



**COUNTY OF LOS ANGELES**  
**DEPARTMENT OF PUBLIC WORKS**

*"To Enrich Lives Through Effective and Caring Service"*

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ALHAMBRA, CALIFORNIA 91803-1331  
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GAIL FARBER, Director

ADDRESS ALL CORRESPONDENCE TO:  
P.O. BOX 1460  
ALHAMBRA, CALIFORNIA 91802-1460

September 07, 2010

The Honorable Board of Supervisors  
County of Los Angeles  
383 Kenneth Hahn Hall of Administration  
500 West Temple Street  
Los Angeles, California 90012

Dear Supervisors:

**DELEGATE AUTHORITY TO THE DIRECTOR OF PUBLIC WORKS  
TO NEGOTIATE AND ENTER INTO PRELIMINARY ENGINEERING REIMBURSEMENT  
AGREEMENT WITH  
THE ALAMEDA CORRIDOR-EAST CONSTRUCTION AUTHORITY  
FOR THE SAN GABRIEL TRENCH PROJECT WITHIN  
THE CITIES OF ALHAMBRA, ROSEMEAD, AND SAN GABRIEL, AND  
THE UNINCORPORATED COUNTY OF LOS ANGELES  
(SUPERVISORIAL DISTRICTS 1 AND 5)  
(3 VOTES)**

**SUBJECT**

This action is to authorize the Director of Public Works or her designee to negotiate and enter into a Preliminary Engineering Reimbursement Agreement and any amendments between the County of Los Angeles, the Los Angeles County Flood Control District, and the Alameda Corridor-East Construction Authority for the review of the San Gabriel Trench Project within the Cities of Alhambra, Rosemead, and San Gabriel; the unincorporated County of Los Angeles community of East San Gabriel; and the jurisdiction of the Los Angeles County Flood Control District.

**IT IS RECOMMENDED THAT YOUR BOARD:**

1. Acting as a responsible agency for the San Gabriel Trench Project, consider the Final Environmental Impact Report prepared and adopted by the Alameda Corridor-East Construction Authority Board on April 19, 2010, together with any comments received during the public review process, certify that the Board had independently considered and reached its own conclusions regarding the environmental effects of the Project as shown in the Final Environmental Impact Report, and adopt the Mitigation Monitoring Plan for the Project.

2. Authorize the Director of Public Works or her designee to negotiate and enter into a Preliminary Engineering Reimbursement Agreement and any amendments between the County of Los Angeles, the Los Angeles County Flood Control District, and the Alameda Corridor–East Construction Authority for the review of the San Gabriel Trench Project, with all review costs, estimated to be \$500,000, to be financed by the Alameda Corridor–East Construction Authority.

### **PURPOSE/JUSTIFICATION OF RECOMMENDED ACTION**

The Alameda Corridor-East Construction Authority (ACE) proposes to construct the San Gabriel Trench Project (Project), which will lower the existing Union Pacific Railroad tracks within a below-grade trench and eliminate four railroad at-grade crossings into the City of San Gabriel. ACE is responsible for the design, right-of-way acquisition, and construction of the Project. As part of this process, Walnut Grove Avenue within the unincorporated County of Los Angeles (County) area will be modified and facilities owned and operated by the Los Angeles County Flood Control District (District) will be relocated and new drainage facilities will be constructed and transferred to the District for operation and maintenance. The County and District are required to review the plans and specifications for the proposed modifications, relocation, and construction. In addition, the City of San Gabriel (City) requested the County to provide specific review services. ACE has agreed to reimburse the County and District for the review services.

The purpose of the recommended action is to authorize the Director of Public Works or her designee to negotiate and enter into a Preliminary Engineering Reimbursement Agreement (Agreement), in a form approved by County Counsel, between the County, the District, and ACE to address the design review of the Project and enable the County and District to be reimbursed for their review services.

### **Implementation of Strategic Plan Goals**

The Countywide Strategic Plan directs the provision of Operational Effectiveness (Goal 1) and Community and Municipal Services (Goal 3). The Project will enhance traffic flow and the community environment for County residents, increase safety, and foster economic vitality, thereby improving their quality of life.

### **FISCAL IMPACT/FINANCING**

There will be no impact to the County General Fund.

The Agreement provides for the County and/or District to provide engineering services such as plan review, meeting attendance, and other sundry activities. The actual cost of services rendered by the County and the District will be financed with Road and Flood Control District Funds and will be fully reimbursed by ACE. The cost for these services is currently estimated at \$500,000. The County will give notification to ACE when its expenses reach 80 percent of this amount to allow sufficient time for ACE to appropriate additional funds if necessary.

Funds to finance this work are included in the Fiscal Year 2010-11 Road and Flood Control District Fund Budgets.

### **FACTS AND PROVISIONS/LEGAL REQUIREMENTS**

ACE will design and build the Project at no cost to the County. The limits of the 2.2 mile long Project

include the Cities of Alhambra, Rosemead, and San Gabriel; and the unincorporated East San Gabriel community. The Project consists of 1.4 miles of reinforced concrete trench, four grade separation roadway bridges in the City of San Gabriel at Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard, and a 5,500-foot, 66-inch storm drain underneath public streets north of the trench that will be transferred to and maintained by the District.

The Agreement will address the responsibilities of ACE, the County, and the District for the review of the subject Project. The Agreement will provide for ACE to follow prescribed standard plans and design criteria acceptable to the County and the District. The County and the District will review engineering design plans and reports for the Project. In addition to the review of improvements within the County and District jurisdiction, the City of San Gabriel requested that the County review specific items within the City. ACE will pay the County and the District's actual costs to review the plans.

The Agreement and any subsequent amendments will be reviewed and approved as to form by County Counsel prior to execution. A separate agreement will be executed for construction and maintenance of the Project.

### **ENVIRONMENTAL DOCUMENTATION**

In executing the Agreement, the County and District are acting as a responsible agency for the Project. ACE, as the lead agency, prepared an Initial Study after consulting with the County and District. The ACE Board adopted the Final Environmental Impact Report on April 26, 2010. The ACE Board found that, based on the Final Environmental Impact Report, environmental impact requires mitigation to be reduced to a less than significant level. Following mitigation, the Project will not have a significant effect on the environment.

The Project is not exempt from payment of a fee to the California Department of Fish and Game pursuant to Section 711.4 of the Fish and Game Code to defray the costs of fish and wildlife protection and management incurred by the California Department of Fish and Game. ACE has paid the fee. Upon the Board's finding the Project will not have a significant effect on the environment, the County Department of Public Works (Public Works) will file a Notice of Determination in accordance with Section 21152(a) of the California Public Resources Code and also pay the required filing fees with the County of Los Angeles Registrar-Recorder/County Clerk in the amount of \$75.

### **IMPACT ON CURRENT SERVICES (OR PROJECTS)**

The recommended action will improve the quality of life for County residents traveling in the San Gabriel Valley through enhanced safety, increased mobility, and improved air quality as a result of the Project, and result in the County being reimbursed for its work in reviewing the Project. Public Works will work with ACE and their consultants to identify and mitigate traffic impacts during construction of the Project.

The Honorable Board of Supervisors  
9/7/2010  
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**CONCLUSION**

Please return one adopted copy of this letter to Public Works, Programs Development Division.

Respectfully submitted,

A handwritten signature in cursive script that reads "Gail Farber".

GAIL FARBER  
Director

GF:SA:pr

Enclosure

c: Chief Executive Office  
County Counsel  
Executive Office

# CONSTRUCTION OF THE SAN GABRIEL TRENCH GRADE SEPARATION PROJECT

State Clearinghouse No. 2008101073

Submitted Pursuant to:  
(State) Division 13, California Public Resources Code  
(Federal) 42 USC 4332(2) C

## FINAL ENVIRONMENTAL IMPACT REPORT/ FINDING OF NO SIGNIFICANT IMPACT



Prepared by the  
State of California Department of Transportation  
and  
Alameda Corridor-East Construction Authority

The environmental review, consultation, and any other action required in accordance with applicable Federal laws for this project is being, or has been, carried out by Caltrans under its assumption of responsibility pursuant to 23 U.S.C.327.



APRIL 2010

**Construction of the  
San Gabriel Trench Grade Separation Project**

**Final Environmental Impact Report/  
Finding of No Significant Impact**

Submitted Pursuant to:  
(State) Division 13, California Public Resources Code and  
(Federal) 42 U.S.C 4332(2) C

The environmental review, consultation, and any other action required in accordance with applicable Federal laws for this project is being, or has been, carried out by Caltrans under its assumption of responsibility pursuant to 23 U.S.C.327.

Alameda Corridor-East Construction Authority

and

State of California  
Department of Transportation

---

Rick Richmond  
Chief Executive Officer  
Alameda Corridor-East Construction Authority

---

Date of Approval

---

Ronald J. Kosinski  
Deputy District Director  
District 7 Division of Environmental Planning  
California Department of Transportation

---

Date of Approval

**California Department of Transportation  
Finding of No Significant Impact (FONSI)**

**for the**

**San Gabriel Trench Grade Separation Project**

The California Department of Transportation (Caltrans) and the Alameda Corridor East Construction Authority (ACE) has determined that the Trench alternative will have no significant impact on the human environment. This FONSI is based on the attached EA which has been independently evaluated by Caltrans and ACE and determined to adequately and accurately discuss the need, environmental issues, and impacts of the proposed project and appropriate mitigation measures. It provides sufficient evidence and analysis for determining that an EIS is not required. Caltrans takes full responsibility for the accuracy, scope, and content of the attached EA (and other documents as appropriate).

The environmental review, consultation, and any other action required in accordance with applicable Federal laws for this project is being, or has been, carried-out by Caltrans under its assumption of responsibility pursuant to 23 U.S.C. 327.

Notwithstanding any other provisions of law, a claim arising under federal law seeking judicial review of a permit, license or approval issued by a federal agency for a highway or public transportation project shall be barred unless it is filed within 180 days after publication of a notice in the Federal Register announcing that the permit, license, or approval is final pursuant to the law under which the agency action is taken, unless a shorter time is specified in the federal law pursuant to which judicial review is allowed.

---

Ronald J. Kosinski  
Deputy District Director  
District 7 Division of Environmental Planning  
California Department of Transportation

---

Date of Approval

**CONSTRUCTION OF THE  
SAN GABRIEL TRENCH GRADE SEPARATION PROJECT**

**DRAFT ENVIRONMENTAL IMPACT REPORT/  
ENVIRONMENTAL ASSESSMENT**


Submitted Pursuant to: (State) Division 13, California Public Resources Code  
(Federal) 42 USC 4332(2) C

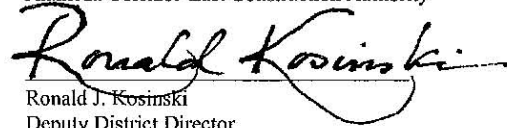
The environmental review, consultation and any other action required in accordance with applicable Federal laws for this project is being, or has been, carried out by Caltrans under its assumption of responsibility to 20 U.S.C.327.

Alameda Corridor-East Construction Authority  
And  
State of California Department of Transportation

Sept. 25, 2009  
Date of Approval

Sept 25, 2009  
Date of Approval

  
Rick Richmond  
Chief Executive Officer  
Alameda Corridor-East Construction Authority

  
Ronald J. Kosinski  
Deputy District Director  
District 7 Division of Environmental Planning  
California Department of Transportation



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## S.0 SUMMARY

### S.1 INTRODUCTION

The proposed project is funded jointly by the California Department of Transportation (Caltrans) and the Federal Highway Administration (FHWA) and is subject to State and federal environmental review requirements. Project documentation, therefore, has been prepared in compliance with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). FHWA's responsibility for environmental review, consultation, and any other action required in accordance with applicable Federal laws for this project is being, or has been, carried out by the Department under its assumption of responsibility pursuant to 23 U.S.C. 327. The Alameda Corridor East (ACE) is the project proponent and the lead agency under CEQA. Some impacts determined to be significant under CEQA may not lead to a determination of significance under NEPA. Because NEPA is concerned with the significance of the project as a whole, it is quite often the case that a "lower level" document is prepared for NEPA. One of the most commonly seen joint document types is an Environmental Impact Report/Environmental Assessment (EIR/EA).

Changes have been made to this environmental document since the circulation of the draft environmental document. Public and agency comments received during the circulation of the Draft EIR/EA, the public hearing process, and subsequent agency consultations have resulted in refinements that have been incorporated into this final environmental document. A vertical line in the outside margin indicates changes in the document.

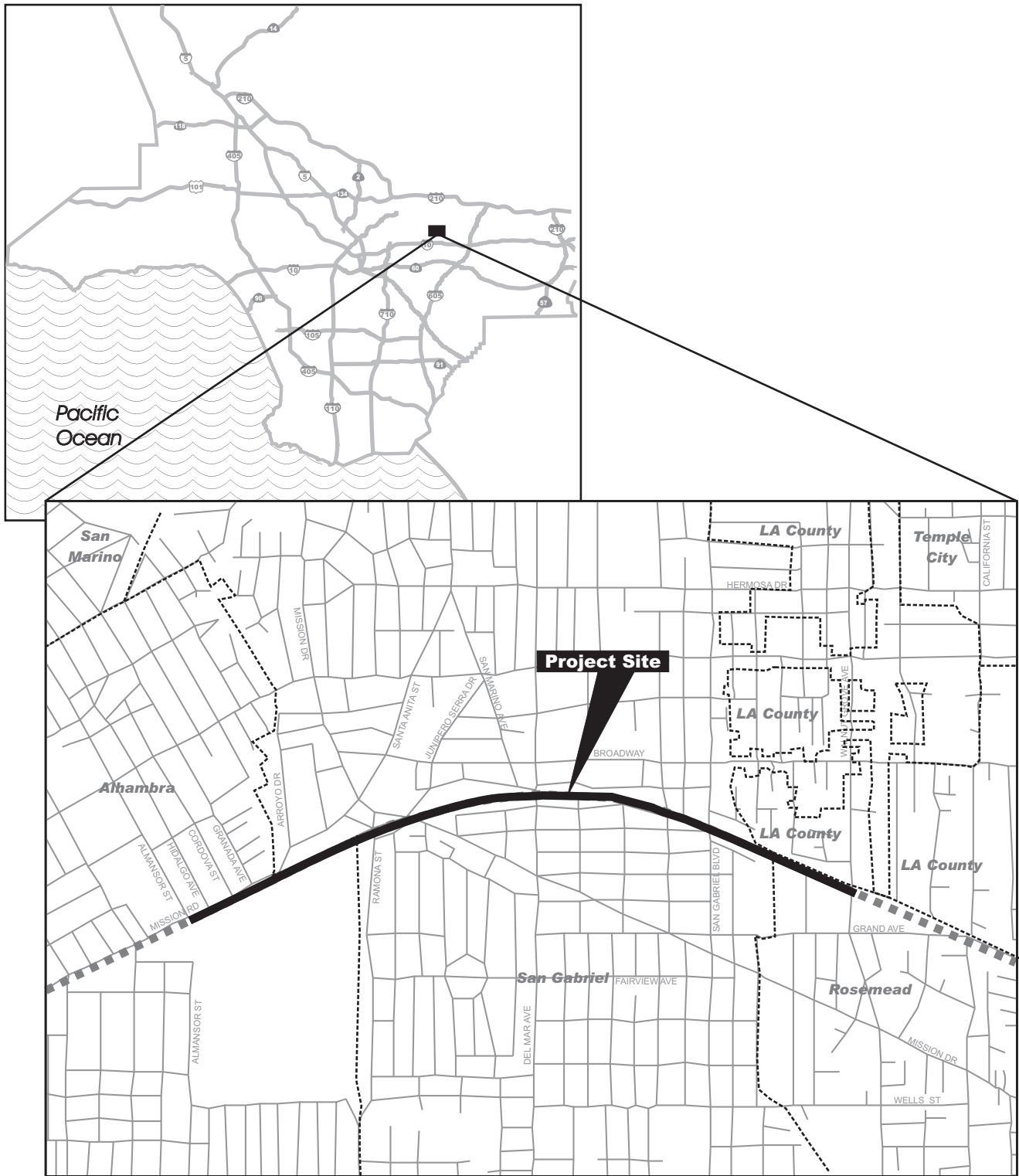
### S.2 PROJECT DESCRIPTION

#### PURPOSE AND NEED

The Alameda Corridor-East Construction Authority (ACE) proposes to eliminate four at-grade railroad crossings along the Union Pacific Railroad (UPRR) in the City of San Gabriel. These improved crossings would occur at Ramona Street, Del Mar Avenue, Mission Drive, and San Gabriel Boulevard. Currently the 2.1-mile stretch of railroad consists of four at-grade crossing with no grade separations between the railroad and vehicles or pedestrians. The proposed project would include the lowering of the existing railroad into a trench that would be located in the City of San Gabriel although construction activities would take place in the Cities of Alhambra and Rosemead. **Figure S-1** shows the regional location of the project site.

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**LEGEND:**

- Project Site
- - -** Union Pacific Railroad - Alhambra Subdivision
- · · · ·** City/Community Boundary

SOURCE: TAHA, 2009.



**San Gabriel Trench Grade Separation Project**  
**Environmental Impact Report/Environmental Assessment**

ALAMEDA CORRIDOR EAST CONSTRUCTION AUTHORITY

**FIGURE S-1**

**REGIONAL LOCATION**



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- The purpose of the proposed project is to eliminate traffic delays and safety hazards associated with the four proposed intersections in the San Gabriel Valley. The San Gabriel Trench Grade Separation Project is proposed to:

- Provide congestion relief in order to improve traffic flow through the City of San Gabriel;
- Improve the safety of four intersections for vehicle travel in the City of San Gabriel;
- Improve the safety and operation of the UPRR through the City of San Gabriel ; and
- Reduce air pollution emissions (regionally and locally).

In addition, the purpose of the proposed project is to:

- Contribute to the overall regional economy by enhancing the region's ability to handle the dramatic growth in goods movement that is anticipated to occur; and
- Help achieve the goals of SCAG's 2008 RTP.

The need for this project arises from:

- Growing demand and reliance of the region's economy on the efficient movement of goods through the region
- Increasing congestion in the area of the proposed project
- Increasing traffic accidents from vehicle-train collisions in the project area

This need for the proposed project is driven in part by population growth, which has led to increased delay at intersections in the project area and the need to enhance an aging existing transportation infrastructure to maintain its long-term viability. The need for this project also arises from the increase in goods movement as a major economic driver in the region.

The San Gabriel Valley Council of Governments (SGVCOG), a joint powers authority comprised of 31 cities and Los Angeles County, and serving 1.9 million residents of the San Gabriel Valley, created the Alameda Corridor-East Construction Authority (ACE) to implement one of the largest transportation programs in the San Gabriel Valley. The ACE Project is a part of a larger transportation corridor known as the Alameda Corridor East Trade Corridor that was designated by the State of California. The Trade Corridor also includes grade separation and rail improvement projects in San Bernardino, Riverside and Orange Counties and has been identified in SAFETEA-LU as a trade corridor of national significance with public infrastructure improvements necessary to connect the San Pedro Bay ports to the transcontinental rail network through the nation's second largest metropolitan area.

When completed, the ACE Project will extend the Alameda Corridor transportation improvements commencing from its terminus near downtown Los Angeles along two 35-mile rail main lines through the San Gabriel Valley to San Bernardino County. The ACE Project consists of multiple construction projects including median improvements, traffic signalization, roadway widenings, and 20 grade separations. The project is divided into two phases. The first phase includes the "Jump Start" safety program completed at 39 crossings, a traffic signalization program being completed, and 10 grade separations. The second phase includes 10 grade separations, including the San Gabriel Trench Grade Separation Project, and the installation of a corridor-wide traffic signalization system.

The proposed project was developed as part of the original Alameda Corridor-East program in the late 1990s. Due to the close proximity of grade crossings and impacts associated with alternative grade separation options near the historic San Gabriel Mission (roadway overhead or underpass alternatives), ACE determined the trench configuration to be the only feasible option.

## PROJECT LOCATION

The project site is primarily located within the City of San Gabriel. The project site includes the Alhambra Subdivision of the Union Pacific Railroad (UPRR) and crosses portions of the Cities of San Gabriel and Alhambra in the San Gabriel Valley. As shown in **Figure S-2**, the project site is an active freight railroad right-of-way, which varies in width, but for the majority of the project limits is approximately 100 feet wide. No land uses or buildings exist on the project site except for traditional railroad-related facilities such as the railroad tracks and crossing gates. **Figure S-3** shows the railroad bridges currently located over both the Alhambra and Rubio Washes. **Figure S-4** shows an aerial view of the project site.

The primary land uses located directly adjacent to the project site include industrial, residential, with some office and commercial land uses. More sensitive historical and civic land uses are set at a distance from the existing railroad facilities. These sensitive land uses include the San Gabriel Mission (north of the Ramona Street and Mission Drive crossings), San Gabriel High School (located southwest of the Junipero Serra Drive and Ramona Street intersection), Rancho Las Tunas Adobe (located approximately 470 feet southeast of the Mission Road and Junipero Serra Drive intersection), the Asian Youth Center (on the north side of the project site at Clary Avenue) and the West San Gabriel Valley YMCA (located southwest of the project site in the City of Alhambra).

**Ramona Street.** Ramona Street is a two-way undivided street with one travel lane in each direction and a posted speed limit of 30 miles per hour (mph) (48.28 kilometers per hour [kmph]). Parking is permitted on both sides of the street. The UPRR railroad tracks intersect at grade with Ramona Street, just south of Mission Road. Ramona Street provides direct access to San Bernardino Freeway (I-10) located to the south.

**Mission Road.** Mission Road is a two-way undivided street with one travel lane in each direction and a posted speed limit of 35 mph (56.33 kmph). Parking is permitted on both sides of the street. Mission Road intersects the UPRR railroad tracks at grade, just south of Junipero Serra Drive. Mission Road provides access to I-10 located to the south via an adjacent north-south street, Del Mar Avenue.

**Del Mar Avenue.** Del Mar Avenue is a north-south street that crosses the UPRR railroad tracks at grade, approximately 0.08 mile (0.13 km) north of Angeleno Avenue. Del Mar Avenue is an undivided two-way street with one travel lane in each direction and posted speed limit of 35 mph. Parking is permitted on both sides of the street. Del Mar Avenue provides direct access to I-10, located to the south.

**San Gabriel Boulevard.** San Gabriel Boulevard has two travel lanes in each direction. It is a two-way undivided street with parking permitted on both sides and a posted speed limit of 35 mph. The UPRR railroad tracks cross San Gabriel Boulevard at grade approximately 0.36 mile (0.58 km) north of Mission Road. San Gabriel Boulevard also provides direct access to I-10 located to the south.

Currently, Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard cross the UPRR tracks at grade; existing facilities at these locations include programmed rail arms, warning bells, and flashing warning lights.



Project site looking west from Mission Road.



Project site looking east from Del Mar Avenue.



Project site looking west from near the Rubio Wash.

SOURCE: TAHA, 2009.

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Looking southeast, from a stormwater ramp at the end of Commercial Avenue, towards the existing Union Pacific Railroad bridge over the Rubio Wash.

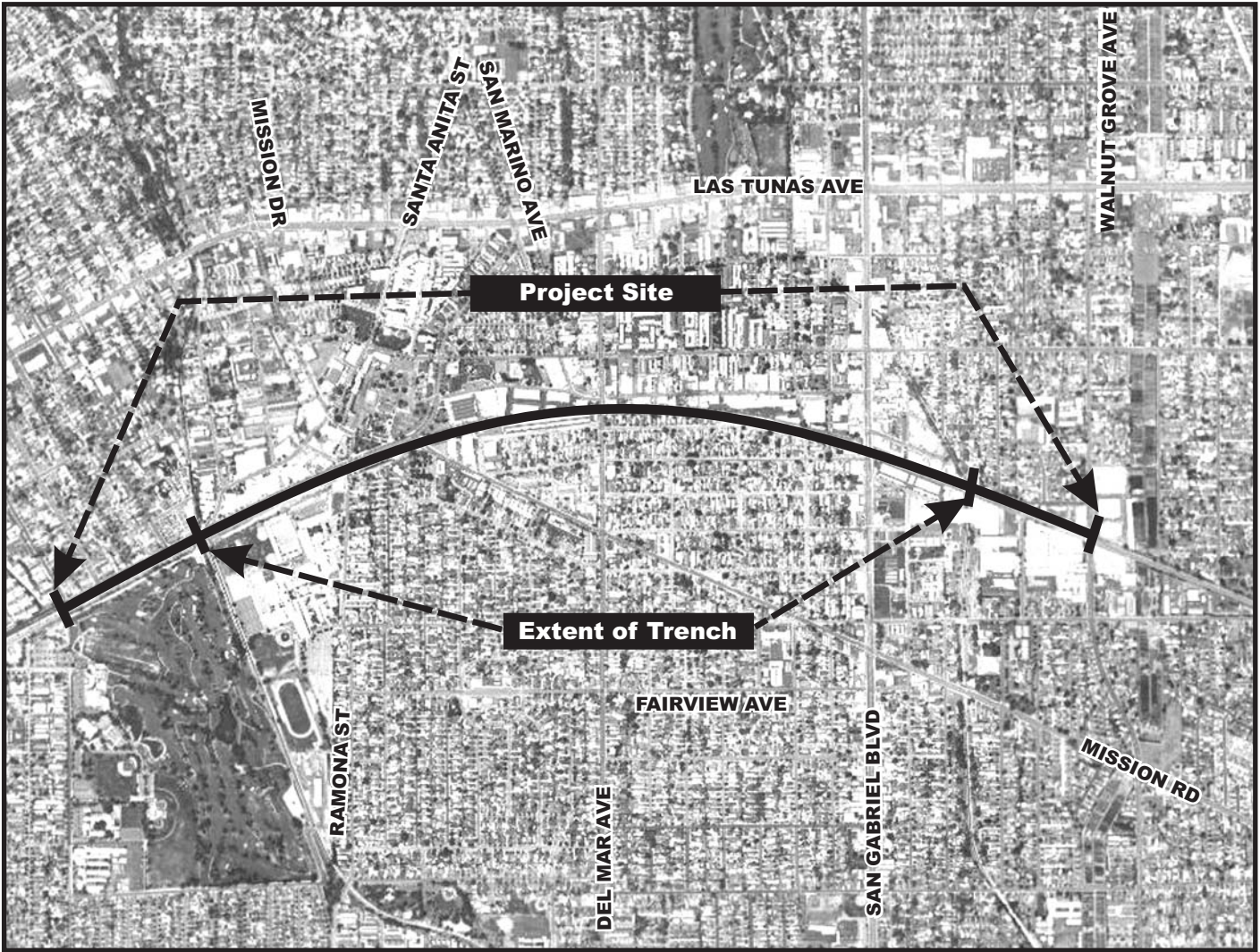


Looking southeast towards the existing Union Pacific Railroad bridge over the Alhambra Wash, adjacent to Mission Road.

SOURCE: TAHA, 2009.

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LEGEND:

- Project Site
- - - City/Community Boundary

SOURCE: County of Los Angeles, 2007 and TAHA, 2009.



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### **S.3 ALTERNATIVES**

Two alternatives are evaluated in this document: the proposed project and the No-Build Alternative. Under CEQA, an EIR must evaluate a range of reasonable alternatives that would feasibly obtain most of the basic objectives of the project, but would avoid or substantially lessen any of the significant effects of the project (*CEQA Guidelines* 15126). This range of alternatives is governed by a “rule of reason” that requires that the EIR set forth only those alternatives that will foster informed decision-making. As a result, a thorough discussion on the determination of alternatives is included in Chapter 3.0 Discussions Required by CEQA.

This evaluation of alternatives is consistent with FHWA’s NEPA guidance (Technical Advisory T6640.8A, October 1987), which states that an EA may be prepared for one or more build alternatives. Due to constraints of the urbanized environment, there were no feasible alternative alignments for a grade-separated crossing.

#### **S.3.1 Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The project is located at the UPRR Alhambra Subdivision in the Cities of San Gabriel and Alhambra. The trench would be located approximately between mile-post (MP) 489.5 and MP 491.8. The grade separations at Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard will be achieved by lowering the track under these crossings in a trench and constructing bridge structures over the railroad at each crossing location. The track depression would begin at the eastern edge of the City of Alhambra and would be extended eastward through the City of San Gabriel. The railroad line would begin its return to grade where it crosses the Rubio Wash, east of San Gabriel Boulevard. It is anticipated that Ramona Street, Mission Road, and Del Mar Avenue would remain at their current elevations. San Gabriel Boulevard would be raised and the rail line depressed to accomplish the grade separation. New permanent bridge structures will also be provided to carry the railroad across the Alhambra Wash and the Rubio Wash.

A shoofly track will be provided on the north side of the trench during construction to maintain railroad operations.<sup>1</sup> The proposed width of the trench is 58 feet (17.68 meters), which will allow for construction of a single track, a service road and a future second track. A 20-foot (6.1-meter) spacing will be provided between the two tracks and 15 feet (4.57 meters) of clearance will be provided to the south wall of the trench. The maximum vertical gradient of the track will not exceed a nominal 1.15 percent grade. A minimum of 23.5 feet (7.32 meters) of vertical clearance will be provided between the top of the rail and underside of the bridge structures. Project construction is preliminarily scheduled to commence in 2011 and be completed in 2014. Project construction cost is estimated to be approximately \$498 million. The project is programmed with state Trade Corridor Improvement Funds (\$336.6) with additional funds being sought from the following sources: federal, state/Public Utilities Commission, Los Angeles Metropolitan Transportation Authority and railroad contribution.

#### **S.3.2 Alternative 2 – No-Build Alternative**

Environmental review must consider the effects of not implementing the proposed project. The No-Build Alternative provides a baseline for comparing the impacts with the other alternative. The No-Build Alternative would consist of all existing and programmed transportation improvements in the project area, without the proposed San Gabriel Trench Grade Separation Project. The crossings at Ramona Street, Mission Drive, Del Mar Avenue and San Gabriel Boulevard would remain at grade under the No-Build

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<sup>1</sup>A shoofly is a temporary stretch of track that allows trains to travel around an accident or construction site.

Alternative. Existing facilities at this location, including programmed rail arms and warning signs, would also remain.

Under the No-Build Alternative, existing conditions would persist at the project site and existing safety issues would not be improved. With increased traffic due to population growth and the potential for increased train traffic due to growth in the goods movement sector, it is anticipated that additional vehicle-train collisions would occur. Also under the No-Build Alternative, air quality would continue to deteriorate in the project vicinity due to increased traffic and queuing at crossings.

### **S.3.3 Alternatives Considered But Eliminated From Further Discussion**

This section includes a discussion of all of the alternatives that were considered during the project development process, but were eliminated before the preparation of the draft environmental document. CEQA provides three factors that may be used to eliminate an alternative from detailed consideration including, 1) failure to meet most of the project objectives, 2) infeasibility (see *CEQA Guidelines* Section 15126.6(f)(1)), or 3) inability to avoid significant environmental impacts.

#### **S.3.3.1 Overpass/Underpass Alternative**

This alternative would consist of building a series of overpasses or underpasses to complete four individual grade separations rather than the proposed trench. Under this alternative, underpasses or overpasses would be constructed at Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard. Overpasses or underpasses at Ramona Street and Mission Road would cause unacceptable and unavoidable impacts to the historic San Gabriel Mission and San Gabriel High School making this alternative infeasible. A variation of this alternative, with partial trench grade separation at Ramona Street and Mission Road, and conventional flyovers at Del Mar Boulevard and San Gabriel Boulevard, was considered and eliminated since the right-of-way and noise impacts would be much greater and the variation offered no significant advantages and could create rail operating difficulties.

#### **S.3.3.1 Elevated Trainway Alternative**

Under this alternative a trainway would be elevated on fill or structures within the existing right-of-way and the four roadways would cross under the elevated railroad at their existing locations. This alternative would significantly increase noise and visual impacts on adjacent sensitive sites including schools, the historic San Gabriel Mission and residential properties due to the elevated trainway. Considering the nature of the increases visual and noise impacts and potential future safety concerns associated with any rail incident on an elevated structure, this alternative was eliminated from further consideration.

#### **S.3.3.4 Deck Park Alternative**

As part of the initial scoping process, ACE issued a Notice of Preparation (NOP) on October 14, 2008. In response to the NOP, ACE received a comment letter from Caltrans (dated November 24, 2008) requesting that ACE include an alternative that improves the visual character by adding a park or open space. ACE recognizes the value that parks and open space can provide to a community and, therefore, evaluated possible options for including a park with the project. One option would be the development of a “deck park” that would allow for a portion of the trench to be capped as a way to provide open space. Deck parks are an innovative solution to addressing the needs of a community and are being proposed in various locations in Los Angeles, including as part of improvements at the Foothill Freeway (I-210) and State Route 2 (SR-2). However, certain project constraints forced ACE to remove this alternative from further consideration. In particular, there is the possibility of safety issues resulting from creating a deck above the trench. The deck could make it difficult for either emergency personnel to access the trench or

to allow persons within the trench to easily exit in the event of an emergency. Further, the project site is not located on public property and is instead owned by UPRR, therefore, it is unclear what the nexus would be between the proposed project and the park. Therefore, this alternative was eliminated from further consideration.

#### **S.4 ENVIRONMENTALLY SUPERIOR ALTERNATIVE (CEQA)**

Section 151.6(e)(2) of the State CEQA Guidelines requires that an EIR identify the “Environmentally Superior Alternative” among the alternatives considered. CEQA states that if the No Build Alternative does not meet the project objectives, an Environmentally Superior Alternative is identified from the build alternatives. The build alternative (Alternative 1) would result in unavoidable significant adverse impacts due to construction noise. The No Build Alternative would not result in any of the impacts of Alternative 1. However, the No Build Alternative would not fulfill project objectives or provide the benefits the Alternative 1 would provide (e.g. reduced congestion, improved traffic circulation). The No Build Alternative would result in increased congestion, decreased mobility and increased air pollution and fuel consumption compared to Alternative 1. Consequently, Alternative 1 would be environmentally superior to the No Build Alternative. Therefore, Alternative 1 would be considered environmentally superior.

#### **S.5 KNOWN AREAS OF CONTROVERSY**

During the public scoping process for the proposed project, a number of persons provided written comments (see Appendix B) or verbal testimony stating their concerns over any build alternative that would have an impact on known historic resources in the area, specifically the San Gabriel Mission. The San Gabriel Mission is listed on the National Register of Historic Places. These concerns have been analyzed in this Final EIR/EA and mitigation measures to reduce these impacts are included in Chapter 2.0.

#### **S.6 ISSUES TO BE RESOLVED**

Further study related to potential hazardous materials at the project site will need to be performed and specific measures to handle the removal of contaminated soil (if necessary) will need to be developed. Additionally, consultation with the State Office of Historic Preservation will be required to identify measures to mitigate potential adverse effects to historic properties for inclusion in a Memorandum of Agreement.

#### **S.7 INTENDED USES OF THE EIR**

According to Section 15121 of the CEQA Guidelines, an EIR is a public document used by a public agency to analyze the potentially significant environmental effects of a proposed project, to identify alternatives and to disclose possible ways to reduce or avoid possible environmental damage. As an information document, an EIR does not recommend for or against approving a project. The main purpose of an EIR is to inform governmental decision-makers and the public about potential environmental impacts of the project. Accordingly, this EIR will be used by ACE, as the lead agency under CEQA, in making decisions with regard to approval of the San Gabriel Trench Grade Separation Project.

The information provided in the EIR may also be used by the responsible agencies identified below in deciding whether to grant permits or approvals necessary to construct or operate the proposed project.

## S.8 PERMITS AND APPROVALS

The following permits would be required to construct the proposed project:

- National Pollutant Discharge Elimination System Permit from the Water Quality Control Board
- Section 401 Water Quality Certification from the California Regional Water Quality Control Board
- Section 1602 Streambed Alteration Agreement from the California Department of Fish and Game
- Section 106 Memorandum of Agreement (MOA) for the San Gabriel Mission site

Permits or approvals may also be required from various utilities and from the Los Angeles Flood Control District to construct the new structure over the Alhambra Wash.

## S.9 SUMMARY OF IMPACTS

Environmental impacts associated with Alternative 1 and Alternative 2 were fully analyzed, the the results are summarized in **Table S-1**.

<b>TABLE S-1: SUMMARY OF ALTERNATIVES AND IMPACTS</b>		
<b>Impact Category</b>	<b>Alternative 1 (Preferred)</b>	<b>Alternative 2 (No Build)</b>
Land Use Compatibility/Division of a Community	Alternative 1 would improve the land use compatibility of the project site with the historic/civic buildings in the Mission District by eliminating four at-grade crossings, which currently contribute to traffic conflicts particularly at Ramona Street and Mission Road. As such, no adverse impacts would occur.	Alternative 2 would not include any direct actions or require any general plan amendments
Displacement of Housing	The project would result in the displacement of two residencies and one business, two additional residences and businesses would potentially be displaced.	Alternative 2 would not require the displacement of any residences or businesses
Environmental Justice	Displacement of one business and two residences, two additional residences and businesses would potentially be displaced.	Alternative 2 would not require the displacement of any residences or businesses
Community Cohesion	The project would eliminate an existing barrier between communities, resulting in a beneficial effect.	Alternative 2 does not include any direct actions, no modifications to the community would occur.
<b>Utilities and Services</b>		
Services	The project could result in a need for additional fire/emergency personnel during the construction phase. These personnel could be provided by nearby cities without negatively affecting response times. Once constructed the project would eliminate delay resulting in a beneficial effect on fire and emergency response times.	Alternative 2 does not include any direct actions, no additional fire or emergency services would be necessary.
Utilities	The proposed project does not include a housing element or other features that	Alternative 2 does not include a housing element or other features that would

<b>TABLE S-1: SUMMARY OF ALTERNATIVES AND IMPACTS</b>		
<b>Impact Category</b>	<b>Alternative 1 (Preferred)</b>	<b>Alternative 2 (No Build)</b>
	would increase demand for water or other utilities.	increase demand for water
Solid Waste	The proposed project does not include a housing element, which would result in population growth and increased demand for solid waste services.	Alternative 2 does not include a housing element, which would result in population growth and increased demand for solid waste services.
<b>Traffic - Operational</b>		
	Implementation of the proposed project would eliminate this delay and alleviate congestion on surrounding streets. This would be a beneficial impact.	Alternative 2 does not include any direct changes and would not improve congestion or delay.
Pedestrian Access	Secure pedestrian access will be maintained throughout the construction of the project. After project completion and during operation of the proposed project, pedestrian access is anticipated to be improved due to the elimination of the at-grade crossings and the potential conflicts between trains and pedestrians. Also, formal sidewalks would be installed separating pedestrian traffic from vehicular traffic. Therefore, beneficial impacts to pedestrian access are anticipated for the proposed project.	Alternative 2 would not change pedestrian access near the existing railroad tracks. No improvements or impacts would occur.
<b>Aesthetics</b>		
Views and Vistas	The project would not result in a visual contrast with the existing buildings and the visual character in the project area and would be consistent with the City of San Gabriel General Plan, City of San Gabriel Mission District Specific Plan, and City of Alhambra General Plan, which support the grade separation of the UPRR railroad in order to improve traffic conditions and visual character.	Alternative 2 would not change the visual character of the area around the railroad tracks. No improvements or impacts would occur.
<b>Cultural Resources</b>		
Archeological Resources	The loss or displacement of San Gabriel Mission Site (CA-LAN-184H) and other undiscovered buried resources would result in an adverse impact.	No changes would occur under Alternative 2, no impacts would occur.
Archeological Resources	The loss or displacement of San Gabriel Mission Site (CA-LAN-184H) and other undiscovered buried resources would result in an adverse impact.	No changes would occur under Alternative 2, no impacts would occur.
Historic Resources	Noise and vibration as a result of construction activities would impact 14 historic resources in the project area. This would be an adverse impact	No changes would occur under Alternative 2, no impacts would occur.

<b>TABLE S-1: SUMMARY OF ALTERNATIVES AND IMPACTS</b>		
<b>Impact Category</b>	<b>Alternative 1 (Preferred)</b>	<b>Alternative 2 (No Build)</b>
<b>Hydrology and Water Quality</b>		
Surface Waters	Alternative 1 would not entail any activity or process that would degrade water quality and would not increase vehicle traffic which could result in an increase in nonpoint-source pollutants or long-term degradation of local surface water quality. Additionally, the proposed project would not substantially change the area of impervious surfaces. The proposed project would impede the conveyance of local storm water and surface runoff from the north side of the UPRR to the south side. The existing storm drain collection systems would need to be re-routed or new systems or pump stations constructed to avoid surface runoff from collecting and potentially flooding areas around the trench.	No changes would occur under Alternative 2, no impacts would occur.
Flooding and Inundation	During construction temporary disruption of storm drains could result in flooding upstream from the proposed project	No changes would occur under Alternative 2, no impacts would occur.
<b>Geology and Soils</b>		
Geology and Soils	Excavation activities associated with project construction could result in the potential for soil to be exposed and eroded.	No changes would occur under Alternative 2, no impacts would occur.
<b>Hazards and Hazardous Materials</b>		
Hazardous Materials	The project site is located within an eighth of a mile of hazardous waste sites. As such, the potential for encountering contaminated soils and/or groundwater during the proposed project construction, particularly during excavation, exists. Once the project is constructed, operation of the project would not generate hazardous materials or wastes.	No changes would occur under Alternative 2, no impacts would occur.
<b>Air Quality - Operational</b>		
Regional Impacts	Alternative 1 would decrease mobile source emissions when compared to baseline conditions by 17 tons per year (tpy) for volatile organic compounds, 73 tpy for nitrogen oxides, 93 tpy for carbon monoxide, less than one tpy for sulfur oxides, one tpy for particulate matter 2.5 microns or less in diameter, and one tpy for particulate matter 10 microns or less in diameter. Emissions associated with the Alternative 1 would not exceed the federal thresholds. Alternative 1 would not result in an adverse regional operational air quality impact.	Under Alternative 2 baseline conditions would continue to persist, no improvements to air quality would occur.



<b>TABLE S-1: SUMMARY OF ALTERNATIVES AND IMPACTS</b>		
<b>Impact Category</b>	<b>Alternative 1 (Preferred)</b>	<b>Alternative 2 (No Build)</b>
Localized Impacts	One-hour CO concentrations would range from approximately 3 to 4 parts per million (ppm) at worst-case sidewalk receptors. Eight-hour CO concentrations would range from approximately 2.4 to 2.6 ppm. The federal one- and eight-hour standards of 35 and 9 ppm, respectively, would not be exceeded at the analyzed intersections. In addition, Alternative 1 would eliminate vehicle idling associated CO emissions during train crossing. CO concentrations would be less with this alternative than with existing conditions. Alternative 1 would result in beneficial localized CO concentrations.	Under Alternative 2 baseline conditions would continue to persist, no improvements to air quality would occur
Toxic Air Contaminants	Alternative 1 would not alter regional vehicle miles traveled and associated mobile source air toxic contaminants. TAC emissions would not increase and Alternative 1 would not result in an adverse TAC impact	Alternative 2 would not represent a change from existing conditions, no impacts would occur.
Conformity	Alternative 1 is a rail crossing project designed to improve safety conditions, and Alternative 1 is exempt from conformity guidance	No direct actions would occur under Alternative 2, no analysis is necessary.
<b>Noise - Operational</b>		
Train Noise	Alternative 1 would result in the substantial reduction of noise exposure near the tracks. The Ldn would be 15 to 20 dBA lower than existing noise levels at sensitive land uses closest to the railroad tracks. The reduced noise levels would be a combined result of the acoustic shielding provided by the trench and eliminating the requirement to sound train horns prior to the grade crossing. Alternative 1 would shift the existing train tracks approximately 20 feet to the south within the railroad right-of-way. This would not affect the majority of sensitive receptors as the trench would reduce noise exposure. The shift would move the tracks closer to Alhambra Municipal Golf Course, Almansor Park, and San Gabriel High School before the trench would reach full depth. The northern portion of the golf course would experience a marginal increase in noise levels and Almansor Park would not experience an audible increase in noise levels. The small noise increase associated with the 20-foot shift would not adversely affect golf course operations. San Gabriel High School would experience occasional increases in noise levels as the trench descends near the high school. The trench walls would act as a partial noise barrier until full depth is reached. Noise increases would be short-	No changes to existing conditions would occur under Alternative 2, train noise would continue at the project site.

<b>TABLE S-1: SUMMARY OF ALTERNATIVES AND IMPACTS</b>		
<b>Impact Category</b>	<b>Alternative 1 (Preferred)</b>	<b>Alternative 2 (No Build)</b>
	term and intermittent would not adversely affect the learning environment substantially more than existing train activity.	
Traffic Noise	Removal of the grade crossings would increase the average vehicle speeds along the segments immediately adjacent to the tracks. However, the increase in average vehicle speed would not exceed existing maximum speed limits and the general project area would experience similar mobile noise levels as existing conditions.	No direct actions would occur under Alternative 2, traffic noise would continue at the project site.
Ground-borne Vibration	The railroad track associated with Alternative 1 would be in same location as the existing track. Alternative 1 would not result in increased train speeds and associated increased vibration through the corridor, and vibration levels would be identical to existing conditions.	No direct actions would take place under Alternative 2, no impacts would occur.
<b>Biological Resources</b>		
Wetlands	No part of the existing UPRR or the proposed project (such as walls or support structures) would be in areas defined as federally protected wetlands. In addition, neither the Alhambra nor Rubio washes are defined as federally protected wetlands. No special status species exist at the site, however nesting birds may exist on the site.	No direct actions would take place under Alternative 2, no impacts would occur.
<b>Air Quality - Construction</b>		
Regional Impacts	Construction activity would increase regional emissions. The construction impacts to air quality are short-term in duration and, therefore, will not result in adverse or long-term conditions.	No direct actions would take place under Alternative 2, no impacts would occur.
Localized Impacts	Alternative 1 has the potential to increase localized CO concentrations associated with increased traffic at specific intersections during road closures. A localized CO analysis was completed to assess potential increases in concentrations. The federal one- and eight-hour standards of 20 and 9.0 ppm, respectively, would not be exceeded at	No direct actions would take place under Alternative 2, no impacts would occur.

<b>TABLE S-1: SUMMARY OF ALTERNATIVES AND IMPACTS</b>		
<b>Impact Category</b>	<b>Alternative 1 (Preferred)</b>	<b>Alternative 2 (No Build)</b>
	the analyzed intersections during any of the road closure scenarios. Localized CO concentrations would not result in an adverse impact.	
Toxic Air Contaminants	It is common for the area around rail tracks to include soil contaminants such as arsenic. If airborne, these materials may cause a health hazard. No hazardous contamination has been identified in over 200 soil samples taken along the tracks. Airborne soil contaminants would result in a less-than-significant impact.	No direct actions would take place under Alternative 2, no impacts would occur.

## S.10 AVOIDANCE, MINIMIZATION AND MITIGATION MEASURES

Several of the project elements have been modified to avoid or minimize potential environmental impacts. Proposed mitigation measures are summarized in **Table S-2** and listed in more detail in Chapters 2.0 Final Affected Environment and 6.0 Comments and Responses. In some cases, avoidance and minimization attempts could not fully resolve the impacts.

