questions regarding these comments. **E4**

Sincerely,



for Ian MacMillan
Program Supervisor, Inter-Governmental Review
Planning, Rule Development & Area Sources

Attachment

IM:MK:GM

LAC130919-01
Control Number

[3] Recommended SCAQMD Significance Thresholds of Significance: http://www.aqmd.gov/ceqa/handbook/signthres.pdf .

PM10 and PM2.5 Attainment Status Update – Table 5.5-1

1. Based on changes to the following designations, the SCAQMD staff recommends that the Lead Agency revise Table 5.5-1 on page 5.5-2 as follows in the Final EIR:

    - **PM10** Federal 24-hour national ambient air quality standard (NAAQS) at 150 $\mu g/m^3$. In June 2013, the EPA approved the State of California's request to redesignate the South Coast PM10 nonattainment area to attainment of the PM10 NAAQS, effective on July 26, 2013. For more details, please refer to the Federal Register language available at http://www.gpo.gov/fdsys/pkg/FR-2013-06-26/html/2013-15145.htm. **E5**
    - **PM2.5** Federal 24-hour PM2.5 NAAQS has been designated as "nonattainment" and not "unclassified" as listed in Table 5.5-1. The 24-hour PM2.5 NAAQS designations were promulgated in November 2009 and can be found online at http://www.epa.gov/pmdesignations/2006standards/final/region9.htm.

Off-Road Equipment Load Factors

2. In the air quality analysis, the Lead Agency estimated project construction air quality impacts using the CalEEMod land use model,[4] Version 2013.2. This model provides default values and allows user-defined overrides to estimate emissions based on the expected land use. The model run for the Draft EIR's air quality analysis shows that the default load factor settings for off-road equipment were modified, reducing each by about one third, effectively lowering the emissions calculated from these sources by one third. For example, the CalEEMod default load factor for an excavator is 0.57; a rubber tired dozer is 0.59; tractor / loaders / backhoe is 0.55; and a grader is 0.61. In the air quality analysis, the Lead Agency used 0.38 as a load factor for an excavator; 0.40 for a rubber tired dozer; a load factor of 0.37 for a tractor / loaders / backhoe; and 0.41 for a grader. This one-third reduction is based on previous guidance. This interpretation did not extend to project specific analysis or the OFFROAD2011 emission factors. The one-third reduction is not recommended by the SCAQMD staff without substantial evidence to support its use. Rather, the SCAQMD staff recommends that the lead agency revise the project impacts in the Final EIR using the CalEEMod model without modifying the off-road equipment load factors. CalEEMod Version 2013.2 incorporates the most recent version of OFFROAD2011[5] and includes up to date fleet information. Therefore, adjusting the load factor values without documentation based on substantial evidence does not demonstrate that off-road equipment emissions are less than significant. **E6**

[4] Version 2013.2.2 is available at the following website: http://www.CalEEMod.com

[5] OFFROAD 2011 shows that additional parameters affect emissions besides load factor, and that some equipment-specific emission factors can be either higher or lower than the OFFROAD 2007 emission factors used in CalEEMod.

Construction Mitigation

3. Should the Lead Agency determine that construction air quality impacts are significant based on comment #1, the SCAQMD staff recommends the following mitigation measures designed to lower NOx emissions from off-site construction equipment in addition to the measures proposed by the lead agency starting on page 5.5-15 of the Draft EIR, if feasible. The Lead Agency should consider adopting a schedule similar to what other lead agencies in the region (including Port of Los Angeles, Port of Long Beach, LA County Metro, and City of Los Angeles)[6] require for all on-site construction equipment.

    - Project start, to December 31, 2014: All off-road diesel-powered construction equipment greater than 50 hp shall meet the Tier 3 off-road emission standards. In addition, all construction equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.

    - Post-January 1, 2015: All off-road diesel-powered construction equipment greater than 50 hp shall meet the Tier 4 emission standards, where available. In addition, all construction equipment shall be outfitted with BACT devices certified by CARB. Any emissions control device used by the contractor shall achieve emissions reductions that are no less than what could be achieved by a Level 3 diesel emissions control strategy for a similarly sized engine as defined by CARB regulations.

        • A copy of each unit's certified tier specification, BACT documentation, and CARB or SCAQMD operating permit shall be provided at the time of mobilization of each applicable unit of equipment.

        • Encourage construction contractors to apply for SCAQMD "SOON" funds. Incentives could be provided for those construction contractors who apply for SCAQMD "SOON" funds. The "SOON" program provides funds to accelerate clean up of off-road diesel vehicles, such as heavy duty construction equipment. More information on this program can be found at the following website: http://www.aqmd.gov/tao/Implementation/SOONProgram.htm

E7

[6] For example see the Metro Green Construction Policy at: http://www.metro.net/projects_studies/sustainability/images/Green_Construction_Policy.pdf

E. RESPONSES TO COMMENTS FROM IAN MACMILLAN, PROGRAM SUPERVISOR, INTER-GOVERNMENTAL REVIEW, PLANNING, RULE DEVELOPMENT & AREA SOURCES, SOUTH COAST AIR QUALITY MANAGEMENT DISTRICT, DATED OCTOBER 29, 2013.

E1. This comment provides introductory language and a summary of the project. Full responses to each of the commenter's concerns are provided below.

E2. The comment cites the California Air Resources Board (CARB) *Air Quality and Land Use Handbook* recommendations of siting new sensitive land uses 500 feet away from freeways. As depicted in Draft EIR *Exhibit 3-5*, *Development Scenario*, sensitive uses (i.e., residences) would be located south of Business Center Drive, which is approximately 500 feet from the Interstate 210 Freeway. The portion of the project north of Business Center Drive would be designated hotel and mixed uses, which are not considered sensitive. Therefore, sensitive uses proposed by the project would not be located within 500 feet of a freeway and would not expose receptors to substantial pollutant concentrations. As a result, an estimation of potential health risks would not be required.