<b>TABLE S-2: SUMMARY OF PROPOSED MITIGATION MEASURES</b>		
<b>CEQA TOPIC AREA</b>	<b>Mitigation Measures</b>	
	<b>Alternative 1 (Preferred)</b>	<b>Significance After Mitigation</b>
<b>Population, Housing, and Employment</b>	<p>ACE shall comply with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, in the relocation of the displaced residents and businesses. A Relocation Assistance Program will be developed for the displaced residents and businesses. The Relocation Assistance Program shall set forth procedures for the fair, uniform, and equitable treatment of persons and businesses displaced from their dwellings regardless of race, ethnicity, income, or age.</p> <p>The removal and replacement of private property for the purposes of permanent or temporary construction easements shall be replaced with “in-kind” facilities, as negotiated with the property owners.</p>	Less than significant

<b>TABLE S-2: SUMMARY OF PROPOSED MITIGATION MEASURES</b>		
<b>CEQA TOPIC AREA</b>	<b>Mitigation Measures</b>	
	<b>Alternative 1 (Preferred)</b>	<b>Significance After Mitigation</b>
<b>Public Services</b>	<p>ACE shall submit for review the construction plans to the San Gabriel Fire Department, the Alhambra Fire Department, and the Los Angeles County Fire Department.</p> <p>ACE shall submit for review the detour plans (including plans for pedestrians and bicycles) and sequence of street closures to the San Gabriel Fire Department, the Alhambra Fire Department, and the Los Angeles County Fire Department.</p> <p>ACE shall create an Emergency Response Plan for the proposed project. ACE shall submit the Emergency Response Plan for review and approval to the San Gabriel Fire Department, the Alhambra Fire Department, and the Los Angeles County Fire Department.</p> <p>ACE shall consult with the San Gabriel Public Library administration regarding alternate pedestrian and vehicle access routes.</p>	Less than significant
<b>Recreation</b>	<p>ACE shall submit the street closure schedule and detour plan to the Departments of Parks and Recreation of the Cities of San Gabriel, Alhambra, and Rosemead and the County of Los Angeles.</p> <p>ACE shall consult with the City of San Gabriel Department of Parks and Recreation administration and the City of Alhambra regarding alternate pedestrian and vehicle access routes during construction.</p>	Less than significant
<b>Utilities</b>	<p>ACE shall work with affected utility companies to make use of available right-of-way as necessary.</p> <p>Prior to project grading, in the event that City of Alhambra water lines to the Water Treatment Plant cross the UPRR tracks, ACE shall coordinate with the City of Alhambra to protect in place water mains and lines and sewer/brine lines owned by the City of Alhambra per the December 2009 Mitigation Agreement between the City of Alhambra and ACE</p> <p>ACE shall install a graded swale or earthen ditch between the UPRR northern right of way and south side of</p>	Less than significant

<b>TABLE S-2: SUMMARY OF PROPOSED MITIGATION MEASURES</b>		
<b>CEQA TOPIC AREA</b>	<b>Mitigation Measures</b>	
	<b>Alternative 1 (Preferred)</b>	<b>Significance After Mitigation</b>
	<p>Mission Road between the Alhambra Wash and Ramona Street to ensure that a 100-year storm event does not impact the proposed project or Mission Road</p> <p>ACE shall construct a new storm drain trunk line that will commence near Junipero Serra Drive and traverse easterly to Rubio Wash along Clary Avenue, Agostino Road and Commercial Ave. Portions of the proposed storm drain, particularly in the area of Clary Street to Agostino Road, will have depths ranging from 15 feet to 20 feet and new storm drains and inlet structures located near the north UPRR right of way will have reverse gradients in order to connect into the proposed trunk line</p>	
<b>Traffic – Operational</b>	<p>ACE shall develop a transit detour plan for Metro Lines 176 and 487 in close consultation with Metro to ensure minimal disruption to services. In particular, it is probable that students at San Gabriel High School and other schools in the area use these routes. Construction of at least one of these streets should be scheduled for the summer period, when school is not in session.</p> <p>ACE shall develop either a transit detour plan or a reduced frequency plan for Montebello Line 20 in close consultation with the City of Montebello to ensure minimal disruption to services.</p>	Less than significant
<b>Aesthetics</b>	<p>ACE shall coordinate with Cities of San Gabriel and Alhambra to ensure that landscaping and any other visual elements installed with the proposed project are consistent with the existing built environment and the City of San Gabriel Mission District Specific Plan. Design elements related to the City of San Gabriel shall be included in the MOU between the City of San Gabriel and ACE. Design elements related to the City of Alhambra will be subject to the review and approval of the City</p> <p>The lighting on the Ramona Street and Mission Road overhead structures shall incorporate design elements as specified in the Mission District Specific Plan.</p>	Less than significant

<b>TABLE S-2: SUMMARY OF PROPOSED MITIGATION MEASURES</b>		
<b>CEQA TOPIC AREA</b>	<b>Mitigation Measures</b>	
	<b>Alternative 1 (Preferred)</b>	<b>Significance After Mitigation</b>
<b>Cultural Resources</b>	<p>Caltrans has determined that adverse effects will be resolved through the execution of a Memorandum of Agreement (MOA). Caltrans will ensure that the undertaking is implemented in accordance with stipulations in order to take into account the effects of the undertaking on historic properties and archeological resources. These stipulations will include, but are not limited to Historic American Building Survey/Historic American Engineering Record (HABS/HAER) documentation, archeological treatment plan, relocation of Chapman's Millrace and nomination of the San Gabriel Mission as a National Historic Landmark.</p>	Less than significant
<b>Paleontological Resources</b>	<p>All project-related ground disturbances that could potentially affect Quaternary older alluvial deposits will be monitored by a qualified paleontological monitor on a full-time basis, as this geologic unit is determined to have a high paleontological sensitivity. Project-related excavations that occur in surficial sediments and younger Quaternary alluvium (estimated to be present at ground surface to a depth of 14 feet or less) will be spot-checked by the project paleontologist to ensure that underlying sensitive sediments are not being impacted.</p> <p>A qualified paleontologist will be retained to supervise monitoring of construction excavations. Paleontological resource monitoring will include inspection of exposed rock units during active excavations within sensitive geologic sediments. The monitor will have authority to temporarily divert grading away from exposed fossils to professionally and efficiently recover the fossil specimens and collect associated data. The qualified paleontologist will prepare monthly progress reports to be filed with ACE (if requested).</p>	Less than significant

<b>TABLE S-2: SUMMARY OF PROPOSED MITIGATION MEASURES</b>		
<b>CEQA TOPIC AREA</b>	<b>Mitigation Measures</b>	
	<b>Alternative 1 (Preferred)</b>	<b>Significance After Mitigation</b>
<b>Hydrology and Water Quality</b>	<p>In the event groundwater is encountered, the project site shall be dewatered during construction. This shall involve the short-term removal of minor amounts of groundwater and would not affect groundwater supplies. Construction staging plans shall include provisions for the diversion of stormwater to avoid upstream flooding. The design of the proposed project shall include a permanent drainage system to remove the water from the depressed railroad alignment; in order to minimize impacts of flooding that may occur during heavy storm events.</p> <p>Under the statewide NPDES General Construction Permit, the project proponent, ACE, must submit an NOI to the SWRCB prior to commencement of construction activities. In addition, an SWPPP must be prepared and implemented at the project site and revised as necessary as administrative or physical conditions change.</p> <p>ACE shall coordinate with USACE to ensure construction of the rail bridge over Alhambra Wash is built to maintain existing flow capacity</p>	Less than significant
<b>Geology and Soils</b>	<p>During final design, trench wall configurations and the areas of the trench near existing improvements shall be designed to include temporary struts, tieback anchors, ground improvement, temporary excavation support, temporary shoring, and/or other recommended installations detailed in the project Preliminary Engineering Report, to limit the lateral deflections of the trench walls.</p> <p>Soil testing shall be conducted during the final design phase, and should any localized expansive soils be identified, they shall be addressed by the final project design. The corrosion potential of project site soils shall also be evaluated. Expansive soils shall not be used as structure or permeable backfill. Appropriate geotechnical design techniques shall be implemented to address the potential for seismically-induced ground liquefaction and settlement, as well as provisions for wet conditions or perched water conditions along the Alhambra and Rubio Washes.</p>	Less than significant

<b>TABLE S-2: SUMMARY OF PROPOSED MITIGATION MEASURES</b>		
<b>CEQA TOPIC AREA</b>	<b>Mitigation Measures</b>	
	<b>Alternative 1 (Preferred)</b>	<b>Significance After Mitigation</b>
	<p>Standard erosion control BMPs shall be used to minimize erosion during construction of the project. Retaining walls shall be constructed for long-term slope stabilization. Where appropriate, erosion prevention planting shall be used in conjunction with a geofabric.</p>	
<b>Hazards and Hazardous Materials</b>	<p>A Phase II ESA that shall further characterize hazardous waste potential at the project site, including the potential for encountering contaminated soils and/or groundwater will be prepared. In the event that contaminated soils and/or groundwater are identified as affecting the project, a remediation plan will be developed and submitted for review and approval to the affected cities and responsible agencies. No construction activities shall occur unless remediation to State exposure standards is possible and until approval of the remediation plan. All subsequent construction activities shall be conducted in accordance with the remediation plan.</p> <p>During excavation, a qualified environmental consultant approved by the city in which excavation shall occur, shall observe the exposed soil for visual evidence of contamination.</p> <p>Areas with contaminated soil determined to be hazardous waste shall be excavated by personnel who have been trained through the Occupational Safety and Health Administration (OSHA) recommended 40-hour safety program (29CFR1910.120), with an approved plan for excavation, control of contaminant releases to the air, and off-site transport or on-site treatment.</p>	No Impact
<b>Biological Resources</b>	<p>The City shall comply with Section 402 of the Clean Water Act and National Pollutant Discharge Elimination System (NPDES) standards during and following construction to ensure that dirt, construction materials, pollutants, or other human associated materials are not discharged from the project area. A certification from the Regional Water Quality Control Board will be required prior to project construction.</p>	Less than significant



<b>TABLE S-2: SUMMARY OF PROPOSED MITIGATION MEASURES</b>		
<b>CEQA TOPIC AREA</b>	<b>Mitigation Measures</b>	
	<b>Alternative 1 (Preferred)</b>	<b>Significance After Mitigation</b>
	<p>If new landscaping is provided as part of the project, planting of invasive species shall be avoided</p> <p>Ground-disturbing and vegetation removal activities associated with construction of the project shall be performed outside of the breeding season for birds, or between September 1 and January 31</p>	
<b>Air Quality - Construction</b>	<p>The construction contractor shall comply with Caltrans' Standard Specifications Section 7-1.01F and Section 10 of Caltrans' Standard Specifications. Section 7-1.01F specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including air pollution control district and air quality management district regulations and local ordinances. Section 10 is directed at controlling dust. If dust palliative materials other than water are to be used, material specifications are contained in Section 18.</p>	<p>Significant and unavoidable for regional nitrogen oxides and localized particulate matter</p>
<b>Noise - Construction</b>	<p>The construction contractor shall utilize temporary noise barriers (e.g., solid walls or sound attenuation blankets) capable of reducing noise levels by 10 dBA to block construction noise at sensitive land uses. The locations of the noise barriers are shown in <b>Table 3-9</b>.</p> <p>The construction contractor shall ensure that the construction noise levels at representative sensitive receptors do not exceed the limits detailed <b>Table 3-10</b>.</p> <p>A noise-monitoring program shall be performed under the direction of ACE or the construction contractor. The monitoring program shall be designed to demonstrate that the contractor is in compliance with the noise limits detailed in the construction contract specifications.</p> <p>Hauling shall be limited to between the hours of 7:00 a.m. and 7:00 p.m.</p> <p>The construction contractor shall submit a noise plan detailing how the construction will be performed in a manner that will not exceed the limits</p>	<p>Less than significant with mitigation for general construction activity. Significant and unavoidable for haul truck activity</p>

<b>TABLE S-2: SUMMARY OF PROPOSED MITIGATION MEASURES</b>		
<b>CEQA TOPIC AREA</b>	<b>Mitigation Measures</b>	
	<b>Alternative 1 (Preferred)</b>	<b>Significance After Mitigation</b>
	<p>specified in <b>Table 3-10</b>. The plan shall be prepared by a qualified acoustical engineer and should be approved by the resident engineer before construction is initiated. The noise control plan shall include an inventory of the equipment, the estimated noise level at 50 feet for each major piece of equipment, calculations of the noise levels at sensitive receptors, and, noise reduction measures for any locations where the predicted noise levels exceed the limits specified in <b>Table 3-10</b>.</p>	
<b>Vibration</b>	<p>A standard pre-construction survey shall be performed to document the existing condition of all structures in the vicinity of the construction site.</p> <p>The following vibration limits shall be utilized to minimize the potential for damage to buildings and historic structures, and to reduce potential for intrusive vibration at sensitive receptors such as residences and schools especially during the nighttime hours when people are trying to sleep:</p> <ul style="list-style-type: none"> <li>• Damage to normal buildings – 0.5 inches per second PPV;</li> <li>• Damage to historic buildings – 0.12 inches per second PPV;</li> <li>• Annoyance to residential buildings (daytime) – 0.022 inches per second PPV;</li> <li>• Annoyance to residential buildings (nighttime) – 0.016 inches per second PPV; and</li> <li>• Annoyance to office space, schools, churches, and other institutional land uses – 0.016 inches per second PPV</li> </ul> <p>Vibration monitoring should be completed during construction activity to verify that construction vibration limits are not exceeded. If vibration from the test hits approaches or exceeds the limits, equipment activity shall be reduced until the vibration amplitudes at all sensitive buildings are below the applicable limit.</p> <p>Low-vibration construction procedures shall be implemented (e.g., drilled holes instead of impact pile driving).</p>	Less than significant
<b>Traffic - Construction</b>	<p>In order to minimize the incrementally increased delay impacts at the intersection of Mission Road/Del Mar Avenue during the AM peak hour due to the closure of Del Mar Avenue at the</p>	<p>Less-than-significant with mitigation for general construction activity. Significant and unavoidable for haul truck activity</p>

**TABLE S-2: SUMMARY OF PROPOSED MITIGATION MEASURES**

CEQA TOPIC AREA	Mitigation Measures	
	Alternative 1 (Preferred)	Significance After Mitigation
	<p>UPRR tracks, signal phasing shall be modified. Modification of the signal phasing at this intersection during the AM peak hour shall include turning off the signal phase or closing the westbound approach of El Monte Street. This action would result in a delay of 21.3 seconds and operate at LOS C in the AM peak hour. The PM peak hour would result in a delay of 24.9 seconds and operate at an LOS C. Implementing this measure would result in no adverse impacts associated with intersection operation of Mission Road/Del Mar Avenue in the AM peak hour during the closure of Del Mar Avenue.</p> <p>ACE shall prepare a detailed detour and haul route plan for the partial closure of each intersection. ACE shall consult the Cities of Alhambra, San Gabriel, Rosemead, and the County of Los Angeles regarding the most feasible detour routes. Additionally, ACE shall consult these jurisdictions regarding haul routes that result in the least amount of queuing and left-turns. The recommended routes provided in the traffic study shall be submitted for review.</p> <p>ACE shall coordinate with Metro regarding the re-routing of Line 487 during the Ramona Street closure and of Line 176 during the Mission Road closure. Metro shall approve the detour route, which may include elements or be the same detour route described in this document. Ensuring that the route maintains most of the service prior to construction would result in no adverse impacts.</p> <p>ACE shall schedule the closing of Ramona Street to coincide with the summer months so as to avoid impacts to school bus routes to San Gabriel High School, Mission Elementary School and Mission High School. ACE shall coordinate with the Alhambra Unified School District and officials at San Gabriel High School, Mission Elementary School and Mission High School prepare a detour route that shall ensure minimal changes to bus schedules. The detour route shall be distributed to students and parents and made available to the public for</p>	

<b>TABLE S-2: SUMMARY OF PROPOSED MITIGATION MEASURES</b>		
<b>CEQA TOPIC AREA</b>	<b>Mitigation Measures</b>	
	<b>Alternative 1 (Preferred)</b>	<b>Significance After Mitigation</b>
	refinement and consensus.	
<b>Cumulative Impacts - Construction Traffic</b>	<p>ACE shall coordinate with the Cities of San Gabriel, Alhambra and Rosemead to obtain construction schedules for major projects in the project area. In addition, ACE shall furnish each city with anticipated construction schedules and notify the cities as changes occur.</p> <p>ACE shall prepare and implement a Transportation Management Plan during construction that identifies street closures and detour routes.</p>	Less than significant

### S.11 PREFERRED ALTERNATIVE

Public and agency concerns have been integral throughout the CEQA/NEPA decision-making process. Alternatives 1 and 2 were fully analyzed. Comments received during the circulation of the Draft EIR/EA were given serious consideration and have led to refinements to Alternative 1 that have reduced community impacts. The information contained in this Final EIR/EA, which addresses all comments and responses on the Draft EIS/EA, was evaluated, discussed, and used as the basis for identifying the Preferred Alternative. Alternative 1 has been identified as the Preferred Alternative based on efforts to minimize impacts to the community, properties, homes, construction footprint and community acceptance. Also, Alternative 1 has been identified as the environmentally superior alternative. Refinements to Alternative 1 have minimized impacts associated with the San Gabriel Mission.

The refinements that have been made to the preferred alternative include the phasing of the project so that the Ramona Street crossing which is located adjacent to San Gabriel High School is constructed during the summer months. This would reduce impacts to the community and students.

The Preferred Alternative also includes a partial closure of San Gabriel Boulevard and construction scheduling where no two adjacent streets are closed at the same time. This would alleviate construction traffic impacts.

## 1.0 PROPOSED PROJECT

### 1.1 INTRODUCTION

This section presents the purpose and need or objectives of the proposed San Gabriel Trench Grade Separation Project (proposed project), a general description of the existing conditions on the project site, a description of the surrounding land uses, a description of the proposed project and alternatives that were previously considered, an estimated timeline for construction, as well as a list of permits and approvals required for the implementation of the proposed project.

### 1.2 PURPOSE AND NEED/PROJECT OBJECTIVES

#### INTRODUCTION

The Alameda Corridor-East Construction Authority (ACE) proposes to eliminate the at-grade portion of four railroad crossings along the Union Pacific Railroad (UPRR) in the City of San Gabriel. These improved crossings would occur at Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard. Currently the 2.2-mile stretch of railroad includes four at-grade crossings with no grade separations between the railroad and vehicles or pedestrians. The proposed project would lower the existing railroad from its current at-grade condition into a trench. Although the actual trench would be located within the City of San Gabriel, construction activities and some limited track work would take place in the Cities of Alhambra, Rosemead and the County of Los Angeles. **Figure 1-1** shows the regional location of the project site.

The purpose of the proposed project is to eliminate traffic delays and safety hazards associated with the four intersections, as currently configured, in the San Gabriel Valley. The San Gabriel Trench Grade Separation Project is proposed to:

- Provide congestion relief in order to improve traffic flow through the City of San Gabriel;
- Improve the safety of four intersections for vehicle travel in the City of San Gabriel;
- Improve the safety and operation of the UPRR through the City of San Gabriel ; and
- Reduce air pollution emissions (regionally and locally).

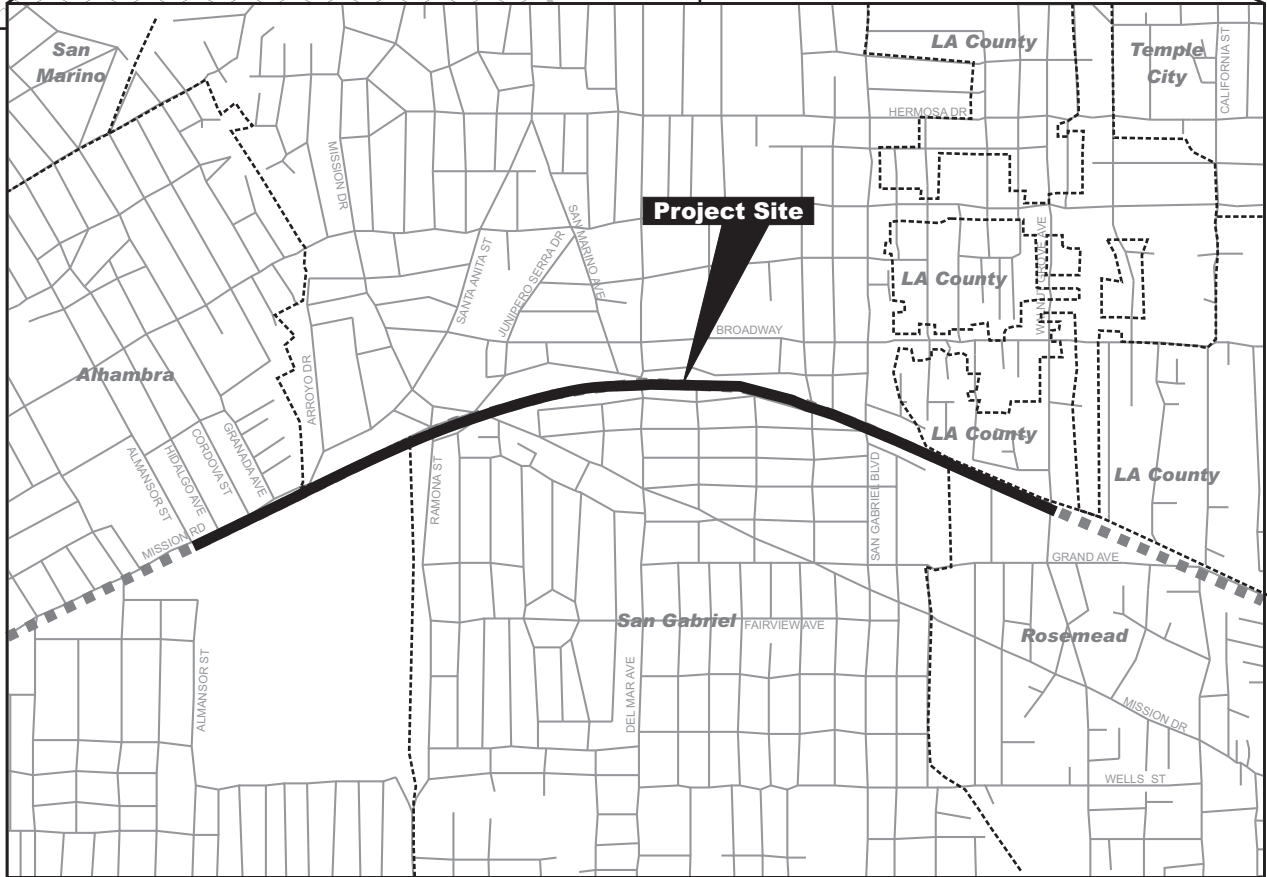
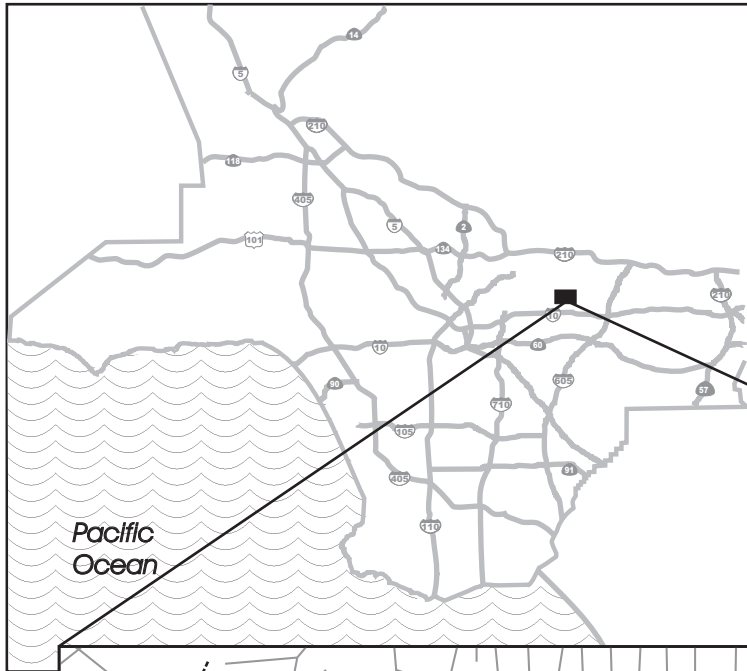
In addition, the purpose of the proposed project is to:

- Contribute to the overall regional economy by enhancing the region's ability to handle the dramatic growth in goods movement that is anticipated to occur; and
- Help achieve the goals of SCAG's 2008 RTP.

The need for this project arises from:

- Growing demand and reliance of the region's economy on the efficient movement of goods through the region
- Increased congestion in the area of the proposed project
- Increased traffic accidents from vehicle-train collisions in the project area

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**LEGEND:**

- Project Site
- - - - -** Union Pacific Railroad - Alhambra Subdivision
- .....** City/Community Boundary

SOURCE: TAHA, 2009.



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The proposed project has been included in the federal transportation improvement program (FTIP) and Regional Transportation Plan (RTP) since 1998 when it was designated as a high priority corridor project on the National Highway System in TEA-21. The ACE project was included in SAFETEA-LU in both Section 1304 (project #34 – High Priority Corridors on the National Highway System) and Section 1301 (project # 9 – Project of National and Regional Significance). The Southern California Association of Governments (SCAG) also collaborated to develop a six-county consensus priority list of goods movement projects within the six southern California counties; the ACE program is included on that list as well.

This need for the proposed project is driven in part by population growth, which has led to increased delay at intersections in the project area and the need to enhance an aging existing transportation infrastructure to maintain its long-term viability. The need for this project also arises from the increase in goods movement as a major economic driver in the region.

## **BACKGROUND**

The San Gabriel Valley Council of Governments (SGVCOG), a joint powers authority comprised of 31 cities and Los Angeles County, serving the 1.9 million residents of the San Gabriel Valley. The SGVCOG created the Alameda Corridor-East Construction Authority (ACE) to implement one of the largest transportation programs in the San Gabriel Valley. The ACE Project is a part of a larger transportation corridor known as the Alameda Corridor East Trade Corridor that was designated by the State of California. The trade Corridor also includes grade separation and rail improvement projects in San Bernardino, Riverside and Orange Counties and has been identified in SAFETEA-LU as a trade corridor of national significance with public infrastructure improvements necessary to connect the San Pedro Bay ports to the transcontinental rail network through the nation's second largest metropolitan area.

When completed, the ACE Project will extend the Alameda Corridor transportation improvements commencing from its terminus near Downtown Los Angeles along two 35-mile railroad main lines, through the San Gabriel Valley, to San Bernardino County. The ACE Project consists of multiple construction projects including median improvements, traffic signalization, roadway widenings, and 20 grade separations. The project is divided into two phases. The first phase includes the "Jump Start" safety program completed at 39 crossings, a traffic signalization program being completed, and 10 grade separations. The second phase includes 10 grade separations, including the San Gabriel Trench Grade Separation Project and the installation of a corridor-wide traffic signalization system.

The proposed project was developed as part of the original Alameda Corridor-East program in the late 1990's. Due to the close proximity of grade crossings and impacts associated with alternative grade separation options near the historic San Gabriel Mission (roadway overhead or underpass alternatives), ACE determined the trench configuration to be the only feasible option.

## **EXISTING CONDITIONS**

Increased vehicle and rail freight traffic in the San Gabriel Valley have augmented the potential for traffic delay and associated accidents at railroad grade crossings. Regional and national economic growth, together with increased international trade, will increase train traffic through the San Gabriel Valley by 67 percent by 2020.<sup>1</sup> Localized economic growth is projected to increase local traffic volumes by almost 50 percent over the same period. As a result of these trends, crossing gate blockage time is expected to increase by 77 percent for 55 crossings in the San Gabriel Valley. Expected vehicle delay at these 55

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<sup>1</sup>Korve Engineering, *San Gabriel Valley Crossing Study*, 1997.

railroad grade crossings will increase by 186 percent between 1994 and 2020. Vehicle queueing caused by the trains will increase by 57 percent on average, resulting in vehicle queues as long as 1,200 feet (365.76 meters).

In response to these anticipated future conditions, the SGVCOG adopted the Alameda Corridor-East Program, including a Jump Start program (installation of traffic control devices), a series of roadway widenings, and various grade separations, such as the San Gabriel Trench Grade Separation Project. The entire program spans from the San Gabriel Valley between downtown Los Angeles and the Los Angeles County line, a distance of approximately 35 miles (56.33 kilometers). The SGVCOG then established the Alameda Corridor East Construction Authority (ACE) for implementation of the individual grade crossing projects.

The San Gabriel Trench Grade Separation Project is one of the projects and is the result of extended study to develop the purpose and need for improvements to San Gabriel Valley grade crossings. This study performed a comprehensive field review of the grade crossings in the San Gabriel Valley, developed a comprehensive database from the involved cities, assembled the most-up-to-date highway and rail forecasts, identified existing and projected mobility impacts at each grade crossing (summarized above), defined a complete set of safety enhancements and mobility improvements, evaluated the overall benefits (enhanced safety and reduced levels of noise, air emissions, and traffic delay), developed a corridor improvement program, and identified a funding and implementation strategy to deliver the program.

Individual ACE projects include safety and signalization improvements, median barriers, street widenings, and grade separations of railroad right-of-way and highways/roadways, such as the San Gabriel Trench Grade Separation Project. Individual environmental documents (Categorical Exemptions/Exclusions or Initial Studies/Environmental Assessments) have been prepared for logical groupings or for individual components, given that the groupings or individual components:

- Are distant from each other;
- Have logical termini and specific project boundaries within which the component or grouping will be constructed;
- Have construction limits that do not overlap for the individual or grouped project components;
- Have independent utility (i.e., each can be used as soon as it is built and does not depend upon future projects or require predecessor projects to realize its traffic delay reduction or improved safety benefits);
- Would not preclude consideration of another project component or alternatives to that component; and
- Would generally be constructed during different time frames.

The proposed project has logical termini and specific project boundaries, and its construction limits do not overlap with those of other ACE projects. The proposed project has independent utility and would not preclude consideration of other project components. The nearest ACE project is the Baldwin Avenue grade separation project located approximately four miles to the east of the proposed project. Although the projects are expected to advance on similar timelines they would not be expected to interfere with one another due to road closing or conflicting construction schedules.

**Table 1-1** shows the existing average daily traffic (ADT) for 2008 and the project ADT for 2012 at the four crossings associated with the proposed project – Ramona Street, Mission Drive, Del Mar Avenue, and San Gabriel Boulevard. It is anticipated that ADT will increase by up to 6,709 vehicles at San Gabriel Boulevard.

<b>TABLE 1-1: AVERAGE DAILY TRAFFIC (2008) AND (2012)</b>		
<b>Street</b>	<b>2008 ADT</b>	<b>2012 ADT</b>
Ramona Street	12,150	14,689
Mission Road	21,700	23,436
Del Mar Avenue	17,100	18,570
San Gabriel Boulevard	35,310	42,019
ADT = Average Daily Traffic SOURCE: KOA Corporation, 2008.		

### 1.3 PROJECT LOCATION AND DEMOGRAPHICS

#### REGIONAL CONTEXT

Wholesale and retail trade, transportation and manufacturing support over 3.3 million jobs in the region according to statistics provided by the California Employment Development Department. Goods movement includes trucking, rail freight, air cargo, marine cargo, and both domestic and international freight, the latter entering the country via the seaports, airports and the international border with Mexico. Additionally, many cargo movements are intermodal (e.g., sea to truck, sea to rail, air to truck, or air to rail). The goods movement system includes not only highways, railroads, sea lanes, and airways, but also intermodal terminals, truck terminals, rail yards, warehousing, freight consolidation/de-consolidation terminals, freight forwarding, package express, customs inspection stations, truck stops, and even truck queuing areas.

The region is served by two main commercial freight railroads – the Burlington Northern and Santa Fe Railway (BNSF) and the Union Pacific Railroad (UPRR). These railroads link Southern California with other U.S. regions, Mexico, and Canada, either directly or via their connections with other railroads. These railroads also provide freight rail service within California. In 2003, railroads moved approximately 155 million tons of cargo throughout California.<sup>2</sup>

The two main line railroads also maintain and serve major facilities in the region. Intermodal facilities in the City of Commerce (BNSF-Hobart), East Los Angeles (UPRR), San Bernardino (BNSF) and Carson near the San Pedro Bay Ports (UPRR), the Los Angeles Transportation Center (UPRR) and the UPRR-City of Industry yards serve on dock rail capacity at the Ports of Los Angeles and Long Beach.

All the major freight corridors in the region have some degree of grade separation, but most still have a substantial number of at-grade crossings on major streets interacting with high volumes of vehicular traffic. These crossings cause both safety and reliability problems for the railroad and vehicles at the affected crossings. Trespassing on railroad rights-of-way by pedestrians is another safety issue affecting both freight and commuter rail.

#### PROJECT SITE

The project site is primarily located within the City of San Gabriel, but also includes a portion of the City of Alhambra (on the west) and the City of Rosemead and County of Los Angeles (on the east). The west end of the project site is generally located near the intersection of Mission Road and Almansor Street; the

<sup>2</sup>Southern California Association of Governments, *Draft 2008 Regional Transportation Plan Program Environmental Impact Report*, January 2008.

east end of the project site is generally located near the intersection of the UPRR and Walnut Grove Avenue. The project site is generally contained within the Alhambra Subdivision of the UPRR right-of-way. Although the length of the project site is approximately 2.2 miles, the actual trench that would be constructed (including retaining walls and other features) would be 1.4 miles and would generally be bounded by Alhambra Wash on the west and Rubio Wash on the east.

As described above and shown in **Figure 1-2**, the project site is an active freight railroad right-of-way, which varies in width, but for a majority of the project limits is approximately 100-foot wide. During construction activities, rail operations would be maintained through the use of a temporary “shoofly” track. No land uses or buildings exist on the project site except for traditional railroad-related facilities such as the railroad tracks and crossing gates. **Figure 1-3** shows the railroad bridges currently located over both the Alhambra and Rubio Washes. **Figure 1-4** shows an aerial view of the project site.

The primary land uses located directly adjacent to the project site include industrial, residential, with some office and commercial land uses. More sensitive historical and civic land uses are set at a distance from the existing railroad facilities. These sensitive land uses include the San Gabriel Mission (north of the Ramona Street and Mission Drive crossings), San Gabriel High School (located southwest of the Junipero Serra Drive and Ramona Street intersection), Rancho Las Tunas Adobe (located approximately 470 feet southeast of the Mission Road and Junipero Serra Drive intersection), the Asian Youth Center (on the north side of the project site at Clary Drive) and the West San Gabriel Valley YMCA (located southwest of the project site in the City of Alhambra).

**Ramona Street.** Ramona Street is a two-way undivided street with one travel lane in each direction and a posted speed limit of 30 miles per hour (mph) (48.28 kilometers per hour [kmph]). Parking is permitted on both sides of the street. The UPRR railroad tracks intersect at grade with Ramona Street, just south of Mission Road. Ramona Street provides direct access to San Bernardino Freeway (I-10) located to the south.

**Mission Road.** Mission Road is a two-way undivided street with one travel lane in each direction and a posted speed limit of 35 mph (56.33 kmph). Parking is permitted on both sides of the street. Mission Road intersects the UPRR railroad tracks at grade, just south of Junipero Serra Drive. Mission Road provides access to I-10 located to the south via an adjacent north-south street.

**Del Mar Avenue.** Del Mar Avenue is a north-south street that crosses the UPRR railroad tracks at grade, approximately 0.08 mile (0.13 km) north of Angeleno Avenue. Del Mar Avenue is an undivided two-way street with one travel lane in each direction and posted speed limit of 35 mph. Parking is permitted on both sides of the street. Del Mar Avenue provides direct access to I-10 located to the south.

**San Gabriel Boulevard.** San Gabriel Boulevard has two travel lanes in each direction. It is a two-way undivided street with parking permitted on both sides and a posted speed limit of 35 mph. The UPRR railroad tracks cross San Gabriel Boulevard at grade approximately 0.36 mile (0.58 km) north of Mission Road. San Gabriel Boulevard also provides direct access to I-10 located to the south.



Project site looking west from Mission Road.



Project site looking east from Del Mar Avenue.



Project site looking west from near the Rubio Wash.

SOURCE: TAHA, 2009.

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Looking southeast, from a stormwater ramp at the end of Commercial Avenue, towards the existing Union Pacific Railroad bridge over the Rubio Wash.

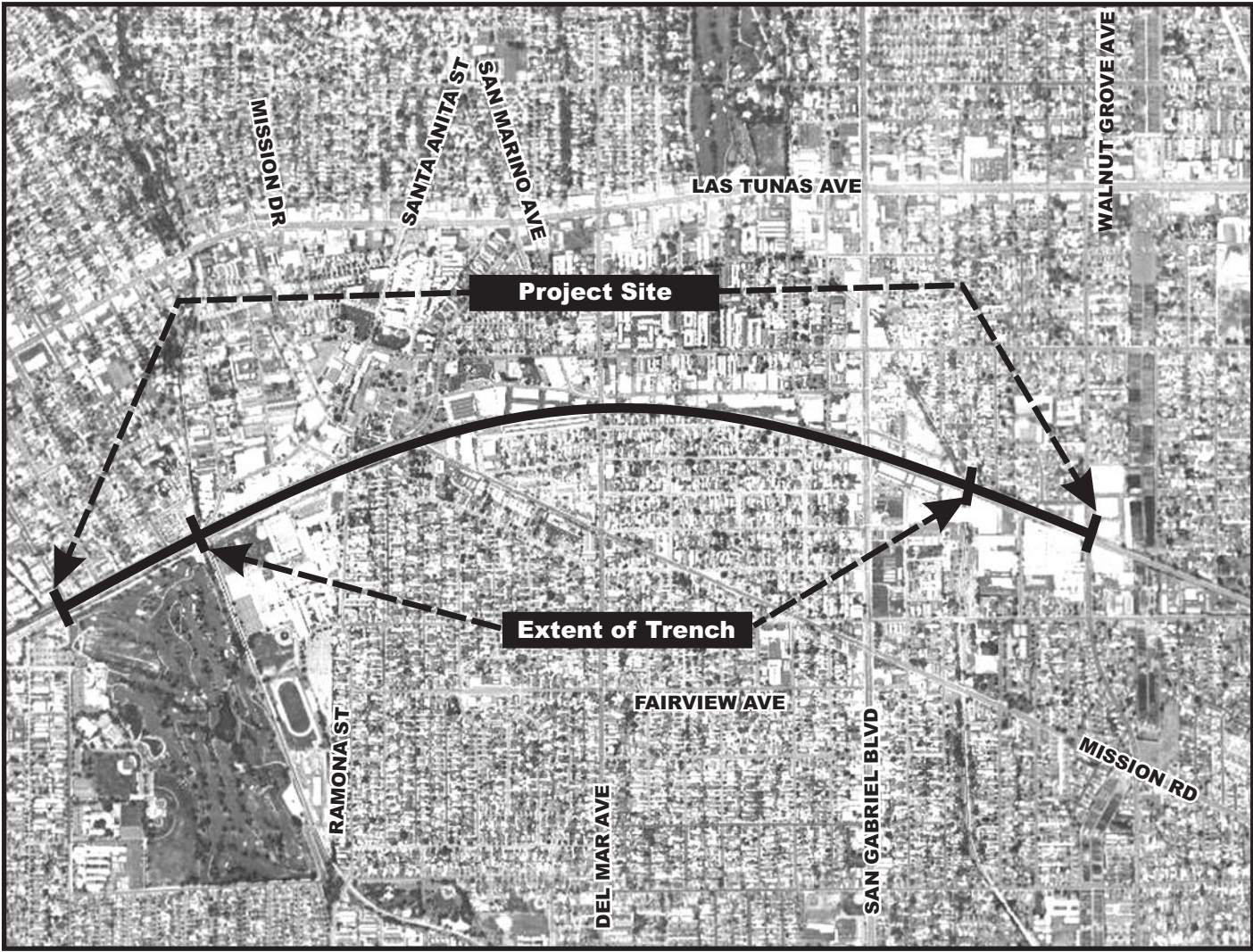


Looking southeast towards the existing Union Pacific Railroad bridge over the Alhambra Wash, adjacent to Mission Road.

SOURCE: TAHA, 2009.

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LEGEND:

- Project Site
- - - City/Community Boundary

SOURCE: County of Los Angeles, 2007 and TAHA, 2009.



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A small portion of Main Street between Ramona Street and Mission Road currently encroaches into the rail corridor and is anticipated to be vacated as part of the proposed project. This section is a narrow, single-lane, one-way connector that provides access for east bound traffic to Mission Road. A driveway will be constructed to provide access to residences that currently use Main Street for access.

Currently, Ramona Street, Del Mar Avenue, Mission Road, and San Gabriel Boulevard cross the UPRR tracks at grade; existing facilities at these locations include programmed rail arms, warning bells, and flashing warning lights.

**Figure 1-5** shows the existing grade crossings at Ramona Street, Del Mar Avenue, and San Gabriel Boulevard.

## DEMOGRAPHICS

The proposed project is located primarily in the City of San Gabriel although construction activities will take place in the Cities of Alhambra and Rosemead and the County of Los Angeles. In general, the San Gabriel Valley has experienced rapid growth and development, and the area around the project site is typical of such a pattern. For the purposes of this evaluation, six census tracts comprised the “study area”; Census Tracts 4322.01, 4810.02, 4811.01, 4811.02, 4811.03, 4812.02, and 4815. None of these Census tracts contain the UPRR right-of-way (ROW); rather, the UPRR ROW is the boundary between these Census tracts. Data for the study area are compared to overall conditions for Los Angeles County and the Cities of San Gabriel and Alhambra. **Figure 1-6** shows the census tracts that comprise the study area.

As shown in **Table 1-2**, in 2008, the population of the County of Los Angeles was approximately 10.4 million and is estimated to be approximately 11 million by 2015. The 2008 population in the City of San Gabriel was approximately 42,000 and is estimated to be approximately 44,600 by 2015. The 2008 population in the City of Alhambra was approximately 90,360 and is estimated to be 93,115 by 2015. The 2008 population of the study area was approximately 24,950 and is estimated to be 25,930 by 2015.

<b>TABLE 1-2: POPULATION GROWTH PROJECTIONS</b>			
<b>Area</b>	<b>2008</b>	<b>2015</b>	<b>Difference</b>
Los Angeles County	10,445,349	10,971,589	526,240
City of San Gabriel	42,389	44,605	2,216
City of Alhambra	90,361	93,115	2,754
Study Area	24,953	25,930	977

**SOURCE:** Southern California Association of Governments, *Regional Transportation Plan, 2008*.

Ethnic composition for Los Angeles County, the Cities of Alhambra and San Gabriel, and the Study Area are shown in **Table 1-3**. As shown in **Table 1-3** the study area and the Cities of San Gabriel and Alhambra is predominantly Asian, followed by Hispanic and white.

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Looking south at the existing Mission Road crossing.



Looking north at the existing Del Mar Avenue crossing.



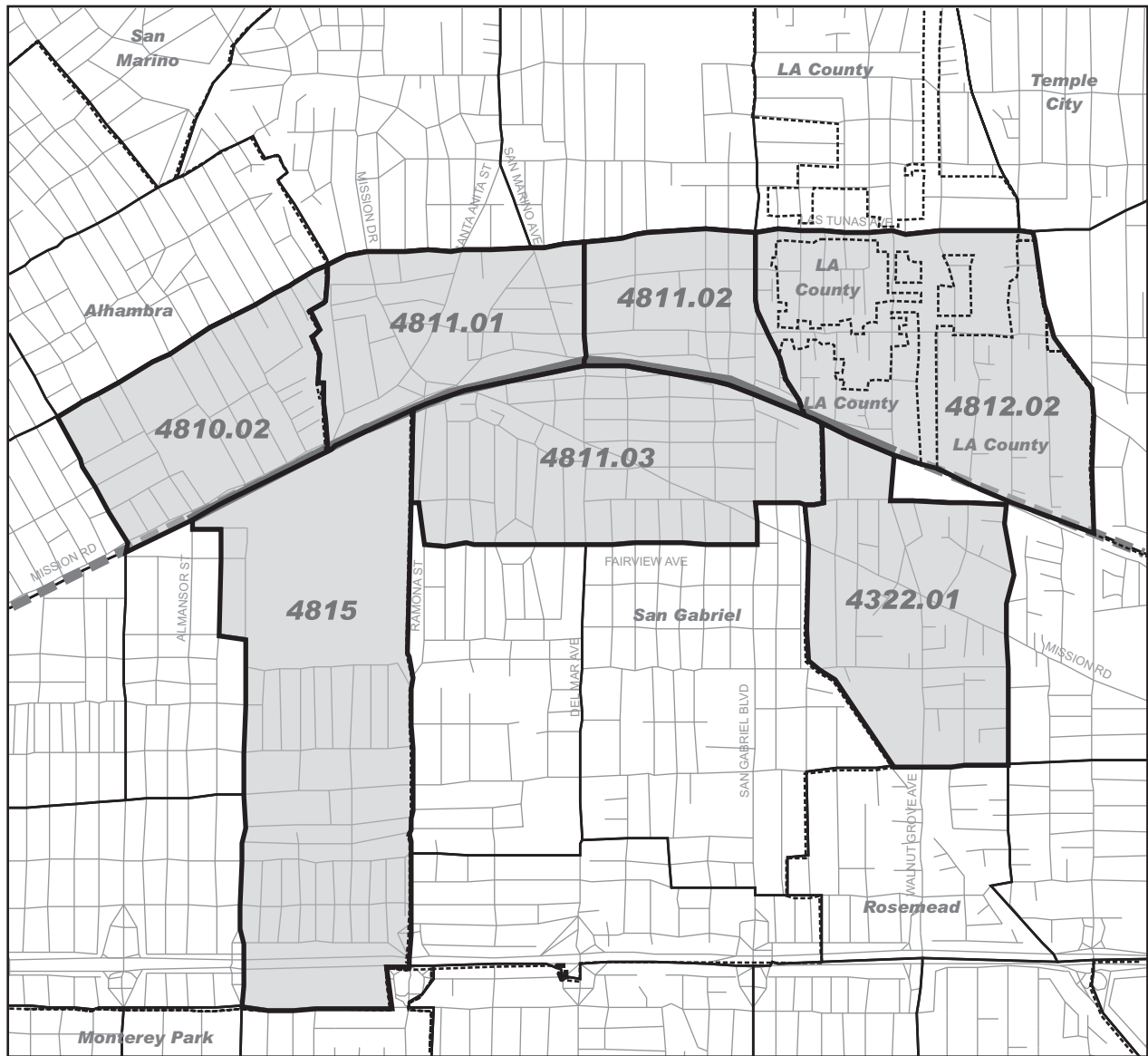
Looking west at the existing Ramona Street crossing.






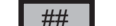

Looking north at the existing San Gabriel Boulevard crossing.

SOURCE: TAHA, 2009.

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**LEGEND:**

-  Project Site
-  Union Pacific Railroad - Alhambra Subdivision
-  Census Tracts
-  Census Tracts Adjacent to Project Site
-  City/Community Boundary

SOURCE: TAHA, 2009.



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TABLE 1-3: ETHNIC COMPOSITION								
Race/Ethnicity	Los Angeles County		Alhambra		San Gabriel		Study Area	
	No. of Persons	% of Total	No. of Persons	% of Total	No. of Persons	% of Total	No. of Persons	% of Total
White	2,946,145	31	11,879	14	6,838	17	1,989	16
Black	891,194	9	1,175	1	384	1	124	1
American Indian or Alaska Native	26,141	<1	85	<1	53	<1	28	<1
Asian	1,123,964	12	40,399	47	19,133	49	5,870	47
Native Hawaiian and Other Pacific Islander	24,376	<1	184	<1	104	<1	73	1
Other	18,859	<1	222	<1	34	<1	7	<1
Two or more races	245,172	3	1,471	2	820	2	339	3
Hispanic	4,242,487	45	30,546	36	11,940	30	4,067	33
<b>Total</b>	<b>9,519,338</b>	<b>100</b>	<b>85,961</b>	<b>100</b>	<b>39,306</b>	<b>100</b>	<b>12,497</b>	<b>100</b>
SOURCE: 2000 U.S. Census.								

The construction of the trench would involve the displacement of two residences (one single family home and one manager’s unit associated with a storage facility). An additional two single-family homes may be impacted through the removal of ancillary structures that encroach into the UPRR right-of-way (Table 1-4). In order to achieve a uniform 100 feet of ROW, these portions that encroach into the UPRR may be relocated, or if not feasible, the entire structure may be removed.<sup>3</sup> Of these four residences, three are currently occupied.<sup>4</sup>

TABLE 1-4: PARCELS POTENTIALLY DISPLACED – RESIDENTIAL			
Assessor’s Parcel Number	Parcel Location	Occupied or Vacant	Number of Occupants
5368-001-006	313 E. Main Street	Occupied	1
5368-001-034	325 E. Main Street	Vacant	0
5368-001-003	327 E. Main Street	Occupied	2
5362-017-002	405 S. Del Mar Ave	Occupied	3 /a/
/a/ Estimated using the average household size per the 2000 U.S. Census (3.10 for the City of San Gabriel). SOURCE: Alameda Corridor-East Construction Authority, <i>Relocation Impact Report for San Gabriel Trench Project, City of San Gabriel</i> , 2003, Updated 2007.			

The construction of the trench would result in the displacement of one business in the City of San Gabriel, which employs approximately 14 persons (Table 1-5).<sup>5</sup> This comprises approximately less than one percent of the existing employment in the City of San Gabriel. The Relocation Impact Report concluded that this business would retain their entire staff upon relocation. As such, there would be no net loss of employment due to the displacement of this business. The Relocation Assistance Program would be implemented to assist this business with relocation and employee retention. Additionally, by 2015, SCAG estimates that there would be an additional 642 jobs available in the City of San Gabriel, and

<sup>3</sup>Moffat and Nichol. *Right of Way and Easement Report*, February 2009.

<sup>4</sup>Alameda Corridor-East Construction Authority, *Draft Relocation Impact Report for San Gabriel Trench Project City of San Gabriel*, August 2003, Revised September 28, 2007.

<sup>5</sup>*Ibid.*

1,256 jobs in neighboring City of Alhambra, which would exceed for both cities the number of jobs that could potentially be lost due to business relocation.

Additionally, two other businesses, located at 330 S. Del Mar Avenue and at 130 Augustino Road would potentially be affected by the trench construction. These two businesses have structures that currently encroach into the UPRR ROW: The car repair shop at 330 S. Del Mar Avenue has an awning that is attached to the existing building and an elevated parking area; and the car repair shop at 130 Augustino Road has a carport-type structure attached to the existing building. It is anticipated that these structures attached to the buildings that encroach onto the UPRR ROW can be removed without compromising the buildings, and thus avoiding relocation of the business.<sup>6</sup>

<b>TABLE 1-5: PARCELS POTENTIALLY DISPLACED – COMMERCIAL</b>				
<b>Assessor's Parcel Number</b>	<b>Parcel Location</b>	<b>Number of Businesses Displaced</b>	<b>Type of Business</b>	<b>Number of Employees</b>
5362-017-002	405 S. Del Mar Ave	1	Storage Units	14 /a/
5367-027-054	330 S. Del Mar Ave	1 (Partial)	Car Repair Shop	14
5367-027-057	130 Augustino Rd	1(Partial)	Car Repair Shop	10
<b>Total Existing Businesses</b>		<b>3 /b/</b>	<b>Total Employees</b>	<b>38</b>
<small>/a/ Number of employees not known for storage units of 85,000 square feet or approximately 2 acres. The number of employees was calculated based on employee per acre relationship for Los Angeles County from the 2001 SCAG Employment Density Study. For a storage unit business, the standard is 7.04 employees per acre, which would result in approximately 14 employees.                      /b/ Total Existing Businesses excludes the three vacant parcels.</small>				
<small><b>SOURCE:</b> Del Richardson Associates, <i>Relocation Impact Report for San Gabriel Trench Project, City of San Gabriel</i>, 2003, Updated 2007 and Southern California Association of Governments, <i>Employment Density Study</i>, 2001.</small>				

## 1.4 PROJECT ALTERNATIVES

This section describes the proposed action and the design alternatives that were developed by a multi-disciplinary team to achieve the project purpose and need while avoiding or minimizing environmental impacts. Two alternatives are evaluated: the proposed project and a No-Build Alternative. Under CEQA, an EIR must evaluate a range of reasonable alternatives that would feasibly obtain most of the basic objectives of the project but would avoid or substantially lessen any of the significant effects of the project (*CEQA Guidelines* 15126). This range of alternatives is governed by a “rule of reason” that requires that the EIR set forth only those alternatives that lead will foster informed decision-making.

This evaluation of alternatives is consistent with Federal Highway Administration (FHWA) NEPA guidance (Technical Advisory T6640.8A, October 1987), which states that an Environmental Assessment (EA) may be prepared for one or more build alternatives. Due to constraints of the urbanized environment, there were no feasible alternative alignments for a grade-separated crossing.

### ALTERNATIVE 1 – PROPOSED PROJECT (SAN GABRIEL TRENCH GRADE SEPARATION PROJECT)

The project site is located at the UPRR Alhambra Subdivision in the Cities of San Gabriel, Alhambra, Rosemead and the County of Los Angeles. The trench would be located approximately between milepost (MP) 489.5 and MP 491.8. The west end, the project site is generally located near the intersection of Mission Road and Almansor Street; the east end of the project site is generally located near the intersection of the UPRR and Walnut Grove Avenue. The project site is generally contained within the Alhambra Subdivision of the UPRR right-of-way. Although the length of the project site is approximately 2.2 miles, the actual trench that would be constructed (including retaining walls and other features) would

<sup>6</sup>Moffat and Nichol. *Right of Way and Easement Report*, February 2009.

be 1.4 miles and would generally be bounded by Alhambra Wash on the west and Rubio Wash on the east.

The grade separations at Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard will be achieved by lowering the track under these crossings in a trench and constructing bridge structures over the railroad at each crossing location. The existing track depression through Alhambra would be continued eastward through the City of San Gabriel. The rail line would return to grade where it crosses Rubio Wash, east of San Gabriel Boulevard. It is anticipated that Ramona Street, Mission Road, and Del Mar Avenue would remain at their current elevations. San Gabriel Boulevard would be raised slightly and the rail line depressed to accomplish the grade separation. New permanent drainage culverts or bridge structures would also be provided at the Alhambra Wash and the Rubio Wash. New rights-of-way will not be required for any project component.

A shoofly track will be provided on the north side of the trench during construction to maintain railroad operations.<sup>7</sup> The proposed width of the trench is 58 feet (17.68 meters), which will allow for construction of a single track, a service road and a future second track. A 20-foot (6.1-meter) spacing will be provided between the two tracks and 15 feet (4.57 meters) of clearance will be provided to the south wall of the trench. The maximum vertical gradient of the track will not exceed a nominal 1.15 percent grade. A minimum of 23.5 feet (7.32 meters) of vertical clearance will be provided between the top of the rail and underside of the bridge structures. Project construction is preliminarily scheduled to commence in 2011 and be completed in 2014. Project construction cost is estimated to be approximately \$498 million. The project is programmed with state Trade Corridor Improvement Funds (\$336.6) with additional funds being sought from the following sources: federal, state/Public Utilities Commission, Los Angeles Metropolitan Transportation Authority and railroad contribution.