E3. As recommended by the South Coast Air Quality Management District (SCAQMD), the California Emissions Estimator Model (CalEEMod) version 2013.2 (latest version available at the time of the analysis) was used to model the project's emissions. It should be noted that the air modeling conducted for the project was initiated with CalEEMod version 2011.1.1 (prior to the release of CalEEMod version 2013.2). In the initial model run, construction equipment load factors were manually updated to match OFFROAD2011 factors (per a prior recommendation from SCAQMD staff).

CalEEMod version 2013.2 was released during the analysis of the project, subsequent to the initial project model runs. As a result, the original model runs were imported into the latest model and re-run to ensure that the modeled emissions were up to date. The CalEEMod outputs show the construction equipment load factors as modified from the default values due to a carryover from the model import. However, these factors match the default values of the latest CalEEMod version and OFFROAD2011 factors. For example, Table 3.3 (OFFROAD Default Horsepower and Load Factors) from Appendix D (Default Data Tables) of the CalEEMod User's Guide lists the load factor for an excavator as 0.38, a rubber tired dozer as 0.40, a tractor/loader/backhoe as 0.37, and a grader as 0.41. These load factors match what was used in the modeling for the project. The load factors that were utilized in the modeling are consistent with those in OFFROAD 2011 as well as the latest version of CalEEMod (version 2013.2.2).

E4. The City of Duarte acting as the lead agency will comply with the requirements of the *Public Resources Code* Section 21092.5 and will provide written comments to public agencies at least ten days prior to certifying the Final EIR.

E5. *Table 5.5-1*, *National and California Ambient Air Quality Standards*, of the Draft EIR will be revised as follows for the Final EIR to update the attainment status for PM_{10}, which was recently redesignated, and to correct a typographical error for the $PM_{2.5}$ attainment status (refer to Section 13.0, Errata for Final EIR):

Particulate Matter (PM_{10})	24 Hour	50 μg/m³	**Nonattainment**	150 μg/m³	**Nonattainment** Attainment
	Annual Arithmetic Mean	20 μg/m³	**Nonattainment**	N/A[7]	**Nonattainment** Attainment
Fine Particulate Matter ($PM_{2.5}$)	24 Hour	No Separate State Standard		35 μg/m³	Unclassified **Nonattainment**
	Annual Arithmetic Mean	12 μg/m³	**Nonattainment**	12 μg/m³	**Nonattainment**

E6. This comment reiterates the comments regarding health risk. Refer to Response E3.

E7. This comment provides mitigation measures designed to lower NO_X emissions from off-road construction equipment. However, as concluded in the Draft EIR, construction exhaust emissions (including NO_X) would not exceed SCAQMD thresholds. Therefore, additional mitigation measures are not required.

COMMENT LETTER F

COUNTY OF LOS ANGELES

FIRE DEPARTMENT

1320 NORTH EASTERN AVENUE
LOS ANGELES, CALIFORNIA 90063-3294

DARYL L. OSBY
FIRE CHIEF
FORESTER & FIRE WARDEN

RECEIVED
OCT 24 2013
CITY OF DUARTE

October 17, 2013

Jason Golding, Senior Planner
Community Development Department
City of Duarte
1600 Huntington Drive
Duarte, CA 91010

Dear Mr. Golding:

DRAFT ENVIRONMENTAL IMPACT REPORT, AMENDMENT 13-1 AND ZONE CHANGE 13-1 "DUARTE STATION SPECIFIC PLAN" WILL AMEND THE GENERAL PLAN DESIGNATION AND CHANGE THE ZONING OF THE SITE AND IS INTENDED TO ESTABLISH THE GENERAL TYPE PARAMETERS, AND CHARACTER OF THE DEVELOPMENT, HIGHLAND AVENUE & EAST DUARTE ROAD, DUARTE (FFER #201300159)

The Draft Environmental Impact Report has been reviewed by the Planning Division, Land Development Unit, Forestry Division, and Health Hazardous Materials Division of the County of Los Angeles Fire Department. The following are their comments:

PLANNING DIVISION:

Fire Protection

FP-6 – This Mitigation Measure should be deleted; the Los Angeles County Fire Department **does not** have a developer Fee Program in effect in the City of Duarte. **F1**

LAND DEVELOPMENT UNIT:

1. This project does not propose construction of structures or any other improvements at this time. Therefore, until actual construction is proposed the project will not have a significant impact to the Fire Department, Land Development Unit. **F2**

2. The County of Los Angeles Fire Department, Land Development Unit appreciates the opportunity to comment on this project. **F3**

3. The statutory responsibilities of the County of Los Angeles Fire Department, Land Development Unit, are the review of, and comment on, all projects within the unincorporated areas of the County of Los Angeles. Our emphasis is on the availability of sufficient water supplies for firefighting operations and local/regional access issues. However, we review all projects for issues that may have a significant impact on the County of Los Angeles Fire Department. We are responsible for the review of all projects within Contract Cities (cities that contract with the County of Los Angeles Fire Department for fire protection services). We are responsible for all County facilities, located within non-contract cities. **F4**

   The County of Los Angeles Fire Department, Land Development Unit may also comment on conditions that may be imposed on a project by the Fire Prevention Division, which may create a potentially significant impact to the environment.