## **ALTERNATIVE 2 – NO-BUILD ALTERNATIVE**

Environmental review must consider the effects of not implementing the proposed project. The No-Build Alternative provides a baseline for comparing the impacts with the other alternative. The No-Build Alternative would consist of all existing and programmed transportation improvements in the project area, without the proposed San Gabriel Trench Grade Separation Project. The crossings at Ramona Street, Mission Road, Del Mar Avenue and San Gabriel Boulevard would remain at grade under the No-Build Alternative. Existing facilities at this location, including programmed rail arms and warning signs, would also remain.

Under the No-Build Alternative, existing conditions would persist at the project site and existing safety issues would not be improved. With increased traffic due to population growth and the potential for increased train traffic due to growth in the goods movement sector, it is anticipated that additional vehicle-train collisions would occur. Also under the No-Build Alternative, air quality would continue to deteriorate in the project vicinity due to increased traffic and queuing at crossings.

## **1.5 ALTERNATIVES CONSIDERED BUT ELIMINATED FROM FURTHER DISCUSSION**

This section includes a discussion of all of the alternatives that were considered during the project development process, but were eliminated before the preparation of the draft environmental document. CEQA provides three factors that may be used to eliminate an alternative from detailed consideration

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<sup>7</sup>A shoofly is a temporary stretch of track that allows trains to travel around an accident or construction site.

including, 1) failure to meet most of the project objectives, 2) infeasibility (see *CEQA Guidelines* Section 15126.6(f)(1)), or 3) inability to avoid significant environmental impacts.

### **OVERPASS/UNDERPASS ALTERNATIVE**

This alternative would consist of building a series of overpasses or underpasses to complete four individual grade separations rather than the proposed trench. Under this alternative, underpasses or overpasses would be constructed at Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard. Overpasses or underpasses at Ramona Street and Mission Road would cause unacceptable and unavoidable impacts to the historic San Gabriel Mission and San Gabriel High School making this alternative infeasible. A variation of this alternative, with partial trench grade separation at Ramona Street and Mission Road, and conventional flyovers at Del Mar Boulevard and San Gabriel Boulevard, was considered and eliminated since the right-of-way and noise impacts would be much greater and the variation offered no significant advantages and could create rail operating difficulties.

### **ELEVATED TRAINWAY ALTERNATIVE**

Under this alternative a trainway would be elevated on fill or structures within the existing right-of-way and the four roadways would cross under the elevated railroad at their existing locations. This alternative would significantly increase noise and visual impacts on adjacent sensitive sites including schools, the historic San Gabriel Mission and residential properties due to the elevated trainway. Considering the nature of the increased visual and noise impacts and potential future safety concerns associated with any rail incident on an elevated structure, this alternative was eliminated from further consideration.

### **DECK PARK ALTERNATIVE**

As part of the initial scoping process, ACE issued a Notice of Preparation (NOP) on October 14, 2008. In response to the NOP, ACE received a comment letter from Caltrans (dated November 24, 2008) requesting that ACE include an alternative that improves the visual character by adding a park or open space. ACE recognizes the value that parks and open space can provide to a community and, therefore, evaluated possible options for including a park with the project. One option would be the development of a “deck park” that would allow for a portion of the trench to be capped as a way to provide open space. Deck parks are an innovative solution to addressing the needs of a community and are being proposed in various locations in Los Angeles, including as part of improvements at the Foothill Freeway (I-210) and State Route 2 (SR-2). However, certain project constraints forced ACE to remove this alternative from further consideration. In particular, there is the possibility of safety issues resulting from creating a deck above the trench. The deck could make it difficult for either emergency personnel to access the trench or to allow persons within the trench to easily exit in the event of an emergency. Further, the project site is not located on public property and is instead owned by UPRR. Therefore, it is unclear what the nexus would be between the proposed project and the park. Therefore, this alternative was eliminated from further consideration.

## **1.6 ESTIMATED CONSTRUCTION SCHEDULE AND PROCESS**

The overall project schedule has been developed based on several constraints including the construction of the Ramona Street crossing during the summer months to accommodate the school schedule, opportunities for utility shut downs from April through October and the phased schedule which does not allow for any two adjacent streets to be closed at the same time. An overview of the construction schedule is presented below:

- Begin Environmental Phase September 2008
- Preliminary Engineering Report Approval - June 2009
- Complete Environmental Approvals - April 2010
- Notice to Proceed – May 2011
- Shoofly and Alhambra Wash Construction - May 2011
- Shift Rail to Shoofly – November 2011
- Construction of Mission Road Street Crossing – September 2011
- Construction of San Gabriel Boulevard Street Crossing – November 2011
- Construction of Ramona Street Crossing – June 2012
- Construction of Del Mar Avenue Street Crossing – April 2013
- Construction of UPRR rail in trench – October 2013
- Shoofly removal and Alhambra Wash construction – January 2014
- Project completion – May 2014

## 1.7 PERMITS AND APPROVALS NEEDED

Agency	Permit/Approval	Status
Los Angeles County/City of San Gabriel	Construction Permit	To be obtained by the contractor prior to construction, will be reviewed by the City of San Gabriel
Los Angeles Regional Water Quality Control Board	NPDES General Permit/SWPP	ACE to issue Notice of Intent, Contractor will prepare prior to construction
South Coast Air Quality Management District	Fugitive Dust – Rule 403	To be obtained by the contractor prior to construction.
Los Angeles County/Cal EPA	Contaminated Soil Disposal Permit	To be obtained by ACE prior to storm drain construction
Los Angeles County Sanitation/City of San Gabriel	Sewer Construction Permit	Multiple connection permits will be required, to be obtained by the contractor prior to construction
City of San Gabriel	Traffic Routing/Phasing Plan Approval	Will be required for surface street routing of traffic, to be obtained by the contractor
City of San Gabriel	Excavation/Grading Permit	Permit by the City of San Gabriel, approval by UPRR
California Public Utilities Commission	Formal Grade Crossing Construction Permit	To be obtained from CPUC prior to any trench construction
South Coast Air Quality Management District	Rule 1403 Permit (Asbestos Emission from Demolition Activities)	Contractor to obtain, will be required for any asbestos removal activities
US Army Corps of Engineers	Flood Control Channel Alteration Permit (Alhambra Wash)	ACE is working with the Corps to obtain permit
Office of Historic Preservation	Memorandum of Agreement (MOA)	A draft MOA was submitted to the State Historic Preservation Office detailing mitigation for effects at and near the San Gabriel Mission site.



## 2.0 AFFECTED ENVIRONMENT, ENVIRONMENTAL CONSEQUENCES, AND AVOIDANCE, MINIMIZATION, AND/OR MITIGATION MEASURES

### 2.1 HUMAN ENVIRONMENT

#### TOPICS FOUND NOT TO HAVE AN ADVERSE IMPACT

As part of the scoping and environmental analysis conducted for the project, the following environmental resources were considered but no potential for adverse impacts to these resources were identified. Consequently, this document provides no further discussion regarding these resources:

- Farmland/timberland – No farmlands are located within the project area. The project will not irreversibly convert farmland directly or indirectly to non-agricultural use.
- Coastal Zone – The project area is not located within a coastal zone
- Energy – The project does not include any new uses that would require additional energy resources.
- Plant species/threatened and endangered species – There are no endangered species located within the project area.

Environmental impacts and mitigation measures reported in the Draft EIR/EA are based on technical studies conducted for this project. The studies are available for review at ACE's office 4900 Rivergrade Road, Ste. A120 Irwindale, CA 91709.

#### Technical Studies Prepared for the San Gabriel Trench Grade Separation Project

Archaeological Evaluation Report	September 2009
Archaeological Survey Report	September 2009
Biological Resources Assessment Letter Report	February 2009
Construction Noise and Vibration Impact Assessment	November 2007
Draft Preliminary Engineering Report	September 2008
Draft Relocation Impact Report	September 2008
Extended Phase I Report	September 2009
Finding of Effect	January 2010
Historical Resources Evaluation Report	December 2009
Historic Property Survey Report	December 2009
Paleontological Resources Assessment	September 2009
Right of Way & Easement Report	February 2009
Transportation Management Plan	August 2009
Traffic Study	September 2008

#### 2.1.1 LAND USE

##### *Regulatory Setting*

Public Resources Code 21083, 21087 and the California Environmental Quality Act Guidelines Section 15126.2(a) require lead agencies to assess the impact of a proposed project by examining alterations in the human use of the land, including population distribution and population concentration, and commercial and residential development. Section 15131 allows public agencies to consider economic and social impacts when determining the significance of an environmental impact.

The description of the affected environment is based on data from the U.S. Census Bureau and from the State of California and County of Los Angeles sources. County-, city-, and tract level data are available from the 2000 Census. This section describes the demographic characteristics of Los Angeles County, the affected communities and where detailed tract-level data is available, the smaller “study area.”

Council on Environmental Quality (CEQ) regulations 40 CFR 1502.16(c) require environmental documents identify possible conflicts between the project and local land use plans. Specifically, this section evaluates the project alternatives’ consistency with the Cities of San Gabriel and Alhambra Planning and Zoning Codes, the Cities of San Gabriel and Alhambra General Plans, Mission District Specific Plan, and Southern California Association of Governments (SCAG) planning documents.

Consistency of the project alternatives with the South Coast Air Quality Management District (SCAQMD) Air Quality Management Plan (AQMP) is discussed in Section 2.2.4 Air Quality of this EIR/EA.

### ***Affected Environment***

#### **Existing Land Uses**

##### Project Site

The project site includes the Alhambra Subdivision of the Union Pacific Railroad (UPRR) and crosses portions of the Cities of San Gabriel, Alhambra and Rosemead in the San Gabriel Valley. The project site is an active freight railroad right-of-way, which is approximately 100 feet wide. No land uses or buildings exist on the project site except for traditional railroad-related facilities such as the railroad tracks and crossing gates. Railroad bridges are currently located over both the Alhambra and Rubio Washes.

##### Surrounding Uses

The primary land uses located directly adjacent to the project site includes industrial, residential, with some office and commercial land uses. More sensitive historical and civic land uses are set at a distance from the existing railroad facilities. These sensitive land uses include the San Gabriel Mission (north of the Ramona Street and Mission Drive crossings), San Gabriel High School (located southwest Mission Road and Ramona Street intersection), Rancho Las Tunas Adobe (located approximately 470 feet southeast of the Mission Road and Junipero Serra Drive intersection) the Asian Youth Center on the north side of the project site at Clary Drive and the West San Gabriel Valley YMCA and the Alhambra Golf Course located southwest of the project site in the City of Alhambra

The land uses surrounding the project site are summarized in **Table 2.1-1**. The project site is divided into several segments listed from west to east. Both directly adjacent land uses and surrounding land uses are listed for each segment. Directly adjacent uses share a property line with the existing railroad right-of-way, surrounding uses do not share a property line, but are located in the general project area. This information is based on project area visits and review of aerial photography. **Figure 2.1-1** illustrates the existing land use designations for the project site and its vicinity



<b>TABLE 2.1-1: SUMMARY OF LAND USES</b>		
<b>Segment</b>	<b>Directly Adjacent Uses</b>	<b>Surrounding Uses</b>
Almansor Street to Ramona Street	Alhambra Municipal Golf Course Alhambra Wash San Gabriel High School	Single- & Multi-Family Residences Alhambra Historic Neighborhood Tract Nursery Industrial Uses Offices San Gabriel City Hall/Civic
Ramona Street to Mission Road	None	San Gabriel Mission (Historic) Single-Family Residences Offices Rancho Las Tunas Adobe (Historic)
Mission Road to Del Mar Avenue	San Gabriel Unified School District Industrial Uses Storage Facility Asian Youth Center	Smith Park Single-Family Residences Auto-Related Uses Commercial Uses
Del Mar Avenue to San Gabriel Boulevard	Auto-Related Uses El Rancho Industrial Park Single-Family Residences Commercial Uses	Del Mar High School Multi-Family Residences Industrial Uses Auto-Related Uses
San Gabriel Boulevard to Walnut Grove Avenue	Auto-Related Uses Industrial Uses /a/ Storage Facility Rubio Wash Single-Family Residences	Industrial Uses Single-Family Residences
Walnut Grove Avenue to Muscatel Avenue	Industrial Uses Nursery Single- & Multi-Family Residences	Industrial Uses Single- & Multi-Family Residences
/a/ A large vacant industrial building spans over the Rubio Wash, adjacent south of the railroad right-of-way. <b>SOURCE:</b> TAHA, 2008		

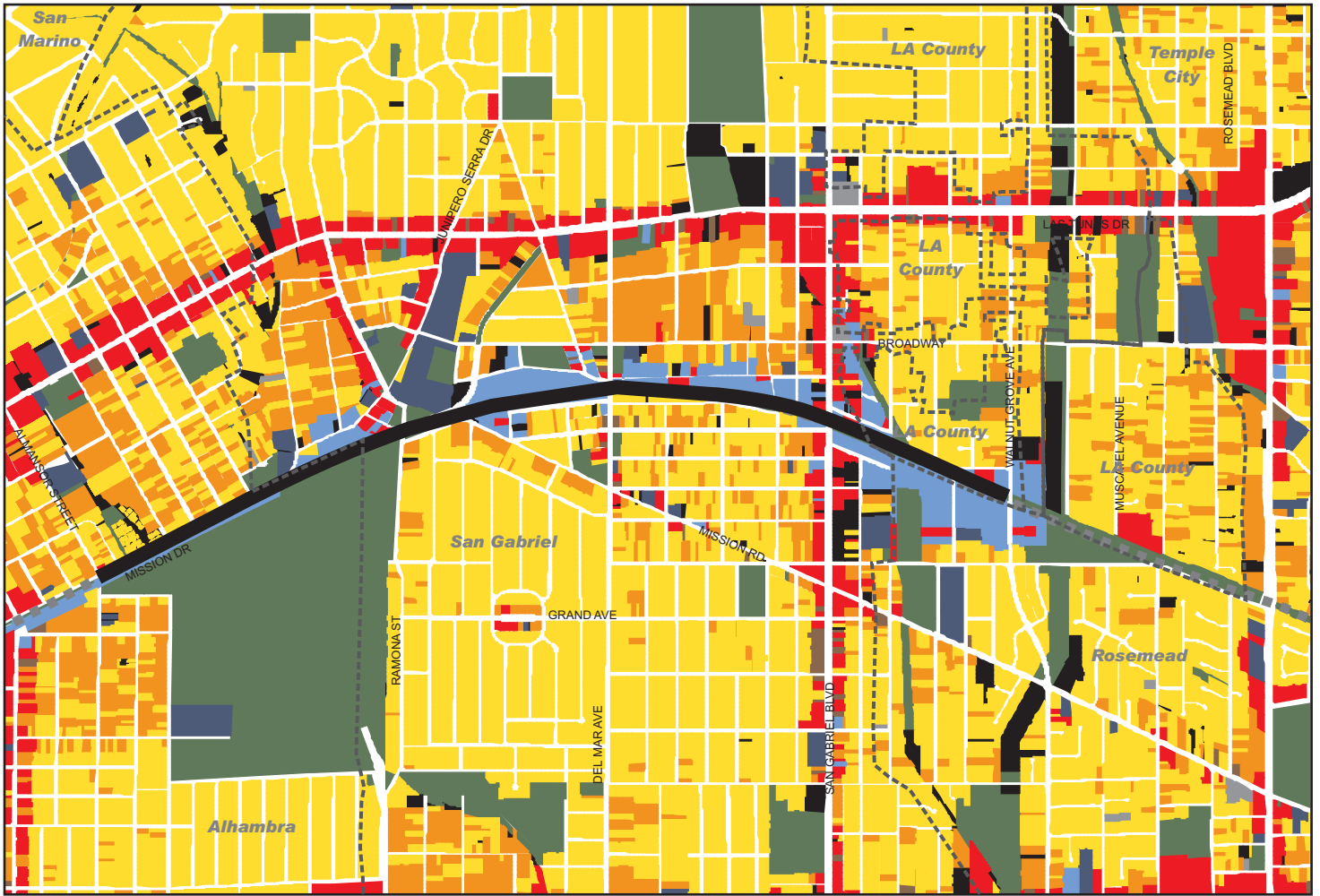
### Consistency with State, Regional and Local Plans

The project site is within the Cities of San Gabriel and Alhambra and is subject to the objectives and policies in both cities’ General Plans and Zoning Codes. In the City of San Gabriel, the project site is within the City of San Gabriel Mission District Specific Plan Area and Redevelopment Area and is subject to the requirements of the City of San Gabriel Urban Design Guidelines.













#### City of San Gabriel General Plan

California law requires each city and county to adopt a general plan that includes seven mandatory elements: land use, circulation, housing, conservation, open space, noise, and safety. Depending on the community’s location, general plans also contain special topics, including local coastal plans, waste management, hazardous waste, seismic hazards, floodplain management, and airport land use. A general plan is the basic planning document of a city or county, which serves as a “blueprint” for development.

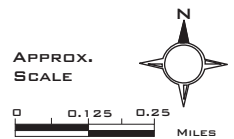
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**LEGEND:**

-  Project Site
-  Union Pacific Railroad - Alhambra Subdivision
-  City/Community Boundary
-  Single-Family Residential
-  Multi-Family Residential
-  Mixed-Use
-  Commercial
-  Institutional
-  Industrial
-  Farm Land, Government, Open Space, and Utility
-  Vacant
-  Unknown Land Use

SOURCE: County of Los Angeles, 2007 and TAHA, 2009.



San Gabriel Trench Grade Separation Project  
 Environmental Impact Report/Environmental Assessment

ALAMEDA CORRIDOR EAST CONSTRUCTION AUTHORITY

FIGURE 2.1-1

EXISTING LAND USE

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The City of San Gabriel General Plan, adopted in 2004, sets forth the comprehensive, long-term land use policy for the City. It provides principles and an overall framework for detailed public and private development decisions and establishes requirements for additional planning studies where greater specificity is needed. The City's General Plan has further divided the 7 state-required elements into the following 11 chapters: Land Use, Housing and Demographics, Mobility, Economic Development, Public and Environmental Safety, Community Facilities, Open Space and Recreation, Environmental Resources, Noise, Community Design, and Cultural Resources. Each chapter lists goals, targets, actions, and implementation strategies to direct the development of the City.

The primary chapters and policies that are applicable to the proposed San Gabriel trench project are listed below:

*Mobility Chapter.* The key mobility and circulation issues for the City include traffic congestion, traffic signals and synchronization, traffic calming, public safety and traffic accidents and the movement of goods. This chapter states the need to maintain the following existing truck routes that bisect or run adjacent to the project site: San Gabriel Boulevard, Del Mar Avenue, Junipero Serra Drive, and Mission Road (west of Junipero Serra Drive). Below is a goal from the Mobility Chapter that is applicable to the proposed project.

- Goal 3.1: We will provide a safe, efficient and environmentally sensitive transportation system for the movement of people and goods

*Public and Environmental Safety Chapter.* The key public and environmental safety issues for the City include seismic/geologic safety, fire safety, policing, emergency preparedness, and toxins/hazard. Below is a target from the Public and Environmental Safety Chapter that is applicable to the proposed project.

- Target 5.3.3: Continue coordination with Alameda Corridor East to lower the railroad tracks, which would improve emergency medical response

*Noise Chapter.* The key noise issues for the City include freeway traffic noise, arterial street traffic noise, train noise on the UPRR, commercial/industrial noise, and noise-sensitive non-residential locations. Below is a goal, target, and action from the Noise Chapter that are applicable to the proposed project.

- Goal 9.3: Support improvements that reduce the noise impacts on the community from the railroad line
  - Target 9.3.1: Complete the Alameda Corridor East grade separations by 2008
    - Action 9.3.1.1: Continue to work cooperatively with federal, state, regional, and local government and railroad officials to assure completion of the railroad lowering on schedule

*Community Design Chapter.* The key community design issues for the City include, the Mission District, classic neighborhoods, lack of unifying design, deteriorating commercial corridors, and poor design of new developments. This chapter states that the enhancement of the Alameda Corridor-East is a priority for the City. The Community Design Chapter also identifies the project site as an "edge," which is a boundary between two (or more) different types of areas.

*Cultural Resources Chapter.* The key cultural resource issues for the City include the protection of threatened resources, Rancho Las Tunas Adobe, and the need to conserve and protect period revival homes in North San Gabriel. Below is a target from the Cultural Resources Chapter that is applicable to the proposed project.

Target 11.1.1: Preserve existing historically significant structures, i.e., pre- and post-statehood artifacts, adobes, Mission-era outbuildings and structures

#### City of San Gabriel Mission District Specific Plan

The City of San Gabriel adopted the Mission District Specific Plan in 2004. The Specific Plan Area is located within the northwestern portion of the City south of Las Tunas Drive, north of Mission Road, west of Junipero Serra Drive, and east of the Alhambra Wash. The San Gabriel Mission, City Hall, and Rancho Las Tunas Adobe are located within the Specific Plan Area. The Mission District Specific Plan is a comprehensive set of tools created to revitalize San Gabriel's Mission District. The main goal of the plan is to improve the area's economic development by attracting people and businesses to the District. This would be accomplished through mixed-use developments along Mission Drive and improved architectural standards. The plan includes development regulations, architectural standards, standards for preserving sites of cultural significance, and methods of improving traffic and parking issues.

A portion of the project site is located within the Specific Plan Area from the Alhambra Wash in the west, to Mission Road in the east. The Plan states that there is currently heavy traffic queuing in the project area on Mission Drive, Santa Anita Street, and Mission Road. The traffic queuing is further impacted by delays caused by trains traveling on the UPRR in its current at-grade configuration. The Plan states that when traffic is stopped by a train traveling on the UPRR, the traffic queuing at Mission Drive and Mission Road extends past the Mission Drive/Santa Anita Street intersection. The Plan supports future railroad improvements to establish grade-separated crossings to relieve this traffic hazard and to enhance the unique visual elements of the Mission District.

#### City of San Gabriel Design Guidelines

The City of San Gabriel has adopted Design Guidelines to encourage particular architectural treatments, urban design features, and landscaping to be implemented with new development, which would assist in maintaining a consistent visual character in the City. The Design Guidelines concentrate specifically on commercial and single- and multi-family residential development.

#### City of Alhambra General Plan

The City of Alhambra General Plan was adopted in 1986 and directs the long-term development of the City. The City's General Plan includes the Land Use, Housing, Circulation, Environmental Management, Economic Development, Noise, and Implementation Elements, as well as a detailed technical background report. Each element lists objectives, policies, and implementation strategies to guide the development of the City. The primary elements and policies that are applicable to the project site and/or its development are listed below:

*Land Use Element.* The key land use issues for the City include land use mix and compatibility, infrastructure constraints, potential for flooding, public services and location of public facilities, and parking management. Below are policies from the Land Use Element that are applicable to the proposed project.

- Policy 4.1.3: Encourage land use patterns that minimize incompatibility between uses  
*Circulation Element.* The key circulation issues for the City include arterial highway intersection capacity, freeway access, and alternate modes of transportation. Below are policies from the Circulation Element that are applicable to the proposed project.

- Policy 4.5.3: Support the establishment of a Citywide fixed route transit system and transportation center as a connecting point between local and regional transit systems, when warranted, to decrease reliance on the automobile

*Environmental Management Element.* The key environmental issues for the City include conservation and protection of natural resources, resources management, community design, open space, parks, and recreation, and hazards management. Below are policies from the Environmental Management Element that are applicable to the proposed project.

- Policy 4.2.2: Promote good air quality on a local and regional basis
- Policy 4.5.5: Promote the routing of vehicles carrying potentially hazardous materials along transportation corridor that reduce public exposure to risk

*Noise Element.* The key noise issues for the City include transportation noise control, noise and land use planning integration, and community noise control for non-transportation noise sources. Below are policies from the Noise Element that are applicable to the proposed project.

- Policy 4.2.2: Ensure acceptable noise levels near schools, hospitals, convalescent homes, and other noise sensitive uses
- Policy 4.3.3: Evaluate noise generated by construction activities

## **Regional Plans and Policies**

### Regional Comprehensive Plan and Guide

The Southern California Association of Governments (SCAG) is a Joint Powers Agency established under California Government Code Section 6502 et seq. The SCAG region includes six counties: Los Angeles, Orange, San Bernardino, Riverside, Ventura and Imperial. These counties comprise an area of 38,000 square miles and have a total population of approximately 16.5 million. SCAG is the regional planning agency with responsibility for reviewing the consistency of local plans, projects, and programs with regional plans.

The Regional Comprehensive Plan and Guide (RCPG), adopted in 1996, examines the future of the region through the year 2015. SCAG recently updated the RCPG, but has directed cities and counties to use the policies in the 1996 RCPG for determining consistency. The RCPG is intended to provide a framework for decision making by local governments regarding growth and development. RCPG chapters are divided into three categories: core, ancillary, and bridge. The core chapters include Growth Management, Regional Transportation Plan (RTP), Air Quality, Hazardous Waste Management, and Water Quality. They constitute the base on which local governments ensure consistency of their plans with applicable regional plans under CEQA. The Air Quality and Growth Management chapters consist of both core and ancillary policies.

RCPG ancillary chapters include the following: Economy, Housing, Human Resources and Services, Finance, Open Space and Conservation, Water Resources, Energy, and Integrated Solid Waste Management. These chapters address important issues facing the region; however, they do not contain actions or policies required of local government. Therefore, they are entirely advisory and establish no new mandates or policies for the region. Bridge chapters include the Strategy and Implementation chapters, functioning as links between the Core and Ancillary chapters of the RCPG.

### Regional Transportation Plan

SCAG's Regional Transportation Plan (RTP) constitutes the region's transportation plan. SCAG is mandated by the federal government to prepare the RTP every four years. The RTP was most recently

updated in May 2008. The RTP provides a framework for the future development of the regional transportation system and addresses all modes of transportation within the region. The RTP policies are incorporated by reference into the RCPG.

At the regional level, the goals, objectives, and policies in the RCPG and RTP are used for measuring consistency with the adopted plan. A discussion of relevant policies is presented subsequently in this section.

### **Habitat Conservation Plan or Natural Community Conservation Plan**

No rare or endangered plant or animal species are known or suspected to exist within the City of Alhambra due to the extent of the development of the City.<sup>1</sup> There are no habitat conservation plans or natural community conservation plans that apply to the project area.

### ***Environmental Consequences***

#### **Division of a Community**

##### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Alternative 1 would separate the existing at-grade Alhambra Subdivision of the UPRR through the City of San Gabriel and in a portion of the City of Alhambra (on the west end) and the City of Rosemead (on the east end) and a portion of the County of Los Angeles. The grade separation at Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard would be achieved by lowering the track under these crossings in a trench and constructing bridge structures over the railroad at each location. The Rubio Wash would be lowered to accommodate the trench profile and a box culvert or bridge would be required at this location during construction. An additional box culvert or railroad bridge would be constructed over the Alhambra Wash. A small portion of Main Street between Ramona Street and Mission Road would be vacated as part of the proposed project. This section is a narrow, single lane, one-way connector that provides access for east bound traffic from Ramona Street to Mission Road. A driveway would provide access to a single residence that currently uses this portion of Main Street.

As previously mentioned, the City of San Gabriel General Plan designates the project site as an “edge,” which separates different areas of the City. The project site functions as an edge between an older residential neighborhood and the San Gabriel Village District, to the south, and the Mission District and San Gabriel Mission, to the north. Because the project site currently divides these areas of the City, the operation of Alternative 1 would not increase or exacerbate the division of these areas. Implementation of Alternative 1 would actually improve or reduce the effect of the project site as an edge due to the proposed change to the railroad configuration, from at-grade to below-grade or trench, which would eliminate disruptive at-grade crossings at Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard. Lowering the train would result in greater access from the north to south side and vice-versa by eliminating waiting and queuing during train crossings. In the City of Alhambra, the project site also currently functions as an edge between the Alhambra Municipal Golf Course to the south and single-family residences to the north. Alternative 1 would reduce the intensity of this edge in the City of Alhambra by lowering the railroad and reducing its visual impact.

The project site currently functions as an at-grade railroad line and is located adjacent to primarily industrial, residential, and historic/civic land uses. Alternative 1 would eliminate the existing at-grade railroad crossing and lower the railroad into a trench configuration and construct overhead bridge structures at Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard. The use of the

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<sup>1</sup>City of Alhambra, *City of Alhambra General Plan*, 1986.



project site and these roadways would not be altered from existing conditions. Alternative 1 would improve the land use compatibility of the project site with the historic/civic buildings in the Mission District by eliminating four at-grade crossings, which currently contribute to traffic conflicts particularly at Ramona Street and Mission Road.

### **Alternative 2 – No Build Alternative**

Under Alternative 2, the project site would not be altered from existing conditions. Alternative 2 would not lower the existing at-grade railroad into a trench configuration or alter the existing railroad to any other configuration. As a result, Alternative 2 would not reduce the function of the project site as an edge between different areas and would not improve the land use compatibility of the project site with existing surrounding land uses. Further, traffic conflicts that occur around the project site would not be alleviated.

### **Local Land Use Plans and Policies**

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Alternative 1 would lower the existing railroad tracks into a trench. The City of San Gabriel General Plan and the City of Alhambra General Plan do not assign a specific land use and/or zoning designation to the project site because it is an existing active railroad line. Therefore, Alternative 1 would not affect any land use designations of the project site and would not require a general plan amendment in either jurisdiction. Alternative 1 would be consistent with the goals and policies of the City of San Gabriel General Plan and the City of Alhambra General Plan.

Additionally, Alternative 1 would meet the goals and policies related to a safe, efficient, and environmentally sensitive transportation system for the movement of people and goods identified in the City of San Gabriel General Plan and the City of Alhambra General Plan. Alternative 1 is not anticipated to affect location, distribution, density, or growth rate of the human population, and it would not support large commercial or residential development.

As previously mentioned, a portion of the project site is located within the Mission District Specific Plan Area. The Mission District Specific Plan, adopted in 2004, provides guidelines for the design and preservation of the historic core of the City of San Gabriel.<sup>2</sup> Approximately 0.4 miles of the proposed project would be located in the Mission District Specific Plan Area, including the Ramona Street and the Mission Road (or Junipero Serra) crossings. The Specific Plan states that existing configuration of the at-grade crossings contribute to traffic queuing and congestion with each train traveling through the area. The Specific Plan supports future railroad improvements to establish grade-separated crossings to relieve traffic hazards and to enhance the unique visual elements of the Mission District.<sup>3</sup> Section 2.1-7 of this EIR/EA, Aesthetics, includes a mitigation measure that would ensure that Alternative 1 is consistent with the Mission District Specific Plan related to the installation of landscaping and other new visual elements. Therefore, Alternative 1 would be consistent with the Mission District Specific Plan goals.

### **Alternative 2 – No Build Alternative**

Under Alternative 2, the project site would not be altered from existing conditions. Alternative 2 would not require any general plan amendments or construct elements that would result in inconsistency with the Mission District Specific Plan. Alternative 2 would not lower the existing railroad tracks into a trench configuration and would not improve the traffic hazards that currently exist at the at-grade crossings in the southern portion of the Mission District Specific Plan Area. However, although Alternative 2 is consistent with several of the general plan policies, Alternative 2 represents baseline conditions and

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<sup>2</sup>City of San Gabriel, *Mission District Specific Plan*, adopted 2004.

<sup>3</sup>*Ibid.*

would not include any direct actions that would improve the impacts that currently exist from the at-grade railroad line. Further, without the proposed improvements, traffic conditions in the project area would be expected to worsen.

**Table 2.1-2** compares the project alternative with the goals and policies of both of these general plan documents.

<b>TABLE 2.1-2: COMPARISON OF PROJECT ALTERNATIVES TO GENERAL PLAN POLICIES</b>		
<b>Objectives/Goals/Targets</b>	<b>Discussion</b>	
	<b>Alternative 1</b>	<b>Alternative 2</b>
<b>City of San Gabriel General Plan</b>		
Goal 3.1: We will provide a safe, efficient and environmentally sensitive transportation system for the movement of people and goods	Alternative 1 would lower the existing at-grade railroad line to a trench configuration. This would improve the efficiency and safety of the movement of goods due to the elimination of four at-grade crossings. Alternative 1 would also improve the environmental sensitivity of the project site by placing the railroad track in a trench configuration, which would isolate the transport of potentially hazardous materials through the City of San Gabriel. In addition, train noise would be reduced due to the elimination of the crossing and air quality emissions due to engine idling would also be reduced. Alternative 1 would be consistent with Goal 3.1.	Alternative 2 would not alter the project site from its existing at-grade configuration. Therefore, the four at-grade crossings would remain with Alternative 2. Although Alternative 2 would not improve the efficiency, safety, or environmental sensitivity of the project site, Alternative 2 would not degrade these conditions. Alternative 2 would be consistent with Goal 3.1.
Target 5.3.3: Continue coordination with Alameda Corridor East to lower the railroad tracks, which would improve emergency medical response	Refer to Section 2.1-4 Public Services. ACE has coordinated with the City of San Gabriel during the preparation of this environmental analysis, which assesses the lowering of the railroad tracks. Alternative 1 is consistent with Target 5.3.3.	Refer to Section 2.1-4 Public Services. Under Alternative 2, the Alameda Corridor-East Construction Authority would continue to coordinate with the City of San Gabriel to lower the railroad tracks at some future date. Alternative 2 is consistent with Target 5.3.3.
Goal 9.3: Support improvements that reduce the noise impacts on the community from the railroad line	Alternative 1 would lower the at-grade railroad tracks to a trench configuration. This configuration would reduce the amount of noise that reaches adjacent properties. Alternative 1 is consistent with Goal 9.3.	Alternative 2 would not result in a change to the existing at-grade railroad line. Noise levels from the trains would not be reduced. Alternative 2 is not consistent with Goal 2.9.
Target 9.3.1: Complete the Alameda Corridor East grade separations by 2008	Alternative 1 will not be completed by 2008 due to required environmental clearance processes. ACE is coordinating with the City of San Gabriel regarding this ongoing process. Alternative 1 is generally consistent with Target 9.3.1.	Alternative 2 would not result in a change to the existing at-grade railroad line. Alternative 2 is not consistent with Target 9.3.1.
Action 9.3.1.1: Continue to work cooperatively with federal, state, regional, and local government and railroad officials to assure completion of the railroad lowering on schedule	Coordination between ACE, the City of San Gabriel, CalTrans, UPRR and other agencies is ongoing. Alternative 1 is consistent with Action 9.3.1.1.	Alternative 2 would not result in a change to the existing at-grade railroad line. Alternative 2 is not consistent with Action 9.3.1.1.

<b>TABLE 2.1-2: COMPARISON OF PROJECT ALTERNATIVES TO GENERAL PLAN POLICIES</b>		
<b>Objectives/Goals/Targets</b>	<b>Discussion</b>	
	<b>Alternative 1</b>	<b>Alternative 2</b>
Target 11.1.1: Preserve existing historically significant structures, i.e., pre- and post-statehood artifacts, adobes, Mission-era outbuildings and structures	Alternative 1 is not located directly adjacent to any historically significant structures. This alternative would not physically impact the historic San Gabriel Mission and ancillary supporting buildings or the Rancho Las Tunas Adobe. Alternative 1 would be consistent with Target 11.1.1.	Alternative 1 is not located directly adjacent to any historically significant structures. This alternative would not physically impact the historic San Gabriel Mission and ancillary supporting buildings or the Rancho Las Tunas Adobe. Alternative 2 would be consistent with Target 11.1.1.
<b>City of Alhambra General Plan</b>		
Policy 4.1.3: Encourage land use patterns that minimize incompatibility between uses	Alternative 1 would lower the at-grade railroad tracks to a trench configuration and eliminate four at-grade crossings. Alternative 1 would be less visible and would reduce traffic hazards existing at at-grade crossings. Alternative 1 would be consistent with Policy 4.1.3.	The project site currently functions a divider between different areas and land uses. Alternative 2 would not result in any actions that would encourage the development of incompatible land uses. Alternative 2 would be consistent with Policy 4.1.3.
Policy 4.2.2: Promote good air quality on a local and regional basis	Refer to Section 2.2-4 Air Quality. Alternative 1 would lower the existing at-grade railroad line to a trench configuration. This would include the elimination of four at-grade crossings. Alternative 1 would potentially reduce the direct expose people to air quality emissions. Alternative 1 would be consistent with Policy 4.2.2.	Refer to Section 2.2-4 Air Quality. Alternative 2 would not result in a change to the existing at-grade railroad line. Without the trench, automobile queuing at the four intersections would continue and air quality would not improve. Alternative 2 is not consistent with Policy 4.2.2.
Policy 4.5.5: Promote the routing of vehicles carrying potentially hazardous materials along transportation corridor that reduce public exposure to risk	Alternative 1 would lower the existing at-grade railroad line to a trench configuration. Alternative 1 would potentially reduce the direct exposure of the public to hazardous materials that may be transported along the railroad line by placing the railroad track below-grade. Alternative 1 would be consistent with Policy 4.5.5.	Alternative 2 would not alter the project site from its existing at-grade configuration. Although, Alternative 2 would maintain the existing transport of potentially hazardous materials along a dedicated railroad right-of-way. Alternative 2 would be consistent with Policy 4.5.5.
Policy 4.2.2: Ensure acceptable noise levels near schools, hospitals, convalescent homes, and other noise sensitive uses	Refer to Section 2.2-5 Noise and Vibration. Alternative 1 would lower the existing at-grade railroad line to a trench configuration. Alternative 1 would potentially reduce the direct exposure of the public and sensitive receptors to train noise because the railroad line would be placed below-grade. Alternative 1 would be consistent with Policy 4.2.2.	Refer to Section 2.2-5 Noise and Vibration. Alternative 2 would not alter the project site from its existing at-grade configuration. Therefore, existing noise levels would remain. Alternative 2 would not be consistent with Policy 4.2.2.
Policy 4.3.3: Evaluate noise generated by construction activities	Refer to Section 2.2-5 Noise and Vibration. This Draft EIR evaluates noise generated by the construction of Alternative 1. Alternative 1 would be consistent with Policy 4.3.3.	Refer to Section 2.2-5 Noise and Vibration. This Draft EIR evaluates construction noise related to Alternative 2. Alternative 2 would be consistent with Policy 4.3.3.
<b>SOURCE:</b> City of San Gabriel General Plan (2004), City of Alhambra General Plan (1986), TAHA 2008.		

## **Regional Plans and Policies**

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Several RCPG and RTP polices are applicable to Alternative 1. **Table 2.1-3** outlines the consistency of Alternative 1 with SCAG’s adopted RCPG and RTP policies. As shown in the table, Alternative 1 would be consistent with the goals of the RCPG and RTP. Alternative 1 would not exceed the population parameters established by SCAG. Additionally, Alternative 1 would not result in any significant unmitigated impacts that would burden the local or regional transportation system. Alternative 1 would lower a portion of the Alhambra Subdivision of the UPRR from an at-grade configuration to a trench or below-grade configuration, eliminating four at-grade crossings. Traffic and transportation hazards at these at-grade crossings would be reduced with Alternative 1

### **Alternative 2 – No Build Alternative**

**Table 2.1-3** also outlines the consistency of Alternative 2 with SCAG’s adopted RCPG and RTP policies. As shown in the table, Alternative 2 would generally be consistent with the goals of the RCPG and RTP. Alternative 2 would not exceed the population parameters established by SCAG. Therefore, no impacts related to consistency with regional plans and policies are anticipated. However, this alternative would not accomplish the goals of the project, including alleviating traffic congestion and improving safety in the project area. Nonetheless, Alternative 2 would be consistent with existing plans, as such, no adverse impacts would occur.

## **Habitat Conservation Plan or Natural Community Conservation Plan**

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

As previously stated, no rare or endangered plant or animal species are known or suspected to exist within the City of Alhambra due to the extent of the development of the City.<sup>4</sup> The City of San Gabriel is also highly developed. There are no habitat conservation plans or natural community conservation plans that apply to the project area.

### **Alternative 2 – No Build Alternative**

Under Alternative 2, the project site would not be substantially altered from existing conditions and a habitat conservation plan or natural community plan does not exist within the project area. Therefore, no adverse impacts related to consistency with a habitat conservation plan or natural community plan would occur.

### ***Measures to Minimize Harm***

No measures are required. However, Section 2.1.7 Aesthetics provides measures to ensure that Alternative 1 would comply with the City of San Gabriel Mission District Specific Plan.

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<sup>4</sup>City of Alhambra, *City of Alhambra General Plan*, 1986.  
2-14

<b>TABLE 2.1-3: COMPARISON OF PROJECT ALTERNATIVES TO SCAG REGIONAL POLICIES</b>		
<b>Policy Type and Goals</b>	<b>Discussion</b>	
	<b>Alternative 1</b>	<b>Alternative 2</b>
<b>REGIONAL COMPREHENSIVE PLAN AND GUIDE</b>		
<b>GROWTH FORECAST POLICIES</b>		
3.01 The population, housing, and job forecasts, which are adopted by SCAG's Regional Council and that reflect local plans and policies, shall be used by SCAG in all phases of implementation and review.	SCAG forecasts are used in this document, where applicable, to determine regional impacts (Refer to Sections 2.2-4 Air Quality, 2.1-2 Population, Housing, and Employment, and 2.1-4 Public Services). Alternative 1 would be consistent with Policy 3.01.	Same as Alternative 1.
3.03 The timing, financing, and location of public facilities, utility systems and transportation systems shall be used by SCAG to implement the region's growth policies.	SCAG forecasts are used in this document, where applicable, to determine regional impacts. Adequate public facilities and transportation systems are in place, and necessary utility infrastructure improvements and relocation would be included as part of Alternative 1 (Refer to Sections 2.2-4 Air Quality, 2.1-4 Public Services, 2.1-6 Traffic and Parking, and 2.1-5 Utilities and Service Systems). Alternative 1 would be consistent with Policy 3.03.	Same as Alternative 1.
<b>POLICIES RELATED TO IMPROVING REGIONAL STANDARD OF LIVING</b>		
3.05 Encourage patterns of urban development and land use, which reduce costs on infrastructure construction and make better use of existing facilities.	See Section 2.1-5 Utilities and Service Systems. Alternative 1 would lower an existing active at-grade railroad to a trench configuration within the UPRR right-of-way. Alternative 1 would include necessary utility infrastructure and/or relocation. Alternative 1 would be consistent with Policy 3.05.	Same as Alternative 1. The existing at-grade configuration of the active railroad would remain.
3.09 Support local jurisdiction's efforts to minimize the cost of infrastructure and public service delivery, and efforts to seek new sources of funding for development and the provision of services.	Refer to Policy 3.05 above. Alternative 1 would utilize existing utility infrastructure and make improvements as necessary to support the proposed development. Alternative 1 would be consistent with Policy 3.09.	Same as Alternative 1. The existing at-grade configuration of the active railroad would remain, utilizing existing utility infrastructure.
3.10 Support local jurisdiction's actions to minimize red tape and expedite the permitting process to maintain economic vitality and competitiveness.	Alternative 1 is undergoing environmental analysis as required under NEPA and CEQA. Implementation of Alternative 1 would not conflict with this policy. Alternative 1 would be consistent with Policy 3.10.	Same as Alternative 1.

<b>TABLE 2.1-3: COMPARISON OF PROJECT ALTERNATIVES TO SCAG REGIONAL POLICIES</b>		
<b>Policy Type and Goals</b>	<b>Discussion</b>	
	<b>Alternative 1</b>	<b>Alternative 2</b>
<b>POLICIES RELATED TO IMPROVING THE REGIONAL QUALITY OF LIFE</b>		
3.12 Encourage existing or proposed local programs aimed at designing land uses which encourage the use of transit and thus reduce the need for roadway expansion, reduce the number of auto trips and vehicle miles traveled, and create opportunities for residents to walk and bike.	Refer to Section 2.1-6 Traffic and Parking. Alternative 1 would lower the existing active railroad line into a trench configuration. Alternative 1 would contribute to a more efficient regional goods movement system and potentially reduce the number of truck trips. The elimination of four at-grade crossings with Alternative 1, would contribute to the increasing safe opportunities for residents to walk and bike. Alternative 1 would consistent with Policy 3.12.	Same as Alternative 1. Although the existing at-grade configuration of the active railroad would remain with Alternative 2, Alternative 2 would contribute to a more efficient regional goods movement system and potentially reduce the number of truck trips. Opportunities for residents to walk or bike would not be enhanced.
3.18 Encourage planned development in locations least likely to cause adverse environmental impacts.	Alternative 1 would be developed within an existing railroad right-of-way. The trench configuration proposed for Alternative 1 would reduce air quality, noise, and hazardous materials impacts. Alternative 1 would consistent with Policy 3.18.	Same as Alternative 1. Alternative 2 would include the existing railroad operations within the existing UPRR railroad right-of-way.
3.21 Encourage the implementation of measures aimed at the preservation and protection of recorded and unrecorded cultural resources and archaeological sites.	Refer to Section 2.1-8 Cultural Resources. Alternative 1 would be constructed in an existing railroad right-of way near the culturally sensitive San Gabriel Mission. The potential for encountering unrecorded cultural or archaeological resources is high. With implementation of recommended mitigation measures, Alternative 1 would be consistent with Policy 3.21.	Same as Alternative 1. Alternative 2 would include the existing railroad operations within the existing UPRR railroad right-of-way. No construction activities that may disturb unrecorded cultural or archaeological resources would occur with Alternative 2.
3.23 Encourage mitigation measures that reduce noise in certain locations, measures aimed at preservation of biological and ecological resource, measures that would reduce exposure to seismic hazards, minimize earthquake damage, and to develop emergency response and recovery plans.	This Draft EIR/EA contains mitigation measures to reduce noise. No biological or ecological resources would be affected, after the implementation of mitigation measures. Additionally, the Alternative 1 would be built in accordance with all current earthquake standards, and emergency plans would be submitted to applicable agencies for approval prior to operation. Alternative 1 would be consistent with Policy 3.23.	Same as Alternative 1. Alternative 2 would include the existing railroad operations within the existing UPRR railroad right-of-way. No activities that may require additional mitigation measures would occur with Alternative 2.

<b>TABLE 2.1-3: COMPARISON OF PROJECT ALTERNATIVES TO SCAG REGIONAL POLICIES</b>		
<b>Policy Type and Goals</b>	<b>Discussion</b>	
	<b>Alternative 1</b>	<b>Alternative 2</b>
<b>REGIONAL TRANSPORTATION PLAN POLICIES</b>		
Transportation investments shall be based on SCAG's adopted Regional Performance Indicators.	Any transportation investments associated with Alternative 1 would be based on SCAG's adopted Regional Performance Indicators. Alternative 1 would be consistent with this policy.	Same as Alternative 1.
Ensuring safety, adequate maintenance, and efficiency of operations on the existing multi-modal transportation system will be RTP priorities and will be balanced against the need for system expansion investments.	Alternative 1 would lower the existing UPRR tracks from an at-grade to a trench configuration. Four at-grade crossing would be eliminated with Alternative 1, increasing pedestrian and vehicular safety and contributing to the increased efficiency of the regional goods movement system. Alternative 1 would be consistent with this policy.	Same as Alternative 1. Although Alternative 2 would include the existing at-grade railroad operations within the existing railroad right-of-way, Alternative 2 would contribute to the increased efficiency and safety of the regional goods movement system with future at-grade crossing improvements.
RTP land use and growth strategies that differ from currently expected trends will require a collaborative implementation program that identifies required actions and policies by all affected agencies and subregions.	Refer to Section 2.1-6 Traffic and Parking. SCAG forecasts are used in this analysis to determine regional transportation impacts. Alternative 1 would comply with RTP policies and all applicable regulations of affected agencies. Alternative 1 would be consistent with this policy.	Same as Alternative 1.
<b>AIR QUALITY CHAPTER CORE ACTIONS</b>		
5.07 Determine specific programs and associated actions needed (e.g., indirect source rules, enhanced use of telecommunications, provision of community based shuttle services, provision of demand management based programs, or vehicle-miles-traveled/emission fees) so that options to command and control regulations can be assessed.	This policy is largely regional in scope. However, Alternative 1 would incorporate all applicable source reduction and control measures including AQMD Rule 403 - Fugitive Dust Control and would strive to identify other programs and actions throughout the life of Alternative 1 so that options to command and control regulations can be assessed. Refer to Sections 2.2-4 Air Quality and 2.1-6 Traffic and Parking for further discussion.	Same as Alternative 1.
5.11 Through the environmental document review process, ensure that plans at all levels of government (regional, air basin, county, subregional and local) consider air quality, land use, transportation and economic relationships to ensure consistency and minimize conflicts.	The interrelationship between air quality, land use, transportation, and economic relationships was considered throughout the analysis contained in this Draft EIR/EA in order to minimize conflicts.	Same as Alternative 1.
<b>SOURCE:</b> SCAG Regional Comprehensive Plan, 1996 and TAHA, 2008.		

## 2.1.2 PARKS AND RECREATIONAL FACILITIES

This section provides an overview of the recreational resources in the vicinity of the project site. The potential impacts of the proposed project on these recreational resources (including public parks, golf courses, and recreation centers) are also evaluated based on the adequacy of existing and planned facilities and personnel to meet any additional demand generated by the proposed project. In addition, mitigation measures are identified, where feasible and necessary.

### *Affected Environment*

#### **Public Parks**

The project site is located primarily within the City of San Gabriel. However, construction activities would take place in the Cities of Alhambra, San Gabriel, and Rosemead and, therefore, affect parks and open space in the surrounding communities. **Table 2.1-4** lists the parks and open spaces located within a half-mile of the project site. **Figure 2.1-2** shows the location of these parks and open spaces.

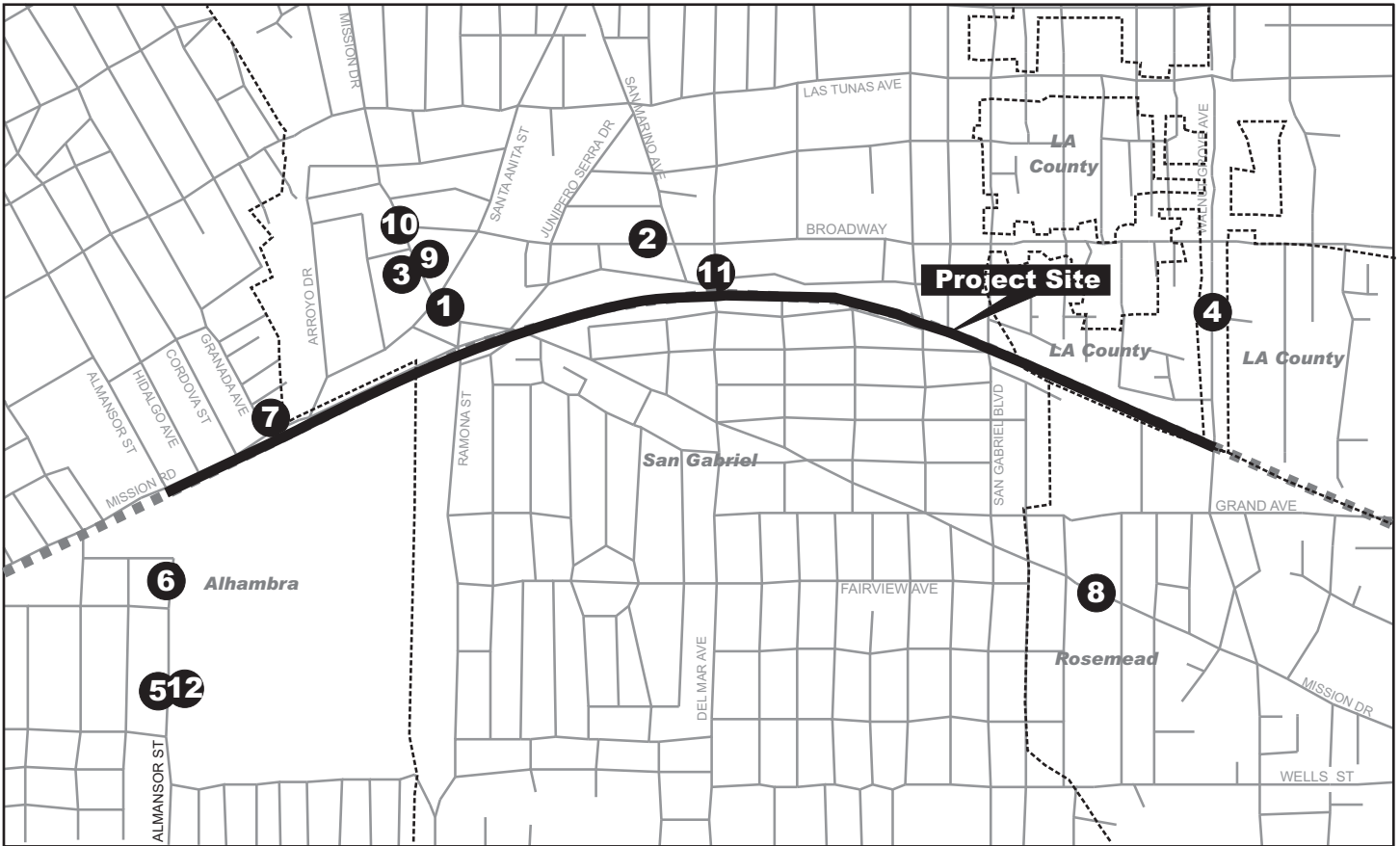
The City of San Gabriel has four parks that are located within a half-mile of the proposed project, all of which are administered by the City of San Gabriel Department of Parks and Recreation. Three of the parks, Plaza Park, Smith Park, and Grapevine Park and Picnic Area are located within sight of the UPRR. The City of Alhambra Department of Parks and Recreation administers Almansor Park, as well as the Winston Smoyer Memorial Community Garden, and the Alhambra Municipal Golf Course. The City of Rosemead's Department of Parks and Recreation administers the Sally Tanner Park.

### *Environmental Consequences*

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The proposed project would involve construction of a trench that would lower the existing UPRR under the roadway crossings at Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard. Currently, because these streets cross the UPRR tracks at-grade, queuing of traffic occurs when the trains are passing. Additionally, the at-grade crossings at Ramona Street and Del Mar Avenue are a safety hazard for pedestrians accessing the parks and recreation centers on the north side of the tracks. During construction of the bridge structures across each of the four at-grade crossings (Ramona Street, Del Mar Avenue, Mission Road, and San Gabriel Boulevard), these streets would be alternately closed and traffic would be detoured onto adjacent streets. The closing of any of these streets, particularly Ramona Street and Del Mar Avenue, would impact pedestrian and vehicular access to the Plaza Park, Smith Park, Grapevine Picnic Area, Adult Recreation Center and Senior Center, and the Community Recreation Center, as well as the non-profit Asian Youth Center. The Transportation Management Plan prepared for the project assumes a total of 13 haul trucks per hour would be used for hauling excavated materials. During excavation of the trench from Alhambra Wash to Ramona Street, haul trucks would access a materials delivery and staging area on the northern portion of the San Gabriel High School site which could further disrupt pedestrian access. However, ACE will continue to provide pedestrian access at each of the grade crossing during the construction period through temporary





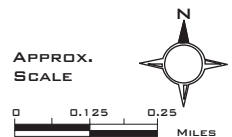
**LEGEND:**

- Project Site
- - -** Union Pacific Railroad - Alhambra Subdivision
- · ·** City/Community Boundary

**#** Parks and Recreation Centers

- |   |   |
|---|---|
| <ul style="list-style-type: none"> <li><b>1.</b> Plaza Park</li> <li><b>2.</b> Smith Park</li> <li><b>3.</b> Grapevine Park &amp; Picnic Area</li> <li><b>4.</b> Roosevelt Park</li> <li><b>5.</b> Almansor Park</li> <li><b>6.</b> Alhambra Municipal Golf Course</li> </ul> | <ul style="list-style-type: none"> <li><b>7.</b> Wintson Smoyer Memorial Community Garden</li> <li><b>8.</b> Sally Tanner Park</li> <li><b>9.</b> Adult Recreation Center &amp; Senior Center</li> <li><b>10.</b> Community Recreation Center</li> <li><b>11.</b> Asian Youth Center</li> <li><b>12.</b> Almansor Park Gymnasium</li> </ul> |
|---|---|

SOURCE: TAHA, 2009.



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<b>TABLE 2.1-4: PARKS AND OPEN SPACES LOCATED WITHIN ½-MILE OF THE PROJECT SITE</b>		
<b>Station</b>	<b>Location</b>	<b>Distance from Project Site (miles)</b>
<b>City of San Gabriel</b>		
Plaza Park	428 S. Mission Drive	0.02
Smith Park	232 W. Broadway	0.08
Grapevine Park & Picnic Area	324 S. Mission Drive	0.02
Roosevelt Park	401 S. Walnut Grove Avenue	0.30
<b>City of Alhambra</b>		
Almanson Park	800 S. Almanson Street	0.43
Alhambra Municipal Golf Course	630 S. Almanson Street	0.01
Winston Smoyer Memorial Community Garden	Granada Street and Mission Road	0.06
<b>City of Rosemead</b>		
Sally Tanner Park	8343 E. Mission Drive	0.30
<b>SOURCE:</b> Websites from the City of San Gabriel, City of Alhambra, and the City of Rosemead, and TAHA 2008		

**Recreation Centers**

**Table 2.1-5** lists the recreation centers located within a half-mile of the project site. **Figure 2.1-2** shows the location of these recreation centers.

<b>TABLE 2.1-5: RECREATION CENTERS LOCATED WITHIN ½-MILE OF THE PROJECT SITE</b>		
<b>Station</b>	<b>Location</b>	<b>Distance from Project Site</b>
<b>City of San Gabriel</b>		
Adult Recreation Center & Senior Center	324 S. Mission Drive	0.08
Community Recreation Center	250 S. Mission Drive	0.27
Asian Youth Center (Non-Profit)	100 W. Clary Avenue	0.01
<b>City of Alhambra</b>		
Almanson Park Gymnasium	800 S. Almanson Street	0.43
West San Gabriel Valley YMCA	401 Corto Street	0.43
<b>SOURCE:</b> Websites from the City of San Gabriel and the City of Alhambra, and TAHA 2008		

The City of San Gabriel has three recreation centers that are located within a half-mile of the proposed project, two of which, the Adult Recreation Center and Senior Center and the Community Recreation Center, are administered by the City of San Gabriel Department of Parks and Recreation. The Asian Youth Center is a non-profit center that provides several recreational opportunities in the community. The City of Alhambra Department of Parks and Recreation administers Almanson Park, as well as its gymnasium as well as one additional recreation center located near the project site, the West San Gabriel Valley YMCA.

bridges and/or channelized pathways that are separated from the construction areas.

During operation of the proposed project, the provision of a grade separation of the four street crossings of the UPRR tracks would improve safety and reduce the potential for train-related incidents (pedestrian and vehicular) and improve pedestrian access to almost all of the parks and recreation centers listed in **Tables 2.1-4** and **2.1-5**.

There are six public parks, a municipal golf course, and a public community garden located within a half-mile of the project site (**Table 2.1-4**). Additionally, there are four public recreation centers within a half-mile of the project site (**Table 2.1-5**). No residential elements (which would increase the need for recreational services by increasing population) are included in the proposed project, nor would the proposed project directly facilitate growth. As such, implementation of the proposed project would not result in an increase in demand for parks and recreational services.

### **Alternative 2 – No Build Alternative**

Under Alternative 2, the project site would not be altered and the UPRR would remain at grade. No disruption to recreation services due to construction activities would occur.

#### ***Measures to Minimize Harm***

**RE1** ACE shall submit the street closure schedule and detour plan to the Departments of Parks and Recreation of the Cities of San Gabriel, Alhambra, and Rosemead and the County of Los Angeles.

**RE2** ACE shall consult with the City of San Gabriel Department of Parks and Recreation administration and the City of Alhambra regarding alternate pedestrian and vehicle access routes during construction. Pedestrians and vehicles shall be directed to use alternate routes during construction through clear, well-posted signage. The signage shall be posted prior to detour implementation. Additionally, detour information shall be made available to the public via all available media, including, but not limited to printed notices, the Internet, and local television and radio.

### **2.1.3 GROWTH**

#### ***Regulatory Setting***

The Council on Environmental Quality (CEQ) regulations, which established the steps necessary to comply with the National Environmental Policy Act of 1969, require evaluation of the potential environmental consequences of all proposed federal activities and programs. This provision includes a requirement to examine indirect consequences, which may occur in areas beyond the immediate influence of a proposed action and at some time in the future. The CEQ regulations, 40 CFR 1508.8, refer to these consequences as secondary impacts. Secondary impacts may include changes in land use, economic vitality, and population density, which are all elements of growth.

The California Environmental Quality Act (CEQA) also requires the analysis of a project's potential to induce growth. CEQA guidelines, Section 15126.2(d), require that environmental documents "...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..."

Under NEPA and CEQA, growth inducement is not necessarily considered detrimental, beneficial, or environmentally significant. Typically, the growth inducing potential of a project is considered significant if it fosters growth or a concentration of population in excess of what is assumed in relevant master plans, land use plans, or in projections made by regional planning agencies. Significant growth impacts could be manifested through the provision of infrastructure or service capacity to accommodate growth beyond the levels currently permitted by local or regional plans and policies. In general, growth induced by a project is considered a significant impact if it directly or indirectly affects the ability of agencies to provide needed public services, or if it can be demonstrated that the potential growth significantly affects the environment in some other way.

Growth in the study area is directed by General Plans for the Cities of San Gabriel, Alhambra and Rosemead. The General Plan is the principal legal and regulatory tool in California for addressing land development and its impacts. As mandated by Government Code Sections 65000 to 66003, each jurisdiction is required to have a General Plan which must include land use, circulation and housing elements, as well as other elements. The goals, objectives, policies and programs of each General Plan element must be both internally consistent and consistent with all other elements of the General Plan. Objectives for population, housing, and employment growth must be coordinated with the provisions of infrastructure and must ensure that infrastructure is constructed as need to serve new development. The California Department of Transportation (Caltrans) has no local or county land use planning or approval authority in the study area.

### **Displacement and Relocation**

The Department's Relocation Assistance Program (RAP) is based on the Federal Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 (as amended) and Title 49 Code of Federal Regulations (CFR) Part 24. The purpose of RAP is to ensure that persons displaced as a result of a transportation project are treated fairly, consistently, and equitably so that such persons will not suffer disproportionate injuries as a result of projects designed for the benefit of the public as a whole. Please see Appendix D for a summary of the RAP.

All relocation services and benefits are administered without regard to race, color, national origin, or sex in compliance with Title VI of the Civil Rights Act (42 U.S.C. 2000d, et seq.). Please see Appendix C for a copy of the Department's Title VI Policy Statement.

## ***Affected Environment***

### **Population, Housing and Employment Growth**

This section discusses the effects the proposed project alternatives could have on local and regional population, housing, and employment. It also addresses the amount of growth expected and the potential displacement caused by the proposed project alternatives. These impacts are evaluated by comparing project conditions to projections provided by the Southern California Association of Governments (SCAG). Additional information is extrapolated from year 2000 Census data.

SCAG is the federally designated Metropolitan Planning Organization (MPO) for six counties in Southern California (Los Angeles, Orange, Riverside, San Bernardino, Ventura, and Imperial). SCAG's mission is to develop long-range regional plans and strategies that provide for efficient movement of people, goods, and information; enhance economic growth and international trade; and improve the quality of life for the Southern California region. SCAG also develops forecasts for population, housing, and employment for the region. SCAG divides its planning area into 14 subregions. The project site is in the San Gabriel Valley Council of Governments (SGVCOG) Subregion.

The following is a discussion of the relevant plans that contain goals and objectives pertaining to population, housing, and employment.

#### SCAG 2008 Regional Transportation Plan

SCAG addresses the future of Southern California through the year 2035 in its Regional Comprehensive Plan and Guide (RCPG). As part of the SCAG RCPG, SCAG has adopted the 2008 Regional Transportation Plan (RTP). This plan focuses on improving the balance between region-wide land uses and the current and future transportation system. SCAG also prepared the Growth Forecast Report for the RTP. SCAG's goals encourage land use and growth patterns that complement transportation investments.

#### City of San Gabriel General Plan, Housing and Demographic Element

The City of San Gabriel General Plan provides growth and development policies by providing a comprehensive long-range view of the City as a whole. The General Plan provides a comprehensive strategy for accommodating long-term growth should it occur as projected. Applicable goals and policies that apply to all development within the City of San Gabriel include a balanced distribution of land uses, adequate housing for all income levels, and economic stability.

The Housing and Demographic Element of the General Plan consists of an identification and analysis of the existing and projected housing needs of all economic segments of the City of San Gabriel. Policies of the Housing and Demographic Element include the provision of an adequate and affordable supply of housing and the goal of encouraging the location of housing, jobs, and services in mutual proximity.

#### City of San Gabriel Mission District Specific Plan

The City of San Gabriel adopted the Mission District Specific Plan in 2004. One of the goals of the Mission District Specific Plan is to promote higher intensity development in the areas that comprise the District. Parts of the UPRR right-of-way are adjacent to the Mission District Specific Plan area.

#### City of Alhambra General Plan, Housing Element

The City of Alhambra General Plan provides growth and development policies by providing a comprehensive long-range view of the City as a whole. The General Plan provides a comprehensive strategy for accommodating long-term growth should it occur as projected. Applicable goals and policies that apply to all development within the City of Alhambra include a balanced distribution of land uses, adequate housing for all income levels, and economic stability.

The Housing Element of the General Plan consists of an identification and analysis of the existing and projected housing needs of all economic segments of the City of Alhambra. Policies of the Housing Element include the provision of an adequate and affordable supply of housing and the goal of encouraging the location of housing, jobs, and services in mutual proximity.

### **Population**

For the purposes of this evaluation, the term "Study Area" refers to Census Tracts 4322.01, 4810.02, 4811.01, 4811.02, 4811.03, 4812.02, and 4815. None of these Census tracts contain the UPRR right-of-way (ROW); rather, the UPRR ROW is the boundary between these Census tracts. Data for the Study Area are compared to overall conditions for Los Angeles County and the Cities of Alhambra and San Gabriel.

As shown in **Table 2.1-6**, in 2008 the population of the County of Los Angeles was approximately 10.4 million and is estimated to be approximately 11 million by 2015. The 2008 population in the City of San Gabriel was approximately 42,000 and is estimated to be approximately 44,600 by 2015. The 2008 population in the City of Alhambra was approximately 90,360 and is estimated to be 93,115 by 2015. The 2008 population of the Study Area was approximately 28,760 and is estimated to be 29,910 by 2015.

<b>TABLE 2.1-6: POPULATION GROWTH PROJECTIONS</b>			
<b>Area</b>	<b>2008</b>	<b>2015</b>	<b>Difference</b>
Los Angeles County	10,445,349	10,971,589	526,240
City of San Gabriel	42,389	44,605	2,216
City of Alhambra	90,361	93,115	2,754
Study Area	28,764	29,910	1,146
<b>SOURCE:</b> Southern California Association of Governments, <i>Regional Transportation Plan</i> , 2008.			

### Housing

As shown in **Table 2.1-7** in 2008 the County of Los Angeles had approximately 3.3 million housing units and is estimated to have approximately 3.5 million housing units by 2015. The City of San Gabriel had approximately 12,800 housing units in 2008 and is estimated to have an increase of 760 housing units by 2015. The City of Alhambra had approximately 29,500 housing units in 2008 and is estimated to have an increase of 1,290 housing units by 2015. The Study Area had approximately 9,130 housing units in 2008 and is estimated to have an increase of 456 housing units by 2015.

<b>TABLE 2.1-7: HOUSING GROWTH PROJECTIONS</b>			
<b>Area</b>	<b>2008</b>	<b>2015</b>	<b>Difference</b>
Los Angeles County	3,298,478	3,509,552	211,074
City of San Gabriel	12,806	13,566	760
City of Alhambra	29,526	30,816	1,290
Study Area	9,134	9,590	456
<b>SOURCE:</b> Southern California Association of Governments, <i>Regional Transportation Plan</i> , 2008.			

### Employment

As shown in **Table 2.1-8** in 2008 the County of Los Angeles had approximately 4.5 million jobs and is estimated to have approximately 4.6 million jobs by 2015. The City of San Gabriel had 14,285 jobs in 2008 and employment is estimated to increase by 642 jobs by 2015. The City of Alhambra had approximately 29,800 jobs in 2008 and employment is estimated to increase by 1,256 jobs by 2015. The Study Area had approximately 10,675 jobs in 2008 and employment is estimated to increase by approximately 450 jobs by 2015.

<b>TABLE 2.1-8: EMPLOYMENT GROWTH PROJECTIONS</b>			
<b>Area</b>	<b>2008</b>	<b>2015</b>	<b>Difference</b>
Los Angeles County	4,487,471	4,675,849	188,378
City of San Gabriel	14,285	14,927	642
City of Alhambra	29,806	31,062	1,256
Study Area	10,676	11,126	450

**SOURCE:** Southern California Association of Governments, Regional Transportation Plan, 2008.

Employment by industry for Los Angeles County, Cities of San Gabriel and Alhambra, and the Study Area are shown in **Table 2.1-9**. The information in **Table 2.1-9** is based on the 2000 U.S. Census employment data. Major employers in the City of San Gabriel include the San Gabriel Valley Medical Center, San Gabriel Unified School District, City of San Gabriel, Howard’s Appliances, and San Gabriel Square Shopping Center. Major employers in the City of Alhambra include Pacific Bell, Alhambra Unified School District, Los Angeles County Public Works, Southern California Edison, and Lucent Technologies.

<b>TABLE 2.1-9: EXISTING EMPLOYMENT BY INDUSTRY</b>				
<b>Industry</b>	<b>Los Angeles County</b>	<b>City of San Gabriel</b>	<b>City of Alhambra</b>	<b>Study Area</b>
Agriculture, Forestry and Fisheries	7,477	19	19	39
Mining	2,711	16	11	8
Construction	202,829	624	1,331	570
Manufacturing	586,627	2,509	5,505	2,128
Transportation, Communications, and Other Public Utilities	198,375	737	1,816	842
Wholesale Trade	184,369	908	2,320	662
Retail Trade	416,390	1,872	3,682	1,685
Finance, Insurance, and Real Estate	272,304	1,424	3,006	1,081
Services	1,743,807	7,542	16,525	7,018
Information	213,589	615	1,547	501
Public Administration	124,937	571	1,659	598

**SOURCE:** 2000 U.S. Census.

*Environmental Consequences*

**Displacement and Relocation**

**Population**

**Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project).**

Implementation of the proposed project would include the construction of a depressed trench that would cross beneath four roadways in the City of San Gabriel. There is no housing associated with the new construction, and therefore, no potential increase in resident population.



The construction of the trench would result in the full take of a parcel located north of the UPRR tracks at 405 S. Del Mar Avenue. The site is currently occupied by a storage facility with a manger’s residence on site. The manager’s residence will be removed with the rest of the storage facility. The construction of the trench would also result in the potential displacement of one single-family home in the City of San Gabriel (**Table 2.1-10**). Currently, portion of this residence extends into the UPRR ROW resulting in an illegal encroachment. In order to achieve a uniform 100 feet of ROW, the portions that encroach into the UPRR will be removed.<sup>5</sup> In addition to the one residence that is expected to be displaced, an additional two residences have illegal encroachments that will be removed. However, the encroachments for these two residences are minimal, such as back porches or other ancillary structures. As a result, it is likely the encroachment could be removed without displacement of the resident. Two of the three residences are currently occupied.<sup>6</sup> According to the San Gabriel Trench Relocation Impact Report, there are at least three persons occupying one of the single-family residences.<sup>7</sup> However, the number of persons in the second occupied single-family home at 405 S. Del Mar Avenue was not ascertained during the field inspection. Based on the 2000 U.S. Census, there is an average of 3.10 persons per household in the City of San Gabriel. Using this estimate, approximately three persons would occupy the household at 405 S. Del Mar Avenue.

In total, the number of residents that the proposed project would potentially displace is four (one at 313 E. Main Street and three at 405 S. Del Mar Avenue). Therefore, the proposed project would reduce the residential population by approximately 4 persons out of the total 44,605 projected in 2015 for the City of San Gabriel. As discussed in the Relocation Impact Report, there exists available replacement housing for the displaced residents within the City of San Gabriel, and, as projected by SCAG, an additional 760 units are anticipated in 2015.

**Alternative 2 – No Build Alternative**

Under Alternative 2, the UPRR would remain at grade; no construction would occur and the site would remain as is currently configured. As such no changes would occur at the project site, or in the residential population.

<b>TABLE 2.1-10: PARCELS POTENTIALLY DISPLACED – RESIDENTIAL</b>			
<b>Assessor’s Parcel Number</b>	<b>Parcel Location</b>	<b>Occupied or Vacant</b>	<b>Number of Occupants</b>
5368-001-006	313 E. Main Street	Occupied	1
5368-001-034	325 E. Main Street (partial)	Vacant	0
5368-001-003	327 E. Main Street (partial)	Occupied	2
5362-017-002	405 S. Del Mar Ave	Occupied	3 /a/
/a/ Estimated using the average household size per the 2000 U.S. Census (3.10 for the City of San Gabriel). <b>SOURCE:</b> Alameda Corridor-East Construction Authority, Relocation Impact Report for San Gabriel Trench Project, City of San Gabriel, 2003, Updated 2007; Moffat & Nichol, Right of Way and Easement Report, 2009			

<sup>5</sup>Moffat and Nichol. *Right of Way and Easement Report*, February 2009.

<sup>6</sup>Alameda Corridor-East Construction Authority, *Draft Relocation Impact Report for San Gabriel Trench Project City of San Gabriel*, August 2003, Revised September 28, 2007.

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

## **Housing**

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Implementation of the proposed project would include the construction of a depressed trench that would cross beneath four roadways in the City of San Gabriel. The proposed project does not include the addition of any new housing on the project site.

The construction of the trench would result in the potential displacement of one single-family home in the City of San Gabriel (**Table 2.1-10**) and one residential unit associated with a storage facility located at 405 S. Del Mar Avenue which is currently in use as the manager's residence. The entire storage facility will be removed as part of the proposed project. Additionally, two other single family residences may be impacted. Currently, portions of these residences, such as porches and yard areas extend into the UPRR ROW. In order to achieve a uniform 100 feet of ROW, those portions that encroach into the UPRR will be removed.<sup>8</sup> These two residences are currently occupied.<sup>9</sup> However, the removal of these ancillary structures such as awnings would not require displacement of the residents. The loss of two units comprises less than one percent of the total housing that exists in the City of San Gabriel. Additionally, by 2015, SCAG estimates that there would be an additional 760 housing units available in the City of San Gabriel. Further, none of the housing that would be displaced is subsidized housing. As described above, there is an adequate supply of housing in the project area; therefore the loss of three housing units would not be considered an adverse impact.

In addition, the construction of the trench would require the re-routing of existing utilities and construction of new utilities, which would in turn require permanent and temporary construction easements from private properties. Additional permanent and temporary construction easements will also be required for locating the contractor field office, material storage yards, temporary utility relocations, subsurface ground improvements, which may require the removal and replacement of garages, storage buildings, fences, walls, and ancillary private property improvements.<sup>10</sup> These temporary or permanent easements would not require the displacement of housing.

### **Alternative 2 – No Build Alternative**

Under Alternative 2, the proposed San Gabriel Trench would not be built and the UPRR would retain its current alignment through the City of San Gabriel. As such, there would be no need to displace housing in the project area.

## **Employment**

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Implementation of the proposed project would include the construction of a depressed trench that would cross beneath four roadways in the City of San Gabriel. The proposed project would generate construction employment opportunities for residents in San Gabriel and the surrounding cities. The proposed project is estimated to generate approximately 593 new construction jobs per year over the three years.<sup>11</sup> As

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<sup>8</sup>Moffat and Nichol. *Right of Way and Easement Report*, February 2009.

<sup>9</sup>Alameda Corridor-East Construction Authority, *Draft Relocation Impact Report for San Gabriel Trench Project City of San Gabriel*, August 2003, Revised September 28, 2007.

<sup>10</sup>Moffat and Nichol. *Right of Way and Easement Report*, February 2009.

<sup>11</sup>Construction employment generation was calculated from the following assumptions: The total cost of the project is approximately \$498 million; usually 65 percent of this total cost (\$324 million) is related to the actual construction and of this, 40 percent is related to construction labor costs (\$129.6 million). Over three years, the cost is approximately \$43.2 million per year.

such, the proposed project would provide a benefit to these communities by increasing employment. However, these construction jobs would be temporary, lasting only as long as the proposed project is under construction, (approximately five years). The total employment generated by the proposed project over the three years (1,778 jobs) would comprise less than one percent of the SCAG estimated employment for Los Angeles County (Table 2.1-8).

The construction of the trench would result in the displacement of one business in the City of San Gabriel, All Aboard Mini-Storage which includes 379 storage spaces and employs approximately 14 persons (Table 2.1-11).<sup>12</sup> This comprises approximately less than one percent of the existing employment in the City of San Gabriel. The Relocation Impact Report concluded that this business would retain their entire staff upon relocation. As such, there would be no net loss of employment due to the displacement of this business. The Relocation Assistance Program would be implemented to assist this business with relocation and employee retention. Additionally, by 2015, SCAG estimates that there would be an additional 642 jobs available in the City of San Gabriel, and 1,256 jobs in neighboring City of Alhambra, which would exceed for both cities the number of jobs that could potentially be lost due to business relocation.

Additionally, two other businesses, located at 330 S. Del Mar Avenue and at 130 Agostino Road would potentially be affected by the trench construction. These two businesses have structures that currently encroach into the UPRR ROW: The car repair shop at 330 S. Del Mar Avenue has an awning that is attached to the existing building and an elevated parking area; and the car repair shop at 130 Agostino Road has a carport-type structure attached to the existing building. It is anticipated that these structures attached to the buildings that encroach onto the UPRR ROW can be removed without compromising the buildings, and thus avoiding relocation of the business.<sup>13</sup>

While relocation of the common uses, such as the auto repair shops would be due to the availability of land for similar uses, it is possible relocation of the storage facility would be difficult. However, due to the current economic market and considerable amount of vacant and underutilized space within and around the project site, it is anticipated that with assistance, the storage facility would be relocated to a satisfactory site without problem.

### **Alternative 2 – No Build Alternative**

Under Alternative 2, the proposed San Gabriel Trench would not be built and the project site would remain with four at grade crossings. The construction jobs that would be generated by the proposed project would not occur. However, the seven businesses that would be displaced by the proposed project would remain in operation at their current location.

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The average construction wage is \$35.00 per hour, and the assumption is working 40 hours for 52 weeks. This results in \$35.00 per hour for 2,080 hours or \$72,800/employee. Therefore, \$43.2 million per year results in 593 employees per year.

<sup>12</sup>Alameda Corridor-East Construction Authority, *Draft Relocation Impact Report for San Gabriel Trench Project City of San Gabriel*, August 2003, Revised December 2009.

<sup>13</sup>Moffat and Nichol. *Right of Way and Easement Report*, February 2009.

<b>TABLE 2.1-11: PARCELS POTENTIALLY DISPLACED – COMMERCIAL</b>				
<b>Assessor's Parcel Number</b>	<b>Parcel Location</b>	<b>Number of Businesses Displaced</b>	<b>Type of Business</b>	<b>Number of Employees</b>
5362-017-002	405 S. Del Mar Ave	1	Storage Units	14 /a/
5367-027-054	330 S. Del Mar Ave	1 (Partial)	Car Repair Shop	14
5367-027-057	130 Augustino Rd	1(Partial)	Car Repair Shop	10
<b>Total Existing Businesses</b>		<b>3 /b/</b>	<b>Total Employees</b>	<b>38</b>

*/a/* Number of employees not known for storage units of 85,000 square feet or approximately 2 acres. The number of employees was calculated based on employee per acre relationship for Los Angeles County from the 2001 SCAG Employment Density Study. For a storage unit business, the standard is 7.04 employees per acre, which would result in approximately 14 employees.  
*/b/* Total Existing Businesses excludes the three vacant parcels.  
**SOURCE:** Del Richardson Associates, Relocation Impact Report for San Gabriel Trench Project, City of San Gabriel, 2003, Updated 2007 and Southern California Association of Governments, Employment Density Study, 2001, .

**Measures to Minimize Harm**

**PHE1** ACE shall comply with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, in the relocation of the displaced residents and businesses. A Relocation Assistance Program will be developed for the displaced residents and businesses. The Relocation Assistance Program shall set forth procedures for the fair, uniform, and equitable treatment of persons and businesses displaced from their dwellings regardless of race, ethnicity, income, or age. Moving expenses will be reimbursed for actual and related costs incurred in moving. In cases where relocation will be necessary for right-of-way acquisition, a decision on relocation will be reviewed with each residence or business owner to ensure that they are aware of all of the opportunities. Suitable facilities for relocation existing in the general area will be sought. The following outlines the relocation process for business relocations:

- Take surveys to determine needs in a replacement site;
- Prepare and send general information notices;
- Search market for available sites;
- Prepare and send Letter of Eligibility advising displacee of relocation assistance;
- Take inventory of properties for moving estimates;
- Obtain moving bids, if displacee chooses a commercial move;
- Prepare claim forms for displacee’s signature;
- Have claim forms signed by displacee;
- Send a 90-day Notice to Vacate, if applicable;
- Prepare and route a check request for moving expenses; and
- Arrange for the property to be secured until demolition (fencing, boarding up).

**PHE2** The removal and replacement of private property for the purposes of permanent or temporary construction easements shall be replaced with “in-kind” facilities, as negotiated with the property owners.

## 2.1.4 COMMUNITY IMPACTS

### *Regulatory Setting*

#### **Environmental Justice**

All projects involving a federal action (funding, permit, or land) must comply with Executive Order (EO) 12898, Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations, signed by President Clinton on February 11, 1994. This Executive Order directs federal agencies to take the appropriate and necessary steps to identify and address disproportionately high and adverse effects of federal projects on the health or environment of minority and low-income populations to the greatest extent practicable and permitted by law. Low income is defined based on the Department of Health and Human Services poverty guidelines. For 2006, this was \$20,000 for a family of four.

All considerations under Title VI of the Civil Rights Act of 1964 and related statutes have also been included in this project. The Department's commitment to upholding the mandates of Title VI is evidenced by its Title VI Policy Statement, signed by the Director, which can be found in Appendix C of this document

The concept of environmental justice is required under NEPA to analyze the extent to which minority or lower-income populations would be disproportionately impacted by a proposed project. On February 4, 1994, Executive Order 12898, *Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations*, was signed into law. Executive Order 12898 requires federal agencies to achieve environmental justice by "identifying and addressing the social and economic effects of their programs, policies, and activities on minority populations and low-income populations in the United States."<sup>14</sup> As Executive Order 12898 applies to the U.S. Environmental Protection Agency (USEPA), environmental justice is the *fair treatment* and *meaningful involvement* of all people regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no group of people, including a racial, ethnic, or socioeconomic group, should bear a disproportionate share of the negative environmental consequences resulting from industrial, municipal, and commercial operations or policies. Meaningful involvement means that: (1) potentially affected community residents have an appropriate opportunity to participate in decisions about a proposed activity that will affect their environment and/or health; (2) the public's contributions can influence the regulatory agency's decision; (3) the concerns of all participants will be considered in the decision-making process; and, (4) the decision makers shall seek out and facilitate the involvement of those potentially affected groups.

In response to Executive Order 12898, the U.S. Department of Transportation (USDOT) issued an Order to Address Environmental Justice in Minority Populations and Low-Income Populations. This order, issued in April 1995, sets guidelines to ensure that all federally-funded transportation-related programs, policies, or activities that have the potential to adversely effect human health or the environment involve a planning and programming process that explicitly considers the effects on minority populations and low-income populations.

Executive Order 13166 requires federally assisted programs to identify any need for services to those persons with LEP and develop and implement a system to provide those services so LEP persons can have meaningful access to them.

The United States Department of Transportation uses the following definition given in Title VI of the Civil Rights Act to define "minority":

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<sup>14</sup>Federal Highway Administration website, <http://fhwa.dot.gov>, accessed February 1, 2008.

<b>Black</b>	a person having origins in any of the black racial groups of Africa.
<b>Hispanic</b>	a person of Mexican, Puerto Rican, Cuban, Central or South American, or other Spanish culture or origin, regardless of race.
<b>Asian</b>	a person having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent.
<b>American Indian/Eskimo/-Aleutian</b>	a person having origins in any of the original people of North America and who maintains cultural identification through tribal affiliation or community recognition.
<b>Native Hawaiian or other Pacific Islander</b>	a person having origins in any of the original peoples of Hawaii, Guam, Samoa, or other Pacific Islands.

The 2000 U.S. Census poverty thresholds are shown in **Table 2.1-12**:

<b>TABLE 2.1-12: 2000 U.S. CENSUS POVERTY THRESHOLDS</b>	
<b>Household Size</b>	<b>Income Threshold</b>
One-Person	\$8,794.00
Two-Person	\$11,239.00
Three-Person	\$13,738.00
Four-Person	\$17,603.00
Five-Person	\$20,819.00
Six-Person	\$23,528.00
Seven-Person	\$26,754.00
Eight-Person	\$29,701.00
Nine-Person	\$35,060.00
<b>SOURCE:</b> 2000 U. S. Census.	

Demographic characteristics of the affected environment are derived from the 2000 U.S. Census and SCAG county and city projections.

For the purposes of the socioeconomic evaluation, the term “Study Area” refers to Census Tracts 4810.01, 4811.01 and 4815. Census tracts 4810.01 and 4811.01 are located at the northeastern portion of the City of Alhambra and census tract 4815 is located in the City of San Gabriel. Data for the study area are compared to overall conditions for Los Angeles County and the Cities of Alhambra and San Gabriel.

***Affected Environment***

**Environmental Justice**

Ethnic composition for Los Angeles County, the Cities of Alhambra and San Gabriel, and the Study Area are shown in **Table 2.1-13**.

<b>TABLE 2.1-13. ETHNIC COMPOSITION (2000 U.S. CENSUS)</b>								
<b>Race/Ethnicity</b>	<b>Los Angeles County</b>		<b>City of Alhambra</b>		<b>City of San Gabriel</b>		<b>Study Area</b>	
	White	2,946,145	31%	11,879	14%	6,838	17%	2,556
Black	891,194	9%	1,175	1%	384	1%	194	1%
American Indian or Alaska Native	26,141	<1%	85	<1%	53	<1%	52	<1%
Asian	1,123,964	12%	40,399	47%	19,133	49%	7,549	47%
Native Hawaiian and Other Pacific Islander	24,376	<1%	184	<1%	104	<1%	132	1%
Other	18,859	<1%	222	<1%	34	<1%	25	<1%
Two or more races	245,172	3%	1,471	2%	820	2%	405	3%
Hispanic	4,242,487	45%	30,546	36%	11,940	30%	5,189	32%
<b>Total</b>	<b>9,519,338</b>	<b>100%</b>	<b>85,961</b>	<b>100%</b>	<b>39,306</b>	<b>100%</b>	<b>16,102</b>	<b>100%</b>

**SOURCE:** 2000 U.S. Census.

The Study Area is predominately Asian, followed by Hispanic and white. Total Study Area percentages for the American Indian and Alaska Native (less than one percent), Native Hawaiian and Other Pacific Islander (1 percent), other (less than one percent), and two or more races (3 percent) populations are comparable to those of the County of Los Angeles and the Cities of Alhambra and San Gabriel. The percentages of Hispanics in the Study Area (32 percent) and in the Cities of Alhambra (36 percent) and San Gabriel (30 percent) are lower than the percentage of the County (45 percent). The percentage of Asians in the Study Area (47 percent) is comparable to the percentages of Asians in the Cities of Alhambra (47 percent) and San Gabriel (49 percent). The percentage of Asians in the Study Area and in the Cities of Alhambra and San Gabriel is nearly four times the percentage of Asians in Los Angeles County. The County has a higher percentage of Black population (nine percent) than the Study Area and the Cities of Alhambra and San Gabriel (one percent each, respectively).

Household characteristics for the County of Los Angeles, the Cities of Alhambra and San Gabriel, and the study area are shown in **Table 2.1-14**. In 2000, 43 percent of the study area housing units were single-family dwellings and 57 percent were multi-family dwellings. The median household income for the study area is slightly less than the median household incomes for the County and the Cities of Alhambra and San Gabriel.

<b>TABLE 2.1-14: HOUSEHOLD CHARACTERISTICS</b>								
	<b>Los Angeles County</b>		<b>City of Alhambra</b>		<b>City of San Gabriel</b>		<b>Study Area</b>	
Total Housing Units	3,270,909		30,086		12,852		5,851	
Single-Family	1,835,087	56%	16,040	53%	8,103	63%	2,508	43%
Multi-Family	1,379,273	42%	14,029	47%	4,705	37%	3,333	57%
Mobile Homes, Trailers, Other.	56,621	2%	17	<1%	44	<1%	10	<1%
Median Household Income	\$42,189		\$39,791		\$41,791		\$ 38,442	
% Households below Poverty Level	15%		13%		14%		15%	
<b>SOURCE:</b> 2000 U.S. Census.								

**Environmental Consequences**

**Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

In 2000, the average household median income for the Census tracts in the study area was \$38,442. The average income for the project area and the percentage of households that are below the poverty level is comparable to the Cities of Alhambra and San Gabriel and the County of Los Angeles. Therefore the area is not considered to be predominately low-income. As such, no disproportionate impacts to low-income communities are anticipated.

The percentage of Asians in the study area and in the Cities of Alhambra and San Gabriel is nearly four times the percentage of Asians in Los Angeles County, making the population in the project area predominately minority. Project-related impacts that would most directly affect populations in the project area are the relocation of businesses and residences. The proposed project may require the relocation of three occupied housing units and three commercial businesses, one of which has a residential dwelling in it (storage business), and which may be owned or occupied by minorities. The displaced properties would be subject to the provisions under the Uniform Relocation Act of 1970. In addition, the Relocation Report indicated that there is sufficient housing stock and commercial space available in the City of San Gabriel for the relocation of these residences and businesses. Therefore, no disproportionate adverse impacts associated with displacement are anticipated.

Other impacts, such as those associated with air quality and noise will be beneficial due to decreased vehicle idling time and due to warning signals and train whistles no longer being required. In addition, pedestrian safety will be improved at crossings adjacent to schools and to cultural resources that are important to the City of San Gabriel, the region, and to Native Americans. Beneficial impacts associated with environmental justice are anticipated.

**Alternative 2 – No Build Alternative**

Under Alternative 2 no construction would occur at the project site and project conditions would remain unchanged.

**Measures to Minimize Harm**

None required.



## 2.1.5 COMMUNITY COHESION

### *Regulatory Setting*

The National Environmental Policy Act of 1969 as amended (NEPA), established that the federal government use all practicable means to ensure that all Americans have safe, healthful, productive, and aesthetically and culturally pleasing surroundings (42 U.S.C. 4331[b][2]). The Federal Highway Administration in its implementation of NEPA (23 U.S.C. 109[h]) directs that final decisions regarding projects are to be made in the best overall public interest. This requires taking into account adverse environmental impacts, such as destruction or disruption of human-made resources, community cohesion, and the availability of public facilities and services.

Under the California Environmental Quality Act, an economic or social change by itself is not to be considered a significant effect on the environment. However, if a social or economic change is related to a physical change, then social or economic change may be considered in determining whether the physical change is significant. Since this project would result in physical change to the environment, it is appropriate to consider changes to community character and cohesion in assessing the significance of the project's effects.

This section examines the affected environment related to communities in the project area. The social, economic, and demographic characteristics of the communities located within the study area are outlined. Following is a discussion of the regulatory framework governing the protection and organization of communities, as well as descriptions and profiles of the existing communities that may be affected by the project alternatives. Following is the impacts analysis of each project alternative.

Major goods movement improvement projects can affect the social environment of neighborhoods and communities, potentially resulting in changes to the physical layout of the area, demographics, land uses, and the sense of neighborhood in local communities. In comparison to a general land use analysis, community and neighborhood impact analyses address community cohesion, the division of established communities, community barriers, removal or displacement of community assets or special buildings, removal of parking, access to community assets, and economic development. As such, the analysis presented relates heavily to the analysis presented in the separate land use, environmental justice, traffic, and relocation/displacement discussions within this document. As part of the NEPA process, ACE has coordinated with local planning agencies and conducted public outreach to determine the scope of potential effects the proposed alternatives may have on established communities within the project area.

### National Environmental Policy Act of 1969 (NEPA)

NEPA was enacted as a result of Congress recognizing the impact of human activity on the natural environment. Specifically, the impacts of population growth, high-density development trends, expansion of industrial uses, resource exploitation, and new technological advances were emphasized. The objective of NEPA was to create mechanisms to restore and maintain environmental quality for the overall welfare of the public. NEPA declares that the federal government, in cooperation with state governments, local governments, and other concerned public and private organizations, would use all practicable means and measures to create and maintain conditions under which man and nature could exist in productive harmony, as well as fulfill the social, economic, and other requirements of present and future generations of Americans.<sup>15</sup>

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<sup>15</sup>National Environmental Policy Act of 1969, Title I, Sec. 101 [42 USC § 4331].

### Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users

The Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) was enacted in 2005 and amended in June of 2008. This Act provides guaranteed funding for highways, highway safety, and public transportation totaling \$286.4 billion.<sup>16</sup> SAFETEA-LU builds previous surface transportation bills by supplying the funds and refining the programmatic framework for investments needed to maintain and expand vital transportation infrastructure. SAFETEA-LU addresses issues such as, improving safety, reducing traffic congestion, improving efficiency in freight movement, increasing intermodal connectivity, protecting the environment, and stakeholder and community outreach.<sup>17</sup>

### Title VI of the Civil Rights Act of 1964

This title declared “it to be the policy of the United States that discrimination on the ground of race, color, or national origin shall not occur in connection with programs and activities receiving federal financial assistance and authorizes and directs the appropriate Federal departments and agencies to take action to carry out this policy.”<sup>18</sup>

### **California Environmental Quality Act (CEQA)**

Adopted in 1970, the purposes of CEQA are to: 1) inform decision-makers and the public of the potential, significant environmental effects of a proposed project, 2) identify the ways in which environmental damage can be avoided or reduced, 3) prevent significant, avoidable damage to the environment by requiring changes to a project through the use of alternatives or mitigation measures, when the governmental agency finds the changes to be feasible, and 4) disclose to the public the reasons why a governmental agency approved a project in the manner the agency chose if significant environmental effects were involved.<sup>19</sup>

Under CEQA, the focus of the environmental analysis is on the physical changes resulting from a project. Social or economic effects of a project are not treated as significant effects on the environment. However, environmental analysis “may trace the chain of cause and effect from a proposed decision on a project through anticipated economic or social changes resulting from the project to physical changes caused, in turn, by the economic or social changes.”<sup>20</sup>

### City of San Gabriel General Plan

The Community Design Chapter of the City of San Gabriel General Plan identifies the UPRR right-of-way as an “edge,” which is a boundary between two (or more) different types of areas. The UPRR right-of-way acts as an edge between an older residential neighborhood and the San Gabriel Village District, in the south, and the Mission District and San Gabriel Mission, in the north.<sup>21</sup>

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<sup>16</sup>Federal Highway Administration, *Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users, A Summary of Highway Provisions*, August 25, 2005.

<sup>17</sup>*Ibid.*

<sup>18</sup>Civil Rights Act of 1964, 42 USC 2000(d)-2000(d)(1).

<sup>19</sup>Title 14, California Code of Regulations, Chapter 3: *Guidelines for Implementation of the California Environmental Quality Act*, Article 1, Section 15002(a).

<sup>20</sup>Title 14, California Code of Regulations, Chapter 3: *Guidelines for Implementation of the California Environmental Quality Act*, Article 9, Section 15131(a).

<sup>21</sup>City of San Gabriel, *Comprehensive General Plan of the City of San Gabriel* (2004), Community Design Chapter and Donald Watson, Alan Plattus, and Robert Shibley, *Time-Saver Standards for Urban Design* (2003), excerpt from *The Image of the City* by Kevin Lynch.

### City of San Gabriel Mission District Specific Plan

The City of San Gabriel Mission District Specific Plan Area is located within the northwestern portion of the City. The San Gabriel Mission (and ancillary contributing buildings), City Hall, and Rancho Las Tunas Adobe are located within the Specific Plan Area. The Mission District Specific Plan is a comprehensive set of tools created to revitalize San Gabriel's Mission District. The main goal of the plan is to improve the area's economic development by attracting people and businesses to the District. This would be accomplished through mixed-use developments along Mission Drive and improved architectural standards.

### City of Alhambra General Plan

The Economic Development Element of the City of Alhambra General Plan outlines goals and policies concerned with the fiscal issues relating to capital expenditures for infrastructure, the provision of urban services, and the economic health of commercial and industrial uses in the City. The policies presented in this Element seek to encourage and enhance the development of the City, provide for economic revitalization, eliminate and prevent the deterioration of buildings in the City, encourage new development that provides benefits to the community, and promote the efficient use of public facilities.

### ***Affected Environment***

A community can be described as an area in which the predominant land use is residential, although there may be a considerable number of residents in primarily non-residential areas. A sense of cohesion within a residential area may or may not exist depending upon factors such as how long residents have lived in the area, whether friends and family live nearby, and the extent of shared activities within the area. It is probable that a cohesive sense of neighborhood exists within areas that are engaged in the neighborhood planning process, have organized a neighborhood association, or have a well-known and long-established identity as a place. Particularly in urban areas, a community may also include a mix of land uses and focus on a community center. Community centers may include institutional facilities (e.g., schools, senior centers, city hall, parks, churches, post office) or commercial uses (e.g., shopping malls, transit stations) located adjacent to established residential areas.

The project site includes the Alhambra Subdivision of the Union Pacific Railroad (UPRR) and crosses portions of the Cities of San Gabriel, Alhambra and Rosemead and the County of Los Angeles in the San Gabriel Valley. The project site is an active freight railroad right-of-way and no land uses or buildings exist on the project site except for traditional railroad-related facilities.

The primary land uses located directly adjacent to the project site includes industrial, residential, with some office and commercial land uses. More sensitive historical and civic and land uses are set at a distance from the existing railroad facilities. These sensitive land uses include the San Gabriel Mission (north of the Ramona Street and Mission Drive crossings), San Gabriel High School (located southwest of the Junipero Serra Drive and Ramona Street intersection), and Rancho Las Tunas Adobe (located approximately 470 feet southeast of the Mission Road and Junipero Serra Drive intersection).

### City of San Gabriel Communities

According to the City of San Gabriel General Plan, the project site is designated as an edge, which divides several different communities in the City of San Gabriel. In the eastern portion of the City, the project

site currently separates the historic Mission District from the San Gabriel Village District and an older residential neighborhood.<sup>22</sup>

A majority of the Mission District is located north of the project site. The Mission District is south of Las Tunas Drive, north of Mission Road, west of Junipero Serra Drive, and east of the Alhambra Wash. The primary thoroughfare of the Mission District is Mission Drive between Las Tunas Drive and Mission Road. This corridor includes the historic landmark San Gabriel Mission, Mission Playhouse, City Hall, the Historical Association's Museum and Hayes House, the Ramona Museum of California History, and many other historic and cultural sites. This area also includes retail shops and restaurants, several vacant or underutilized buildings, and surface parking lots. The northern portion of Mission Drive, within the Mission District, includes general offices, medical/dental offices, and service businesses with some small, older multi-family housing interspersed among the commercial uses. Several open space areas are also included in the Mission District.<sup>23</sup>

A residential neighborhood is located south of the project site, north of Mission Road, and west of San Gabriel Boulevard. This neighborhood primarily consists of small-scale, one- to two-story single- and multi-family residences. According to the Mission District Specific Plan, this residential area is the oldest outside of the Mission District. The San Gabriel Village District is located south of the project site and Mission Road, west of Del Mar Avenue, north of Valley Boulevard, and east of Ramona Street. This area primarily consists of small-scale, one- to two-story, single-family residences and includes the Rancho Las Tunas Adobe. The City of San Gabriel General Plan designates the Circle Drive and Fairview Avenue intersection as a node in the City. This node consists of single-family residences with several multi-family apartment buildings along with one story commercial areas.

### City of Alhambra Communities

The project site traverses a small portion of the City of Alhambra and currently functions as a divider between different areas of the City. Adjacent and west of the Alhambra Wash, the Alhambra Municipal Golf Course is located south of the project site and Mission Road, which travels parallel to the project site in the is area. Directly north of the golf course, the project site, and Mission Road, the Alhambra Historic Neighborhood Tract is located along Granada Avenue. This neighborhood consists of older and well-maintained medium-scale single-family residences.

### **Demographics**

For the purposes of profiling the community adjacent to the project site, similar to the environmental justice discussion within this document, the term "Study Area" refers to Census Tracts 4322.01, 4810.02, 4811.01, 4811.02, 4811.03, 4812.02, and 4815. **Table 2.1-15** below presents the age profile of the study area. As shown in the table, the Study Area primarily consists of young adults and other adults less than 45 years of age (43 percent). Children (under 18 years of age) and older adults (45 to 64 years of age) represent 23 and 20 percent of the Study Area population, respectively.

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<sup>22</sup>City of San Gabriel, *Comprehensive General Plan of the City of San Gabriel* (2004), Community Design Chapter, Figure 10-1 Community Design.

<sup>23</sup>City of San Gabriel, *Mission District Specific Plan*, 2004.