4. Should any questions arise regarding subdivision, water systems, or access, please contact the County of Los Angeles Fire Department, Land Development Unit Inspector, Claudia Soiza, at (323) 890-4243. **F5**

FORESTRY DIVISION – OTHER ENVIRONMENTAL CONCERNS:

1. The areas germane to the statutory responsibilities of the County of Los Angeles Fire Department, Forestry Division have been addressed. **F6**

2. The statutory responsibilities of the County of Los Angeles Fire Department, Forestry Division include erosion control, watershed management, rare and endangered species, vegetation, fuel modification for Very High Fire Hazard Severity Zones or Fire Zone 4, archeological and cultural resources, and the County Oak Tree Ordinance. **F7**

HEALTH HAZARDOUS MATERIALS DIVISION:

1. Prior to any grading, a Phase I must be completed for each of the commercial and/or industrial properties within the proposed development area. Properties identified with potential use, release or storage of hazardous materials must be assessed and if necessary mitigated under oversight of the Los Angeles County Fire Department or the State Department of Toxic Substances Control. **F8**

If you have any additional questions, please contact this office at (323) 890-4330.

Very truly yours,

Frank Vidales

FRANK VIDALES, CHIEF, FORESTRY DIVISION
PREVENTION SERVICES BUREAU

FV:ij

F. RESPONSES TO COMMENTS FROM FRANK VIDALES, CHIEF, FORESTRY DIVISION, PREVENTION SERVICES BUREAU, COUNTY OF LOS ANGELES FIRE DEPARTMENT, DATED OCTOBER 17, 2013.

F1. Mitigation Measure FP-6 will be removed wherever referenced in the Draft EIR. As a result, the Fire Protection Mitigation Measures in the Draft EIR will be renumbered in the Final EIR.

F2. The comment notes that the project does not currently propose construction of structures or other improvements; therefore, the proposed project will not have a significant impact to the Fire Department, Land Development Unit. The comment is acknowledged. No further response is necessary.

F3. The comment states their appreciation for the opportunity to comment on the project. The comment is acknowledged. No further response is necessary.

F4. The comment notes the statutory responsibilities of the County of Los Angeles Fire Department, Land Development Unit. The comment is acknowledged. No further response is necessary.

F5. The comment provides Los Angeles County Fire Department contact information regarding subdivision, water systems, or access. The comment is acknowledged. No further response is necessary.

F6. The comment notes the areas germane to the Forestry Division have been addressed. The comment is acknowledged. No further response is necessary.

F7. The comment notes the statutory responsibilities of the County of Los Angeles Fire Department, Forestry Division. The comment is acknowledged. No further response is necessary.

F8. The comment notes that prior to grading, a Phase I must be completed for each of the commercial and/or industrial properties. Properties with the potential release, use, or storage of hazardous materials must be assessed and if necessary mitigated under oversight of the Los Angeles County Fire Department of State Department of Toxic Substances Control. Draft EIR Section 5.8, Hazards and Hazardous Materials, includes mitigation measures which require identification of potential hazardous conditions within the site, characterization of the hazards, and implementation of appropriate remedial action in compliance with the Los Angeles County Fire Department and other applicable regulatory agencies, if required.

COMMENT LETTER G

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
Telephone: (562) 699-7411, FAX: (562) 699-5422
www.lacsd.org

GRACE ROBINSON CHAN
Chief Engineer and General Manager

November 1, 2013

Ref File No.: 2734523

RECEIVED
NOV 04 2013
CITY OF DUARTE

Mr. Jason Golding, Senior Planner
City of Duarte
1600 Huntington Drive
Duarte, CA 91010-2592

Dear Mr. Golding:

Duarte Station Specific Plan

The County Sanitation Districts of Los Angeles County (Districts) received a Draft Environmental Impact Report for the subject project on September 19, 2013. The proposed development is located within the jurisdictional boundaries of District No. 22. We offer the following comments:

1. Previous comments submitted by the Districts in correspondence dated May 9, 2013 (copy enclosed) still apply to the subject project with the following updated information. **G1**

2. The San Jose Creek Water Reclamation Plant (WRP) currently processes an average flow of 74.5 million gallons per day, and the Whittier Narrows WRP currently processes an average flow of 8.1 mgd. **G2**

3. The expected average wastewater flow from the project site is 235,950 gallons per day. **G3**

4. All other information concerning Districts' facilities and sewerage service contained in the document is current. **G4**

If you have any questions, please contact the undersigned at (562) 908-4288, extension 2717.

Very truly yours,

Grace Robinson Chan

Adriana Raza
Customer Service Specialist
Facilities Planning Department

AR:ar

Enclosure

cc: M. Tremblay
J. Ganz

DOC: #2778554.D22

Recycled Paper

COUNTY SANITATION DISTRICTS
OF LOS ANGELES COUNTY

1955 Workman Mill Road, Whittier, CA 90601-1400
Mailing Address: P.O. Box 4998, Whittier, CA 90607-4998
Telephone: (562) 699-7411, FAX: (562) 699-5422
www.lacsd.org

GRACE ROBINSON CHAN
Chief Engineer and General Manager

May 9, 2013

Ref. File No: 2563368

Mr. Jason Golding, Senior Planner
City of Duarte
1600 Huntington Drive
Duarte, CA 91010

Dear Mr. Golding:

Duarte Station Specific Plan

The County Sanitation Districts of Los Angeles County (Districts) received a Notice of Preparation of a Draft Environmental Impact Report for the subject project on April 11, 2013. The proposed development is located within the jurisdictional boundaries of District No. 22. We offer the following comments regarding sewerage service:

1. The Districts should review individual developments within the City in order to determine whether or not sufficient trunk sewer capacity exists to serve each project and if Districts' facilities will be affected by a project.

2. The following is a list of Districts' trunk sewers that could serve the project area.

Name	Location	Size (dia.)*	Design Capacity (mgd)**	Peak Flow (mgd)	Last Measured
Buena Vista Trunk Sewer	In Three Ranch Road west of Duncannon Avenue	12"	1.7mgd	0.5mgd	2010
Duarte Trunk Sewer	In Highland Avenue between the 210 freeway and Duarte Road	12"	1.7mgd	1.0mgd	2009

*(dia.) – diameter
**(mgd) – million gallons per day

3. The wastewater generated by the proposed project will be treated at the San Jose Creek Water Reclamation Plant (WRP) located adjacent to the City of Industry, which has a design capacity of 100 mgd and currently processes an average flow of 76.6 mgd, or the Whittier Narrows WRP located near the City of South El Monte, which has a design capacity of 15 mgd and currently processes an average flow of 8.0 mgd.