<b>TABLE 2.1-15: STUDY AREA POPULATION BY AGE</b>		
<b>Age</b>	<b>Number of Persons</b>	<b>Percent of Total</b>
Under 18 Years	7,837	23%
18 to 44 Years	14,385	43%
45 to 64 Years	6,718	20%
65 Years and Older	4,672	14%
Total	33,604	100%

**SOURCE:** US Census 2000 and TAHA 2008.

Data presented in **Tables 6-4** and **6-5**, which are presented in the environmental justice discussion within the document, is used in the discussion of demographics below regarding ethnic composition and household characteristics.

According to the US Census 2000, the Cities of San Gabriel, Alhambra, as well as the Study Area consist of a high percentage of Asian population compared to Los Angeles County. The study area consists of 47 percent Asian while Los Angeles County is 12 percent Asian. Other ethnicities that are present in the Study Area include Hispanic and White populations at 32 and 16 percent, respectively. With such a high percentage of Asian population, the Study Area is relatively ethnically homogeneous, or similar. Ethnic homogeneity is typically an indicator of a community with a high level of cohesion.

In 2000, 43 percent of the Study Area housing units were single-family dwellings and 57 percent were multi-family dwellings. The median household income for the study area is slightly less than the median household incomes for the County and the Cities of Alhambra and San Gabriel. Table 2.1-16 shows the housing characteristics of the Study Area compared to surrounding jurisdictions. The Study Area consists of more renter-occupied housing units (57 percent) than owner-occupied housing units (40 percent), which is more similar to the City of Alhambra than the City of San Gabriel or the County of Los Angeles as a whole.

<b>TABLE 2.1-16: HOUSING BY OCCUPANCY</b>								
<b>Occupancy</b>	<b>Study Area</b>		<b>Los Angeles County</b>		<b>City of San Gabriel</b>		<b>City of Alhambra</b>	
	<b>No. of Units</b>	<b>Percent of Total</b>	<b>No. of Units</b>	<b>Percent of Total</b>	<b>No. of Units</b>	<b>Percent of Total</b>	<b>No. of Units</b>	<b>Percent of Total</b>
Owner-Occupied	4,539	40%	1,499,744	46%	5,988	46%	11,421	38%
Renter-Occupied	6,392	57%	1,634,030	50%	6,599	51%	17,690	59%
Vacant	321	3%	137,135	4%	322	3%	958	3%
Total	11,252	100%	3,270,909	100%	12,909	100%	30,069	100%

**SOURCE:** US Census 2000 and TAHA 2008.

### ***Environmental Consequences***

Established communities have a set of identifiable perceptual and behavioral relationships occurring within an identifiable geographic area. The level of cohesion is a relative descriptor of a community. Cohesion refers to the degree of attraction among the parts of a neighborhood (i.e., individuals groups and institutions). In addition, cohesion relates to the level of interaction and interdependence present within a community.

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Alternative 1 would lower the existing UPRR tracks into a trench configuration and construct grade separations or overhead bridge structures at Ramona Street, Del Mar Avenue, Mission Road and San

Gabriel Boulevard. Because the railroad tracks would be lowered beneath these four streets, the grade separation of these four streets would maintain the streets at approximately their current elevation, eliminating four at-grade crossings.

As previously mentioned, the existing UPRR right-of-way (project site) is acts as an edge or a physical divider between various areas in the Cities of San Gabriel and Alhambra. The project Study Area is considered to have a high level of community cohesion due to the presence of historic and civic uses and the ethnic similarities. However, the cohesion of the community does not appear to transcend the project site. Rather, community cohesion exists on the north side of the project site and on the south side of the project site, separately. Alternative 1 would not relocate the railroad right-of-way to another location, potentially disrupting the community cohesion or character of an existing neighborhood or district. Alternative 1 would construct the proposed project within the existing UPRR right-of-way. Community cohesion within the City of San Gabriel may be enhanced by the elimination of four at-grade crossings, which currently disrupts traffic at these intersections and affects ease of access of residential areas to the community facilities within the Mission District. The elimination of these at-grade crossings would improve traffic in the area and increase the ease of access to the Mission District and City Hall, therefore, enhancing community cohesion. Therefore, impacts related to community cohesion would be beneficial.

### **Alternative 2 – No Build Alternative**

Under Alternative 2, the project site would not be substantially altered from existing conditions. As previously mentioned, the project site is currently considered to be an edge or a divider between various areas in the Cities of San Gabriel and Alhambra. Therefore, no adverse effects are anticipated related to community cohesion.

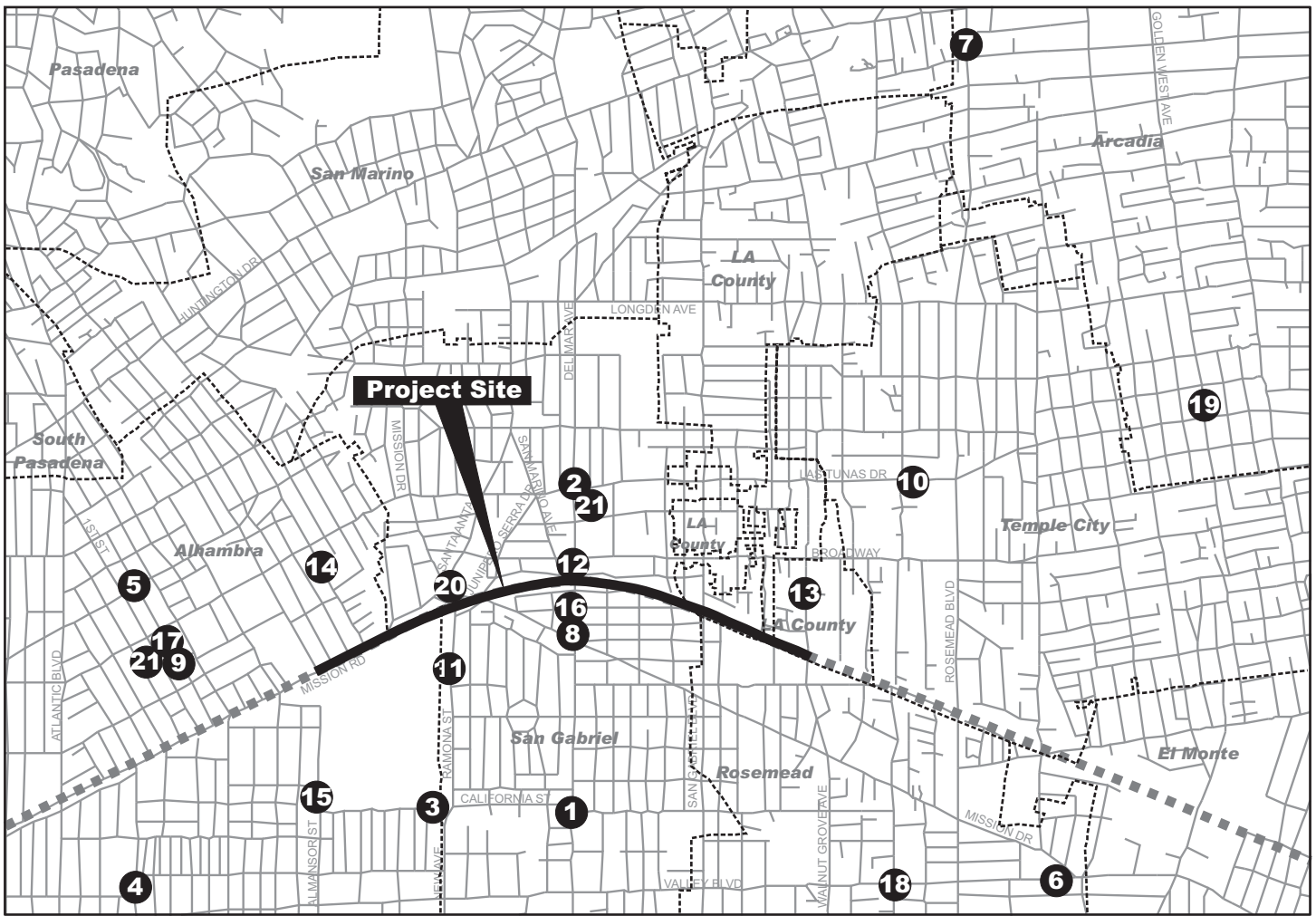
### **2.1.6 PUBLIC SERVICES**

This section presents an overview of fire and police services within the vicinity of the project site. The potential impacts of the proposed project on these services are also evaluated based on the adequacy of existing and planned facilities and personnel to meet any additional demand generated by the proposed project. In addition, mitigation measures are identified, where feasible and necessary.




#### ***Affected Environment***

##### **Fire Protection**

The project site is located primarily within the City of San Gabriel. However, construction activities would take place in the Cities of Alhambra, San Gabriel, and Rosemead. **Table 2.1-17** lists the fire stations located in the vicinity of the project site for all these jurisdictions. **Figure 2.1-3** shows the location of these fire stations.



**LEGEND:**

-  Project Site
-  Union Pacific Railroad - Alhambra Subdivision
-  City/Community Boundary

**FIRE SERVICES**

1. San Gabriel Fire Department Headquarters
2. San Gabriel Fire Department Station #2
3. Alhambra Fire Department Training Facility
4. Alhambra Fire Department Station #72
5. Alhambra Fire Department Station #71
6. Los Angeles County Fire Department Station # 42
7. Los Angeles County Fire Department Station # 5

**POLICE SERVICES**

8. San Gabriel Police Department
9. Alhambra Police Department
10. Los Angeles County Sheriff Temple Station

**SCHOOL SERVICES**

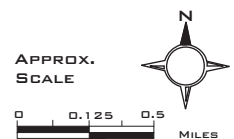
11. San Gabriel High School
12. Del Mar High School
13. Roosevelt Elementary School
14. Granada Elementary School
15. Martha Baldwin Elementary School

**LIBRARY SERVICES**

16. San Gabriel Public Library
17. Alhambra Public Library
18. Rosemead Public Library
19. Temple City Public Library

20. City of San Gabriel City Hall
21. United States Postal Service

SOURCE: TAHA, 2009.



**FIGURE 2.1-3**

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<b>TABLE 2.1-17: FIRE STATIONS SERVING THE PROJECT SITE</b>		
<b>Station</b>	<b>Location</b>	<b>Distance from Proposed Project (Miles)</b>
<b>San Gabriel Fire Department</b>		
Headquarters	1303 S. Del Mar Avenue	0.91
Fire Station #2	115 N. Del Mar Avenue	0.41
<b>Alhambra Fire Department</b>		
Station #71 – Headquarters	301 N. First Street	1.65
Station #72 – Southeast District	1215 S. Sixth Street	1.57
Fire Training Facility	911 S. New Avenue	1.15
<b>Los Angeles County Fire Department</b>		
Fire Station #42	9319 E. Valley Boulevard, Rosemead	1.81
Fire Station #5	7225 N. Rosemead Boulevard, San Gabriel	2.86
<b>SOURCE:</b> Websites from the City of San Gabriel, City of Alhambra, City of Rosemead, and the Los Angeles County Fire Department, and TAHA 2008.		

San Gabriel Fire Department

The San Gabriel Fire Department (SGFD) has two fire stations each located within a mile of the project site. As such, these fire stations would be the primary respondents for any fire emergency services. According to the SGFD, the tracks are the dividing line for service, and depending on the location of the fire emergency (north or south of the tracks), either station would be the first to respond. SGFD Fire Station #2, located at 115 N. Del Mar Avenue is located 0.41 mile from the project site. SGFD Fire Station #2 is staffed and equipped with a three-person paramedic assessment engine, which is also a triple combination apparatus. The average response time for SGFD Station #2 is on average two to three minutes.<sup>24</sup>

The SGFD Headquarters, located at 1303 S. Del Mar Avenue, is approximately 0.90 mile from the project site. This fire station would serve as second respondent in case of fire emergencies. The SGFD Headquarters is staffed and equipped with a three-person triple combination fire engine and a two-person paramedic transport ambulance. The average response time for the SGFD Headquarters is on average two to three minutes. Collectively, in 2007, the SGFD responded to approximately 2,400 fire emergencies.<sup>25</sup>

Alhambra Fire Department

The Alhambra Fire Department (AFD) has four fire stations citywide and one fire training facility. Of these fire stations, two are located less than two miles from the proposed project. AFD Fire Station #71 (Headquarters) is located at 301 N. First Street and is located approximately 1.65 miles from the project site. AFD Fire Station #71 has one engine, one paramedic truck, and one fire truck. AFD Fire Station #72 (Southeast District) is located at 1215 S. Sixth Street and is located approximately 1.57 miles from the project site. AFD Fire Station #72 has one engine and has three full-time personnel.<sup>26</sup>

<sup>24</sup>Letter from Don Berry, Deputy Fire Marshall, received November 24, 2008.

<sup>25</sup>Letter from Don Berry, Deputy Fire Marshall, received November 24, 2008.

<sup>26</sup>City of Alhambra website, [www.cityofalhambra.org/government/fire\\_department/stations.html](http://www.cityofalhambra.org/government/fire_department/stations.html), accessed November 20, 2008

Also, the fire training facility is located approximately 1.15 miles from the project site at 911 S. New Avenue. Although not directly responsible for responding to fire emergency calls, the training facility can serve as a resource in case of fire emergencies.

Los Angeles County Fire Department

The Los Angeles County Fire Department (LACOFD) has two fire stations that are located within three miles of the project site. Although these stations are not considered to be the first respondent for fire emergencies in the City of San Gabriel, they can provide support, if needed. LACOFD Fire Station #42 is located at 9319 E. Valley Boulevard in the City of San Gabriel, and is located approximately 1.80 miles from the project site. LACOFD Fire Station #5 is located at 2644 N. San Gabriel Boulevard in the City of Rosemead, and is located approximately 2.8 miles from the project site.<sup>27</sup>

**Police Protection**

Although the project site is located primarily within the City of San Gabriel, construction activities would take place in the Cities of Alhambra, San Gabriel, and Rosemead. Therefore, **Table 2.1-18** lists the police stations located in the vicinity of the project site for all these jurisdictions. **Figure 2.1-3** shows the location of these police stations.

<b>TABLE 2.1-18: POLICE STATIONS SERVING THE PROJECT SITE</b>		
<b>Station</b>	<b>Location</b>	<b>Distance from Proposed Project (Miles)</b>
<b>San Gabriel Police Department</b>		
Headquarters	625 S. Del Mar Avenue	0.13
<b>Alhambra Police Department</b>		
Headquarters	211 S. First Street	0.96
<b>Los Angeles County Sheriff's Department</b>		
Temple Station	8838 Las Tunas Drive, Temple City	1.07
<b>SOURCE:</b> Websites from the City of San Gabriel, City of Alhambra, City of Rosemead, and the Los Angeles County Sheriff's Department, and TAHA 2008.		

The San Gabriel Police Department (SGPD), which is headquartered at 625 S. Del Mar Avenue, is located less than a quarter-mile from the project site. The SGPD would provide primary police protection services for the proposed project. The Alhambra Police Department (APD), located at 211 S. First Street, is approximately one mile from the western terminus of the project site. The Los Angeles County Sheriff's Department Temple Station, located at 8838 Las Tunas Drive in Temple City, is located approximately one mile from the eastern terminus of the proposed project. Both the APD and Temple Station would serve as support for police protection services for the proposed project.

As of July 2008, the predominate type of Part I crimes (33 percent) in the City of San Gabriel is larceny (theft) (**Table 2.1-19**). This is consistent with the year-to-date figures for 2008 (45 percent) and for 2007 (42 percent). Other predominate types of Part I crimes include assaults (27 percent) and burglary (22 - percent).<sup>28</sup>

<sup>27</sup>County of Los Angeles Fire Department website, [www.fire.lacounty.gov](http://www.fire.lacounty.gov), accessed November 20, 2008

<sup>28</sup>City of San Gabriel Police Department website, [http://www.sgpd.org/html/crime\\_statistics.html](http://www.sgpd.org/html/crime_statistics.html), accessed November 24, 2008.

<b>TABLE 2.1-19: CRIME STATISTICS FOR THE CITY OF SAN GABRIEL</b>						
<b>Type of Part I Crime</b>	<b>Reported Crimes</b>					
	<b>As of July 2008</b>	<b>Percentage of Total</b>	<b>This Year To Date</b>	<b>Percentage of Total</b>	<b>Last Year to Date</b>	<b>Percentage of Total</b>
Homicide	0	0%	0	0%	0	0%
Rape	0	0%	0	0%	4	<1%
Robbery	6	8%	40	7%	65	9%
Assaults	21	27%	126	21%	157	22%
Motor Vehicle Thefts	8	10%	56	9%	46	7%
Burglary	17	22%	109	18%	134	19%
Larceny	25	33%	275	45%	296	42%
Arson	0	0%	1	<1%	6	1%
<b>Total</b>	<b>77</b>	<b>100%</b>	<b>607</b>	<b>100%</b>	<b>708</b>	<b>100%</b>

**SOURCE:** City of San Gabriel Police Department website, [http://www.sgpd.org/html/crime\\_statistics.html](http://www.sgpd.org/html/crime_statistics.html), and TAHA 2008.

**Medical Institutions**

Hospitals and healthcare facilities located in the vicinity of the project site include the Vista Cove Care Center (909 Santa Anita Street), and the San Gabriel Medical Center (438 W. Las Tunas Drive). The Vista Cove Care Center is a senior living facility that provides long-term care, rehabilitation, assisted living, hospice and respite care and adult day care. San Gabriel Medical Center is a 273-bed acute care hospital that has been in operation since 1960.

**Public Schools**

There are five school districts in the vicinity of the proposed project: Alhambra Unified School District (AUSD), San Gabriel Unified School District (SGUSD), Garvey Elementary School District (GESD), Rosemead Elementary School District (RESD), and Temple City Unified School District (TCUSD). There are five public schools located within one-half mile of the project site:

- Roosevelt Elementary (401 S. Walnut Grove Avenue)
- Granada Elementary (100 S. Granada Avenue)
- Martha Baldwin Elementary (900 S. Almansor Street)
- San Gabriel High School (801 S. Ramona Street)
- Del Mar High School (312 S. Del Mar Avenue)

Of the schools located in the vicinity of the proposed project, only San Gabriel High School is located adjacent to the UPRR ROW.

**Public Libraries**

The project site is located primarily within the City of San Gabriel. However, construction activities would take place in the Cities of Alhambra, San Gabriel, and Rosemead. There are four public libraries located within ½ mile of the project site:

- San Gabriel Public Library (500 S. Del Mar Avenue)

- Alhambra Civic Center Library (101 S. First Street)
- Rosemead Public Library (8800 Valley Boulevard)
- Temple City Public Library (5939 Golden West Avenue)

The San Gabriel Public Library, which is part of the Los Angeles County Library system, is located less than one-quarter-mile from the proposed project. All other libraries in the vicinity of the proposed project are located at least one mile from the project site.

Other community facilities that are located within ¼-mile of the proposed project include:

- San Gabriel Mission Church (428 S. Mission Drive)
- Winston Smoyer Community Garden (Granada Street and Mission Road)
- Almansor Court (700 S. Almansor Street)
- Almansor Park (800 S. Almansor Street)
- La Casa de San Gabriel Community Center (203 E. Mission Road)
- First Baptist Church of Rosemead (8618 Mission Drive)
- Kingdom of Living God (702 S. Del Mar Avenue)
- Indonesian Worship Church (620 S. Del Mar Avenue)

### *Environmental Consequences*

#### **Fire Protection**

##### Construction Impacts

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The proposed project would involve construction of a trench that would separate the train tracks from the at-grade roadways crossings at Ramona Street, Del Mar Avenue, Mission Road, and San Gabriel Boulevard. Currently, because these streets cross the UPRR tracks at-grade, queuing of traffic occurs when the trains are passing. During construction of the bridges across each of the four at-grade crossings (Ramona Street, Del Mar Avenue, Mission Road, and San Gabriel Boulevard), these streets would be alternately closed and traffic would be detoured onto adjacent streets. Although three of the four crossings would remain open during construction as part of this detour plan, potential impacts to response time could occur due to the increased congestion on the other streets that remain open. In particular, the closure of or detour onto Del Mar Avenue, which is where both SGFD fire stations are located, could potentially delay fire emergency response times.

It is possible that crimes could occur in the area of the trench during construction, or that an accident could occur in the trench during construction, as a result, there could be a need for increased police, fire and medical services. However, as described above, the Cities of San Gabriel, Alhambra and Rosemead have adequate emergency personnel to respond in the event of an emergency. Further, implementation of the minimization measures listed below, coupled with best practices for construction (i.e., fencing, etc) would ensure adequate safety at the site.

#### **Alternative 2 – No Build Alternative**

Under Alternative 2, the proposed San Gabriel Trench would not be built and therefore no construction related impacts would occur.

### Operational Impacts

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

During operation of the proposed project, creation of the trench and the removal of the at-grade crossings would enhance response times for fire emergency services by enabling emergency vehicles to cross over the railroad tracks in the project area at the same time that trains are passing through.

There are seven fire stations within two miles of the proposed project (Table 2.1-17). As such, adequate fire emergency service facilities exist that would serve the proposed project. Additionally, there are no residential or commercial structures associated with the proposed project that would increase the resident population or the daytime employed population, which typically results in a need for new or expanded emergency facilities. Therefore, the need for additional fire emergency service facilities is not anticipated. It is anticipated that the proposed project will include safety and security elements to restrict general access (fences) but allow emergency access to the trench at fixed locations. Nevertheless, an Emergency Response Plan would be necessary to assist local police emergency respondents in the event of emergencies within the trench.

#### **Alternative 2 – No Build Alternative**

Under Alternative 2, the proposed San Gabriel Trench would not be built and therefore would not achieve the same beneficial operation impacts by eliminating queuing by emergency personnel as would be achieved with the proposed project.

### **Police Protection**

#### Construction Impacts

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The proposed project would involve construction of a trench that would separate the train tracks from the at-grade roadway crossings at Ramona Street, Del Mar Avenue, Mission Road, and San Gabriel Boulevard. Currently, because these streets cross the UPRR tracks at-grade, queuing of traffic occurs when the trains are passing. During construction of the bridges across each of the four at-grade crossings (Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard), these streets would be alternately closed and traffic would be detoured onto adjacent streets. Although three of the four crossings would remain open during construction as part of this detour plan, potential impacts to police response times could occur due to the increased congestion on the other streets that remain open. In particular, the closure of or detour onto Del Mar Avenue, which is where the SGPD headquarters is located, could potentially delay police emergency response times. Implementation of the minimization measures below would ensure response times remain adequate.

#### **Alternative 2 – No Build Alternative**

Under Alternative 2, the proposed San Gabriel Trench would not be built and therefore no construction related impacts would occur.

## Operational Impacts

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

During operation of the proposed project, the grade separation of the four street crossings of the UPRR tracks would enhance response times for police emergency services by enabling emergency vehicles to cross over the railroad tracks in the project area at the same time that trains are passing through.

There are three police jurisdictions within a mile from the proposed project (**Table 2.1-18**, above). As such, adequate police service facilities exist to serve the proposed project. Additionally, there are no residential or commercial structures associated with the proposed project that would increase the resident population or the daytime employed population resulting in an increase in the need for police services. Therefore, the need for additional police service facilities is not anticipated. It is anticipated that the proposed project will include safety and security elements to restrict general access (fences) but allow emergency access to the trench (gates, ramps). Nevertheless, an Emergency Response Plan would be necessary to assist local police emergency respondents in the event of emergencies within the trench.

### **Alternative 2 – No Build Alternative**

Under Alternative 2, the proposed San Gabriel Trench would not be built and therefore would not achieve the same beneficial operation impacts by eliminating queuing by emergency personnel as would be achieved with the proposed project.

## **Public Schools**

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The current at-grade crossing of Ramona Street is a safety hazard for the students at San Gabriel High School and school buses that utilize this street for dropping off and picking up students. During construction of the bridges across each of the four at-grade crossings (Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard), these streets would be alternately closed and traffic would be detoured onto adjacent streets. The closing of any of these streets, particularly Ramona Street, would impact student drop-off and pick-up, from private vehicles and school buses. Although vehicular access would be restricted during construction, pedestrian access would be maintained at each of the crossing sites. Nonetheless, potentially significant impacts associated with access to schools are anticipated during construction of the proposed project.

During operation of the proposed project, the provision of a grade separation of the four street crossings of the UPRR tracks would improve safety and reduce the potential for train-related incidents, pedestrian and vehicular. Additionally, the lack of queuing is anticipated to improve drop-off and pick-up operations at the school. Although it is expected that some traffic interruptions would occur during construction, once the project is complete access to community facilities would be improved and connections between the south and north sides of the tracks would be enhanced.

### **Alternative 2 – No Build Alternative**

Under Alternative 2, the project site would not be substantially altered from existing conditions. No impacts related to community facilities would occur.

### ***Measures to Minimize Harm***

- PS1** ACE shall submit for review the construction plans to the San Gabriel Fire Department, the Alhambra Fire Department, and the Los Angeles County Fire Department.
- PS2** ACE shall submit for review the detour plans (including plans for pedestrians and bicycles) and sequence of street closures to the San Gabriel Fire Department, the Alhambra Fire Department, and the Los Angeles County Fire Department. During construction of the proposed project, ACE shall remain in close contact with these Fire Departments and keep them apprised of work progress and any changes to the closure and detour plans and schedules.
- PS3** ACE shall create an Emergency Response Plan for the proposed project. ACE shall submit the Emergency Response Plan for review and approval to the San Gabriel Fire Department, the Alhambra Fire Department, and the Los Angeles County Fire Department.
- PS4** ACE shall consult with the San Gabriel Police Department, the Alhambra Police Department, and the Los Angeles County Sheriff's Department regarding safety elements (including fencing and security) that can be implemented in the design of the proposed project.
- PS5** ACE shall submit for review the detour plans (including plans for pedestrians and bicycles) and sequence of street closures to the San Gabriel Police Department, the Alhambra Police Department, and the Los Angeles County Sheriff's Department. During construction of the proposed project, ACE shall remain in close contact with these Departments and keep them apprised of work progress and any changes to the closure and detour plans and schedules.
- PS6** ACE shall create an Emergency Response Plan for the proposed project. ACE shall submit the Emergency Response Plan for review and approval to the San Gabriel Police Department, the Alhambra Police Department, and the Los Angeles County Sheriff's Department.

### **Discussion**

As discussed above, impacts related to police and fire protection services would occur primarily during the construction phase of the project which would disrupt access across the project site. Implementation of the measures above and the measures in the Traffic Management Plan (TMP) would reduce this impact. As a result, impacts would not be adverse.

## **2.1.7 UTILITIES**

### ***Regulatory Setting***

California Code of Regulations Street and Highways Code Sections 700-711 discuss utility relocation policies and procedures. Public Resources Code 21083, 21087 and the CEQA Guidelines Section 15126.2(a) require lead agencies to assess the impact of a proposed project by examining alterations in the human use of the land, including public services. Public Utilities Commission General Order 131-D provides guidance for transportation projects that involve relocation of 50kV or higher transmission lines.

### ***Affected Environment***

The project site is located in a highly urbanized environment with infrastructure already in place to support the provision of water, sewer, and solid waste within the project area.

### **Water Supply**

The majority of the proposed project is located in the City of San Gabriel. The City of San Gabriel is served by five water suppliers: The San Gabriel County Water District, the California American Water Company, the Sunnyslope Water Company, the San Gabriel Valley Water Company, and the Southern California Water Company.<sup>29</sup> **Figure 2.1-4** shows the service areas within the City of San Gabriel. The project area is primarily served by the San Gabriel County Water District. However, a small part of the project area is also served by the California American Water Company.

A small portion of the project will occur in the City of Alhambra. The City of Alhambra maintains approximately 17,000 service connections and provides approximately 90,000 customers with drinking water. Eighty percent of the City of Alhambra's water comes from eight active wells whose average depth is 790 feet. Twenty percent of the City of Alhambra's water comes from a service connection with the Metropolitan Water District (MWD). The MWD water is surface water treated at the Weymouth Treatment Plant in the City of La Verne and transported via transmission main to the City of Alhambra.<sup>30</sup>

### **Stormwater and Drainage**

The Cities of San Gabriel and Alhambra, as well as the areas surrounding the project site are fully developed, urbanized areas with mostly impervious surfaces. Stormwater runoff is channeled to drains and catch basins located along the streets and into the Alhambra and Rubio Washes. The general topography of the project area slopes from the north to the south. In addition to the gradual north to south sloping terrain, the natural topography also provides a dividing line or basin boundary for surface runoff and drainage flows in a westerly and easterly direction near Ramona Street and Mission Road. Surface runoff west of Ramona Street/Mission Road drains towards the Alhambra Wash while runoff east of the basin boundary drains toward the Rubio Wash. The Alhambra and Rubio Washes are two primary flood control channels that convey flood flows through the City of San Gabriel and other nearby communities.

In the City of San Gabriel there are 115 storm drain catch basins. Storm drains are cleaned once a year in October-November prior to rainy season. Inspections are made throughout the rainy season to maintain proper operation.

### **Sewage and Wastewater Treatment**

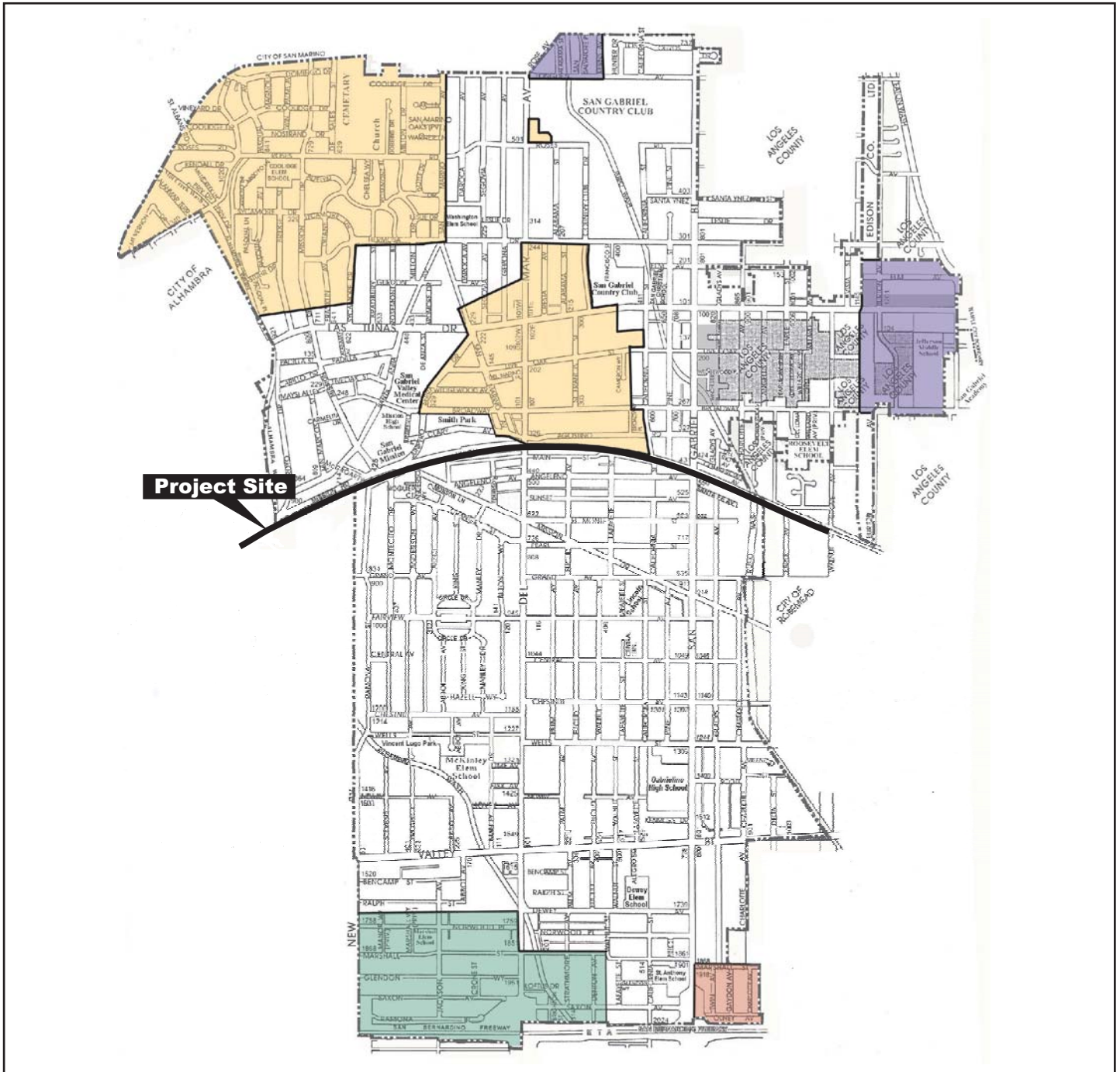
The City of San Gabriel has 72 miles of sewer running beneath its surface and approximately 1,300 manholes. The City maintains the main sewer system and some easements that run along the back of certain properties. Of the several sewer lines that make up the 72 miles of sewers, six sewer lines cross the UPRR at Ramona Street, Mission Road, mid-block east of Mission Road, Del Mar Avenue, and San Gabriel Boulevard. These sewer lines move wastewater from the north to the south and eventually connect to Los Angeles County Sanitation District (LACSD) sewer trunk lines.

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<sup>29</sup>City of San Gabriel website, <http://www.sangabrielcity.com/cityservices/communitydev/faqs.shtml>, accessed December 8, 2008.

<sup>30</sup>City of Alhambra Department of Utilities, *2007 Consumer Confidence Report*, 2007.





LEGEND:

-  Project Site
-  City of San Gabriel City Boundary
-  San Gabriel County Water District
-  California American Water Company
-  Sunnyslope Water Company
-  San Gabriel Valley Water Company
-  Southern California Water Company

SOURCE: City of San Gabriel, 2008.



NOT TO SCALE

San Gabriel Trench Grade Separation Project  
 Environmental Impact Report/Environmental Assessment

ALAMEDA CORRIDOR EAST CONSTRUCTION AUTHORITY

FIGURE 2.1-4

WATER DISTRICTS

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The City of Alhambra maintains and operates the sanitary sewer collection system, which consists of approximately 1,000 storm drains/catch basins, 2,800 manholes, and seven lift stations with main sewer lines ranging in size from four inches to 36 inches. In the project area, the City of Alhambra operates and maintains two water lines and one sewer line that cross beneath the UPRR tracks at Granada Avenue. The water and sewer line under the UPRR move water and sewage waste, respectively to the Alhambra Water Treatment Plant located at 512 South Granada Avenue.<sup>31</sup>

Through 24 special districts, the LACSD provides wastewater treatment services for cities and unincorporated areas of the Los Angeles County. The LACSD Districts 2 and 15 include the City of San Gabriel. Districts 2 and 16 include the City of Alhambra. The majority of the wastewater generated from the Cities of Alhambra and San Gabriel are routed to the San Jose Creek Water Reclamation Plant (SJCWRP), located in an unincorporated Los Angeles County, west of the City of Industry. The Whittier Narrows Treatment Plant and the Joint Water Pollution Control Plant (JWPCP) serves as alternative destinations of wastewater. The LACSD operates two sewer lines, one located at Ramona Street and the other located at Rubio Wash. The sewer line in Ramona Street functions as a main sewer trunk line that serves the City of San Marino, to the north. The Rubio Wash sewer line is the San Jose Creek Interceptor, a siphon that crosses Rubio Wash and routes wastewater to the SJCWRP.

### **Solid Waste**

The City of San Gabriel contracts with Athens Services, a private company, for the disposal of solid waste and recycling collection. Trash and recyclables collected from businesses and residences in the City of San Gabriel are hauled to the Athens Services Material Recovery Facility (MRF). The MRF is located in the Los Angeles County unincorporated community of Bassett, located near the city of Industry. At the MRF, all recyclables are separated from waste materials and are either hauled to the Refuse to Energy Facility in the City of Commerce and waste materials are hauled to the Puente Hills landfill in a Los Angeles County unincorporated area near the City of Whittier. Residential yard waste is collected from the curbside and delivered directly to the Puente Hills Landfill.

According to the California Integrated Waste Management Board (CIWMB) data, the City of San Gabriel disposes approximately 40,292 tons of solid waste per year<sup>32</sup>. Total household and business waste disposal is approximately 12,893 and 27,399 tons per year, respectively. Food accounts for the majority of the materials disposed by residences and businesses, representing approximately 22 percent of total disposed material. Restaurants and medical/health services comprise approximately 23 percent and 17 percent, respectively, of the City of San Gabriel's total commercial waste.

The City of Alhambra contracts the disposal of residential trash, yard waste, and recycling collection with Allied Waste Services, also a private company. Allied Waste Services does not utilize a transfer station for the disposal of residential trash, yard waste, and recyclables. Allied Waste Services collects residential trash and disposes them at the Sunshine Canyon Landfill in Sylmar. Residential yard waste is collected and disposed of at the Puente Hills Landfill. Recyclables are collected from residences and sent to various third-party recycling facilities. The City of Alhambra contracts the disposal of commercial trash, yard waste, and recycling collection with Consolidated Disposal Services. Solid waste and recyclable material is hauled to the Bel Art Transfer Station in Long Beach, where waste and recyclable material is sorted. Sorted waste and recyclable material are respectively hauled to Chiquita Canyon Disposal, in Valencia, and a Consolidated-operated recycling facility located in Anaheim.

According to the CIWMB data, The City of Alhambra disposes approximately 65,440 tons of solid waste per year. Total household and business waste disposal is approximately 35,400 and 30,040 tons per year,

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<sup>31</sup>Telephone conversation with Martin Ray, Deputy Director of Utilities. December 8, 2008

<sup>32</sup>California Integrated Waste management Profile, Waste Stream Profile, 2008.

respectively. Food accounts for the majority of the material disposed by residences and businesses, representing approximately 20 percent of the total disposed material. Restaurants services account for approximately 20 percent of the City of Alhambra's total commercial waste.

### ***Environmental Consequences***

#### **Water Supply**

##### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The proposed project would involve construction of a trench that would separate the train tracks from the at-grade roadways crossings at Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard. Neither construction nor operation of the proposed project would require infrastructure for the provision of water supply. Construction of the proposed project would be temporary and all water used for construction would be taken from existing water lines or imported onto the project site. During construction, water lines that cross the project site will need to be rerouted in order to maintain service. The rerouting of water lines would cause some disruption in water service, but this disruption would be temporary and done prior to major construction in the trench. However, water mains and lines and sewer/brine mains and lines owned by the City of Alhambra would not be relocated, as part of a Mitigation Agreement between ACE and the City of Alhambra. As such, Alhambra water mains and lines would not experience a disruption in service. The operation of the proposed project will not require water supply. Additionally, the proposed project does not include a housing element that would result in population growth and increased demand for water.

##### **Alternative 2 – No Build Alternative**

Under Alternative 2, the project site would not be substantially altered from existing conditions. Water supply would not increase and infrastructure would not be disrupted or disturbed. No impacts related to water supply would occur.

#### **Sewage and Wastewater Treatment**

##### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The proposed project would involve construction of a trench that would separate the train tracks from the at-grade roadways crossings at Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard. As mentioned earlier, the UPRR divides the City of San Gabriel into a northern and southern area and construction of the proposed project will restrict the ability of gravity utility systems, such as sanitary sewers, to convey sewage across the trench. Existing drainage patterns are shown in **Figure 2.1-5**. The LACSD has a main sewer trunk line located beneath Ramona Street that serves the City of San Marino to the north and an existing 27-inch diameter siphon that crosses under Rubio Wash just north of the UPRR crossing of the Wash. Re-routing the sewer lines in a sewer main that parallels the trench to gravity flow around or under the proposed project is not practical and presents right of way and site constraints. Re-routing at the western end of the project site would result in sewer depths in excess of 25 to 35 feet and require approximately 2,500 to 3,000 lineal feet of deep sewer construction in existing streets before joining existing sewers south of the UPRR. Easements and/or ROW acquisition for the re-routing would be required. Similarly, re-routing at the eastern end of the project site would require agreements, easements and/or ROW acquisition from Los Angeles County and the City of Rosemead as that portion near Walnut Grove Avenue, where the UPRR tracks would return at grade, is approximately a quarter-mile outside the City of San Gabriel city limits. The site conditions that constrain the re-routing approach include impacts to private property and the potential crossing of two major drainage channels

(Alhambra & Rubio Washes). Measures **US1** through **US3** are included below to minimize impacts related to the rerouting of existing sewage and wastewater treatment systems.

The proposed project does not include a housing element, which would result in population growth and increased demand for wastewater infrastructure or wastewater treatment.

### **Alternative 2 – No Build Alternative**

Under Alternative 2, the project site would not be substantially altered from existing conditions. Sewage and wastewater patterns in the area would not be disrupted or disturbed.

### **Stormwater and Drainage**

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The proposed project would involve construction of a trench that would separate the train tracks from the at-grade roadways crossings at Ramona Street, Del Mar Avenue, Mission Road, and San Gabriel Boulevard. The proposed project is located in a fully developed, urbanized area and the construction of the proposed project would not add or reduce the amount of impervious surfaces to the area. Therefore, the proposed project would not increase substantially the amount of stormwater runoff in the project area. However, stormwater flow across the UPRR tracks would be disrupted by the proposed project during construction and operations. As stated above, the topography of the Cities of Alhambra and San Gabriel direct stormwater flow from north to south. The City of Alhambra has rerouted most of its drains towards the Alhambra Wash due to the existing depressed UPRR tracks and its associated trench structure west of the project limits. It is anticipated that the routing and collection of storm water and urban runoff within the basin tributary to Alhambra Wash will remain unchanged with the construction of the proposed project and no re-routing of existing storm drain systems will be required. However, there are two storm drain lines that cross the UPRR tracks in the City of San Gabriel. These storm drain lines are gravity-driven, and it is infeasible to redirect them beneath the trench. In order to maintain the drainage efficiency of these lines, a new storm drain trunk line would be constructed to collect stormwater runoff north of the trench and convey it to Rubio Wash.

The federal Clean Water Act, as amended, requires projects that disturb more than five acres of land to develop and implement a Stormwater Pollution Prevention Plan (SWPPP). The purpose of a SWPPP is to reduce the amount of construction-related pollutants that are transported by stormwater runoff to surface waters. During construction, the proposed project would implement a SWPPP to control stormwater runoff. Additionally, the proposed project would need to incorporate design elements in order to avoid flooding in the trench structure. Measures US4 and US5 would reduce impacts related to stormwater and drainage. With inclusion of measures US4 and US5, impacts would not be adverse.

### **Alternative 2 – No Build Alternative**

Under Alternative 2, the project site would not be substantially altered from existing conditions. Stormwater and drainage patterns in the area would not be disrupted or disturbed.

### **Solid Waste**

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The proposed project would involve construction of a trench that would separate the train tracks from the at-grade roadways crossings at Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard. The proposed project is not anticipated to generate significant solid waste that would require

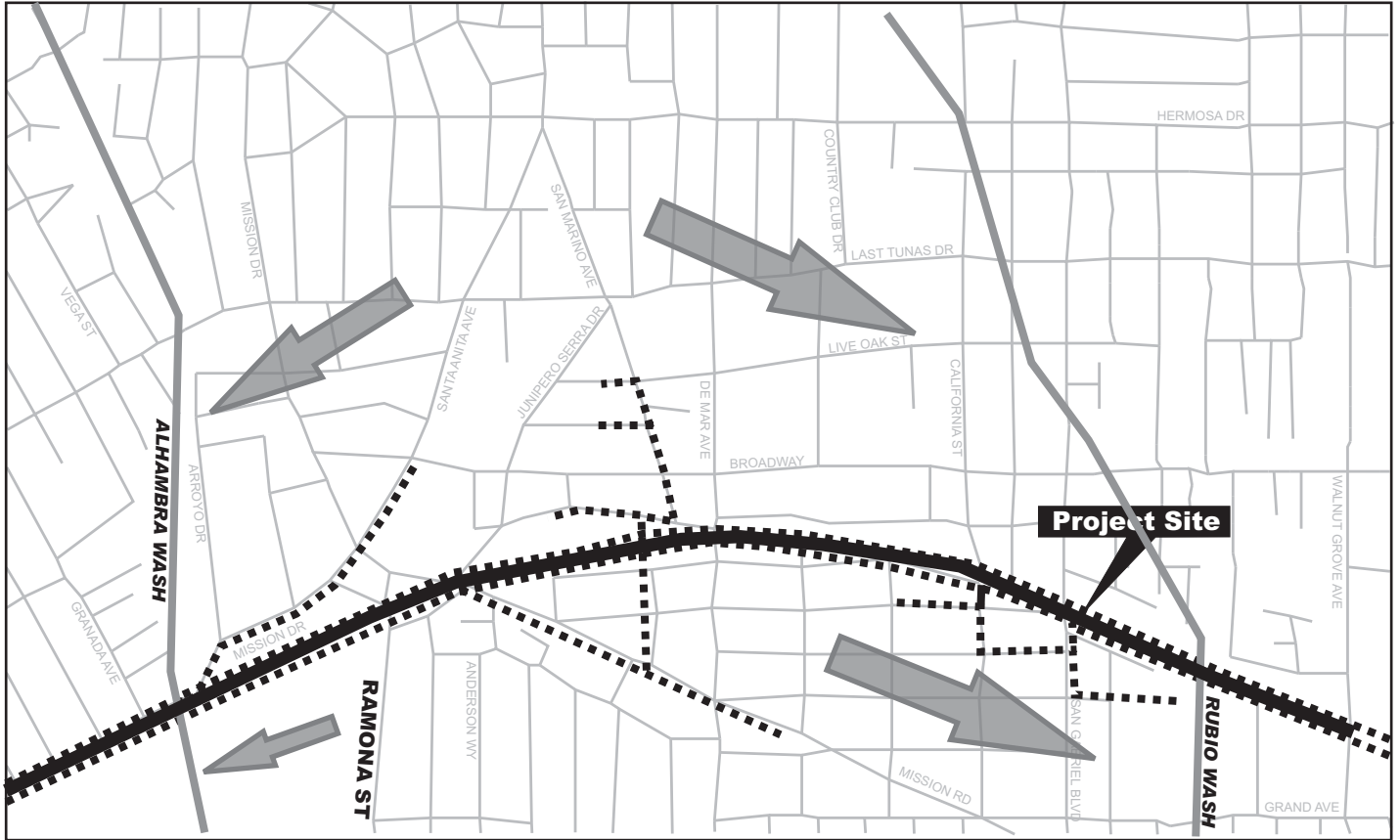
additional disposal services either due to construction or operation. Although it is anticipated that the project excavation and demolition will generate approximately 874,500 cubic yards of soil, all of the soil would be hauled off-site by the contractor. It is anticipated that the haul trucks will deliver the soil to the local landfill sites, including Sunshine Canyon Landfill and Puente Hills Landfill. If any hazardous materials are encountered in the soil and debris, they will be disposed of according to State and federal regulations at certified sites in the vicinity of the project site. Additionally, the proposed project does not include a housing element, which would result in population growth and increased demand for solid waste services.

### **Alternative 2 – No Build Alternative**




Under Alternative 2, the project site would not be substantially altered from existing conditions. No construction activities would occur that could generate solid waste.

#### ***Measures to Minimize Harm***

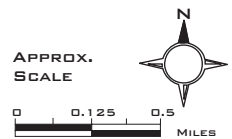
- US1** ACE shall work with affected utility companies to make use of available right-of-way as necessary. Relocation of utilities shall be scheduled to either precede construction or occur simultaneously. Customers shall be notified in advance of any disruptions to service.
- US2** Prior to project grading, in the event that City of Alhambra water lines to the Water Treatment Plant cross the UPRR tracks, ACE shall coordinate with the City of Alhambra to protect in place water mains and lines and sewer/brine lines owned by the City of Alhambra per the December 2009 Mitigation Agreement between the City of Alhambra and ACE.
- US3** ACE shall install a sewer siphon system at Ramona Street, Del Mar Avenue and San Gabriel Boulevard in order to connect the existing sewer lines on the northern side of the UPRR tracks with the southern side. ACE shall coordinate with the City of San Gabriel, as well as the Los Angeles County Sanitation Districts the exact location of these systems. ACE shall work closely with these agencies to ensure that efficient sewer capacity is achieved.
- US4** ACE shall install a graded swale or earthen ditch between the UPRR northern right of way and south side of Mission Road between the Alhambra Wash and Ramona Street to ensure that a 100-year storm event does not impact the proposed project or Mission Road.
- US5** ACE shall construct a new storm drain trunk line that will commence near Junipero Serra Drive and traverse easterly to Rubio Wash along Clary Avenue, Agostino Road and Commercial Ave. Portions of the proposed storm drain, particularly in the area of Clary Street to Agostino Road, will have depths ranging from 15 feet to 20 feet and new storm drains and inlet structures located near the north UPRR right of way will have reverse gradients in order to connect into the proposed trunk line



**LEGEND:**

-  Project Site
-  Los Angeles County Storm Drain Pipe
-  Existing Direction of Flow

SOURCE: Moffat & Nicol, 2008.



**FIGURE 2.1-5**

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## 2.1.8 TRAFFIC AND TRANSPORTATION

### *Regulatory Setting*

The Department, as assigned by FHWA, directs that full consideration should be given to the safe accommodation of pedestrians and bicyclists during the development of federal-aid highway projects (see 23 CFR 652). It further directs that the special needs of the elderly and the disabled must be considered in all federal-aid projects that include pedestrian facilities. When current or anticipated pedestrian and/or bicycle traffic presents a potential conflict with motor vehicle traffic, every effort must be made to minimize the detrimental effects on all highway users who share the facility.

The Department is committed to carrying out the 1990 Americans with Disabilities Act (ADA) by building transportation facilities that provide equal access for all persons. The same degree of convenience, accessibility, and safety available to the general public will be provided to persons with disabilities.

This section provides a description of the transportation setting and assesses the potential circulation impacts associated with the implementation of the proposed project.

### *Affected Environment*

#### Existing Street System

The existing street system in the vicinity of the project site consists of a regional highway system including major arterials and a local street system including secondary arterials, collectors, and local streets (Figure 1-1 Regional Location). The San Bernardino Freeway (Interstate 10), the Foothill Freeway (Interstate 210), and Rosemead Boulevard (State Route 19) provide the primary regional access to the project site. The San Bernardino Freeway is located approximately 1.75 miles south of the project area, the Foothill Freeway is located approximately 3.8 miles north of the project area, and Rosemead Boulevard is located 0.63 mile east of the eastern terminus of the project area. The major and other arterial streets used to access the project site include Del Mar Avenue, Mission Road, San Gabriel Boulevard, Las Tunas Drive, and Valley Boulevard. Ramona Street, New Street, Walnut Grove Avenue, and Santa Anita Street provide local access and circulation. Brief descriptions of the arterial facilities serving the study area are included below.

#### Las Tunas Drive

Las Tunas Drive is a major arterial that runs in an east-west direction that is located approximately 0.35 miles north of the project area. Las Tunas Drive provides four travel lanes, has a striped median, and allows parking on both sides of the street.