4. In order to estimate the volume of wastewater a project will generate, go to www.lacsd.org, Wastewater & Sewer Systems, Will Serve Program, and click on the Table 1, Loadings for Each Class of Land Use link.

5. The Districts are authorized by the California Health and Safety Code to charge a fee for the privilege of connecting (directly or indirectly) to the Districts' Sewerage System or increasing the strength or quantity of wastewater attributable to a particular parcel or operation already connected. This connection fee is a capital facilities fee that is imposed in an amount sufficient to construct an incremental expansion of the Sewerage System to accommodate the proposed project. Payment of a connection fee will be required before a permit to connect to the sewer is issued. For a copy of the Connection Fee Information Sheet, go to www.lacsd.org, Wastewater & Sewer Systems, Will Serve Program, and click on the appropriate link. For more specific information regarding the connection fee application procedure and fees, please contact the Connection Fee Counter at extension 2727.

6. In order for the Districts to conform to the requirements of the Federal Clean Air Act (CAA), the design capacities of the Districts' wastewater treatment facilities are based on the regional growth forecast adopted by the Southern California Association of Governments (SCAG). Specific policies included in the development of the SCAG regional growth forecast are incorporated into clean air plans, which are prepared by the South Coast and Antelope Valley Air Quality Management Districts in order to improve air quality in the South Coast and Mojave Desert Air Basins as mandated by the CAA. All expansions of Districts' facilities must be sized and service phased in a manner that will be consistent with the SCAG regional growth forecast for the counties of Los Angeles, Orange, San Bernardino, Riverside, Ventura, and Imperial. The available capacity of the Districts' treatment facilities will, therefore, be limited to levels associated with the approved growth identified by SCAG. As such, this letter does not constitute a guarantee of wastewater service, but is to advise you that the Districts intend to provide this service up to the levels that are legally permitted and to inform you of the currently existing capacity and any proposed expansion of the Districts' facilities.

If you have any questions, please contact the undersigned at (562) 908-4288, extension 2717.

Very truly yours,

Grace Robinson Chan

Adriana Raza
Customer Service Specialist
Facilities Planning Department

AR: ar

c: M. Tremblay
J. Ganz

Doc #: 2589559.D22

G. RESPONSES TO COMMENTS FROM ADRIANA RAZA, CUSTOMER SERVICE SPECIALIST, COUNTY SANITATION DISTRICTS OF LOS ANGELES COUNTY, DATED NOVEMBER 1, 2013.

G1. The comment states that previous comments submitted still apply to the project with updated information. Refer to response to Comment G2 and G3.

G2. The comment provides updated information for the San Jose Creek Water Reclamation Plan (WRP) and Whittier Narrows WRP since issuance of the Notice of Preparation (NOP). In accordance with CEQA Guidelines Section 15125 (Environmental Setting) the Draft EIR includes a description of environmental conditions as they existed at the time the NOP was published. The environmental setting establishes the baseline conditions by which the lead agency determines whether an impact is significant. The Draft EIR identifies the average flow for the San Jose Creek WRP and Whittier Narrows WRP provided by the County Sanitation Districts of Los Angeles County at the time the NOP was issued, in compliance with the CEQA Guidelines. However, it is noted that more current information is available since issuance of the Draft EIR and has been provided by the County Sanitation Districts of Los Angeles County.

G3. The comment identifies expected average wastewater flow from the project site as 235,950 gallons per day (gpd). The Draft EIR calculates average wastewater flow for the proposed project using typical industry values based on land use, which results in less wastewater flow than identified by the Districts. It should be noted that site-specific development is not currently being proposed as part of the project. Wastewater generated by future development associated with the proposed project would be determined on a project-by-project basis. The Draft EIR acknowledges that implementation of the proposed project would generate increased wastewater flows, placing greater demands on wastewater treatment facilities. In order for the Districts to conform to the requirements of the Federal Clean Air Act (CAA), the design capacities of the Districts' wastewater treatment facilities are based on the regional growth forecast adopted by the Southern California Association of Governments (SCAG). All expansions of Districts' facilities must be sized and service phased in a manner that will be consistent with the SCAG regional growth forecast for the Los Angeles County, among others. The available capacity of the Districts' treatment facilities would, therefore, be limited to levels associated with the approved growth identified by SCAG. The Districts have expressed their intent to provide service up to the levels that are legally permitted. As indicated in the Draft EIR, although the proposed project would contribute to the growth anticipated by SCAG, project implementation would not cause SCAG's 2035 household and population forecasts for the City to be exceeded. Thus, the proposed project would not conflict with SCAG's population and household forecasts for the City. Furthermore, the Districts would review development projects on a project-by-project basis, in order to determine if adequate capacity exists within the Districts' wastewater treatment facilities to serve the development and if Districts' facilities would be impacted.

G4. The comment notes that other information concerning the Districts' facilities and sewerage service contained in the Draft EIR is current.