#### Mission Road

Mission Road is a major arterial that runs in an east-west direction north of the UPRR ROW and southeasterly south of the UPRR ROW. Mission Road parallels the UPRR tracks to the north of the UPRR ROW and intersects the UPRR tracks east of Ramona Street at Junipero Serra Drive. Mission Road is the main roadway to access the San Gabriel Mission and the Mission Historic District in the City of San Gabriel. Mission Road north of the UPRR tracks provides four travel lanes, a striped median, and does not allow parking on either side of the street. Mission Road southeasterly of the UPRR tracks provides two travel lanes, a combination of striped and raised medians, and allows parking on both sides of the street. Mission Road is one of the four grade separations to be completed under the proposed project.

### Valley Boulevard

Valley Boulevard is a major arterial that runs in an east-west direction that is located approximately 1.2 miles south of the project area. Valley Boulevard provides four travel lanes, has a striped median, and allows parking on both sides of the street.

### Garfield Avenue

Garfield Avenue is a major arterial that runs in a north-south direction that is located approximately 0.5 mile to the west of the western terminus of the project area in the City of Alhambra. Garfield Avenue provides access to the western part of the project area from the San Bernardino Freeway. Garfield Avenue provides four travel lanes, has a striped median, and allows parking on both sides of the street.

### Ramona Street

Ramona Street is a local street that runs in a north-south direction. Ramona Street is the westernmost at-grade crossing of the UPRR tracks in the project area. Ramona Street provides access to the San Bernardino Freeway via merger with New Avenue, approximately 0.85 miles to the south of the project area. Ramona Street provides two travel lanes, a striped median, and allows parking on both sides of the street. Ramona Street is one of the four grade separations to be completed under the proposed project.

### New Avenue

New Avenue is a local street that runs in a north-south direction that is located approximately 0.85 mile south of the project area. New Avenue provides access to the western part of the project area from the San Bernardino Freeway via its merger with Ramona Street. New Avenue provides four travel lanes, has a striped median, and allows parking on both sides of the street.

### Del Mar Avenue

Del Mar Avenue is a major arterial that runs in a north-south direction. Del Mar Avenue has an at-grade crossing of the UPRR tracks. Del Mar Avenue provides access to the San Bernardino Freeway from the project area. Del Mar Avenue provides two to four travel lanes, a striped median, and allows parking on both sides of the street. Del Mar Avenue is one of the four grade separations to be completed under the proposed project.

### San Gabriel Boulevard

San Gabriel Boulevard is a major arterial that runs in a north-south direction. San Gabriel Boulevard has an at-grade crossing with the UPRR tracks. San Gabriel Boulevard provides access to the San Bernardino and the Foothill Freeways from the project area. San Gabriel Boulevard provides four travel lanes, a striped median, and allows parking on both sides of the street. San Gabriel Boulevard is one of the four grade separations to be completed under the proposed project.

### Walnut Grove Avenue

Walnut Grove Avenue is an arterial that runs in a north-south direction and is the easternmost at-grade crossing of the UPRR tracks for the project area. Walnut Grove Avenue provides access to the San Bernardino Freeway from the project area. Walnut Grove Avenue is partially located in the County of Los Angeles and the City of Rosemead and provides two to four travel lanes, a striped median, and allows parking on both sides of the street. Minor modifications to Walnut Grove are anticipated as part of the proposed project.

Santa Anita Avenue

Santa Anita Avenue is a local street that runs in a northeasterly direction from its intersection with Mission Road in the project area. Santa Anita Avenue provides local access and via San Marino Avenue (which merges with Sierra Madre Boulevard) to the Foothill Freeway. Santa Anita Avenue provides two travel lanes, has a striped median, and allows parking on both sides of the street.

**Existing Traffic Conditions**

Level of Service

The efficiency of traffic operations at a location is measured in terms of level of service (LOS). Level of service is a description of traffic performance at intersections. The level of service concept is a measure of the average operating conditions at an intersection during an hour. It is based on vehicle-delay and is defined by a range of grades from A to F. LOS A represents free-flow conditions where little or no delay is experienced at the intersection. LOS F characterizes extremely unstable flow conditions and severe congestion with volumes at or near the designed capacity. At LOS F, vehicles are likely to experience major delays crossing an intersection. Minor incidents may lead to forced flow conditions (LOS F) with operating traffic flows substantially less than capacity, which may result in long queues backing up from all approaches to intersections. This analysis incorporates the effects of lane geometry and signal phasing (i.e. protected or permitted left turns) to produce the results described by the LOS scale indicated by delay and LOS. According to the City of San Gabriel, LOS D is acceptable at all signalized intersections within the City. Intersection LOS was analyzed at the signalized intersections for the proposed project using the Critical Movement Analysis (CMA) as described in Transportation Research Circular 212. **Table 2.1-20** describes LOS for signalized intersections.

<b>TABLE 2.1-20: LEVEL OF SERVICE DESCRIPTIONS</b>		
<b>Level of Service</b>	<b>Description</b>	<b>Delay (seconds per vehicle)</b>
A	Excellent operation. All approaches to the intersection appear quite open, turning movements are easily made, and nearly all drivers find freedom of operation.	. 10
B	Very good operation. Many drivers begin to feel somewhat restricted within platoons of vehicles. This represents stable flow. An approach to an intersection may occasionally be fully utilized and traffic queues start to form.	. 10, 20
C	Good operation. Occasionally drivers may have to wait more than 60 seconds, and back-ups may develop behind turning vehicles. Most drivers feel somewhat restricted.	> 20, 35
D	Fair operation. Cars are sometimes required to wait more than 60 seconds during short peaks. There are no long-standing traffic queues.	> 35, 55
E	Poor operation. Some long-standing vehicular queues develop on critical approaches to intersections. Delays may be up to several minutes.	> 55, 80
F	Forced flow. Represents jammed conditions. Backups form locations downstream or on the cross street may restrict or prevent movement of vehicles out of the intersection approach lanes; therefore, volumes carried are not predictable. Potential for stop and go type traffic flow.	> 80

**SOURCE:** Transportation Research Board, *Highway Capacity Manual, Special Report 209*, 2000.

Based on the traffic counts at the project area intersections and the signal timing/phasing, an existing volume-to-capacity ratio (V/C) and corresponding existing level of service (LOS) was determined for

each of the 21 intersections. The analysis is based on traffic counts taken during the school periods, in order to define worst-case situations. **Table 2.1-21** summarizes the results of the intersection capacity analysis for Existing (2008) conditions at each of the 21 intersections analyzed for the proposed project. As illustrated in **Table 2.1-21**, most of the 21 intersections are currently operating at LOS D or better during the AM and PM peak hours. Two intersections, Mission Road/Garfield Avenue and Las Tunas Drive/San Gabriel Boulevard currently operate at LOS E during the PM peak hour.

<b>TABLE 2.1-21: EXISTING LEVEL OF SERVICE AT THE STUDY INTERSECTIONS</b>							
<b>Intersection</b>		<b>AM Peak</b>			<b>PM Peak</b>		
		<b>LOS</b>	<b>Delay</b>	<b>V/C</b>	<b>LOS</b>	<b>Delay</b>	<b>V/C</b>
1	Valley Boulevard/Garfield Avenue	C	25.8	0.66	C	33.3	0.85
2	Valley Boulevard/Ramona Street	C	31.9	0.75	C	31.5	0.82
3	Valley Boulevard/Del Mar Avenue	C	28.5	0.75	D	35.9	0.83
4	Valley Boulevard/San Gabriel Boulevard	C	31.0	0.75	D	41.2	0.86
5	Mission Road/San Gabriel Boulevard	C	22.6	0.83	B	17.8	0.65
6	Mission Road/Del Mar Avenue	D	53.2	0.85	C	31.7	0.76
7	Mission Road/Junipero Serra Drive	C	23.2	0.45	B	19.1	0.44
8	Mission Road/Ramona Street	C	22.1	0.81	D	53.0	0.84
9	Mission Road/Chapel Avenue	C	28.6	0.76	D	38.5	0.95
10	Mission Road/Garfield Avenue	C	31.3	0.85	E	57.5	0.98
11	Las Tunas Drive/S. Mission Drive	B	18.7	0.59	B	19.8	0.67
12	Las Tunas Drive/San Marino Avenue	B	12.7	0.63	B	13.2	0.56
13	Las Tunas Drive/Del Mar Avenue	C	29.6	1.01	C	22.8	0.81
14	Las Tunas Drive/San Gabriel Boulevard	D	48.5	0.95	E	65.7	1.00
15	Broadway/San Gabriel Boulevard	C	29.0	0.76	C	25.1	0.86
16	Santa Anita Avenue/Las Tunas Drive	B	15.4	0.54	B	18.2	0.55
17	S. Mission Drive/Broadway	A	4.7	0.32	A	5.0	0.30
18	Del Mar Avenue/Broadway	B	12.8	0.67	B	16.0	0.72
19	Walnut Grove Avenue/Broadway	B	18.6	0.83	B	17.5	0.84
20	Santa Anita Avenue/S. Mission Drive	B	10.7	0.50	B	10.2	0.46
21	Santa Anita Avenue/Mission Road	C	23.3	0.75	B	17.8	0.57
22	Granda Street/E. Mission Road	C	24.1	N/A	C	20.0	N/A

**SOURCE:** JMD, San Gabriel Trench Construction Transportation Management Plan, 2009.

The data in **Table 2.1-21** indicate that two of the study intersections operate at LOS E or F:

- Mission Road/Garfield Avenue operates at LOS E during the PM peak hour
- Las Tunas Drive and San Gabriel Boulevard operates at LOS E during the PM peak hour

Average Daily Trips

Vehicle volumes were collected on seven area roadway segments, immediately adjacent to the project corridor. Two-days of complete 24-hour roadway volumes were collected by KOA Corporation and averaged to represent on typical day of volume. These locations, and the average daily weekday two-way volumes, are listed below as rounded totals:

- Garfield Avenue, between Mission Road and Park Street- 29,250 vehicles
- Chapel Avenue, between Mission Road and Corto Street- 11,860 vehicles
- Ramona Street, between the UPRR tracks and Main Street- 12,150 vehicles
- Mission Road, between the UPRR tracks and Main Street- 21,700 vehicles
- Del Mar Avenue, between the UPRR tracks and Main Street- 17,100 vehicles
- San Gabriel Boulevard, between the UPRR tracks and Commercial Avenue- 35,310 vehicles
- Walnut Grove Avenue, between the UPRR tracks and Clanton Street- 14,900 vehicles

The highest-volume roadway is San Gabriel Boulevard at 35,310 daily vehicle trips. The lowest volume roadway is Chapel Avenue at 11,860 vehicle trips.

### Congestion Management Program

To address the increasing public concern that traffic congestion is impacting the quality of life and economic vitality of the State of California, the Congestion Management Program (CMP) was enacted by Proposition 111. The intent of the CMP is to provide the analytical basis for transportation decisions through the State Transportation Improvement Program (STIP) process. The Los Angeles County Metropolitan Transportation Authority (Metro), the local CMP agency, has established a countywide approach to implement the statutory requirements of the CMP. The countywide approach includes designating a highway network that includes all State highways and principal arterials within the County and monitoring the network's LOS standards.

The CMP traffic impact analysis guidelines require analyses of all CMP monitoring intersections where a project could add a total of 50 or more trips during either the AM or PM peak hours. Additionally, all freeway segments where a project could add 150 or more trips in either direction during the peak hours must be analyzed.

The nearest CMP arterial monitoring intersection to the project site is the intersection of Rosemead Boulevard/Valley Boulevard, approximately 1.1 miles to the south of the project area. The nearest mainline freeway monitoring location to the project area is located at the Rosemead Boulevard/San Bernardino Freeway intersection, approximately 1.6 miles to the southeast of the eastern terminus of the project area.

### **Parking**

On-street parking is available on a majority of the street corridors in the Cities of San Gabriel, Alhambra, and Rosemead and unincorporated portions of Los Angeles County adjacent to the project site. Additionally, some commercial and other developments in the vicinity of the project site provide off-street parking. The existing street system discussion above describes in more detail the on-street parking availability in these jurisdictions.

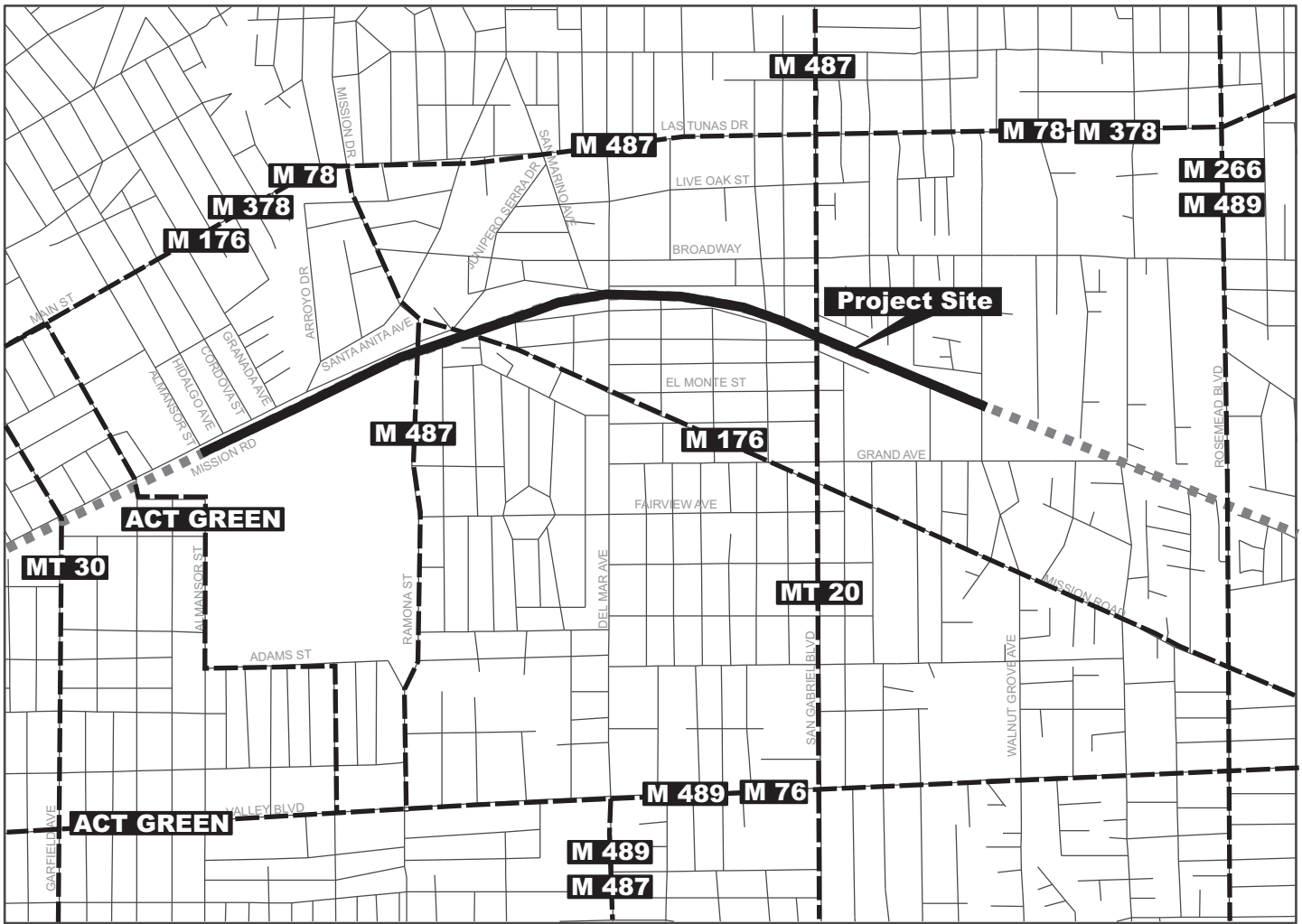
### **Existing Transit Service**

The project area is served by several bus transit lines operated by the Los Angeles County Metropolitan Transportation Authority (Metro), the City of Montebello (Montebello Transit), and the City of Alhambra (Alhambra Community Transit) (**Table 2.1-22**). The Alhambra Community Transit Green Line is a loop route, but in the vicinity of the project site, it runs north-south along Almansor Avenue. Metro runs seven lines in the vicinity of the project area. Montebello Transit runs two lines in the vicinity of the project area. The existing transit lines are shown in **Figure 2.1-6**. Transit lines that utilize any of the four San Gabriel at-grade crossings that would be alternately closed during the proposed project construction include Metro Line 487 (Ramona Street), Metro Line 176 (Mission Road), and Montebello Line 20 (San Gabriel Boulevard).

<b>TABLE 2.1-22: EXISTING TRANSIT LINES SERVING PROJECT AREA</b>				
<b>Operator</b>	<b>Line</b>	<b>Service Direction</b>	<b>Primary Street in Project Area Vicinity</b>	<b>Peak Period Frequency (minutes)</b>
Alhambra Community Transit	Green	North-South	Almansor Avenue	20
Metro	76	East-West	Valley Boulevard	10-12
	78	East-West	Las Tunas Drive	20
	176	East-West	Mission Drive/ Mission Road/Main Street	30-60
	266	North-South	Rosemead Boulevard	20-40
	378	East-West	Las Tunas Drive	18-22
	487	North-South	Ramona Street	30
	489	East-West North-South	Valley Boulevard/ Rosemead Boulevard	20
Montebello Transit	20	North-South	San Gabriel Boulevard	20
	30	North-South	Garfield Avenue	40-45
<b>SOURCE:</b> Iteris, Draft Traffic Study Report for Construction Conditions for the San Gabriel Trench Grade Separation Project, 2008 and the City of Alhambra website, <a href="http://www.cityofalhambra.org/government/public_works/shuttle.html">http://www.cityofalhambra.org/government/public_works/shuttle.html</a> , accessed December 2008.				

**Existing Pedestrian Access**

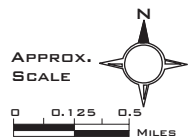
Currently, pedestrian access across the UPRR tracks is generally unrestricted. Although “No Trespassing” signs are posted along the corridor, there are few fences that physically prohibit pedestrians from accessing the UPRR tracks. Signals are present at the four at-grade crossings in the project area, which indicate to pedestrians and vehicles of a railroad crossing. Crossing arms and gates are installed at these four intersections as well as flashing lights.



LEGEND:

- Project Site
- - - -** Union Pacific Railroad - Alhambra Subdivision
- . - . -** Bus Line
- M ###** Los Angeles County Metropolitan Transit Authority
- MT ##** Montebello Transit
- ACT XX** Alhambra Community Transit

SOURCE: TAHA, 2009.



San Gabriel Trench Grade Separation Project  
 Environmental Impact Report/Environmental Assessment

ALAMEDA CORRIDOR EAST CONSTRUCTION AUTHORITY

FIGURE 2.1-6

EXISTING TRANSIT LINES

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## ***Environmental Consequences***

### **Increased Traffic**

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The proposed project would eliminate four at-grade crossings in the City of San Gabriel. A trench and four overhead structures (i.e., road bridges) would be built to allow the train to pass under the roadway where it currently intersects with Ramona Street, Mission Road, Del Mar Avenue and San Gabriel Boulevard. In addition, a short section of Main Street between Ramona Street and Mission Road would be vacated as part of the project. This section is a narrow, single lane, one-way connector that provides access for east-bound traffic to Mission Road from Ramona Street. Under the current configuration, vehicles traveling down each of these roads must stop to accommodate the train. As discussed previously, there is currently heavy traffic queuing in the project area on Mission Drive, Santa Anita Street, and Mission Road. The traffic queuing is further impacted by delays caused by trains traveling on the UPRR in its current at-grade configuration. Under current conditions, when traffic is stopped by a train traveling on the UPRR, the traffic queuing at Mission Drive and Mission Road extends past the Mission Drive/Santa Anita Street intersection. The intersections at Ramona Street, Del Mar Avenue and San Gabriel Boulevard experience similar queuing and delay. The length of time that a vehicle is stopped would vary and could range from just a few seconds (if they reach the intersection just as the train is departing) to several minutes (if they arrive at the intersection as crossing arms go down). This current configuration leads to vehicle delay and adds to total delay and congestion in the area. It is estimated that vehicle delay is approximately 1,744 hours per day for all of the four intersections. Implementation of the proposed project would eliminate this delay and alleviate congestion on surrounding streets. This would be a beneficial impact.

#### **Alternative 2 – No Build Alternative**

Under Alternative 2, the proposed project would not be built. Existing conditions would continue to persist at the project site. As traffic on local roadways increases (as population increases and as development occurs), congestion at the four crossing would continue to increase and conditions would deteriorate. As such, continued adverse impacts associated with increased traffic volumes and congestion would occur under Alternative 2.

### **Congestion Management Program**

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

As discussed in the Existing Settings, the CMP traffic impact analysis guidelines require analyses of all CMP monitoring intersections where a project could add a total of 50 or more trips during either the AM or PM peak hours. Additionally, all freeway segments where a project could add 150 or more trips in either direction during the peak hours must be analyzed. The proposed project would involve construction of a trench that would separate the train tracks from the existing at-grade roadways crossings at Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard. The proposed project itself would not generate any additional trips; therefore a CMP analysis is not necessary.

#### **Alternative 2 – No Build Alternative**

The No Build Alternative would not construct a trench to separate the train tracks from the at-grade roadways crossings at Ramona Street, Del Mar Avenue, Mission Road, and San Gabriel Boulevard.

## **Parking**

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The proposed project would involve construction of a trench that would separate the train tracks from the existing at-grade roadways crossings at Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard. The proposed project is not anticipated to permanently remove or restrict parking on any of the streets in the vicinity of the project area. Temporary closures of the at-grade intersections may restrict parking on some streets, but the parking would be made available upon completion of the proposed project. In addition, the proposed project does not include a residential or commercial aspect and would not provide a transit station. Thus, parking spaces are not required as part of the proposed project.

### **Alternative 2 – No Build Alternative**

The No Build Alternative would not construct a trench to separate the train tracks from the at-grade roadways crossings at Ramona Street, Del Mar Avenue, Mission Road, and San Gabriel Boulevard. There is no construction associated with the No Build Alternative and, therefore, no street closures that could temporarily restrict parking. The No Build Alternative would not add parking to the project area. Therefore, no impact would occur.

## **Transit Service**

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

As discussed in the existing settings, there are three transit lines (Metro Lines 176 and 487; Montebello Transit Line 20) that utilize some of the at-grade crossings that would be alternately closed during the proposed project construction. Specifically, Metro Line 487 would be affected by the temporary closure of Ramona Street, Metro Line 176 would be affected by the temporary closure of Mission Road, and Montebello Line 20 would be affected by the construction work on San Gabriel Boulevard. Ramona Street and Mission Road are anticipated to be full street closures and Metro Lines 176 and 487 would need to be re-routed to adjacent streets. The southbound route of Line 487 would be redirected from Ramona Street to Mission Drive to Del Mar Avenue and Fairview Avenue. The northbound route would be redirected to Fairview Avenue, Del Mar Avenue and Mission Road. The traffic study prepared for the project evaluated the proposed transit detours and indicated that although access to this route would generally move as far as one-half mile, this distance would be within a typical walking distance. In addition, measures TT1 and TT2 would reduce the potential for impacts.

As San Gabriel Boulevard would be partially closed for construction, Montebello Line 20 would not require detouring, but may experience some delay due to the limited lane configuration. Measures TT1 and TT2 would also apply to this impact.

### **Alternative 2 – No Build Alternative**

The No Build Alternative would not construct a trench to separate the train tracks from the at-grade roadways crossings at Ramona Street, Del Mar Avenue, Mission Road, and San Gabriel Boulevard. There is no construction associated with the No Build Alternative and, therefore, no street closures that would affect existing transit service.

## **Pedestrian Access**

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The proposed project would involve construction of a trench that would separate the train tracks from the at-grade roadways crossings at Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard. During construction, it is anticipated that one of these crossings would be alternately closed to vehicular traffic. If pedestrian access is restricted or removed during construction of the proposed project, potential adverse impacts would occur. However, project plans and the traffic study for the proposed project indicate that secure pedestrian access will be maintained throughout the construction of the project, additional construction impacts are discussed in Section 2.4.3 Construction Traffic.

After project completion and during operation of the proposed project, pedestrian access is anticipated to be improved due to the elimination of the at-grade crossings and the potential conflicts between trains and pedestrians. Also, formal sidewalks would be installed separating pedestrian traffic from vehicular traffic, these sidewalks and crossing will be in compliance with the American with Disabilities Act (ADA). Therefore, beneficial impacts to pedestrian access are anticipated for the proposed project.

### **Alternative 2 – No Build Alternative**

The No Build Alternative would not construct a trench to separate the train tracks from the at-grade roadways crossings at Ramona Street, Del Mar Avenue, Mission Road, and San Gabriel Boulevard. There is no construction associated with the No Build Alternative and, therefore, no street closures that would affect pedestrian access. Therefore, no impacts associated with pedestrian access are anticipated for the No Build Alternative

### ***Measures to Minimize Harm***

#### **Alternative 1**

- TT1** ACE shall develop a transit detour plan for Metro Lines 176 and 487 in close consultation with Metro to ensure minimal disruption to services. In particular, it is probable that students at San Gabriel High School and other schools in the area use these routes. Construction of the Ramona Street grade crossing shall occur during the summer months, when school is not in session.
- TT2** ACE shall develop either a transit detour plan or a reduced frequency plan for Montebello Line 20 in close consultation with the City of Montebello to ensure minimal disruption to services.

#### **Alternative 2**

None required.

## **2.1.9 VISUAL/AESTHETIC RESOURCES**

### ***Regulatory Setting***

The National Environmental Policy Act of 1969, as amended (NEPA), as amended establishes that the federal government use all practicable means to ensure all Americans safe, healthful, productive, and *aesthetically* (emphasis added) and culturally pleasing surroundings (42 U.S.C. 4331[b][2]). To further emphasize this point, the Federal Highway Administration in its implementation of NEPA (23 U.S.C. 109[h]) directs that final decisions regarding projects are to be made in the best overall public interest

taking into account adverse environmental impacts, including among others, the destruction or disruption of aesthetic values.

Likewise, CEQA establishes that it is the policy of the state to take all action necessary to provide the people of the state “with...enjoyment of aesthetic, natural, scenic and historic environmental qualities.” (CA Public Resources Code Section 21001[b])

### ***Affected Environment***

This section presents the existing visual character, views and vistas, scenic resources, light and glare, and shadow conditions of the project site and vicinity. Following is an analysis of these characteristics as they relate to the project alternatives and an assessment of the potential for significant impacts on the existing aesthetic resources of the area.

### **Visual Character**

Visual character can be defined in terms of the overall impression formed by the relationship between perceived visual elements of the built urban environment existing in the potentially impacted area. Elements contributing to this impression include the following:

- The nature and quality of buildings/structures
- The compatibility between uses and activities with the built environment
- The quality of streetscape, including roadways, sidewalks, plazas, parks and street furniture
- The nature and quality of private property landscaping that is visible to the general public

Visual character functions as a point of reference in assessing whether a project’s features would appear to be compatible with the established built environment. In general, evaluation of visual character is determined by the degree of contrast that could potentially result between the proposed project and the existing built environment. Contrast is assessed by considering the consistency of the following features of a proposed project with those of the existing built environment:

- Scale: Refers to the general intensity of development comprised of the height and set back of buildings
- Massing: Refers to the volume and arrangement of buildings
- Open Space: Refers to set back of buildings and amount of pedestrian spaces

### **City of San Gabriel General Plan**

The Community Design Chapter of the City of Gabriel’s General Plan outlines goals and targets related to urban design, landscaping, streetscape, and maintaining distinct visual corridors and the visual character of the Mission District. This chapter designates significant “portals” or visual entry points into the City. A portal that is located in the project area includes Mission Drive at Arroyo Drive, which represents the western entry into the City. The Community Design Chapter also identifies the project site as an “edge,” which is a boundary between two (or more) different types of areas. The project site acts as an edge between an older residential neighborhood and the San Gabriel Village District, in the south, and the Mission District and San Gabriel Mission, in the north. The San Gabriel Mission is designated as a “landmark,” which is a unique or special point of reference in a city.<sup>33</sup>

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<sup>33</sup>City of San Gabriel, *Comprehensive General Plan of the City of San Gabriel* (2004), Community Design Chapter and Donald Watson, Alan Plattus, and Robert Shibley, *Time-Saver Standards for Urban Design* (2003), except from *The Image of the City* by Kevin Lynch.

The Community Design Chapter presents a goal and targets in reference to the proposed project as stated below:

Goal 10.12: Make the Alameda Corridor East project an amenity of which to be proud.

- Target 10.12.1 Apply for grant funding to secure architectural and engineering enhancements for the San Gabriel stretch of the corridor, including but not limited to ornamental street lighting, enhanced luminaries, street trees and landscaping to soften engineered features, public amenities, bus benches, trash receptacles, ornamental fencing and screening.
- Target 10.12.2: Secure design improvements specifically targeted to improve the character of the streetscape along Mission Drive and Main Street, on each side of the corridor. These should include but not be limited to ornamental street lighting, enhanced luminaries, street trees and landscaping to soften engineered features, public amenities, bus benches, trash receptacles, ornamental fencing and screening.
- Target 10.12.3: Design improvements in such way as to integrate and protect existing historic features, including the Chapman Mill ruins, into the streetscape program.
- Target 10.12.4: Provide incentives that promote the integration of historic and architecturally significant structures into new development.

#### City of San Gabriel Mission District Specific Plan

The City of San Gabriel adopted the Mission District Specific Plan in 2004. The City of San Gabriel Mission District Specific Plan Area is located within the northwestern portion of the City south of Las Tunas Drive, north of Mission Road, west of Junipero Serra Drive, and east of the Alhambra Wash. The San Gabriel Mission (and ancillary contributing buildings), City Hall, and Rancho Las Tunas Adobe are located within the Specific Plan Area. The Mission District Specific Plan is a comprehensive set of tools created to revitalize San Gabriel's Mission District. The main goal of the plan is to improve the area's economic development by attracting people and businesses to the District. This would be accomplished through mixed-use developments along Mission Drive and improved architectural standards. The plan includes development regulations, architectural standards, standards for preserving sites of cultural significance, and methods of improving traffic and parking issues.

The City of San Gabriel Mission District Specific Plan states that the current configuration of the street level crossings of the UPRR tracks at Ramona Street and Junipero Serra Drive, in the southern portion of the Specific Plan Area, contributes significantly to traffic congestion with each train that travels through the area. The Specific Plan is supportive of grade separating the UPRR, specifically, to a below-grade configuration, to reduce traffic congestion and lessen the visual contrast between the UPRR right-of-way and the historic buildings and character of the Specific Plan Area.<sup>34</sup>

#### City of San Gabriel Design Guidelines

The City of San Gabriel has adopted Design Guidelines to encourage particular architectural treatments, urban design features, and landscaping to be implemented with new development, which would assist in maintaining a consistent visual character in the City. The Design Guidelines concentrate specifically on commercial and single- and multi-family residential development.

#### City of Alhambra General Plan

The City of Alhambra General Plan was adopted in 1986. The Environmental Management Element presents goals and policies related to conservation and protection of natural resources, resources

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<sup>34</sup>City of San Gabriel, *Mission District Specific Plan*, 2004.

management, community design, open space, parks and recreation, and hazards management. This Element presents the following applicable policy related to community design:

- Policy 4.3.4: Encourage the beautification of entry points to the City and development of attractive parks, signs, and landscaped right-of-way within clean view of passing motorists to distinguish the City from surrounding cities.

### Project Site

The project site includes the active Alhambra Subdivision of the UPRR and crosses portions of the Cities of San Gabriel, Alhambra, Rosemead and the County of Los Angeles in the San Gabriel Valley (**Figure 2.1-7**). The project site is an active freight railroad right-of-way, which is approximately 100 feet wide and consists of unpaved surfaces and scattered landscaping. No land uses or buildings exist on the project site except for traditional railroad-related facilities such as the railroad tracks and crossing gates. Railroad bridges are currently located over both the Alhambra and Rubio Washes.

### Project Vicinity

The area surrounding the project site primarily consists of industrial, residential, with some office and commercial land uses. The visual character of the project site vicinity varies from the western to the eastern ends. Beginning from Almanson Street, a residential street in Alhambra, the area is characterized by modest one- to two-story single- and multi-family residential buildings. A majority of these residences are either east- or west facing. However, a few of these residences face the south, towards the project site. The Alhambra Municipal Golf Course is located directly adjacent to the project site and represents a large area of open space adjacent to the Alhambra Wash undercrossing. East of the Alhambra Wash are large-scale industrial buildings, as well as San Gabriel High School.

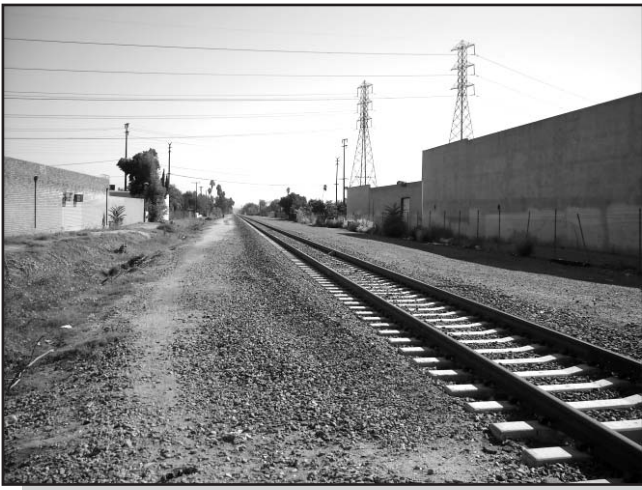
Between Ramona Street and Mission Road the project area is characterized by several historic and significant buildings including the San Gabriel City Hall complex and the historic San Gabriel Mission and supporting ancillary buildings. This area also includes numerous mature palm trees a green open space area. Modest single-family residences are also located in this area.

East of Mission Road to the eastern end of the project site, the project area primarily includes large-scale industrial and storage buildings, single-family residences, as well as the Rubio Wash undercrossing. As with many of the properties that are located directly adjacent to the project site, the back yard areas of many of these residences are separated from the project site by fences or walls. In addition, there is not a direct view from the historic Rancho Las Tunas Adobe (315 Monson Lane), which is located approximately 470 feet southeast of the Mission Road and Junipero Serra Drive intersection.

**Table 2.1-23** summarizes the visual character of the areas adjacent to the project site. The summary is organized by segment of the project site from west to east. The visual character descriptions of each segment are also listed from west to east.



Looking east from Ramona Street, south of the San Gabriel Mission, the project site is bordered by bushes, palm trees, and other landscaping.



Looking east from Walnut Grove Avenue, the project site is bordered primarily by large, industrial buildings.



Looking West from the Rubio Wash, the project site includes Oleander bushes, and is located directly adjacent to one- to two-story single-family residences.

SOURCE: TAHA, 2009.

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<b>TABLE 2.1-23: SUMMARY OF VISUAL CHARACTER</b>	
<b>Segment</b>	<b>Visual Character of Surrounding Area</b>
Almanson Street to Ramona Street	<ul style="list-style-type: none"> <li>• Open green space with mature trees (Alhambra Municipal Golf Course)</li> <li>• One- to two-story single-family residences</li> <li>• One- to two-story multi-family residences</li> <li>• Open space (nursery)</li> <li>• Alhambra Wash</li> <li>• Large two-story industrial/commercial buildings</li> <li>• San Gabriel High School athletic fields; one- to two-story school buildings; surface parking lots</li> <li>• Spanish-style San Gabriel City Hall (Mission District) and mature palm and other trees</li> </ul>
Ramona Street to Mission Road	<ul style="list-style-type: none"> <li>• Historic Mission District</li> <li>• One- to two-story single-family residences</li> <li>• Historic two-story San Gabriel Mission; ancillary support buildings; palm trees and open green space; surface parking lots</li> </ul>
Mission Road to Del Mar Avenue	<ul style="list-style-type: none"> <li>• One- to three-story industrial and storage buildings</li> <li>• Outdoor industrial storage yards</li> <li>• Surface parking lots</li> <li>• Few mature palm and other trees</li> </ul>
Del Mar Avenue to San Gabriel Boulevard	<ul style="list-style-type: none"> <li>• One- to two-story industrial/auto-repair buildings</li> <li>• Outdoor vehicle storage yards</li> <li>• One- to two-story single-family residences</li> <li>• Few mature palm trees and Oleander bushes</li> </ul>
San Gabriel Boulevard to Walnut Grove Avenue	<ul style="list-style-type: none"> <li>• One- to two-story industrial/auto-repair/storage buildings</li> <li>• Large deteriorating (vacant) industrial building spanning Rubio Wash</li> <li>• One- to two-story single-family residences</li> <li>• Industrial surface parking lots</li> <li>• Outdoor storage space</li> </ul>
Walnut Grove Avenue to Muscatel Avenue	<ul style="list-style-type: none"> <li>• One- to two-story industrial buildings</li> <li>• Open space (nursery and greenhouses)</li> <li>• One- to two-story single-family residences</li> <li>• Surface parking lots</li> <li>• Mature palm trees, other trees, and bushes</li> </ul>
<b>SOURCE:</b> TAHA, 2008	

**Figures 2.1-8 through 2.1-10** illustrates the visual character of the areas adjacent to the project site.

The proposed project would include the construction of a trench for the UPRR tracks and four overhead structures or roadway bridges at the current railroad crossings. These structures would be located at Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard. A brief description of the visual character of each of these streets on the project area is presented below.

**Ramona Street.** Ramona Street is a north-south street with one travel lane in each direction and provides direct access to Interstate 10 located to the south. North of the project site, Ramona Street bisects the San Gabriel City Hall and San Gabriel Mission complexes and then turns into Mission Drive. A manicured open green space including mature palm trees and wide pedestrian sidewalks (and crosswalks) is included adjacent to the San Gabriel Mission. South of the project site, the street includes San Gabriel High School and one- to two-story, small-scale, single- and multi-family residences. Several mature trees are located adjacent to the residences.

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Looking east on Mission Road from Ramona Street, the Mission District includes Plaza Park, decorative pedestrian level lighting, and the San Gabriel Mission.



Looking north on S. Mission Drive, from Mission Road, the San Gabriel City Hall building exhibits traditional Spanish-style architecture that is consistent with the San Gabriel Mission.



Looking west on Mission Road, the Mission District includes the historic San Gabriel Mission, the Plaza Park, and mature palm trees.

SOURCE: TAHA, 2009.

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Looking southwest towards San Gabriel High School on Ramona Street, south of the Mission District.



Looking south on Mission Road, at Junipero Sera Drive, is a view of industrial and residential buildings.

SOURCE: TAHA, 2009.

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Looking north on Del Mar Avenue from Main Street: One- to two-story industrial and storage facilities; residences are located to the south.



Looking north on San Gabriel Boulevard: One- to two-story industrial, auto-related, and commercial buildings.

SOURCE: TAHA, 2009.

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**Mission Road.** Mission Road is generally an east-west street with one travel lane in each direction and intersects the UPRR railroad tracks at-grade just south of Junipero Serra Drive. North of the project site, Mission Road is characterized by the historic San Gabriel Mission and supporting ancillary buildings, a manicured open green space including mature palm trees adjacent to the mission, the Spanish-style San Gabriel City Hall complex, large-scale industrial buildings, and modest one- to two-story single family residences. This section of Mission Road includes pedestrian sidewalks only on the north side of the street, and not on the south side, which is directly adjacent to the project site. South of the project site, Mission Road is characterized by one- to two-story industrial buildings and single- and multi-family residences. Mature trees are located along Mission Road primarily near the intersection with the UPRR, as well as the intersection with Junipero Serra Drive.

**Del Mar Avenue.** Del Mar Avenue is a north-south street with one travel lane in each direction and provides direct access to Interstate 10 located to the south. North of the project site, Del Mar Avenue is characterized primarily by medium-scale industrial, auto-related buildings and multi-family residential buildings, one fast food restaurant is also located on Del Mar Avenue in the project area. South of the project site, the street consists of a large-scale storage facility and one- to two-story single and multi-family residences. Several mature trees are located adjacent to the residential buildings, south of the project site.

**San Gabriel Boulevard.** San Gabriel Boulevard is a north-south street with two travel lanes in each direction and provides direct access to Interstate 10 located to the south. North of the project site, San Gabriel Boulevard is characterized by medium-scale, one- to two-story industrial and commercial buildings. South of the project site, this street consists of a large-scale storage facility and one- to two-story commercial and office buildings. Existing landscaping along San Gabriel Boulevard is minimal consisting of scattered small trees and bushes.

### Views and Vistas

Views refer to visual access and obstruction to see a focal point or panoramic view from an area. Typically, views are closely tied to topography and the distance from visual features or resources. The project site is in an urbanized, industrial and residential area within the Cities of San Gabriel and Alhambra. The project site is situated south of the San Gabriel Mountains and is relatively flat with no significant topographical features. The regional topography of the project area is gently sloping to the southeast.

No particularly unique landforms or topographic features exist on or immediately surrounding the project area. The nearest natural feature of visual interest in the project area is the view of the San Gabriel Mountains, located approximately six miles to the north. Motorist and pedestrian view corridors of the San Gabriel Mountains are available along the north-south oriented streets in the project area including Ramona Street, Del Mar Avenue, San Gabriel Boulevard, and Walnut Grove Avenue. Although these view corridors are valued in the project area, there are no local policies or ordinances protecting the view corridors. However, views of the historic San Gabriel Mission are available looking north from the project site. Views of the historic mission from the single-family residences located south of the project site are disrupted due to existing bushes, which block the view, and the location of the residences down-slope from the historic mission. In addition, the south-facing view of the Alhambra Municipal Golf Course from the single-family residential area to the north, is considered to be a valued local view. **Figures 2.1-11 and 2.1-12** show photographs of the existing view corridors in the project area.

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Looking north on Pine Street, just west of San Gabriel Avenue, this is a typical view of the San Gabriel Mountains from the project site.



Looking north on Del Mar Avenue, San Gabriel Mountains are visible.

SOURCE: TAHA, 2009.

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Looking north on San Gabriel Boulevard, the view of the San Gabriel Mountains is interrupted, but still dominates the northern view.



Looking north on Walnut Grove Avenue, the view of the San Gabriel Mountains has fewer visual interruptions.

SOURCE: TAHA, 2009.

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## Scenic Resources

The nearest scenic highway to the project site is State Route 2, north of State Route 210 in La Canada Flintridge, located approximately nine miles northwest of the project site. The view corridors of the San Gabriel Mountains along Ramona Street, Del Mar Avenue, and San Gabriel Boulevard are considered to be a scenic resource. However, the San Gabriel Mission and the Alhambra Municipal Golf Course are the primary visual resources in the vicinity of the project site.

## Light and Glare

The project site is within the central portions of the Cities of San Gabriel and Alhambra and is characterized by primarily industrial, residential, and some commercial uses. A minimal amount of lighting exists within the UPRR right-of-way. However, a high level of ambient light exists in the project area due to required building security, vehicular, and pedestrian street lighting standards. Lighting installed on approximately 40-foot tall light poles currently illuminates the roadways adjacent to the project site. In addition, lighting installed on decorative 20-foot tall pedestrian level lighting illuminate the public sidewalks located adjacent to and within the San Gabriel Mission and San Gabriel City Hall complexes (Mission District).<sup>35</sup>

Glare is a common phenomenon in the Southern California area primarily due to the occurrence of a high number of days per year with direct sunlight and the highly urbanized nature of the region, resulting in a large concentration of potentially reflective surfaces. The majority of existing structures within the project area are comprised of non-reflective materials, such as concrete, wood, and plaster. Glare can result from sunlight reflecting off the plastic awnings or other structural fixtures of industrial buildings located on adjacent to the UPRR right-of-way and on adjacent streets in the project area. During the daytime, parked vehicles can produce a large source of glare from sunlight being reflected off windshields and other surfaces. This phenomenon is noticeable in the numerous small surface parking lots located in the project area.

## Shade and Shadows

Shadows are cast in a clockwise direction from west/northwest to east/northeast from approximately 7:00 a.m. to 4:00 p.m. or later depending on the time of the year: Summer Solstice (June 20), Spring/Fall Equinoxes (March 20 and September 22), and Winter Solstice (December 21). Generally, the shortest shadows are cast during the Summer Solstice and grow increasingly longer until the Winter Solstice. During the Winter Solstice, the sun appears to be lower in the sky and shadows are at their maximum coverage lengths. Shadow impacts may be considered to be significant when they cover shadow-sensitive uses for a substantial amount of time (three to four hours depending on the time of the year). Shadow-sensitive uses generally include routinely useable outdoor spaces associated with residential, recreational, or institutional land uses; commercial uses, such as pedestrian-oriented outdoor spaces or restaurants with outdoor eating areas; nurseries; and existing solar collectors/panels.

Due to the relatively dense arrangement of existing one- to three-story industrial, residential, and commercial buildings within the project area, shadow effects on shadow-sensitive uses already exist in the project area. However, there are no buildings or structures that currently exist on the project site that cast shadows onto shade-sensitive uses for a substantial amount of time.

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<sup>35</sup>The pedestrian level lampposts located adjacent to the San Gabriel Mission and San Gabriel City Hall complexes will be evaluated in future cultural resources reports/surveys.

## ***Environmental Consequences***

### **Visual Character**

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Alternative 1 would grade separate the existing Alhambra Subdivision of the UPRR in the Cities of San Gabriel and Alhambra. The grade separation at Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard would be achieved by lowering the track under these crossings in a trench and constructing bridges over the railroad at each location. The Rubio Wash would be lowered to accommodate the trench profile and a temporary bridge would be required at this location during construction. A railroad bridge would be constructed over the Alhambra Wash.

Alternative 1 would not introduce substantial new visual elements that would alter or contrast with the visual character of the project area. An approximately two-foot tall concrete barrier and six-foot tall fence would be installed at-grade on both sides of the proposed trench. This would be similar to the fences and concrete walls that currently divide the UPRR right-of-way from adjacent industrial and residential properties. However, the proposed concrete barrier and fence would be shorter in height than these existing fences and walls. Although existing landscaping within the UPRR right-of-way would likely be removed with Alternative 1, new landscaping and other visual amenities would be included, which would improve the visual character of the UPRR right-of-way to be more consistent with the visual character of the Mission District. Currently, the landscaping plans include incorporating cultural elements from the City of San Gabriel and the San Gabriel Mission. These landscaping plans are being developed in coordination with the City of San Gabriel to maximize visual cohesion with the surrounding area.

The overhead bridge structures proposed at Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard would be at-grade or street level and would be virtually flat with no noticeable crest. Each vehicular overhead bridge structure would include ample public sidewalk space of at least 11 feet in width. Sidewalks for the overhead bridge structures proposed at Ramona Street and Mission Road would be up to three feet wider than the existing public sidewalks at these locations.

Alternative 1 would not result in a visual contrast with the existing buildings and the visual character in the project area. In addition, Alternative 1 would be consistent with the City of San Gabriel General Plan, City of San Gabriel Mission District Specific Plan, and City of Alhambra General Plan, which support the grade separation of the UPRR railroad in order to improve traffic conditions and visual character. To ensure that Alternative 1 is constructed in compliance with the City of San Gabriel Mission District Specific Plan, Measures **A1** and **A2** are provided below.

#### **Alternative 2 – No Build Alternative**

Under Alternative 2, the project site would not be substantially altered from existing conditions. Therefore, no impacts are anticipated related to visual character.

### **Views and Vistas**

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The primary view of interest from the project area consists of the San Gabriel Mountains located six miles north of the project site. As previously mentioned, the existing view corridors of the San Gabriel Mountains are located along Ramona Street, Del Mar Avenue, San Gabriel Boulevard, and Walnut Grove Avenue in the project area. A significant change to the view corridors is not anticipated because Alternative 1 would not construct any new structures that would be of sufficient height to block existing



north-facing views. As previously mentioned, Alternative 1 would include an approximately two-foot tall concrete barrier and six-foot tall fence located at-grade on both sides of the proposed trench. These new elements would not be tall enough to block or disrupt the existing view of the San Gabriel Mountains. In addition, the existing disrupted view of the San Gabriel Mission from the single-family residential area located south of the project site would be improved with the likely removal of existing landscaping and bushes in the right-of-way. However, the new landscaping installed with Alternative 1 may disrupt this view, which would not be a substantial change of existing conditions. Alternative 1 would not introduce new visual elements at-grade that would block or disrupt the view of the Alhambra Municipal Golf Course from motorists and pedestrians on Mission Road, as well as the residential neighborhoods located to the north.

### **Alternative 2 – No Build Alternative**

Under Alternative 2, the project site would not be substantially altered from existing conditions. Therefore, no impacts are anticipated related to views and vistas.

### **Scenic Resources**

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

As previously mentioned, the nearest scenic highway to the project site is State Route 2, north of State Route 210 in La Canada Flintridge, located approximately nine miles northwest of the project site. Therefore, Alternative 1 would not degrade any scenic resources within a state scenic highway. The San Gabriel Mission and Alhambra Municipal Golf Course are considered to be scenic resources, although they are not located within a scenic highway. However, as described above, views of these scenic resources would not be substantially altered from existing conditions. The view corridors in the project area mentioned above would be considered a scenic resource. However, as previously discussed, the proposed project would not significantly impact these existing view corridors. Therefore, impacts would not be adverse.

#### **Alternative 2 – No Build Alternative**

Under Alternative 2, the project site would not be substantially altered from existing conditions. Therefore, no impacts are anticipated related to scenic resources.

### **Light and Glare**

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The project site is located in an industrial and residential section of the Cities of San Gabriel and Alhambra. The project area currently has a high level of ambient lighting. The proposed project would include security lighting within the trench. The street lighting on the new bridges would be compatible with the surrounding urban area and typical of street lighting in the vicinity and would not expose the surrounding areas to spillover light. In accordance with the City of San Gabriel Mission District Specific Plan, the overhead bridge structure proposed at Ramona Street would include pedestrian level lamppost lighting similar to the existing pedestrian level lighting in the Mission District, adjacent to the San Gabriel Mission and San Gabriel City Hall complexes. With implementation of all applicable local requirements related to exterior lighting and/or railroad trench security lighting, any potential lighting impacts would be less than significant levels. However, to ensure that lighting provided with Alternative 1 is in compliance with the City of San Gabriel Mission District Specific Plan, recommended measures are provided below.

It is anticipated that exterior building materials, such as concrete and plaster, would be used in the construction of the proposed project. When installed properly, these types of exterior building materials

are not considered to be reflective. Exterior building materials associated with proposed project would be installed in compliance with all applicable local standards related to the use of non-reflective materials. In addition, a majority of the proposed project would be located below-grade and not within view of pedestrians and motorists. Measure **A2** is provided to reduce this impact.

### **Alternative 2 – No Build Alternative**

Under Alternative 2, the project site would not be substantially altered from existing conditions. Therefore, no impacts are anticipated related to light and glare.

### **Shade and Shadow**

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Shadow impacts are directly attributable to the building height, massing, and the location of a project relative to shadow-sensitive, off-site land uses. The significance of such impacts is measured by the extent and duration of shading, the type of impacted land use, and the resulting functional effects (the extent and duration, combined with and measured against the use and design of the affected premises). Alternative 1 would lower the existing Alhambra Subdivision of the UPRR to a trench configuration and would not include any structures located at-grade that would potentially cast shadows onto shade-sensitive uses.