COMMENT LETTER H

PIERCE LAW FIRM
A PROFESSIONAL CORPORATION

WWW.PIERCEFIRM.COM

1440 NORTH HARBOR BOULEVARD, SUITE 900
FULLERTON, CALIFORNIA 92835
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FACSIMILE (714) 449-3337

OUR FILE NO.
8160.001
SENDER S EMAIL ADDRESS
BPierce@piercefirm.com

November 4, 2013

VIA EMAIL AND FIRST CLASS U.S. MAIL
Jason Golding, Senior Planner - goldingj@accessduarte.com
City of Duarte
1600 Huntington Drive
Duarte, CA 91010

Re: Comments on Draft EIR for Duarte Station Specific Plan (SCHNO 2013041032)

Dear Mr. Golding:

Thank you for the opportunity to comment on the City's EIR for the Duarte Station Specific Plan (General Plan Amendment 13-1 and Zone Change 13-1). As you know we represent the owners of the properties located at 1716 Evergreen and 1801 Highland.

As you also know, we have been working with the City Attorney's office and Craig Hensley, the City's Director of Community Development and we provided comments at the Planning Commission meeting on October 21, 2013 concerning the proposed project. Our concern with respect to the EIR is that the EIR fails to address the environmental impacts of a likely outcome of the project. As currently drafted the Specific Plan provides for the continued use by the property owners in the plan area of their existing uses, notwithstanding the non-conformity of those uses with the proposed project, i.e. not part of the transit oriented development plan. Those uses are identified as Legacy Uses and the sites are identified as Legacy Sites. **H1**

As explained in the EIR the reference to Legacy Sites and Legacy Uses is intended to document the concept that the existing uses may continue until market forces stimulate a change in use. However, the limitations on the Legacy Uses and Legacy Sites do not allow the current property owners to respond to market conditions that do not bring about the developments anticipated by the EIR. Accordingly, the EIR fails to address a scenario where market conditions do not give rise to the project as described in the EIR while the new Specific Plan limits the Legacy Sites and Legacy Uses from being redeveloped (unless damaged by forces beyond the owners' and tenants' control), thereby potentially resulting in blight that cannot be remedied consistent with the Specific Plan and a host of other impacts that are not addressed in the EIR.

A scenario where the development anticipated by the EIR does not come to fruition is likely and therefore must be analyzed in the EIR. For example, as noted in the EIR, this specific plan revision is "City initiated," not market or developer driven. Additionally, while the EIR notes that individual developers and teams expressed interest in such a development in 2007-2008, current economic conditions are substantially different from those in place during the 2007 and 2008 time period. Additionally, lessons learned during 2008 and 2009 call into question the viability of the plans proposed by the development teams in 2007-2008, as well as the development contemplated by the EIR. The City's consultant, Economic & Planning Systems, Inc. also questions the viability of the proposed project in its August 5, 2013 Final Report – Implementation Strategy Duarte Gold Line Station Transit Village Area Plan.

Further, competition from other light rail station sites and cities whose TOD developments come on-line before the City of Duarte's, further undermines the likelihood of a successful development like that contemplated in the EIR. Accordingly, to comply with the California Environmental Quality Act the EIR must consider the environmental impacts of the implementation of the Specific Plan and Zone Amendments should market forces not bring about the development contemplated. As drafted, it does not.

The owners and staff have been working on revised language for the Specific Plan that would apply to Legacy Uses and Legacy Sites and avoid the need for the EIR to address the situation where the TOD development is not accomplished, yet the Legacy Uses and Legacy Sites are rezoned. **H1**

If the following language for the Specific Plan related to existing users is incorporated, then these comments will be moot because the express language of the Specific Plan will allow the existing property owners to redevelop their Legacy Sites consistent with the code.

4.1.6 Existing Users

Sites within the Specific Plan area that contain uses that are not otherwise consistent with the Specific Plan are deemed "Legacy Sites." Uses that are currently allowed within the M-1 zoning designation of the City are deemed Legacy Uses. Legacy Uses shall be permitted to continue on Legacy Sites until such time as they are abandoned. A Legacy Use on a Legacy Site is deemed abandoned when (i) any Legacy Use on the Legacy Site has been discontinued for a continuous period of one year or more, (ii) when the owner of a Legacy Site affirmatively indicates in writing that it has abandoned Legacy Uses on the Legacy Site, and/or (iii) the owner of a Legacy Site redevelops the site with a non-Legacy Use. For a

multiple tenant building on a Legacy Site: individual tenant spaces that are vacant for more than one year shall not be deemed a discontinuance under this section.

At any time prior to abandonment, Legacy Sites may be expanded by an amount not to exceed five percent (5%) of the building square footage of the subject Legacy Site that existed as of the date of the adoption of the Specific Plan. If a Legacy Site is expanded, reconstructed or repaired in accordance with this paragraph, it shall be subject to site plan and design review as outlined in Section 6 of this Specific Plan, but shall be subject to the development standards set forth for properties in the Industrial Zone, as specified in the Duarte Development Code. **H1**

It is the intent of this Specific Plan that Legacy Uses on Legacy Sites are allowed until such time as market conditions cause the property owners to wish to redevelop the Legacy Site with Non-Legacy Uses.

After working with staff to craft the foregoing language, the owners are confident that if the Specific Plan is revised to use include the proposed language for the existing uses, the EIR adequately addresses the potential environmental impacts of the plan.

Very truly yours,

Bradley D. Pierce

BDP/lsd
Enclosure

H. RESPONSES TO COMMENTS FROM BRADLEY D. PIERCE, PIERCE LAW FIRM, DATED NOVEMBER 4, 2013.

H1. The commentator identifies that he represents the owners of two properties within the Specific Plan area.

Specific Plan

The commentator has raised concerns regarding the legacy site and legacy use language in Specific Plan Section 4.1.6, Existing Users. In addition, the commentator notes that he has been working with the City of Duarte regarding language in Section 4.1.6 and recommends language on pages 2 and 3 of the letter.

At the November 4, 2013 Planning Commission hearing, the revised language recommended by the commentator along with additional language recommendations by City Staff for Section 4.1.6 of the Specific Plan was included as part of the recommendation to the City Council, and will be reflected in the Final Specific Plan. The final wording is noted below.

Sites within the Specific Plan area that contain uses that are not otherwise consistent with the Specific Plan are deemed "Legacy Sites." Uses that are currently allowed within the M-1 zoning designation of the City are deemed Legacy Uses. Legacy Uses shall be permitted to continue on Legacy Sites until such time as they are abandoned. A Legacy Use on a Legacy Site is deemed abandoned when (i) any Legacy Use on the Legacy Site has been discontinued for a continuous period of one year or more, (ii) when the owner of a Legacy Site affirmatively indicates in writing that it has abandoned Legacy Uses on the Legacy Site, and/or (iii) the owner of a Legacy Site redevelops the site with a non-Legacy Use. For a multiple tenant building on a Legacy Site: individual tenant spaces that are vacant for more than one year shall not be deemed a discontinuance under this section.

At any time prior to abandonment, Legacy Sites may be expanded by an amount not to exceed five percent (5%) of the building square footage of the subject Legacy Site that existed as of the date of the adoption of the Specific Plan. If a Legacy Site is expanded, reconstructed or repaired in accordance with this paragraph, it shall be subject to site plan and design review as outlined in Section 6 of this Specific Plan, and shall be subject to the development standards set forth for properties in the Industrial Zone, as specified in the Duarte Development Code.

It is the intent of this Specific Plan that Legacy Uses on Legacy Sites are allowed until such time as market conditions cause the property owners to wish to redevelop the Legacy Site with Non-Legacy Uses.

Environmental Impact Report

The commentator concluded the letter by stating "if the Specific Plan is revised to include the proposed language for the existing uses, the EIR adequately addresses the potential impacts of the Plan."

The City concurs with the statement that Environmental Impact Report (EIR) has adequately addressed the environmental impacts associated with the Duarte Station Specific Plan. The revised language in Section 4.1.6 of the Specific Plan does not require changes to the project description, nor does it change the conclusions in the EIR.

SECTION 13.0
Errata for Final EIR

13.0 ERRATA FOR FINAL EIR

Changes to the Draft Environmental Impact Report (Draft EIR) are noted below. A double-underline indicates additions to the text; strikeout indicates deletions to the text. Changes have been analyzed and responded to in Section 12.0, Comments and Responses of the Final EIR. The changes to the Draft EIR do not affect the overall conclusions of the environmental document. Changes are listed by page and, where appropriate, by paragraph.

SECTION 1.0, EXECUTIVE SUMMARY

Pages 1-12 through 1-15 of the Draft EIR will be revised as follows to modify Mitigation Measures TRF-1, TRF-2, TRF-3, and TRF-4.

TRF-1	Village Road/Duarte Road – Install a new traffic signal at the Village Road/Duarte Road intersection. All project applicants within the Duarte Station Specific Plan Area~~PM~~ and the City of Hope (Phase 1) shall have a fair-share contribution for signal modification at the Buena Vista Street/Duarte Road intersection. The first development project(s) shall be responsible for the signal modification and will be reimbursed on a fair share basis by the remainder of the developments in the Duarte Station Specific Plan Area ~~PM~~ and/or the City of Hope (Phase 1).
TRF-2	Buena Vista Street/Duarte Road – Modify the traffic signal by implementing a right-turn overlap phase at the westbound Duarte Road approach. All project applicants within the Duarte Station Specific Plan Area~~PM~~ and the City of Hope (Phase 1) shall have a fair-share contribution for signal modification at the Buena Vista Street/Duarte Road intersection. The first development project(s) shall be responsible for the signal modification and will be reimbursed on a fair share basis by the remainder of the developments in the Duarte Station Specific Plan Area ~~PM~~ and/or the City of Hope (Phase 1).
TRF-3	Buena Vista Street/Three Ranch Road – Install "KEEP CLEAR" or "DO NOT BLOCK" signing and striping in both directions of travel on Buena Vista Street at the Buena Vista Street/Three Ranch Road intersection. The City shall install the signage and striping and will be reimbursed on a fair-share basis by all development within the Duarte Station Specific Plan Area~~PM~~ and the City of Hope (Phase 1).
TRF-4	All project applicants within the Duarte Station Specific Plan Area~~PM~~ shall prepare and submit at their time of their development application to the Community Development Department a traffic study that: 1) documents the project-related trips and provides a comparative review with the analysis in this EIR, and 2) uses the Highway Capacity Manual (HCM) intersection analysis methodology to determine whether the individual project increases the average delay per vehicle

intersections having an existing unacceptable level of service without project traffic.

The thresholds to be used for the delay analysis are:

a. Signalized Intersections: The project increases the average delay by more than 5 seconds per vehicle at an intersection having an unacceptable LOS without project traffic.

b. All-Way Stop Intersections: The project increases the overall average delay by more than 5 seconds per vehicle at an intersection that has an unacceptable LOS without the project and the intersection also meets the peak hour volume signal warrant.

c. One- and Two-Way Stop Intersections:
The project causes the following to occur for the worst-case movement:
-The LOS declines to an unacceptable LOS, and
-The volume to capacity ratio exceeds 0.75, and
-The 95th percentile queue exceeds 75 feet (3 vehicles), or
The project causes the worst-case movement's acceptable LOS to decline to an unacceptable LOS and the peak hour volume signal warrant is met, or
The project increases the average delay for the worst-case movement by more than 5 seconds per vehicle at an intersection that has an unacceptable LOS without the project and the intersection also meets the peak hour volume signal warrant.

The study will need to identify appropriate mitigation and timing, if impacts are identified. The study and mitigation requires review and approval from the City Engineer.