### **Alternative 2 – No Build Alternative**

Under Alternative 2, the project site would not be substantially altered from existing conditions. Therefore, no impacts are anticipated related to shade and shadow.

### ***Measures to Minimize Harm***

- A1** ACE shall coordinate with Cities of San Gabriel and Alhambra to ensure that landscaping and any other visual elements installed with the proposed project are consistent with the existing built environment and the City of San Gabriel Mission District Specific Plan. Design elements related to the City of San Gabriel shall be included in the MOU between the City of San Gabriel and ACE. Design elements related to the City of Alhambra will be subject to the review and approval of the City.
- A2** The lighting on the Ramona Street and Mission Road overhead structures shall incorporate design elements as specified in the Mission District Specific Plan.

## **2.1.10 CULTURAL AND PALEONTOLOGICAL RESOURCES**

### ***Regulatory Setting***

“Cultural resources” as used in this document refers to all historical and archaeological resources, regardless of significance. Laws and regulations dealing with cultural resources include:

The National Historic Preservation Act of 1966, as amended, (NHPA) sets forth national policy and procedures regarding historic properties, defined as districts, sites, buildings, structures, and objects included in or eligible for the National Register of Historic Places. Section 106 of NHPA requires federal agencies to take into account the effects of their undertakings on such properties and to allow the Advisory Council on Historic Preservation the opportunity to comment on those undertakings, following regulations issued by the Advisory Council on Historic Preservation (36 CFR 800).

On January 1, 2004, a Section 106 Programmatic Agreement (PA) between the Advisory Council, FHWA, State Historic Preservation Officer (SHPO), and the Department went into effect for Department projects, both state and local, with FHWA involvement. The PA implements the Advisory Council's regulations, 36 CFR 800, streamlining the Section 106 process and delegating certain responsibilities to the Department. The FHWA's responsibilities under the PA have been assigned to the Department as part of the Surface Transportation Project Delivery Pilot Program (23 CFR 773) (July 1, 2007).

Historic properties may also be covered under Section 4(f) of the U.S. Department of Transportation Act, which regulates the "use" of land from historic properties. See Appendix B for specific information regarding Section 4(f).

Historical resources are considered under CEQA, as well as California Public Resources Code (PRC) Section 5024.1, which established the California Register of Historical Resources. PRC Section 5024 requires state agencies to identify and protect state-owned resources that meet National Register of Historic Places listing criteria. It further specifically requires the Department to inventory state-owned structures in its rights-of-way. Sections 5024(f) and 5024.5 require state agencies to provide notice to and consult with the SHPO before altering, transferring, relocating, or demolishing state-owned historical resources that are listed on or are eligible for inclusion in the National Register or are registered or eligible for registration as California Historical Landmarks.

The unique aspect of the proposed project is that the excavation and construction activity will take place in proximity to the San Gabriel Mission. The San Gabriel Mission is one of the 21 missions founded during the Spanish Period of California history (1769 to 1822). The San Gabriel Mission is a recognized cultural resource and its surroundings are culturally and archeologically sensitive. Because of the importance of the Mission and its environs, a comprehensive discovery effort (as described below) has been undertaken, including published sources as well as on-site reconnaissance and field testing by qualified architectural historians and archaeologists. The geographic focus of all work conducted as part of this process within an area designated as the Area of Potential Effects (APE). The APE has been defined to include those properties presumed to be affected by the proposed project. The APE has been established through a consultation and coordination process with Caltrans and the California Historic Preservation Officer (State Historic Preservation Officer or SHPO). As shown in **Figure 2.1-13**, above, what is referred to as the APE consists of two components, a "direct" APE which includes only those areas that would be disturbed by construction activities and an "indirect" APE which includes properties to the north and south that have the potential to be indirectly affected by the proposed project. These terms are further defined below.

A Historic Property Survey Report (HPSR), that includes an Archeological Survey Report (ASR), and Historic Resources Evaluation Report (HRER) was prepared in accordance with Section 106 of the National Historic Preservation Act and its implementing regulations [36 CFR Section 800, December 2000] and CEQA. Due to the number and sensitivity of resources in the project area, the HPSR for the San Gabriel Trench also includes Phase I, Extended Phase I (XPI) and Phase II cultural studies. The purpose of the XPI and Phase II cultural resources studies was to determine the presence of and evaluate the National Register of Historic Places (NRHP) eligibility of historical archaeological sites within the direct APE. The studies are available for review at ACE's offices.

An important step in the identification process is the Caltrans consultation with parties with an interest in the effects of the proposed project on historic properties. Consultation was initiated with SHPO, for the purpose of requesting concurrence on the delineation of the APE, and an inventory of potential historic properties was then conducted. Historic properties are those cultural resources that met criteria for eligibility for listing in the NRHP. Properties eligible for the NRHP are also eligible for nomination to the California Register. Caltrans, in consultation with SHPO and interested parties, determines which

properties within the APE meet eligibility criteria and would be given further consideration regarding project effects.

Under 36 CFR Part 800.4 it is first necessary to determine the scope of identification efforts associated with a project, then to determine and document an APE, defined in Part 800.16(d), to subsequently review existing information on historic properties within the area of potential effects, including data concerning possible historic properties not yet identified; and to seek information, as appropriate, from consulting parties, and other individuals and organizations likely to have knowledge of, or concerns with, historic properties in the area, and to identify issues relating to the undertaking's potential effects on historic properties. According to Section 106, an "historic property" is defined as:

*"any prehistoric or historic district, site, building, structure, or object included in, or eligible for inclusion in, the National Register of Historic Places maintained by the Secretary of the Interior. This term includes artifacts, records, and remains that are related to and located within such properties. The term includes properties of traditional religious and cultural importance to an Indian tribe or Native Hawaiian organization and that meet the National Register criteria (36 CFR Part 800 Protection of Historic Properties, §800.16 Definitions (1) (1))."*

Established in 1966, the NRHP or National Register is the nation's official list of districts, sites, buildings, structures, and objects significant in American history, architecture, archeology, engineering and culture. The National Register recognizes "The quality of significance in American history, architecture, archeology, engineering, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and:

- A. That are associated with events that have made a significant contribution to the broad patterns of our history; or
- B. That are associated with the lives of persons significant in our past; or
- C. That embody the distinctive characteristics of a type, period, or method of construction, or that represent the work of a master, or that possess high artistic values, or that represent a significant and distinguishable entity whose components may lack individual distinction; or
- D. That have yielded or may be likely to yield, information important in prehistory or history (36 CFR Part 60.4).

To be considered for National Register eligibility, properties must generally have been completed at least 50 years before the evaluation is made. Properties which do not meet that age criteria must be demonstrated to possess exceptional significance, in order to be considered for listing.

On January 1, 2004, a Section 106 Programmatic Agreement (PA) among the Advisory Council, FHWA, SHPO, and Caltrans went into effect for Caltrans projects, both state and local, with FHWA involvement. The PA takes the place of the Advisory Council's regulations, 36 Code of Federal Regulations (CFR) Part 800, streamlining the Section 106 process and delegating certain responsibilities to Caltrans.

Historic properties may also subject to Section 4(f) of the U.S. Department of Transportation Act, which regulates the "use" of land from historic properties. See Appendix B for specific information regarding Section 4(f).

"Historical resources" are described under the CEQA, and in California Public Resources Code (PRC) Section 5024.1, which established the California Register. Historical resources are defined as:

*"...a resource listed in, or determined eligible for listing in, the California Register... in a local register of historical resources..., or deemed significant pursuant to criteria set forth in subdivision (g) of Section 5024.1, [are] ... presumed to be historically or culturally significant for purposes of this section, unless the preponderance of the evidence demonstrates that the resource is not historically or culturally significant (PRC §21084.1)."*

Section 5024 requires state agencies to “formulate policies to preserve and maintain, when prudent and feasible, all State-owned historical resources under its jurisdiction.” State agencies must identify and protect state-owned resources that meet National Register eligibility requirements. It specifically requires inventory of state-owned properties in proposed rights-of-way. Sections 5024(f) and 5024.5 require state agencies to provide notice to and consult with SHPO before altering, transferring, relocating, or demolishing state-owned historical resources.

CEQA and the CEQA Guidelines as they apply to cultural resources are also part of this project review. Under CEQA, it is necessary for a lead agency to evaluate proposed projects for the potential to cause significant impacts on “historical resources.” A proposed project that may affect historical resources is submitted to SHPO for review and comment prior to project approval by the lead agency and before any project-related clearance, demolition, or construction activities commence.

Under *PRC* §5024.1, the California Register was established to serve as an authoritative guide to the state’s significant historical and archaeological resources. In order for a property to be considered eligible for listing in the California Register, it must be found by the State Historical Resources Commission to be significant under at least one of the following four criteria; if the resource:

- 1) Is associated with events that have made a significant contribution to the broad patterns of California’s history and cultural heritage.
- 2) Is associated with the lives of persons important in our past.
- 3) Embodies the distinctive characteristics of a type, period, region, or method of construction, or represents the work of an important creative individual or possesses high artistic values.
- 4) Has yielded, or may be likely to yield, information important in prehistory or history.

In addition to possessing one of the above-listed significance characteristics, to be eligible for listing in the California Register, resources must retain integrity to their period of significance. Guidance on the subject asserts “Simply, resources must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance.”<sup>36</sup> Integrity, while somewhat subjective, is one of the complex components of professional judgment that comprise the evaluation of a given property’s historic significance. The requisite conclusion is whether a property retains its integrity; the physical and visual characteristics necessary to convey its significance or it does not. The concept of integrity is defined in State guidelines as “...the authenticity of an historical resource’s physical identity evidenced by the physical survival of characteristics that existed during the resource’s period of significance.” The seven aspects or qualities that, in various combinations, define integrity in National Register guidance are: location, design, setting, materials, workmanship, feeling and association.<sup>37</sup> To retain its historic integrity, a property must possess several, and usually most, of these aspects.

Historical resources are defined in California Public Resources Code (hereinafter *PRC*) §21084.1 as:

*“...a resource listed in, or determined eligible for listing in, the California Register of Historical Resources. Historical resources included in a local register of historical resources..., or deemed significant pursuant to criteria set forth in subdivision (g) of Section 5024.1, [is] ... presumed to be historically or culturally significant for purposes of this section, unless the preponderance of the evidence demonstrates that the resource is not historically or culturally significant.”*

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<sup>36</sup> California Office of Historic Preservation. “Technical Assistance Series #3: What Is the California Register?” 4 September 2002, n.p.

<sup>37</sup> National Park Service, “How to Apply the National Register Criteria for Evaluation” (Washington, DC: Government Printing Office) 1990, revised 2002, n.p. <http://www.cr.nps.gov/nr/publications/bulletins/nrb15/>

The California Register also includes properties which:

- have been formally determined eligible for listing in, or are listed in the National Register (emphasis added);
- are registered State Historical Landmark Number 770 and all consecutively numbered landmarks above Number 770;
- are points of historical interest, which have been reviewed and recommended to the State Historical Resources Commission for listing; and
- are city and county-designated landmarks or districts (if the criteria for designation are determined by the California Office of Historic preservation to be consistent with California Register criteria).

Historic districts are defined in “What is the California Register?” as:

*“a concentration of historic buildings, structures, objects, or sites within precise boundaries that share a common historical, cultural or architectural background. Individual resources within an historic district may lack individual significance but be considered a contributor to the significance of the historic district.”*

PRC §5024.1 states:

(g) A resource identified as significant in an historical resource survey may be listed in the California Register if the survey meets all of the following criteria:

- 1) The survey has been or will be included in the State Historical Resources Inventory.
- 2) The survey and the survey documentation were prepared in accordance with [OHP]... procedures and requirements.
- 3) The resource is evaluated and determined by the office to have a significance rating of category 1-5 on DPR [Department of Parks and Recreation] form 523.
- 4) If the survey is five or more years old at the time of its nomination for inclusion in the California Register, the survey is updated to identify historical resources which have become eligible or ineligible due to changed circumstances or further documentation and those which have been demolished or altered in a manner that substantially diminishes the significance of the resource.

### *Affected Environment*

#### Public Participation/Native American Consultation

Public Participation and Native American Consultation are an essential element of the Section 106 compliance process. Caltrans contacted the Native American Heritage Commission (NAHC) on March 20, 2002, requesting a search of their Sacred Lands File for traditional cultural resources. The reply from the NAHC, dated April 18, 2002, states that the results of the Sacred Lands File search failed to identify the presence of Native American cultural resources in the immediate vicinity of the project area. The NAHC reply included a list of 12 Native American groups and/or individuals who may have knowledge of cultural resources in the project area. Gary Iverson of Caltrans subsequently corresponded with nine Native American groups and/or individuals regarding the current proposed project by letter and telephone call.

#### Archaeology

Cultural resources are nonrenewable, and their scientific, cultural, and aesthetic values can be impaired by disturbance. To deter vandalism, artifact hunting and other activities that can damage cultural resources, only the generalized locations are given herein. The specific site locations are confidential.

For purposes of the cultural resources investigation, the archeological, or direct, APE was delineated. The direct APE encompasses all ground disturbances associated with the project, including an approximately 2.4-mile-long segment of the approximately 100-foot wide railway corridor in the Cities of Alhambra, San Gabriel and Rosemead. In addition to the 100-foot wide segment of the existing UPRR Alhambra subdivision, portions of Ramona Street, Mission Road, Junipero Serra Drive, Clary Avenue, Del Mar Avenue, San Gabriel Boulevard, Commercial Avenue, and Santa Fe Avenue were surveyed as part of the direct APE. The indirect APE includes full- and partial-take parcels, as well as easements surrounding the direct APE. It also includes parcels approximately one parcel away from the direct APE, the San Gabriel Mission District Core, and parcels with potential noise and vibration effects. The direct and indirect APE is shown in Figure 2.1-13.

A literature/records search was conducted that included review of many archival sources such as archeological site records; historic, geological and soils maps; and several inventories of historic properties and ethnic sites. An archaeological survey and a XPI study were conducted to identify archeological sites within the project area.

#### Ethnography

The San Gabriel Trench Grade Separation Project is located in the heart of Gabrielino/Tongva territory. Surrounding native groups included the Chumash and Tataviam/Alliklik to the north, the Serrano to the East, and the Luiseño/Juaneño to the south. There is documented interaction between the Gabrielino and many of their neighbors in the form of intermarriage and trade.

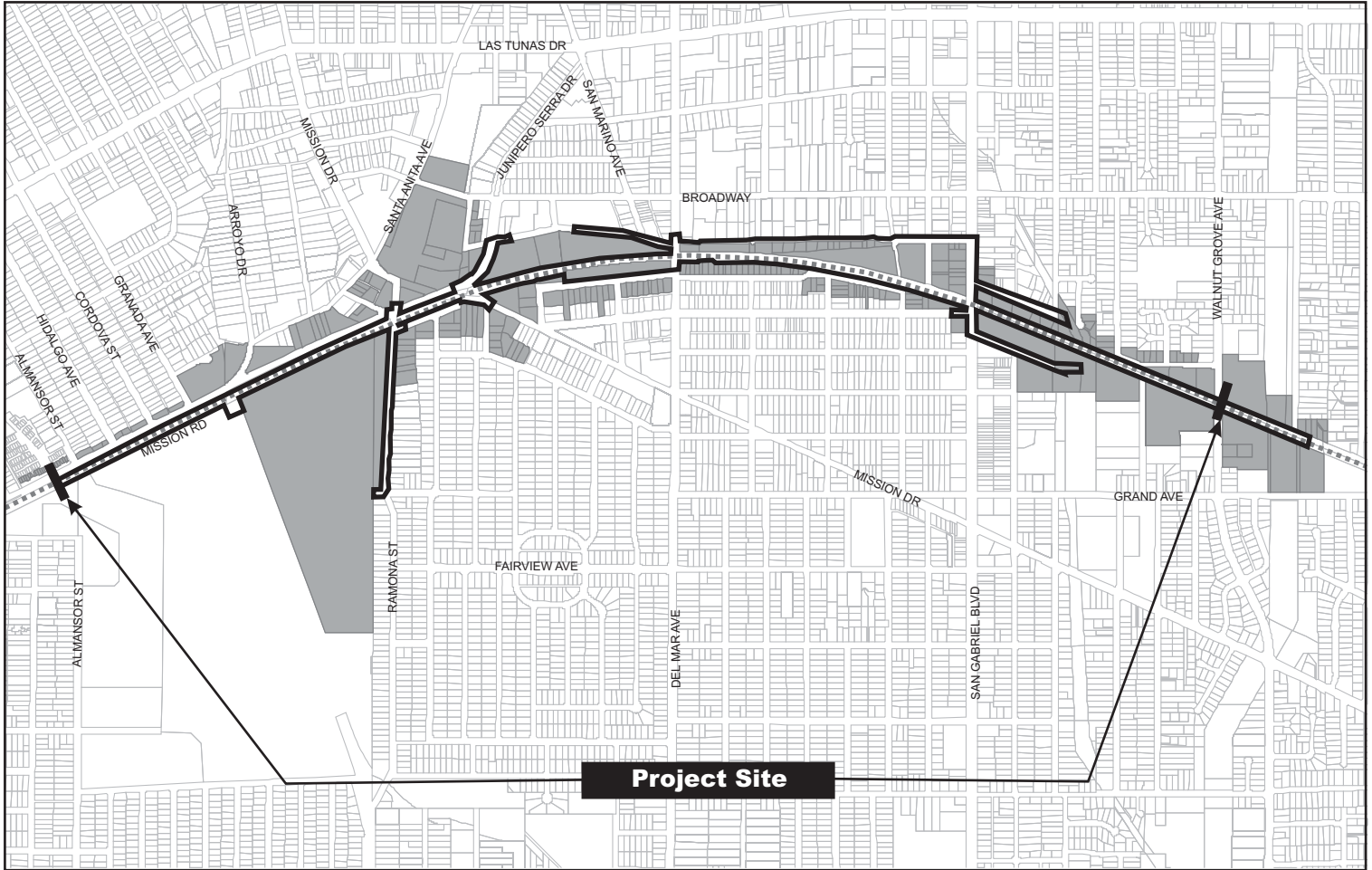
#### Prehistory

Numerous chronological sequences have been devised to aid in understanding cultural changes within southern California. Four periods are generally presented in the prehistoric sequence: Early Man, Milling Stone, Intermediate, and Late Prehistoric.

- *Horizon I–Early Man* (ca. 10,000–6,000 B.C.) - Common elements in many sites from this period, for example, include leaf-shaped bifacial projectile points and knives, stemmed or shouldered projectile points, scrapers, engraving tools, and crescents
- *Horizon II–Milling Stone* (6000–3000 B.C.) - Stone chopping, scraping, and cutting tools made from locally available raw material are abundant in Milling Stone/Encinitas deposits. Less common are projectile points, which are typically large and leaf-shaped, and bone tools such as awls. Items made from shell, including beads, pendants, and abalone dishes, are generally rare. Evidence of weaving or basketry is present at a few sites.

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**LEGEND:**

- Union Pacific Railroad - Alhambra Subdivision
- Direct Area of Potential Effect
- Indirect Area of Potential Effect

SOURCE: TAHA, 2009.



NOT TO SCALE

**San Gabriel Trench Grade Separation Project  
Environmental Impact Report/Environmental Assessment**

ALAMEDA CORRIDOR EAST CONSTRUCTION AUTHORITY

**FIGURE 2.1-13**

**PROJECT AREA OF  
POTENTIAL EFFECTS (AREA)**

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- *Horizon III–Intermediate* (3000 B.C.–A.D. 500) - Chipped stone tools suitable for hunting are more abundant and diversified, and shell fishhooks become part of the toolkit during this period. Larger knives, a variety of flake scrapers, and drill-like implements are common during this period. Projectile points include large side-notched, stemmed, and lanceolate or leaf-shaped forms.
- *Horizon IV–Late Prehistoric* (A.D. 500–Historic Contact) - There was a concomitant increase in the diversity and complexity of material culture during the Late Prehistoric, demonstrated by more classes of artifacts. The recovery of a greater number of small, finely chipped projectile points, usually stemless with convex or concave bases, suggests an increased usage of the bow and arrow rather than the atlatl (spear thrower) and dart for hunting. Other items include steatite cooking vessels and containers, the increased presence of smaller bone and shell circular fishhooks, perforated stones, arrow shaft straighteners made of steatite, a variety of bone tools, and personal ornaments made from shell, bone, and stone.

## History

The post-Contact history of California is divided into three periods: the Spanish Period (1769–1822), the Mexican Period (1822–1848), and the American Period (1848–present)

## Local History

### The San Gabriel Mission

The first Euro-American settlement in Los Angeles County came with the founding of the fourth Alta California mission. The Mission San Gabriel Arcangel was established on September 8, 1771 and moved five miles northwest to its current site in 1775. In addition to the large church, the San Gabriel Mission's facilities included priests' quarters, guest rooms, neophyte housing, shops, a kitchen, a cemetery, and many other structures. While many of these buildings were made with adobe, many Gabrielino residents of the mission community lived in traditional brush houses. The physical center of the community initially consisted of a large, open plaza. The mission complex expanded as the community grew. By 1790, a quadrangle formed by the adobe church, residential apartments, and storerooms had been built. A grand new stone and masonry church was constructed between 1790 and approximately 1801, featuring unique architectural details such as capped buttresses and long, narrow windows that give the building a distinctly Moorish appearance, evoking the cathedral in Cordova, Spain. Later additions to the complex include a second quadrangle, a tannery, numerous granaries, a hospital, three water-powered mills, a hen house, a fountain, a girl's dormitory, and soldiers' barracks. An agricultural settlement at its heart, the gardens, vineyards, animal pens, and grazing lands, along with the aqueduct that watered them, were also essential elements of the San Gabriel community.

The San Gabriel Mission's first grist mill, constructed under the direction of Father José María de Zalvidea in 1816, was a dramatic improvement over the manual grain processing that the mission had previously relied upon. It was built approximately two miles northwest of the mission at the confluence of two small arroyos, in present-day San Marino. The first mill had several design flaws, necessitating a replacement. Joseph Chapman, an American who had recently completed a mill at Santa Inés, was commissioned to build a replacement mill in 1821. Relying on Native American labor, he completed the water-fed facility in 1823. Chapman's Mill was destroyed during the construction of a subdivision street in 1941.

### Chapman's Millrace

Chapman's Mill stood about 200 feet south of the mission and featured a 13.5-foot-diameter undershot waterwheel housed in a masonry chamber that drove large millstones in a separate gear room. The long-abandoned mill was subjected to archaeological excavations on at least two occasions: in 1894 by Dr. Hiram A. Reid and in 1934 by Edith B. Webb. Neither excavation was fully reported. SWCA archaeologists relocated the four masonry constructs that comprise the millrace and identified two additional fragments likely associated with the millrace located on the north side of the UPRR tracks approximately 50 meters northwest of the previously recorded millrace location. These fragments are not in-situ but are constructed in a similar fashion as the millrace in that both the displaced fragments and the intact millrace consist of whole and fragmentary bricks and tiles embedded in concrete. These six features consist of whole and fragmentary bricks and tiles embedded in concrete. The bricks are poorly oxidized and display a distinctive orange exterior and black interior.

### The Southern Pacific Railroad (SPRR)

Southern Pacific Railroad began connecting Los Angeles with neighboring towns to the north, east, and south in 1873. The eastern route, known as the Los Angeles Division, began at the San Fernando Street railyard, crossed the Los Angeles River, and ran through the San Gabriel Valley. Stations were ultimately constructed at San Gabriel, El Monte, and Puente. The line ended at the Spadra stage stop, just west of present-day Pomona. The route commenced regular operations in January 1874, and freight houses were added to the San Gabriel, El Monte, and Spadra stops the same year. In 1875, the line was extended to Colton. Due to engineering and safety advances, such as the introduction of the diesel-electric locomotive and the streamlined passenger train, the original materials and structures on early lines like the Los Angeles Division were obsolete by the 1930s. These included structures built to serve steam engines such as water tanks, wells, and pumping stations. Rapid post-World War II development resulted in the dismantling of additional buildings and equipment. By 1952, most of the original Los Angeles Division facilities had been replaced. UPRR acquired SPRR in 1996, and the Los Angeles Division continues to carry freight and passengers today.

### Field Research

#### Archaeological Survey

SWCA's pedestrian survey located two previously recorded cultural resources: P-19-187367 (Chapman's Millrace) and CA-LAN-185H (a Mission-era artifact scatter). Because these resources are contemporary with, culturally affiliated with, and adjacent to the San Gabriel Mission site (CA-LAN-184H), SWCA recommended that they be included within site CA-LAN-184H and that their previous designations be dropped.

In addition, previous historical research identified the presence of seven potential archaeological resources within the direct APE. These resources include the San Gabriel Mission garden wall, the Spruance Fruit Company warehouse, a concrete pipe culvert, the Southern Pacific Railroad (SPRR) San Gabriel depot, the T. J. Wilson warehouse, a concrete map culvert, and a lime and cement storage building. The pedestrian survey did not identify any surface evidence of these resources. Mission related resources are shown in **Figure 2.1-14**.



View of San Gabriel Mission from Mission Road.



View of the above-surface remnants of the Mill Race from Main Street.

SOURCE: Robert A. Estremo, 2005 and TAHA, 2009.

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### Extended Phase I Study

SWCA's Extended Phase I (XPI) survey consisted of site mapping, artifact collection, shovel test pit (STP) excavation, and a ground penetrating radar (GPR) study. These techniques were intended to establish the presence, vertical and horizontal extent, and potential integrity of the eight potential archaeological resources within the direct APE.

#### *CA-LAN-184H (San Gabriel Mission site)*

These data are interpreted as evidence that a substantial, undisturbed deposit of Mission-period features and artifacts exists at the San Gabriel Mission site (CA-LAN-184H). Intact features exist at and immediately below the current grade, while unmixed artifact deposits exist in parts of the site from about two to three feet below the current ground surface. Therefore, a Phase II study was recommended to assess the eligibility of this component as a contributor to the NRHP-listed San Gabriel Mission (CA-LAN-184H).

#### *Other Potential Archaeological Sites*

The XPI GPR study revealed three areas that may yield subsurface deposits related to the historic building and structure locations in the vicinity of the Spruance Fruit Company Warehouse, the SPRR San Gabriel Depot, and the Lime and Cement Storage building. Phase II testing was recommended in the form of mechanical trenching in these areas to investigate the possibility of intact buried resources related to these buildings to evaluate the NRHP-eligibility of each of these resources.

No evidence of remnants was observed in the immediate vicinity of the T. J. Wilson Warehouse. No further work is recommended for this potential resource. Due to safety concerns and the likelihood of GPR signal interference related to their proximity of active rails, the two culvert features could not be included in the GPR survey. Consequently, the XPI testing cannot confirm or disconfirm the existence of these resources within the UPRR right-of-way. For the same safety reasons, Phase II testing at these locales is not possible.

It is recommended that a qualified archaeological monitor attempt to locate and evaluate these culverts during the track removal phase of the proposed project.

### Archaeological Evaluation (Phase II) Study

The Phase II study included the manual excavation of test units and shovel test pits at CA-LAN-184H and mechanical trenching in the vicinity of the historically mapped Spruance Fruit Company Warehouse and Lime and Cement Storage building. Mechanical trenching was planned in the mapped location of the SPRR San Gabriel Depot, but found not to be possible due to the proximity of fiber optic transmission lines. It is recommended that the SPRR San Gabriel Depot be further investigated and tested for NRHP-eligibility during the utility relocation phase of the proposed project.

The Phase II study was intended to establish the presence of archaeological deposits associated with the two historic buildings and to evaluate the eligibility of all three resources (CA-LAN-184H, Spruance Fruit Company Warehouse, and Lime and Cement Storage building) for listing in the National and California Registers. Although CA-LAN-184H is already listed in the National and California Registers under Criteria A/1 and C/3, it is not listed under Criterion D/4.

Mechanical trenching in the former location of the Spruance Company Warehouse revealed a layer of charcoal and unburned wood likely related to the 1927 fire that destroyed the warehouse. No diagnostic artifacts or building foundations were identified in this location. Mechanical trenching in the former location of the Lime and Cement Storage building identified a buried concrete building foundation with a single associated brick stamped with the word "SIMONS." This brick dates from 1890-1929, which is in line with the date of construction for the Lime and Cement Storage building (between 1913 and 1938). Due to a lack of data potential, these two archaeological resources are not eligible for the National or

California registers under Criteria D/4. Due to a lack of integrity, they are not eligible for the registers under the remaining criteria. No further work is recommended for these resources.

The manual excavation of seven 1 x 1 meter test units, five 2 x 3 meter trench units, and several additional trench units and STPs at CA-LAN-184H confirmed and expanded upon the results of the XPI study. The trench units exposed portions of Chapman's Millrace and the mission garden wall foundation, revealing them to have substantial and intact segments within the direct APE. The excavations recovered over 18,000 artifacts and ecofacts, as deep as approximately five feet below the current ground surface. Although the upper portion of the site demonstrated substantial mixing between American period and Mission period deposits, an intact, 1.4 to 1.8 feet-thick Mission period stratum was exposed in two test units. This deposit includes food remains, ceramic artifacts, and other materials that are associated with the mission's Native American occupation. Because the portion of CA-LAN-184H within the direct APE retains substantial and intact Mission period features and artifact deposits, it is eligible for the National and California Registers at the state and local level of significance under Criteria D/4.

## Architectural History

### Historical Resources in the Built Environment

There are numerous buildings within the project area that are old enough to merit review (build more than 50 years ago). As was the case with the archeological review, an architectural, or indirect APE was delineated for the project in consultation with Caltrans, and takes into account both direct and indirect effects. The built environment survey identified 271 resources that are within the project APE. Of the 271 resources located within the APE, 99 properties warranted consideration for National and California Register eligibility. Of the 99 resources evaluated for historic significance, 16 are eligible for the National and California Registers, including two (2) that were previously identified as historically significant:

- **Mission San Gabriel Arcángel, 428 S. Mission Drive, San Gabriel.** The Mission San Gabriel Arcángel was separately listed by in the National Register of Historic Places by the Keeper in 1971, and was designated State Historic Landmark No. 158 in 1935. This resource is also listed in the California Register. The mission is the anchor property for the Mission San Gabriel Arcángel Historic District under Criteria A/1 and C/3.
- **San Gabriel Mission Elementary School, 416 S. Mission Drive, San Gabriel.** The San Gabriel Mission Elementary School was determined eligible for the National Register under Criterion C as a separate property in 1994 by consensus through the Section 106 process. It is, therefore, listed in the California Register. The school is also eligible for listing in the National and California Registers as a contributor to a larger, historic district, the Mission San Gabriel Arcángel Historic District of Mission-related buildings at the state and local level of significance under Criteria A/1 and C/3

Fourteen (14) resources were found for the National Register and California Registers:

- **San Gabriel City Hall, 425 S. Mission Drive, San Gabriel.** The San Gabriel City Hall is eligible as a contributor to the San Gabriel Civic Center District at the local level under Criteria A/1 and C/3. It is also separately eligible under Criteria A/1 and C/3.
- **Arcade Shops, 409-419 S. Mission Drive, San Gabriel.** The Arcade Shops are eligible for listing in the National and California Registers at the local level of significance as a contributor to the San Gabriel Civic Center Historic District under Criteria A/1 and C/3.
- **403-407 S. Mission Drive building, 403-407 S. Mission Drive, San Gabriel.** The 403-407 S. Mission Drive building is eligible for listing in the National and California Registers at the local



level of significance as a contributor to the San Gabriel Civic Center Historic District under Criteria A/1 and C/3.

- **The Raya building/(former) Post Office, 401 S. Mission Drive, San Gabriel.** This resource is eligible for listing in the National and California Registers at the local level of significance as a contributor to the San Gabriel Civic Center Historic District under Criteria A/1 and C/3.
- **San Gabriel Mission Museum, 428 S. Mission Drive, San Gabriel.** The San Gabriel Mission Museum is eligible for listing in the National and California Registers as a contributor to a larger, National and California Register historic district, the Mission San Gabriel Arcángel Historic District of Mission-related buildings at the state and local level of significance under Criteria A/1 and C/3. The museum is eligible for separate listing in the National and California Registers under Criteria A/1, B/2, C/3 and D/4. Despite its construction by and for the Catholic Church, the adobe's associative eligibility is for its direct connection to the Mission as housing for the Padres, and for its embodiment of the distinctive characteristics of a type (early residences), period (Mission, Mexican and American), and archaic adobe method of construction (Criteria Consideration A).
- **San Gabriel Mission Gardens, 416 S. Mission Drive, San Gabriel.** The San Gabriel Mission Gardens is eligible for listing in the National and California Registers as a contributor to a larger, historic district, the Mission San Gabriel Arcángel Historic District of Mission-related buildings at the state and local level of significance under Criteria A/1 and C/3. The San Gabriel Mission Gardens is also separately eligible for the National and California Registers under Criterion A/1.
- **San Gabriel Mission Curia, 412-414 S. Mission Drive, San Gabriel.** The San Gabriel Mission Curia is eligible for listing in the National and California Registers as a contributor to a larger, historic district, the Mission San Gabriel Arcángel Historic District of Mission-related buildings at the state and local level of significance under Criteria A/1 and C/3.
- **Church of the Annunciation, 425 S. Junipero Serra, San Gabriel.** The Church of the Annunciation is eligible for listing in the National and California Registers as a contributor to a larger, historic district, the Mission San Gabriel Arcángel Historic District of Mission-related buildings at the state and local level of significance under Criteria A/1 and C/3.
- **Ortega-Vigare Adobe, 614-616 S. Ramona Street, San Gabriel.** The Ortega-Vigare Adobe is eligible for listing in the National and California Registers as a contributor to San Gabriel Adobes Historic District at the state and local level of historic significance under Criteria A/1, B/2, C/3 and D/4. The Ortega-Vigare Adobe is also eligible for separate listing in the National and California Registers under Criteria A/1, B/2, C/3 and D/4. It is also California Historic Landmark No. 451.
- **Rancho Las Tunas Adobe, 315 Monson Lane, San Gabriel.** The Rancho Las Tunas Adobe is eligible for listing in the National and California Registers as a contributor to San Gabriel Adobes Historic District at the state and local level of historic significance under Criteria A/1, B/2, C/3 and D/4. The Rancho Las Tunas Adobe is also eligible for separate listing in the National and California Registers under Criteria A/1, B/2, C/3 and D/4.
- **Tile pavement, in alley behind S. Mission Drive and McGroarty Street, San Gabriel.** The tile pavement in the alley behind S. Mission Drive and McGroarty Street is eligible for listing in the National and California Registers at the local level of significance as a contributor to the San Gabriel Civic Center Historic District under Criteria A/1 and C/3.
- **La Casa Vieja De Lopez Adobe, 338 ½ S. Santa Anita Avenue, San Gabriel.** The La Casa Vieja De Lopez Adobe is eligible for listing in the National and California Registers as a contributor to a larger, historic district, the Mission San Gabriel Arcángel Historic District at the state and local level of significance under Criteria A/1 and C/3. In addition, the adobe is eligible for listing in the National and California Registers as a contributor to San Gabriel Adobes Historic District at the state and local level of historic significance under Criteria A/1, B/2, C/3 and D/4. La

Casa Vieja De Lopez Adobe is also eligible for separate listing in the National and California Registers under Criteria A/1, B/2, C/3 and D/4.

- **San Gabriel Mission High School 254 S. Santa Anita Avenue, San Gabriel.** The San Gabriel Mission High School is eligible for listing in the National and California Registers as a contributor to a larger historic district, the Mission San Gabriel Arcángel Historic District, at the state and local level of significance under Criteria A/1 and C/3.
- **San Gabriel Mission Cemetery, 421 S. Junipero Serra Drive, San Gabriel.** The San Gabriel Mission Cemetery is eligible for listing in the National and California Registers as a contributor to a larger historic district, the Mission San Gabriel Arcángel Historic District at the state and local level of significance under Criteria A/1 and C/3.

The location of these resources is shown on **Figure 2.1-15**. **Figure 2.1.16** shows two of the historic adobes located in the project APE.

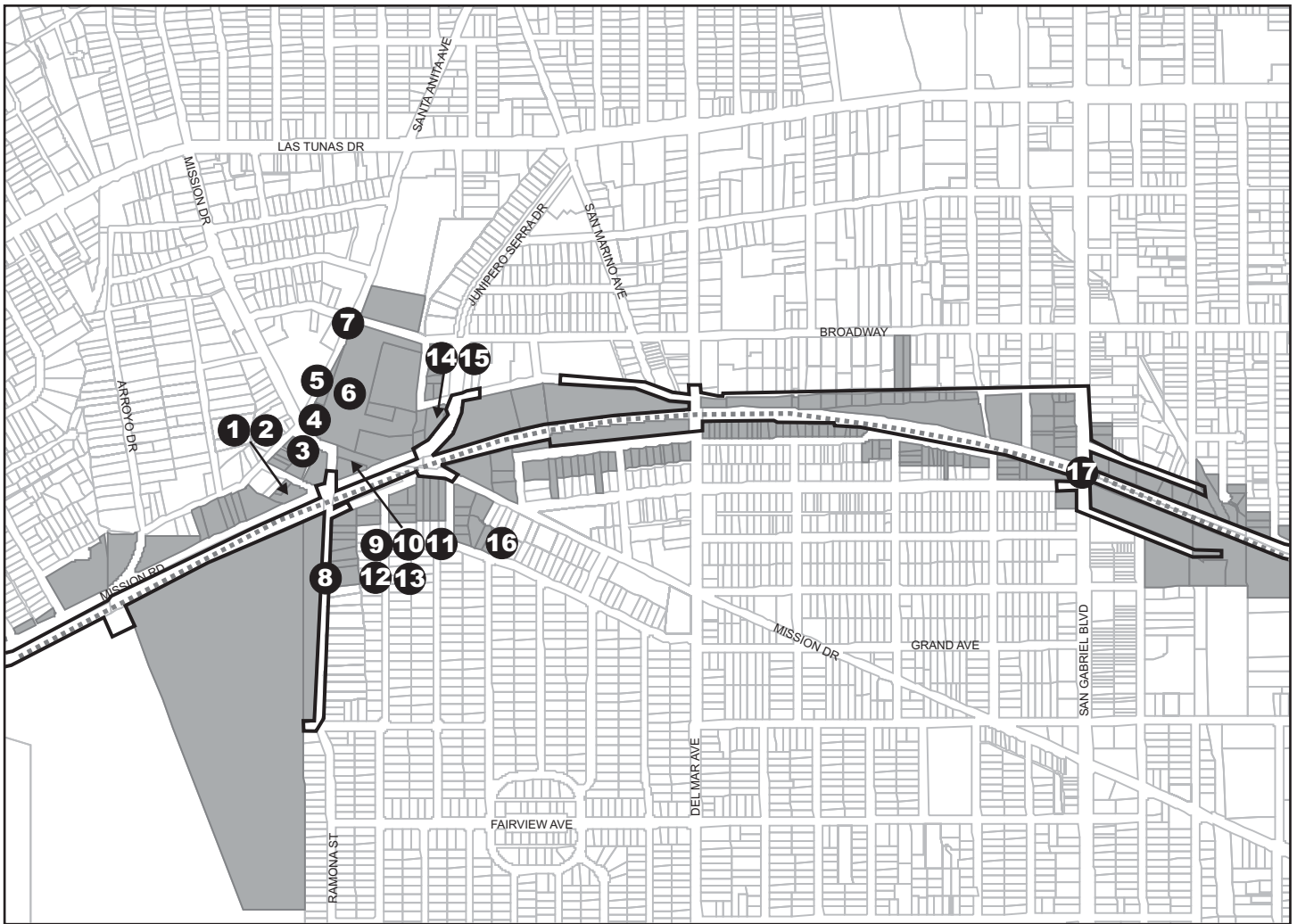
### ***Environmental Consequences***

#### **Historical and Archaeological Resources**

The implementing regulations for Section 106 of the National Historic Preservation Act (NHPA) identify the following as potential adverse impacts on historic properties that are listed on or eligible for the NRHP:

- Physical destruction of or damage to all or part of the property
- Alteration of a property, including restoration, rehabilitation, repair, maintenance, stabilization, hazardous material remediation and provision of handicapped access, that is not consistent with the *Secretary's Standards for the Treatment of Historic Properties* (36 CFR Part 68) and applicable guidelines
- Removal of the property from its historic location
- Change of the character of the property's use or of physical features within the property's setting that contribute to its historic significance
- Introduction of visual, atmospheric or audible elements that diminish the integrity of the property's significant historic features
- Neglect of a property which causes its deterioration, except where such neglect and deterioration are recognized qualities of a property of religious and cultural significance to an Indian tribe or Native Hawaiian organization
- Transfer, lease, or sale of property out of Federal ownership or control without adequate and legally enforceable restrictions or conditions to ensure long-term preservation of the property's historic significance (36 CFR Part 800.5(a) (2))

To comply with Section 106, the criteria of adverse effect are applied to historic properties in the project APE, pursuant to 36 CFR Part 800.5 (a)(1). A finding of no adverse effect may be appropriate when the undertaking's effects do not meet the thresholds set forth in the criteria of adverse effect or in certain cases when the undertaking is modified to avoid or lessen effects. If adverse effects findings are made, mitigation is proposed and resolution of adverse effects occurs through consultation pursuant to 36 CFR Part 800.6(a) to avoid, minimize, or mitigate adverse effects on historic properties.



**LEGEND:**

- ..... Union Pacific Railroad - Alhambra Subdivision
- Direct Area of Potential Effect
- Indirect Area of Potential Effect

**#** Historic Resource

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li><b>1.</b> San Gabriel City Hall</li> <li><b>2.</b> Tile Pavement</li> <li><b>3.</b> Arcade Shops</li> <li><b>4.</b> 403-407 Mission Drive Building</li> <li><b>5.</b> Las Casa Vieja De Lopez Adobe</li> <li><b>6.</b> San Gabriel Mission Elementary School</li> <li><b>7.</b> San Gabriel Mission High School</li> <li><b>8.</b> Ortega-Vigare Adobe</li> <li><b>9.</b> Mission San Gabriel Arcángel</li> </ul> | <ul style="list-style-type: none"> <li><b>10.</b> San Gabriel Mission Gardens</li> <li><b>11.</b> San Gabriel Mission Museum</li> <li><b>12.</b> San Gabriel Mission Curia</li> <li><b>13.</b> The Raya Building/(former) Post Office</li> <li><b>14.</b> San Gabriel Mission Cemetary</li> <li><b>15.</b> Church of the Annunciation</li> <li><b>16.</b> Rancho Las Tunas Adobe</li> <li><b>17.</b> Spanish Galleon Corp</li> </ul> |
|--|--|

SOURCE: TAHA, 2009.



NOT TO SCALE

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View of Las Tunas Adobe from Monson Lane.



View of the Ortega-Vigare Adobe from Ramona Street.

SOURCE: TAHA, 2009.

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CEQA equates a “substantial adverse change” in the historic significance of a resource with a significant effect on the environment (PRC Section 21084.1). Thresholds of substantial adverse change are established in PRC Section 5020.1 as demolition, destruction, relocation, or “alteration activities that would impair the significance of the historic resource.” If a project is expected to result in an effect on historic resources, CEQA Guidelines require analysis of a range of reasonable alternatives to the project, or to the location of the project, which would feasibly attain most the basic objectives of the project and avoid or substantially lessen any significant effects on the historical resource.

On January 1, 2004, a Section 106 Programmatic Agreement (PA) among the Advisory Council, FHWA, SHPO and Caltrans went into effect for Caltrans projects, both state and local, with FHWA involvement. The PA takes the place of the Advisory Councils regulations, 36 CFR 800, streamlining the Section 106 process and delegating certain responsibilities to Caltrans.

Historical resources are considered under CEQA, as well as PRC Section 5024.1, which establishes the California Register of Historical Resources. PRC Section 5024 requires state agencies to identify and protects state-owned resources that meet national Register of Historic Places listing criteria. It further specifically requires Caltrans to inventory state-owned structures in its rights-of-way

## **Archaeology**

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The proposed project would involve construction of a trench that would separate the existing UPRR tracks from the at-grade roadway crossings at Ramona Street, Del Mar Avenue, Mission Road, and San Gabriel Boulevard. The western part of the project area has been documented as an area of high historical and archaeological sensitivity, primarily due to the presence of the San Gabriel Mission. As such, construction of the proposed project could adverse impacts associated with these resources without mitigation. The following archaeological resources may potentially be impacted by the construction of the proposed project.

#### San Gabriel Mission Site (CA-LAN-184H)

An archaeological component of the San Gabriel Mission site, including portions of a garden wall, a grist mill, and a substantial artifact deposit, is located within the direct APE. This component is likely to yield important to historical information. The loss or displacement of these artifacts and features that are related to the Mission would result in an adverse impact.

#### Railroads

Results of the field research indicate that structures and features that once existed within the APE associated with historical train operations may potentially exist as archeological deposits. These structures and features are associated with the operation and maintenance of the SPRR circa 1910 to 1940 and include the Spruance Fruit Company Warehouse, two concrete pipe culverts, and the SPRR Depot. As described above, due to the location of these resources it was not possible to test for their presence either during the XPI or Phase II. Further testing of these resources will be required. It is anticipated that this testing will occur once construction activities or utility relocations are underway. The discovery and destruction of these potential resources would result in an adverse impact.

Operation of the trains on the trench would not result in a direct impact on any known archaeological resources. However, this would be because any remaining archeological resources that are currently located within the APE resources would have been removed during the construction of the trench.

### **Alternative 2 – No Build Alternative**

The No Build Alternative would not create a trench structure. No construction activities would be associated with the No Build Alternative and, therefore, no impacts associated with archaeological resources are anticipated.

### **Architectural History**

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The proposed project would involve construction of a trench that would separate the existing UPRR tracks from the at-grade roadway crossings at Ramona Street, Del Mar Avenue, Mission Road, and San Gabriel Boulevard. The western part of the project area has been documented as an area of high cultural sensitivity, primarily due to the presence of the San Gabriel Mission. As such, construction of the proposed project would have adverse impacts associated with these resources without mitigation.

There is potential for impacts resulting from construction noise and vibration at historic sites located near the UPRR tracks, including the San Gabriel Mission located less than 100 feet north of the project site. A Finding of Effect (FOE) was prepared to determine impacts related to historic resources for the project. The FOE determined that 14 built resources would be adversely effected: Mission San Gabriel Arcángel, San Gabriel Mission Elementary School, La Casa Vieja De Lopez Adobe, San Gabriel City Hall, Arcade Shops, 403-407 South Mission Drive Building, Raya Building San Gabriel Mission Museum, San Gabriel Mission Campo Santo and Work Area, Ortega-Vigare Adobe Rancho, Las Tunas Adobe, Mission San Gabriel Arcángel Historic District (nine contributing properties), San Gabriel Adobes Historic District (three contributing properties), and San Gabriel Civic Center Historic District (five contributing properties).

With operation of the proposed project, the UPRR would operate within a trench below grade rather than its current at-grade configuration. Vibration associated with the operation of the UPRR would be expected to be similar to current conditions. Noise levels at the site would be reduced due to the below-grade configuration which would shield many of the historic properties including the San Gabriel Mission from noise associated with the train traveling on the track. Further, noise associated with train horns, alarms and crossings, would also be reduced as the trains would no longer sound horns while traveling through the intersection of Ramona Street and Mission Road, near the San Gabriel Mission. However, potential noise and vibration impacts regarding historic resources will be further evaluated in the Finding of Effect document prepared for the proposed project. As described above, if adverse effects findings are made, mitigation and resolution occurs through the consultation process that is ongoing.

Improvements associated with the trench would also result in a more visually appealing environment for many of the historic resources in the indirect APE, as passing trains would be hidden from view. In addition, traffic flow and congestion would be improved allowing greater access to the San Gabriel Mission and other cultural sites in the area.

### **Alternative 2 – No Build Alternative**

The No Build Alternative would not create a trench structure. Although potential construction related impacts would not occur, existing conditions at the site including noise, traffic and visual annoyances would persist.

### **Human Remains**

**Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project).** The project site is not part of a formal cemetery. However, due to the history of the project area, it is likely that there are



informal cemeteries in the APE or in the vicinity of the APE. Therefore, it is highly likely that human remains exist on or in the vicinity of the project site. Construction activities (e.g., demolition, grading, etc.) may potentially result in the disturbance and possible loss of these resources, which would result in a significant impact.

Operation of the trains on the trench would not directly impact any human remains as there are trains already operating on the at-grade tracks and there are no formal cemeteries in the vicinity of the project area. Therefore, less-than-significant impacts associated with disturbance of human remains are anticipated during operations of the proposed project.

**Alternative 2 – No Build Alternative** The No Build Alternative would not create a trench structure. No construction activities would be associated with the No Build Alternative and, therefore, no impacts associated with disturbance of human remains are anticipated.

### ***Measures to Minimize Harm***

### **Historical and Archaeological Resources**

**CR1** A Treatment Plan has been developed to address four archaeological resources: San Gabriel Mission archaeological site (CA-LAN-184H), former location of the SPRR San Gabriel Depot, and two historic culverts (Attachment 3). The project's archaeological resources fall into two broad thematic categories: California mission archaeology and railroad archaeology. A Data Recovery Plan (Phase III) is proposed as part of the treatment of these resources. The San Gabriel Mission archaeological site (CA-LAN-184H) contains data that can be used to answer research questions regarding site function and chronology; Native American health, status, and ethnicity; and Mission period architecture and engineering practices. The three potential archaeological resources, if present, may contain data pertinent to research questions regarding site formation processes, chronology, function, and affiliation. Proposed data recovery methods include manual excavation, mechanical excavation, remote sensing, archaeological monitoring, archival research, and the physical relocation of Chapman's Mill and Millrace, as well as numerous specialized laboratory analyses.

Large, diagnostic, or otherwise interesting artifacts will be mapped in situ. Most artifacts and all ecofacts from will be counted and described, placed into zip-top plastic bags labeled with the provenience information, date, excavators, and other pertinent information, and submitted to the archaeological laboratory for cleaning, analysis, and curation preparation. Because bulky building materials such as bricks (*ladrillos*), tiles (*tejas*), rocks, and cement are ubiquitous at CA-LAN-184H, these non-diagnostic artifacts will be volumetrically quantified using a graduated bucket and stockpiled separately on site during the excavation. The Union Pacific Railroad Museum, San Gabriel Mission Arcángel Musuem, San Gabriel Historical Association, and or the Ramona Museum will be allowed to select a representative sample of the materials for public education purposes. The Union Pacific Railroad Museum has first right of refusal. If none of the museums express an interest in curating the materials, they may be distributed to local schools as comparative material to be used as a learning aid for the California Fourth Grade Mission Project studies module or similar purposes. Because there is a potentially large amount of building materials present, SWCA recommends that each organization consider the quantity of materials (e.g. number of buckets, boxes, etc.) that they would like to receive prior to the start of excavation to assist the archaeologists in ensuring that these building materials are properly stockpiled. Because of their limited data potential and the expense of long-term curation, surplus examples of undiagnostic materials will be discarded if the aforementioned groups refuse them.