Potential improvements to be considered as mitigation include, but are not limited to:

- Restrict on-street parking during peak hours
- Install "KEEP CLEAR" or "DO NOT BLOCK" signage and striping
- Install signalized pedestrian crossing
- Install Two-Way Stop
- Install Four-Way Stop
- Signal timing and coordination
- Addition of lanes within existing right-of-way, including restriping
- Lengthening of existing turn lanes to accommodate additional vehicles
- Widening of right-of-way consistent with Circulation Element Diagram CIR-1, Standard Roadway Cross-Sections, and Diagram CIRC-4, Circulation System, requirements

Pages 1-15 and 1-16 of the Draft EIR will be revised as follows to modify Mitigation Measure TRF-5.

TRF-5 When deemed necessary by the City Community Development Director and/or City Engineer, the project applicant(s) shall prepare, implement, and fund ~~and implement~~ a Neighborhood Traffic Management Plan (NTMP), which shall include three components: education, enforcement, and enhancement.

The educational component of the NTMP shall provide the community with a means of understanding traffic management tools and processes and also increase public awareness of the impact that traffic will have on the neighborhood. Educational efforts that could be implemented as part of the NTMP include, but are not limited to, the following:

- Coordination of neighborhood NTMP meetings
- Coordination of a speed watch program
- Coordination of the placement of temporary NTMP yard signs with volunteers
- Design and distribution of NTMP brochures
- Coordination of applicant and/or staff presentations to neighborhood groups

The enforcement component of the NTMP entails focusing law enforcement efforts to acknowledge areas of concern. Enforcement efforts that could be implemented as part of the NTMP include, but are not limited to, the following:

- Increased enforcement
- Real-time speed feedback signs
- Signage ("Entering residential neighborhood…")

The enhancement component of the NTMP consists of non-physical and physical transportation system improvements. Numerous traffic-calming devices may be selected by a neighborhood for placement on a street. Potential improvements that could be implemented by the applicant and/or City of Duarte as part of the NTMP include, but are not limited to, the following:

- Pavement marking/lane narrowing
- Temporary speed tables
- Neckdowns/bulbouts (extensions of curbs/corner sidewalks at an intersection)
- Choker/Chicane (chokers are build-outs added to a road to narrow it, while chicanes are sequences of tight serpentine curves designed to slow roadway traffic)
- Turn movement restrictions
- Diagonal intersection diverters
- Median barrier through intersection
- Forced turn island

Pages 1-22 and 1-13 of the Draft EIR will be revised as follows to modify Mitigation Measure N-3.

N-3	Prior to site plan approval~~the issuance of building permits~~, the Community Development Director shall confirm that all applicable building plans and specifications include a closed design (i.e., a solid wall) for the walls of parking structures that are within 150 feet of residences, including the western side of the parking structure that faces Denning Avenue. The closed design is only required for walls that face residences.

Page 1-29 of the Draft EIR will be revised as follows to modify Mitigation Measure FP-3.

FP-3	Prior to issuance of building permits~~construction~~, a will-serve letter from the California American Water Company shall be obtained by the project applicant, which states that the Water Company can adequately meet water flow requirements.

Page 1-30 of the Draft EIR will be revised as follows to remove Mitigation Measure FP-6, per the County of Los Angeles Fire Department and renumber the remaining mitigation measures.

~~**FP-6**~~	~~Concurrent with the issuance of building permits, each project applicant shall participate in the Developer Fee Program to the satisfaction of the Los Angeles County Fire Department.~~
FS-~~7~~6	All new structures shall have automatic fire sprinkler systems.
FS-~~8~~7	A supervised fire alarm system that meets requirements of the California Fire Code shall be placed in an accessible location with an annunciator.
FS-~~9~~8	Access to and around structures shall meet Los Angeles County Fire Department and California Fire Code requirements.
FS-~~10~~9	A water supply system shall be in place to supply fire hydrants and automatic fire sprinkler systems.
FS-~~11~~10	All traffic signals on public access ways shall include the installation of optical preemption devices.
FS-~~12~~11	All electric gates within the project shall install emergency opening devices approved by the Los Angeles County Fire Department.

SECTION 5.4, TRAFFIC

Pages 5.4-28 and 5.4-29 of the Draft EIR will be revised as follows to modify Mitigation Measure TRF-5.

TRF-5 When deemed necessary by the City Community Development Director and/or City Engineer, the project applicant(s) shall prepare, implement, and fund ~~and implement~~ a Neighborhood Traffic Management Plan (NTMP), which shall include three components: education, enforcement, and enhancement.

The educational component of the NTMP shall provide the community with a means of understanding traffic management tools and processes and also increase public awareness of the impact that traffic will have on the neighborhood. Educational efforts that could be implemented as part of the NTMP include, but are not limited to, the following:

- Coordination of neighborhood NTMP meetings
- Coordination of a speed watch program
- Coordination of the placement of temporary NTMP yard signs with volunteers
- Design and distribution of NTMP brochures
- Coordination of applicant and/or staff presentations to neighborhood groups

The enforcement component of the NTMP entails focusing law enforcement efforts to acknowledge areas of concern. Enforcement efforts that could be implemented as part of the NTMP include, but are not limited to, the following:

- Increased enforcement
- Real-time speed feedback signs
- Signage ("Entering residential neighborhood…")

The enhancement component of the NTMP consists of non-physical and physical transportation system improvements. Numerous traffic-calming devices may be selected by a neighborhood for placement on a street. Potential improvements that could be implemented by the applicant and/or City of Duarte as part of the NTMP include, but are not limited to, the following:

- Pavement marking/lane narrowing
- Temporary speed tables
- Neckdowns/bulbouts (extensions of curbs/corner sidewalks at an intersection)
- Choker/Chicane (chokers are build-outs added to a road to narrow it, while chicanes are sequences of tight serpentine curves designed to slow roadway traffic)
- Turn movement restrictions
- Diagonal intersection diverters
- Median barrier through intersection
- Forced turn island

SECTION 5.5, AIR QUALITY

Table 5.5-1, *National and California Ambient Air Quality Standards*, of the Draft EIR will be revised as follows to update the attainment status for PM_{10}, which was recently redesignated, and to correct a typographical error for the $PM_{2.5\ attainment}$ status.

Particulate Matter (PM_{10})	24 Hour	50 μg/m³	**Nonattainment**	150 μg/m³	~~**Nonattainment**~~ Attainment
	Annual Arithmetic Mean	20 μg/m³	**Nonattainment**	N/A[7]	~~**Nonattainment**~~ Attainment
Fine Particulate Matter ($PM_{2.5}$)	24 Hour	No Separate State Standard		35 μg/m³	~~Unclassified~~ **Nonattainment**
	Annual Arithmetic Mean	12 μg/m³	**Nonattainment**	12 μg/m³	**Nonattainment**

SECTION 5.7, NOISE

Page 5.7-24 of the Draft EIR will be revised as follows to modify Mitigation Measure N-3.

N-3 Prior to site plan approval~~the issuance of building permits~~, the Community Development Director shall confirm that all applicable building plans and specifications include a closed design (i.e., a solid wall) for the walls of parking structures that are within 150 feet of residences, including the western side of the parking structure that faces Denning Avenue. The closed design is only required for walls that face residences.

SECTION 5.10, FIRE PROTECTION

Page 5.10-1 of the Draft EIR will be revised as follows to modify Mitigation Measure FP-3.

FP-3 Prior to issuance of building permits~~construction~~, a will-serve letter from the California American Water Company shall be obtained by the project applicant, which states that the Water Company can adequately meet water flow requirements.

Page 5.10-4 of the Draft EIR will be revised as follows to remove Mitigation Measure FP-6, per the County of Los Angeles Fire Department and renumber the remaining mitigation measures.

~~FP-6~~	~~Concurrent with the issuance of building permits, each project applicant shall participate in the Developer Fee Program to the satisfaction of the Los Angeles County Fire Department.~~
FS-~~7~~6	All new structures shall have automatic fire sprinkler systems.
FS-~~8~~7	A supervised fire alarm system that meets requirements of the California Fire Code shall be placed in an accessible location with an annunciator.
FS-~~9~~8	Access to and around structures shall meet Los Angeles County Fire Department and California Fire Code requirements.
FS-~~10~~9	A water supply system shall be in place to supply fire hydrants and automatic fire sprinkler systems.
FS-~~11~~10	All traffic signals on public access ways shall include the installation of optical preemption devices.
FS-~~12~~11	All electric gates within the project shall install emergency opening devices approved by the Los Angeles County Fire Department.

Page 5.10-5 of the Draft EIR will be revised as follows to correctly reference the numbered mitigation measures.

Mitigation Measures: Refer to Mitigation Measures FP-1 through FP-~~12~~11. No additional mitigation measures are required.

SECTION 5.9, HYDROLOGY AND DRAINAGE

Page 5.9-5 of the Draft EIR will be revised to include the following text before the City of Duarte Municipal Code heading.

Low Impact Development

Permittees that elect to prepare a Watershed Management Program or an Enhanced Watershed Management Program under the MS4 Permit are required to establish a Low Impact Development (LID) Ordinance to lessen the impacts of development by using smart growth principles and to integrate LID practices and standards for stormwater pollution mitigation through means of infiltration, evapotranspiration, biofiltration, and rainfall harvest and use for new development and redevelopment projects. The City of Duarte is a Permittee and must adopt an LID Ordinance by June 30, 2014. The LID Ordinance will require

stormwater mitigation for a larger number of development and redevelopment projects that previously required under SUSMP.

LID is a stormwater management strategy that seeks to mitigate the impacts of runoff and stormwater pollution as close to its source as possible. LID comprises a set of site design approaches and best management practices (BMPs) to address runoff and pollution at the source. The LID practices can effectively remove nutrients, bacteria, and metals while reducing the volume and intensity of stormwater flows.

Pages 5.9-16 and 1-28 of the Draft EIR will be revised as follows to modify Mitigation Measure HYD-1.

HYD-1 Prior to issuance of any grading or building permit, each project applicant shall enroll electronically through the SMARTS program to comply with the State of California General Construction Permit. Proof of enrollment must be submitted to the City of Duarte before issuance of grading or building permits. Also, a Stormwater Pollution Prevention Plan (SWPPP) or functional equivalent required at that time shall be reviewed and approved by the ~~Director of~~ Public Works Manager and the City Engineer for water quality construction activities on-site. A copy of the SWPPP or functional equivalent required at that time shall be available and implemented at the construction site at all times. The SWPPP or functional equivalent required at that time shall outline the source control and/or treatment control Best Management Practices ~~(BMPs)~~ to avoid or mitigate runoff pollutants at the construction site to the "maximum extent practicable."

Pages 5.9-20 and 1-28 of the Draft EIR will be revised as follows to modify Mitigation Measures HYD-2 and HYD-3.

HYD-2 Concurrent with Site Plan Review or issuance of a grading permit, whichever comes first, a hydrology review shall be conducted by a Registered Civil Engineer for each development phase to ensure that runoff values for each phase remain at or below the runoff values shown in Table 5.9-2, and in compliance with current State law or other applicable statutes.

HYD-3 Prior to the issuance of grading permit, each project applicant shall prepare a plan (i.e., Standard Urban Storm Water Management Plan [SUSMP] or functional equivalent document per current State law or other applicable statutes) in accordance with the guidance to be developed by the NPDES Permit permittees, that includes Low Impact Development and other post-construction Best Management Practices BMPs (such as LID) to reduce pollutant loading. The plan shall be reviewed and approved by the Duarte Public Works ~~Director~~ Manager and City Engineer. The applicant shall be responsible for implement the measures identified in the SUSMP or functional equivalent document.