Archaeological monitoring will be employed for all areas containing buried cultural material as identified by the XPI and Phase II investigations. Archaeological monitoring shall be restricted to sensitive areas, specifically, the upper 10 feet of the broader Mission San Gabriel archaeological

site and in the immediate vicinity of the SPRR San Gabriel Depot and two historic culvert locations. The treatment plan also includes public outreach and Native American coordination, and curation plans, along with a description of the study's anticipated personnel, scope, and schedule.

The treatment plan shall also include an acknowledgment that the proposed mitigation measures and any unanticipated discoveries, including human remains will avoid interfering with UPRR railroad operations. The UPRR has also expressed an interest in observing archaeological excavations. Prior to the start of field work, the UPRR will be notified of the anticipated field schedule to allow railroad personnel to observe the excavations.

- CR2** Prior to and for the duration of ground disturbance, ACE shall provide cultural resources training to key personnel or supervisors (including but not limited to engineers, inspectors, contractor representatives, laborers, operators, foremen, and utility workers) prior to the start of any excavations. The training shall be prepared by an archaeologist and or architectural historian who meet the *Secretary of the Interior's Professional Qualifications Standards*, it may be conducted by any member of the cultural resources team or the Resident Engineer, and may be presented in the form of a video. The training may be discontinued when ground disturbance, including landscaping, is completed.

The training shall describe appropriate measures for treatment and protection in compliance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*. It shall include a discussion of applicable laws and penalties under the law, samples or visual representations of artifacts that might be found in the project vicinity. The training will outline the steps that must be taken in the event that cultural resources are encountered during project construction, including the authority of archaeological monitors to halt construction in the area of a discovery to an extent sufficient to ensure that the resource is protected from further impacts.

- CR3** The Native American monitoring services of a preapproved Native American Monitor of the Gabrieleno/Tongva Tribal Council of San Gabriel, selected by Caltrans and the City of San Gabriel will be retained for the Data Recovery (Phase III) program. The Native American Monitor(s) will ensure that Native American cultural resources will be treated appropriately and will draw from their extensive knowledge of the ethnographic and historic occupation and development of the San Gabriel Mission and the City of San Gabriel. Native American monitoring will occur along the full horizontal extent of the 2.2-mile long direct APE between Post Miles 489.4 to 491.6 to a moderate depth (0-10 feet). The purpose of this monitoring will be to identify unmarked human remains out side of archaeological sites, if any are present. If sensitive Native American cultural materials are identified during the Data Recovery (Phase III) program, archaeologists will coordinate with Native Americans to ensure proper treatment and disposition of the materials

- CR4** If human remains are unearthed during construction, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the human remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). Caltrans District 7 Environmental Planning Branch shall be notified immediately. A detailed plan for the discovery of human remains is outlined in the Treatment Plan (Attachment 3). The plan shall include provisions for preferred removal technique, storage and re-internment to the extent feasible. The plan shall also include an acknowledgment that the plan shall accommodate ongoing rail operations and minimize any potential interference to rail service.

- CR-5** Following the documentation of Chapman's Mill and Millrace, the most intact portion(s) of the feature will be physically relocated to one or more locations for the purpose of public display and

interpretation. The relocation of this heavy and unreinforced masonry feature will be logistically challenging. Relocation and rehabilitation of Chapman's Millrace shall be undertaken in consultation with the qualified structural engineer, in collaboration with a qualified archaeologist, historic architect, or architectural historian (hereinafter qualified consultant team). A Relocation Feasibility Study of the Millrace resource shall be prepared by the qualified consultant team as a baseline, with the intention of determining a specific relocation methodology, identifying receiver sites, and analyzing other factors relevant to the mill and millrace relocation.

If feasible, the features will be housed in a secure and environmentally stable temporary storage facility until their display locations are identified and available. The details of the relocation process, including the destination(s) of the relocated features, will be finalized prior to excavation of the trench. The resulting relocation of Chapman's Mill and Millrace shall be within the existing UPRR right-of-way or in another location between Ramona Street and Mission Road/Junipero Serra that is acceptable to both ACE and the City of San Gabriel. The mill and millrace relocation shall be oriented in the same compass orientation as it is currently. Potential destinations for mill/millrace segments include open space within the project APE, on property owned by the City of San Gabriel (City Hall), or at the Mission San Gabriel Arcángel. If those locations are not feasible due to space constraints, the Millrace shall be relocated to an appropriate substitute receiver site, such as property owned by the Old Mill Foundation (El Molino Viejo), identified prior to construction. Conditions of the sale or transfer of title (e.g., protective covenants, stipulations for the moving process, recordation prior to the move, standards for documentation of the property, re-evaluation of the property in its new location) shall be subject to review and approval by SHPO.

To mitigate effects or impacts to Chapman's Mill and Millrace prior to relocation, the feature will be documented and recorded to Historic American Engineering Record (HAER) standards prior to any construction activities that will directly impact this resource. Recordation of the adversely affected archeological resource is recommended to ensure a permanent record of the feature's appearance and context in its original (donor) site. The resulting HAER documentation will be offered to the Library of Congress, with copies provided to the City of San Gabriel, the San Gabriel Library, and the San Gabriel Historical Association. The HAER report will include a narrative history and context statement for the Millrace.

- CR-6** The public outreach plan referenced in the Treatment Plan (Attachment 3) will include disseminating the results of the archaeological data recovery program to professionals and to the public in the form of a technical report for professionals and a modified version of this report for the public. The professional report will be submitted to the South Central Coastal Information Center (SCCIC) at California State University, Fullerton. SWCA will also submit an article using a portion of the data to an archaeological publication and give presentations at the Society for California Archaeology Annual Meeting. The public report will be made available to the City of San Gabriel, San Gabriel Historical Association, Union Pacific Railroad Museum, San Gabriel Arcángel Mission Museum, San Gabriel Historical Association Museum, Ramona Museum, San Gabriel Library, City of Alhambra Public Library, County of Los Angeles Public Library, Rosemead Branch, City of San Marino Public Library, and the City of Pasadena Public Library. In addition, a public display focusing on Chapman's Mill and Millrace will be created to accompany the millrace in its permanent display location.

In regard to the Mission San Gabriel Arcángel and other eligible buildings, interpretive displays of photographs and drawings produced during the course of built environment studies shall be produced for public exhibition, museum exhibits, or historic image reproduction as part of project public outreach efforts. An appropriate number of interpretive signs or other media (e.g. permanent pole signs, monument signs, or decorative tiles), subject to review and approval by City of San Gabriel, shall be erected in or immediately adjacent to the project area to commemorate and describe the history of historic districts and separate historic properties in the project APE. Details of an acceptable standard height will be negotiated with the City. These

measures will mitigate effects/impacts on historic properties, setting, and changes in views from properties in the project area.

- CR-7** Reports documenting the condition of all historic properties that are expected to be affected by vibration and thus have the potential for damage or differential settlement as a result of the proposed project shall be undertaken prior to the commencement of any construction or demolition activities associated with the proposed project. Those specified properties are: Mission San Gabriel Arcángel, San Gabriel City Hall, Arcade Shops, 403-407 South Mission Drive Building, Raya Building, San Gabriel Mission Museum, Old Kitchen in the San Gabriel Campo Santo and Work Area, La Casa Vieja De Lopez Adobe, Ortega-Vigare Adobe, and Rancho Las Tunas Adobe. Pre-Construction surveys will be conducted subject to approval of the property owners.

Pre-Construction Surveys shall be prepared by a qualified structural engineer with more than five years' experience in successful investment tax credit projects (including seismic retrofit, hereinafter "qualified structural engineer"), subject to approval and collaboration by an architect or architectural historian qualified under the Secretary of the Interior's *Professional Qualifications Standards* in Architecture, Architectural History or History (hereinafter "qualified architectural historian"), and the City of San Gabriel. The Pre-Construction survey prepared for each property is required in order to establish a baseline, and shall contain written descriptions of each property's existing condition, along with photographs and measured drawings, sketches, or CAD drawings of all cracks, walls with particular attention paid to cracks, bulges and planes in and out of plumb, floors in and out of level, openings and roof planes, as needed. The types of drawings deemed appropriate shall be at the discretion of the qualified structural engineer, with consultation by the project qualified architectural historian and the City of San Gabriel. The resulting Pre-Construction surveys shall be made available to property owners and stewards, on request, and shall be retained on file for a minimum of 15 years after project completion at the at the City of San Gabriel Planning Department due to the sensitive nature of the materials.

- CR-8** Prior to issuance of construction permits, updated documentation of San Gabriel Mission Arcángel shall be completed in accordance with Historic American Buildings Survey (HABS) Guidelines and Standards, in compliance with the Secretary of the Interior's Standards for Architectural and Engineering Documentation. The resulting HABS report shall include narrative discussion of the significance of the building in context, its physical conditions, historic and updated measured drawings, historic maps and current locator mapping, historic with large-format current-condition photographs, and a historic context statement documenting the history and significance of the resource. The documentation shall be prepared by a qualified historic architect, with the services of a qualified architectural historian. The original archival-quality documentation shall be offered material to the Historic American Buildings Survey for inclusion in the permanent collection of the Library of Congress. Archival copies of the documentation shall be donated to local repositories, including the main San Gabriel Library, the City of San Gabriel, and local historic preservation advocacy groups. This mitigation measure shall be completed prior to commencement of construction activities.

- CR-9** A noise management and monitoring plan shall be adopted for the proposed project with measures such as maximum noise limits and specified hours for noisier construction activities. The adopted noise management plan should include provisions for continuous noise monitoring throughout the duration of the project. It shall be undertaken in consultation with a registered engineer, experienced in noise and vibration control studies with demonstrated success in transit projects (hereinafter, qualified noise and vibration consultant). The Noise Management and Monitoring Plan will be consistent with Chapter 9: Noise of the City of San Gabriel's General Plan. Noise thresholds shall be clearly expressed in project construction specifications, under direction of the qualified noise and vibration consultant, subject to review by qualified structural engineer and incorporated in any applicable project construction cost estimates. If noise studies

indicate significant effects on historic properties, temporary soundwalls shall be erected to reduce the level of effect to less than significant.

- CR-10** A vibration management and continuous monitoring plan shall be developed and adopted to protect historic resources and ensure against damage caused by vibration or differential settlement caused by vibration during project construction and operation activities. The vibration management and monitoring plan shall include continuous vibration monitoring through the duration of the project and for a period of no less than one year following project completion. It shall be undertaken in consultation with a registered engineer, experienced in noise and vibration control studies with demonstrated success in transit projects (hereinafter, qualified noise and vibration consultant).

The vibration management and continuous monitoring plan shall constitute a blended approach, setting up survey targets on the building's crack monitors across existing cracks at the direction of the qualified structural engineer, in order to observe displacements. The use of survey targets and crack monitors will be coupled with continuous vibration monitoring. Continuous monitoring protocol shall include electronic monitoring equipment specified by the noise and vibration consultant at specified historic properties during construction and after, to continuously measure whether ground displacement during construction and operation is approaching the levels at which damage to the historic resources may be anticipated.

Measurement of vibration would be undertaken using specialized monitors with instrumentation "seismographs" capable of recording both ground and airborne vibration. The seismographs or other measuring devices may be left unattended, set to trigger an emission level exceeding a predetermined, set level. Vibration event reports would be reviewed continuously in the first week of construction and demolition activity; with appropriate durations (e.g. alternating days, bi-weekly or weekly) established in consultation with the qualified noise and vibration consultant, in consultation with the qualified structural engineer.

Construction shall be halted if levels of vibrations are found to exceed levels established in the Vibration Management and Monitoring Plan. The resident engineer must stop work in the immediate vicinity if significant vibration levels are reached. Construction may continue elsewhere as long as vibration levels remain below the thresholds established in the Vibration Management and Monitoring Plan. ACE will notify specific property owners in the event that significant vibration levels are reached. Such levels shall be clearly expressed in project construction specifications, under direction of the qualified noise and vibration consultant, subject to review by qualified structural engineer and incorporated in any applicable project construction cost estimates.

If necessary, repair of inadvertent damage caused by differential settlement, vibration, or project construction shall be performed in compliance with the *Standards for Treatment* under the direction of a qualified structural engineer in consultation with, and subject to review and approval by, a qualified historic architect or architectural historian and the City of San Gabriel Planning Department. The cost of such repairs shall be borne by ACE. ACE is not responsible for damage caused by natural events such as earthquakes.

- CR-11** Post-construction surveys, commensurate with and parallel to the level of effort in project Pre-Construction surveys shall be prepared to document condition of the specified historic properties, commenced within the first two months of project completion. The project Resident Engineer shall notify the qualified structural engineer and qualified architectural historian, once the project is substantially completed (e.g., rail traffic is operational in trench). If the Resident Engineer fails to notify the qualified structural engineer and architectural historian, those parties shall notify ACE and shall commence preparation of Post-Construction Surveys.

If, at the discretion of the qualified structural engineer in consultation with the qualified architectural historian, it is found that damage has occurred as a result of project-related activities,

repair of that damage shall be undertaken in conformance with the *Standards for Treatment* under the direction of a qualified structural engineer in consultation with a qualified historic architect or architectural historian. The cost of such repairs shall be borne by ACE.

**CR-12** All visible project-related features in the vicinity of the historic properties identified in the project clearance documentation, subject to review and approval by SHPO (including, walls, barriers, and fences), shall be reviewed by a qualified historic architect or architectural historian for conformance with the *Standards for Treatment*, as they relate to setting and effects to districts and neighborhoods. The resulting project designs shall be subject to courtesy review and comment by representatives of the City of San Gabriel Planning Department and interested historic preservation advocacy groups.

**CR-13** Subject to owner consent, to mitigate effects and impacts to the Mission San Gabriel Arcángel, preparation and submittal of a National Historic Landmark (NHL) application for the Mission San Gabriel Arcángel shall be undertaken by a qualified architectural historian. ACE shall ensure that the NHL Nomination is submitted to SHPO and the National Park Service and oversee amendments or modifications to the application until it is either designated or rejected by the National Park System Advisory Board and Secretary of the Interior. The nomination shall be prepared in collaboration with local historic preservation advocacy groups, as identified by the qualified architectural historian in consultation with the City of San Gabriel.

#### Operational Mitigation Measures

**CR-14** Continuous noise and vibration monitoring for a minimum of the first one year of operation shall be undertaken by the qualified noise and vibration consultant, with collaboration by the qualified structural engineer (see Stipulation IV.H above). The duration and frequency of operational monitoring shall be at the discretion of the qualified noise and vibration consultant, with collaboration by the qualified structural engineer, but shall be no less frequent than the first week of operation, and unless vibrations levels are found to be harmful, after one month, then bi-monthly, etc.

**CR-15** Repair of damage caused by vibration related to the proposed project to specified properties, during construction or the three years following, shall be undertaken as undertaken in conformance with the *Standards for Treatment* under the direction of qualified structural engineer in consultation with a qualified historic architect or architectural historian. The cost of such repairs shall be borne by ACE.

#### Discussion

Caltrans finds that that there are historic properties affected pursuant to Section 106 PA Stipulation IX.B. For the undertaking as a whole, the Federal Highway Administration (FHWA) has determined that the undertaking will have an Adverse Effect on historic properties pursuant to Section 106 Programmatic Agreement Stipulation X.C and, with cooperation and assistance of Caltrans, is consulting SHPO regarding the resolution of adverse effects, pursuant to Section 106 PA Stipulation XI, 36 CFR 800.6(a), and 800.6(b)(1). Mitigation measures that will reduce project effects to each of the affected historic properties are listed in Table 8. To ensure that these mitigation measures are completed, Caltrans has prepared a MOA which stipulates the terms under which the undertaking will be implemented in order to take into account its effects on historic properties

### 2.1.11 PALEONTOLOGICAL RESOURCES

#### **Regulatory Setting**

Paleontology is the study of life in past geologic time based on fossil plants and animals. A number of federal statutes specifically address paleontological resources, their treatment, and funding for mitigation as a part of federally authorized or funded projects. (e.g., Antiquities Act of 1906 [16 USC 431-433], Federal-Aid Highway Act of 1935 [20 USC 78]). Under California law, paleontological resources are protected by the California Environmental Quality Act, the California Code of Regulations, Title 14, Division 3, Chapter 1, Sections 4307 and 4309, and Public Resources Code Section 5097.5.

#### **Federal**

Federal protection for scientifically significant paleontological resources applies to projects if any construction or other related project impacts occur on federally owned or managed lands, involve the crossing of state lines, or are federally funded. The following federal protections may apply to paleontological resources within portions of the project area:

The American Antiquities Act of 1906 establishes a penalty for disturbing or excavating any historic or prehistoric ruin or monument or object of antiquity on federal lands as a maximum fine of \$500 or 90 days in jail.

NEPA recognizes the continuing responsibility of the federal government to “preserve important historic, cultural, and natural aspects of our national heritage....”

The National Historic Preservation Act of 1966 provides for the survey, recovery, and preservation of significant paleontological data when such data may be destroyed or lost due to a federal, federally licensed, or federally funded project.

The Federal Land Management and Policy Act of 1976 defines significant fossils as unique, rare or particularly well-preserved; an unusual assemblage of common fossils; being of high scientific interest; or providing important new data concerning (1) evolutionary trends, (2) development of biological communities, (3) interaction between or among organisms, (4) unusual or spectacular circumstances in the history of life, or (5) anatomical structure.

#### **State**

Guidelines for the implementation of CEQA, define procedures, types of activities, persons, and public agencies required to comply with CEQA.

Other State requirements for paleontological resources management are included in PRC (Chapter 1.7) Sections 5097.5 and 30244. These statutes prohibit the removal of any paleontological site or feature on public lands without permission of the jurisdictional agency, define the removal of paleontological sites or features as a misdemeanor, and require reasonable mitigation of adverse impacts to paleontological resources from developments on public (State) lands.

#### **Local**

The County of Los Angeles is in the process of comprehensively updating the existing Los Angeles General Plan, adopted in 1980. In 2007, a Draft Preliminary General Plan was released in which paleontological resources are addressed under Conservation and Open Space, Section VII Historical, Cultural, and Paleontological Resources. Programs for Cultural and Historical Resources for CEQA indicate the following:

CEQA provided guidelines for the identification and protection of archaeological sites, artifacts, and paleontological resources. If a project threatens an archaeological or paleontological resource, the project is required to provide mitigation measures to protect the site or enable study and documentation of the site. Assessment of these resources requires a survey prepared by a qualified archaeologist or paleontologist.

### ***Affected Environment***

The project is located within the Los Angeles basin physiographic province. The Los Angeles basin is subdivided into four structural blocks, which are bounded by major fault zones extending into underlying crystalline basement. The project area is located within the northeastern block, which is characterized as a triangular wedge about 35 miles in length from north to south and about 18 miles wide from east to west and includes most of the Puente Hills, San Jose Hills, Repetto Hills, and the San Gabriel Valley.

According to geologic mapping, the project is immediately underlain by Quaternary “older” and “younger” alluvial fan and valley deposits. The older alluvial deposits are Pleistocene in age (1.8 million years ago [Ma] to 10,000 years before present [BP]) and composed of undivided and moderately to well consolidated alluvial and fluvial sediments locally dominated by sand and gravel. Younger alluvial deposits are Holocene in age (less than 10,000 years BP to Recent) and composed of undivided and unconsolidated gravel, sand, silt, and clay deposited in modern stream channels and fluvial slope wash. Within the project vicinity, the younger alluvial deposits are predominantly composed of sand and may be distinguished from older alluvial deposits by their relatively poor consolidation and less weathered appearance. The surficial alluvial and fluvial sediments comprising the San Gabriel Valley floor are derived from alluvial fan and floodplain deposits of the numerous local streams and rivers. The depth of these valley deposits may reach as much as 200 feet in thickness.

Numerous fossil localities in Pleistocene-age alluvial and fluvial deposits throughout Southern California have yielded fossilized terrestrial vertebrates such as mammoths, mastodons, ground sloths, dire wolves, short-faced bears, saber-toothed cats, horses, camels, and bison. Therefore, Quaternary older alluvial deposits mapped within the western portion of the project area are determined to have a high paleontological sensitivity. The Holocene-age alluvial deposits mapped within the eastern portion of the project area are too young to contain fossils, although they may contain cultural and biological remains. However, since Pleistocene-age alluvial sediments are likely to underlie these younger sediments at a relatively shallow depth, these sediments are considered to have a paleontological sensitivity increasing from low to high (increasing with depth).

The Vertebrate Paleontology section of the LACM performed a paleontological collections records search to locate fossil localities within and in the immediate vicinity of the project area. Museum records indicate that at least one vertebrate fossil locality yielding scientifically significant vertebrate specimens has been documented somewhat nearby the project area and within Quaternary older alluvium (McLeod, 2009). LACM (CIT) locality 342 yielded fossil remains of *Mammuthus* (mammoth) and *Parapavo californicus* (California Turkey) at a depth of 14 feet below the surface.

### ***Environmental Consequences***

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Surficial and/or very shallow excavations within Quaternary younger alluvial deposits are unlikely to result in adverse impacts to significant paleontological resources; however, deeper excavations into this unit and any excavations within previously undisturbed Quaternary older alluvial deposits may have an adverse impact to paleontological resources. The proposed project includes four grade separations that would include excavation and disturbance of soils to construct the trench and its associated structures (walls, etc.). It is estimated that older alluvial deposits may be present underlying younger alluvial deposits at a depth of 14 feet or greater below ground surface based on previous discoveries in the general



area.<sup>38</sup> The destruction of fossils as a result of human-caused ground disturbance has a significant cumulative impact, as it makes biological records of ancient life permanently unavailable for study by scientists.

Operation of the trains on the trench would not directly impact any paleontological resources as there are trains already operating on the at-grade tracks. Therefore, less-than-significant impacts associated with paleontological resources are anticipated during operations of the proposed project.

### **Alternative 2 – No Build Alternative**

The No Build Alternative would not create a trench structure. No construction activities would be associated with the No Build Alternative and, therefore, no impacts associated with paleontological resources are anticipated.

#### ***Measures to Minimize Harm***

- PR1** All project-related ground disturbances that could potentially affect Quaternary older alluvial deposits will be monitored by a qualified paleontological monitor on a full-time basis, as this geologic unit is determined to have a high paleontological sensitivity. Project-related excavations that occur in surficial sediments and younger Quaternary alluvium (estimated to be present at ground surface to a depth of 14 feet or less) will be spot-checked by the project paleontologist to ensure that underlying sensitive sediments are not being impacted.
- PR2** A qualified paleontologist will be retained to supervise monitoring of construction excavations. Paleontological resource monitoring will include inspection of exposed rock units during active excavations within sensitive geologic sediments. The monitor will have authority to temporarily divert grading away from exposed fossils to professionally and efficiently recover the fossil specimens and collect associated data. The qualified paleontologist will prepare monthly progress reports to be filed with ACE (if requested).
- PR3** At each fossil locality, field data forms will be used to record pertinent geologic data, stratigraphic sections will be measured, and appropriate sediment samples will be collected and submitted for analysis.
- PR4** Recovered fossils will be prepared to the point of curation, identified by qualified experts, listed in a database to facilitate analysis, and repositied in a designated paleontological curation facility. The most likely repository is the LACM.
- PR5** The qualified paleontologist will prepare a final monitoring and mitigation report to be filed with ACE and the repository.

## **2.2 PHYSICAL ENVIRONMENT**

### **2.2.1 HYDROLOGY AND WATER QUALITY**

#### ***Regulatory Setting***

Executive Order 11988 (Floodplain Management) directs all federal agencies to refrain from conducting, supporting, or allowing actions in floodplains unless it is the only practicable alternative. The Federal Highway Administration requirements for compliance are outlined in 23 CFR 650 Subpart A.

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<sup>38</sup>SWCA Environmental Consultants, *Paleontological Resources Assessment of the San Gabriel Trench Separation Project*, September 2009.

In order to comply, the following must be analyzed:

- The practicability of alternatives to any longitudinal encroachments
- Risks of the action
- Impacts on natural and beneficial floodplain values
- Support of incompatible floodplain development
- Measures to minimize floodplain impacts and to preserve/restore any beneficial floodplain values impacted by the project.

The base floodplain is defined as “the area subject to flooding by the flood or tide having a one percent chance of being exceeded in any given year.” An encroachment is defined as “an action within the limits of the base floodplain.”

### ***Affected Environment***

This section provides an overview of hydrology and water quality on the project site and its vicinity and an analysis of impacts to hydrology and water quality associated with the project alternatives. Hydrology and water quality includes surface water hydrology (flood hazards), surface water quality, and groundwater quality. Additional discussion on stormwater can be found in 2.1-5 Utilities.

#### Water Quality

A number of factors affect surface water quality. These factors include, but are not limited to, the following: (1) the types of land uses in a given area, (2) hydrological conditions, (3) meteorological conditions, (4) geological conditions, and (5) soil types. Activities associated with the different types of land uses may affect surface water quality (e.g., an office building generates fewer exterior pollutants that can be washed away by surface water runoff than a surface parking lot that has deposits of oil, gasoline, and other pollutants that may affect the quality of surface water runoff). Similarly, meteorological conditions can influence the quantity and concentration of pollutants that are washed away by surface water runoff through the frequency and intensity of storm events. In addition, geological conditions (e.g., types of soil, presence of geological features) may affect surface water quality in that they determine infiltration and runoff velocity. Surface water runoff has less potential to carry sediments and pollutant when runoff is slow (i.e., sheet flow over a relatively flat surface versus sheet flow down a slope) and infiltrates the soil.

In receiving waters, excess sediments can cause high turbidity, which can affect biological organisms (i.e., plant and animal life in lakes, ponds, rivers, etc.). In urban areas, non-sediment pollutants, such as zinc, copper, and lead, which can cause toxic effects in high concentrations, are most commonly associated with surface water runoff.

In 1972, the Federal Water Pollution Control Act (also referred to as the Clean Water Act (CWA) was amended to provide that the discharge of pollutants to waters of the United States from any point or non-point source is unlawful unless the discharge is in compliance with a National Pollutant Discharge Elimination System (NPDES) permit. In November 1990, the United States Environmental Protection Agency (USEPA) published final regulations that established stormwater permit application requirements for specified categories of industries. With subsequent amendments, current regulations provide that discharges of stormwater to waters of the United States from industrial activities and from construction activities that encompass one acre or more of soil disturbance are effectively prohibited unless the discharge is in compliance with a NPDES permit.

Federal regulations allow two permitting options for stormwater discharges (individual permits and general permits). The State Water Resource Control Board (SWRCB) has elected to adopt one statewide

general permit for construction activity at this time. The General Construction Activities Stormwater Permit (GCASP) applies to all stormwater discharges associated with construction activity, except for those on tribal lands, those in the Lake Tahoe Hydrologic Unit, and those performed by the California Department of Transportation (Caltrans). Currently, the GCASP requires all dischargers where construction activity disturbs one acre or more to conduct the following:

- Develop and implement a Stormwater Pollution Prevention Plan (SWPPP), which specifies Best Management Practices (BMPs) that will prevent all construction pollutants from contacting stormwater and with the intent of keeping all products of erosion from moving offsite into receiving waters;
- Eliminate or reduce non-stormwater discharges to storm sewer systems and other waters of the United States; or
- Perform inspections of all BMPs.

The SWRCB has adopted a general NPDES permit for municipal stormwater and urban runoff discharges within the County of Los Angeles and the incorporated cities therein (excluding the City of Long Beach). The City of Los Angeles has established a Development Best Management Practices Handbook to provide general guidance for selecting and implementing BMPs to prevent the discharge of pollutants from construction sites to receiving bodies of water. This handbook also provides guidance on preparing the State Stormwater Pollution Plan (SWPPP) and a Standard Urban Stormwater Mitigation Plan (SUSMP), which are part of the NPDES permit.

The SUSMP sets requirements for specified types of development and redevelopment Projects for the capture or treatment of stormwater runoff. The SUSMP ordinance identifies a number of BMPs to be utilized to minimize impacts to stormwater runoff.

The Los Angeles Regional Water Quality Control Board (RWQCB) developed the Water Quality Control Plan (Basin Plan) for the Los Angeles Region. The Basin Plan outlines conservation and enhancement of water resources and establishes beneficial uses for inland surface waters, tidal prisms, harbors, and groundwater basins. The Project is located within the Rio Hondo and Los Angeles River Watersheds, to which stormwater captured on the site ultimately flows.

The San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy (RMC) developed the Rio Hondo Watershed Management Plan for the Rio Honda Watershed. The Rio Honda Watershed Plan explores the potential opportunities in water quality, conservation, and supply, habitat preservation, public health and safety, and stewardship of the watershed.

### Groundwater

The project site is located in an urbanized portion of Los Angeles and is developed by as a railroad; the area adjacent to the project site is developed with residential, commercial, industrial and institutional uses. The subsurface soil conditions encountered within the borings generally consist of sands and silty sands with layers of sandy silts and sandy lean clays. Generally gravelly soils were encountered. A layer of gravel approximately 15 feet thick was encountered from approximately 8 feet below existing ground surface (bgs). The sands and silty sands were generally loose to medium dense from the existing ground surface to 10 feet bgs, medium dense to dense from 10 feet to 30 feet bgs, and dense to very dense below 30 feet bgs. The silts and clays were generally hard. Groundwater was not encountered in the borings to 80 feet bgs (maximum depth of borings).<sup>39</sup>

### Drainage

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<sup>39</sup> Moffatt and Nichol, *Draft Preliminary Engineering Report (Advanced Engineering Concept Plan)*, September 3, 2008.

The general topography of the City gradually slopes from the north to the south and the urban runoff and existing storm drain collection systems follow this topographic pattern. In addition to the gradual north to south sloping terrain the natural topography also provides a dividing line or basin boundary for urban runoff/drainage flows in a westerly and easterly direction near the Ramona Street and Mission Road area. The Rubio Wash, located 900 feet (274.32 meters) east of San Gabriel Boulevard, and the Alhambra Wash, located 0.3 mile (0.48 kilometer) west of Ramona Street, are both concrete-lined drainage facilities that cross beneath the existing tracks. Flow in the washes consists primarily of stormwater runoff, which is conveyed to the Rio Hondo drainage channel in the City of El Monte. The Rio Hondo Channel then discharges into the Los Angeles River in the City of South Gate. Surface runoff west of Ramona Street and Mission Road drains toward the Alhambra Wash while runoff east of the basin boundary drains toward the Rubio Wash. The Alhambra and Rubio Washes are two primary flood control channels that convey storm runoff through the City of San Gabriel and other nearby communities and ultimately connect to the Rio Hondo Wash and to the Los Angeles River.

#### Alhambra Wash

The Alhambra Wash is owned and managed by the United States Army Corps of Engineers (USACE), which requires a permit for any construction or modification to their facility. The proposed trench crossing would not encroach into the hydraulic section of the existing Wash. However a new drainage culvert or rail bridge would be constructed as part of the proposed project and therefore a permit will be required from the USACE.

#### Rubio Wash

The Rubio Wash is owned and controlled by the Los Angeles County Department of Public Works (LACDPW), which requires a permit for access and construction. As part of the project Rubio Wash will be lowered where it meets the UPRR to accommodate the trench. A box culvert will be constructed to maintain current drainage flows.

#### Flooding, Inundation and Floodplains

Los Angeles County is subject to a wide range of flood hazards, including those caused by earthquakes, intense storms, and failure of man-made structures. However, there are no areas of 100-year floodplain in the project area. As there are no floodplains in the project area, the risk associated with the project is low. The proposed project would not support incompatible floodplain development. No large bodies of water are present in the vicinity of the project, and the project site is more than 24 miles (38.62 kilometers) from the Pacific Ocean coastline. Based on information provided in the Preliminary Engineering report for the project, the existing storm drain collection systems handles a 10-year storm event. In addition, Las Tunas Drive is a major east/west roadway with an existing major storm drain line along its entire length. This roadway and associated storm drain serves as a basin dividing line between the north to south surface runoff flows. Any water discharge due to the project would require permits from the appropriate agencies. Discharges from the project should also comply with the "Caltrans National Pollutant Discharge Elimination System (NPDES) permit regulation."

#### **Water Quality and Storm Water Runoff**

##### ***Regulatory Setting***

Section 401 of the Clean Water Act requires water quality certification from the State Water Resource Control Board (SWRCB) or a Regional Water Quality Control Board (RWQCB) when the project requires a Federal permit. Typically this means a Clean Water Act Section Section 404 permit to discharge dredge or fill into a water of the United States, or a permit from the Coast Guard to construct a bridge or causeway over a navigable water of the United States under the Rivers and Harbors Act.

Along with Clean Water Act Section 401, Section 402 establishes the National Pollutant Discharge Elimination System (NPDES) for the discharge of any pollutant into waters of the United States. The federal Environmental Protection Agency has delegated administration of the NPDES program to the SWRCB and the nine RWQCBs. To ensure compliance with Section 402, the SWRCB has developed and issued the Department an NPDES Statewide Storm Water Permit to regulate storm water and non-storm water discharges from Department' right-of-way, properties and facilities. This same permit also allows storm water and non-storm water discharges into waters of the State pursuant to the Porter-Cologne Water Quality Act.

Storm water discharges from the Department's construction activities disturbing one acre or more of soil are permitted under the Department's Statewide Storm Water NPDES permit. These discharges must also comply with the substantive provisions of the SWRCB's Statewide General Construction Permit. Non-Departmental construction projects (encroachments) are permitted and regulated by the SWRCB's Statewide General Construction Permit. All construction projects exceeding one acre or more of disturbed soil require a Storm Water Pollution Prevention Plan (SWPPP) to be prepared and implemented during construction. The SWPPP, which identifies construction activities that may cause discharges of pollutants or waste into waters of the United States or waters of the State, as well as measures to control these pollutants, is prepared by the construction contractor and is subject to Department review and approval.

Finally, the SWRCB and the RWQCBs have jurisdiction to enforce the Porter-Cologne Act to protect groundwater quality. Groundwater is not regulated by Federal law, but is regulated under the state's Porter-Cologne Act. Some projects may involve placement or replacement of on-site treatment systems (OWTS) such as leach fields or septic systems or propose implementation of infiltration or detention treatment systems which may pose a threat to groundwater quality. Currently the OWTS program is without SWRCB regulation but you should be aware of threats to groundwater quality on the project site and evaluate and address accordingly in the environmental document. Design standards for installation and operation of infiltration and detention treatment systems should protect groundwater quality and those protections should also be addressed in the environmental document.

#### Statewide Construction Activity General NPDES Permit Requirements

The Construction General Permit requires all dischargers where construction activity disturbs one acre or more to:

- Develop and implement a Stormwater Pollution Prevention Plan (SWPPP) that specifies best management practices (BMPs) to prevent construction pollutants from contacting stormwater, with the intent of keeping all products of erosion moving off-site into receiving waters;
- Eliminate or reduce non-stormwater discharges to MS4s and other waters; and
- Perform inspections of all BMPs.

The discharger must submit a notice of intent (NOI) to the SWRCB and obtain Construction General Permit coverage prior to any soil disturbance. Coverage under this permit would not commence until the discharger develops an adequate SWPPP for the project. The SWPPP must be implemented at the appropriate level to protect water quality at all times throughout the life of the project. The SWPPP's major objectives are to:

- Identify all pollutant sources, including sources of sediment, from the construction site;
- Identify non-stormwater discharges,
- Construct and implement BMPs to reduce or eliminate pollutants in stormwater discharges and authorized non-stormwater discharges, and

- Develop a maintenance schedule for all post-construction BMPs designed to reduce or eliminate pollutants.

The Construction General Permit requires development and implementation of a monitoring program. The program must be implemented at the start of construction activity and must include inspections that:

- Identify areas contributing to stormwater discharge,
- Evaluate whether BMPs identified in the SWPPP are adequate and functioning properly,
- Evaluate whether additional control practices or corrective maintenance activities are needed, and
- Develop a Sampling and Analysis Plan (SAP) that accurately identifies potential sources of pollutants and the locations where these pollutants have the potential

#### Statewide Caltrans NPDES Permit Requirements

In 1996, Caltrans requested that the State Board consider adopting a single NPDES for all activities, properties, and facilities that would cover both the MS4 requirements and the statewide Construction General Permit requirements. The permit is intended to cover all Caltrans activities that require a current MS4 permit and construction activities that require a federal permit.

In its request for a single NPDES permit, Caltrans created a Storm Water Management Program (SWMP). The intent of the SWMP is to reduce or prevent pollutants in stormwater discharge and authorized non-stormwater discharges through the development and implementation of BMPs. The SWMP must also comply with the local MS4 stormwater permit for the region in which the project is located. The BMPs chosen must comply with either Maximum Extent Practicable (MEP) or Best Available Technology Economically Achievable (BAT)/Best Conventional Technology (BCT) standards, whichever is applicable. There are three categories of BMPs in the SWMP:

- Technology-based and pollution prevention controls, including maintenance and design BMPs;
- Construction controls; and
- Treatment controls.

#### ***Environmental Consequences***

##### **Water Quality**

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Construction of the San Gabriel Trench would result in construction activities that have the potential to cause erosion, sedimentation and the discharge of non-stormwater from the project site. Clearing of vegetation and grading activities, for example, would lead to exposed or stockpiled soils susceptible to peak stormwater runoff flows. Also, the compaction of soils by heavy equipment may minimally reduce the infiltration capacity of soils (exposed during construction) and increase runoff and erosion potential. Construction activities and the presence of raw materials for trench construction, such as concrete may also lead to stormwater runoff contamination. If uncontrolled, these materials could lead to water quality problems, including sediment-laden runoff prohibited non-stormwater discharges and ultimately the degradation of downstream receiving water bodies such as the Rio Honda Watershed and ultimately the Los Angeles River. However, BMPs will be implemented in accordance with NPDES permit requirements to control construction erosion and discharges into the Rio Honda channel. With implementation of these measures, no substantial adverse impacts to surface waters would occur.

Alternative 1 would not entail any activity or process that would degrade water quality and would not increase vehicle traffic which could result in an increase in nonpoint-source pollutants or long-term degradation of local surface water quality. Additionally, the proposed project would not substantially

change the area of impervious surfaces. The proposed project would impede the conveyance of local storm water and surface runoff from the north side of the UPRR to the south side. The existing storm drain collection systems would need to be re-routed, or new systems or pump stations constructed to avoid surface runoff from collecting and potentially flooding areas around the trench.

The proposed project includes modifications to two concrete-lined flood channels, Rubio and Alhambra Washes. Rubio Wash will be lowered as part of the project and a new drainage culvert or rail bridge will be built over both the Rubio and Alhambra Washes. Modifications of these washes have the potential to disrupt storm flows either during construction or during operation of the proposed project. However, both channel structures will be built to maintain the existing hydraulic capacity of the existing concrete channels (a flowrate capacity of 8,650 cfs and 13,500 cfs for Alhambra and Rubio Wash, respectively).<sup>40</sup> As such, impacts would not be adverse.

### **Alternative 2 – No Build Alternative**

Alternative 2 consists of the No Build Alternative; under this alternative the project site would remain as is, no construction would occur. As such, water quality impacts would not be expected to occur.

## **Groundwater**

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The project site is developed primarily with industrial uses consisting of UPRR. Groundwater is not known to exist above a depth of 80 feet below ground surface.<sup>41</sup> Excavation activities would not exceed 80 feet, as the proposed trench would be built to a depth of 40 feet. It is, however, possible to encounter wet conditions or perched water conditions during the rainy season or along the Alhambra and Rubio Washes and in irrigated areas such as the Alhambra Golf Course. Planned construction and design should accommodate provisions for such conditions. Construction of Alternative 1 would require grading and excavation. Maximum excavation for the proposed project would be approximately 30 feet (9.14 meters). However, these activities would not interfere with or degrade groundwater supplies, as no areas of shallow groundwater are known to be present within the project site or its immediate vicinity. The types of development proposed for Alternative 1 (i.e., the trench) also would not interfere with or degrade groundwater supplies. Therefore, Alternative 1 would not substantially deplete or degrade groundwater resources or result in a demonstrable reduction in groundwater recharge capacity. Measure **HW1** will ensure groundwater resources would not be adverse.

### **Alternative 2 – No Build Alternative**

Alternative 2, the No Build Alternative, would not include the proposed grade separations included under Alternative 1. No new construction would occur under Alternative 2. Therefore no impacts to groundwater would result under this alternative.

## **Flooding, Inundation and Floodplains**

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The proposed project is not located within a 100-year flood hazard area. As there are no floodplains in the project area, the risk associated with the project is low. The proposed project would not support incompatible floodplain development. During construction, temporary disruption of storm drains in the area could result in flooding upstream from the proposed project. BMPs will be implemented to reduce

<sup>40</sup> Moffatt and Nichol, *Draft Preliminary Engineering Report (Advanced Engineering Concept Plan)*, September 3, 2008.

<sup>41</sup> *Ibid.*

potential impacts. Measures **HW2** through **HW5** are included to reduce the potential for impacts. With inclusion of **HW2** through **HW5** impacts would not be adverse.

### **Alternative 2 – No Build Alternative**

Impacts associated with flooding and inundation for Alternative 2 would not occur as no development would occur under this alternative. Existing conditions would remain under this alternative. Therefore, no impacts associated with flooding and inundation are anticipated.

#### ***Measures to Minimize Harm***

##### Drainage and Stormwater Runoff

See 2.1-5 Utilities for Mitigation Measures **US1** through **US5** related to stormwater runoff and drainage.

##### Groundwater

See 2.1-5 Utilities for Mitigation Measures **US1** through **US5** related to water quality and storm water runoff.

**HW1** In the event groundwater is encountered, the project site shall be dewatered during construction. This shall involve the short-term removal of minor amounts of groundwater and would not affect groundwater supplies. Construction staging plans shall include provisions for the diversion of stormwater to avoid upstream flooding. The design of the proposed project shall include a permanent drainage and pump system to remove the water from the depressed railroad alignment; in order to minimize impacts of flooding that may occur during heavy storm events.

##### Flooding and Inundation

**HW2** Under the statewide NPDES General Construction Permit, the project proponent, ACE, must submit an NOI to the SWRCB prior to commencement of construction activities. In addition, an SWPPP must be prepared and implemented at the project site and revised as necessary as administrative or physical conditions change. The SWPPP will include BMPs that address source reduction and provide measures and controls necessary to mitigate potential pollutant sources. The SWPPP will be available to the public under Section 308(b) of the CWA and will be made available to the SWRCB upon request. Required elements of the SWPPP include:

- A site description addressing the elements and characteristics specific to the site;
- Descriptions of BMPs for erosion and sediment control;
- BMPs for construction waste handling and disposal;
- Implementation of approved local plans;
- Proposed post-construction controls, including a description of local post-construction erosion and sediment control requirements; and
- Non-stormwater management.

Recommended BMPs for the construction phase include proper stockpiling and disposal of demolition debris, concrete, and soil; protecting existing storm drain inlets; stabilizing disturbed areas; erosion controls; proper management of construction materials; waste management; aggressive litter control; and sediment controls.

**HW3** ACE shall coordinate with USACE to ensure construction of the drainage structure or rail bridge over Alhambra Wash is built to maintain existing flow capacity.

**HW4** ACE shall coordinate with LACDPW to ensure the drainage structure or rail bridge over Rubio Wash is built to maintain existing flow capacity.



**HW5** A flood permit from the Los Angeles Flood Control District and a Section 1601 Streambed Alteration Agreement from CDFG may be required. In addition, a Section 404 Nationwide Permit from the USACOE and a Section 401 Water Quality Certification from the RWQCB may also be required for the proposed project. Consultation shall be conducted with the San Gabriel and Los Angeles RMC, CDFG, RWQCB, and USACOE to identify any permit requirements for the lowering of the Rubio Wash and the potential impacts to the Alhambra Wash.

## 2.2.2 GEOLOGY AND SOILS

### *Regulatory Setting*

For geologic and topographic features, the key federal law is the Historic Sites Act of 1935, which establishes a national registry of natural landmarks and protects “outstanding examples of major geological features.” Topographic and geologic features are also protected under the California Environmental Quality Act.

This section also discusses geology, soils, and seismic concerns as they relate to public safety and project design. Earthquakes are prime considerations in the design and retrofit of structures. The Department’s Office of Earthquake Engineering is responsible for assessing the seismic hazard for Department projects. The current policy is to use the anticipated Maximum Credible Earthquake (MCE), from young faults in and near California. The MCE is defined as the largest earthquake that can be expected to occur on a fault over a particular period of time.

### *Affected Environment*

This section identifies the potential for geological and seismic hazards to occur in or around the project site. Issues of concern include suitability of soil for development; geologic faults; and direct and indirect seismic hazards such as floods, subsidence, liquefaction, and landslides. This section was prepared utilizing documents and maps published by the United State Geological Survey (USGS), California Department of Conservation, California Geological Survey (CGS), the County of Los Angeles, the Cities of Alhambra and San Gabriel, as well as other applicable sources.

### Geologic Materials and Soils

The geologic nature of the larger San Gabriel Valley region, including the project area, consists of steep mountains, low foothills, and relatively flat valleys. The project site is located in the low-lying plains of the San Gabriel Valley with the San Gabriel Mountains located approximately six miles to the north. The San Gabriel Mountains occupy the central portion of the Transverse Ranges. The San Gabriel Mountains are bounded by the San Andreas Fault on the north, the Cucamonga and Sierra Madre Faults on the south, and the San Bernardino Mountains and Castaic Block on the east and west, respectively. The San Gabriel Mountains are composed of ancient crystalline rocks.<sup>42</sup>

The western portion of the City of San Gabriel is composed of Ramona-Placentia Association soils while the eastern portion is composed of Hanford Association soils. The City of Alhambra is primarily composed of Ramona-Placentia Association soil.<sup>43</sup> Based on a review of the Los Angeles County General Soils Map, the western two-thirds of the project site is composed of Ramona-Placentia Association soil and the eastern one-third of the project site is composed of Hanford Association soil. Ramona-Placentia Association soil is a brown/red-brown, heavy or sandy loam, located on gently sloping terraces, which is known to have moderate natural drainage properties and moderate erosion hazards. Hanford Association

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<sup>42</sup>United States Geological Survey, *Geology of the San Gabriel Mountains, Transverse Ranges Province*, available at [http://geomaps.wr.usgs.gov/social/geology/transverse\\_ranges/san\\_gabriel\\_mtns/index.html](http://geomaps.wr.usgs.gov/social/geology/transverse_ranges/san_gabriel_mtns/index.html), accessed November 12, 2008.

<sup>43</sup>Los Angeles County, General Soils Map and Document, 1969.

soil is a pale brown, course sandy loam, located on gently sloping alluvial fans and is known to have good natural drainage properties and a slight erosion hazard.<sup>44</sup> Soil boring activities performed at the project site encountered gravelly soils at eight feet below ground surface (bgs) and sands and silty sands from 10 to over 30 feet bgs. The silts and clays encountered were generally hard.<sup>45</sup> Soils with a certain percentage of clay have the potential to expand when water is added and shrink when water is lost, resulting in expansive soils. Expansive soils can result in damage to overlying structures.

### **Seismicity**

The project site is within the seismically-active Southern California region. Earthquakes and other seismically-induced effects are constant potential hazards. The project site may be exposed to strong ground shaking during a seismic event. Issues of concern relating to earthquakes include fault rupture, strong ground shaking, liquefaction, and landslides, which are described below.

### **Fault Rupture**

Los Angeles County contains areas of active faulting. A fault is a fracture in the Earth's crust along which rocks on one side have moved relative to rocks on the other side. Most faults are the result of repeated displacement over long periods of time.<sup>46</sup>

The Alquist-Priolo Earthquake Fault Zone Map was reviewed to determine if the project site is located within an earthquake fault zone. The Alquist-Priolo Fault Zone is named after the Alquist-Priolo Special Studies Zone Act of 1972. The Act was passed as a direct result of the 1971 San Fernando Earthquake. The Act's purpose is to mitigate the hazards associated with fault rupture by "preventing construction of buildings used for human occupancy on the surface trace of active faults."<sup>47</sup> The Act has been revised eleven times, most recently in 2007, to reflect changes and additions of affected cities. Faults that are believed to pose a seismic risk are generally designated as "active" or "potentially active." Recently, this terminology has been in flux and faults that have been determined to pose a seismic threat are also defined as "substantially active" or "well-defined." A fault is considered to be substantially active if one or more of its segments or strands shows evidence of surface displacement during the Holocene era<sup>48</sup>. A fault is considered well-defined if its trace can be identified clearly by a trained geologist at the ground surface, or in the shallow subsurface using standard professional techniques, criteria, and judgment.<sup>49</sup>

The Cities of San Gabriel and Alhambra are not designated as cities affected by earthquake fault zones under the Alquist-Priolo Act as of August 2007. However, the City of Rosemead, which is directly adjacent and south of the project site, is listed as being affected.<sup>50</sup> A review of the fault systems of Southern California revealed that no active or potentially active faults traverse the project area. However, trace faults are known to exist in the area, and may potentially traverse the project site. Nine known faults are located within ten miles of the project site. These faults include the East Montebello Hills Fault, Whittier Heights, Workman Hill, Elysian Park Thrust, Hollywood, Verdugo, Eagle Rock-San

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<sup>44</sup>*Ibid.*

<sup>45</sup>Moffatt and Nichol, *Draft Preliminary Engineering Report (Advanced Engineering Concept Plan)*, September 3, 2008.

<sup>46</sup>California Geological Survey, *Alquist-Priolo Earthquake Fault Zones* (2007), available at [www.consrv.ca.gov/CGS/RGHM/AP/Pages/Index.aspx](http://www.consrv.ca.gov/CGS/RGHM/AP/Pages/Index.aspx), accessed November 12, 2008.

<sup>47</sup>*Ibid.*

<sup>48</sup>Defined as the last approximately 11,000 years.

<sup>49</sup>California Geological Survey, *Special Publication 42 Fault-Rupture Hazard Zones in California, Interim Revision*, August 2007.

<sup>50</sup>California Geological Survey, *Alquist-Priolo Earthquake Fault Zones, Table 4 - Cities and Counties Affected by Alquist-Priolo Earthquake Fault Zones as of May 1, 1999*, available at [www.consrv.ca.gov/cgs/rg hm/ap/Pages/affected.aspx](http://www.consrv.ca.gov/cgs/rg hm/ap/Pages/affected.aspx), accessed November 12, 2008.

Rafael, Raymond, and Sierra Madre Faults.<sup>51</sup> The Elysian Park Thrust and East Montebello Hills Faults are located approximately 0.8 and 0.9 mile from the project site, respectively.

### Ground Shaking

Ground shaking is the actual trembling or jerking motion of the ground during an earthquake. The most widespread damaging effects of earthquakes are caused by strong ground shaking and can vary widely across an area and depend on such factors as earthquake intensity and fault mechanism, duration of shaking, soil conditions, type of building, and other factors.

As with all properties in the seismically-active Southern California region, the project site is susceptible to strong seismic ground shaking. Earthquakes generally occur on faults, which are the planar features within the earth. Numerous regional and local faults are capable of producing severe earthquakes of magnitude 6.0 or greater. Usually, the effect of an earthquake originating from any given fault will depend upon its distance from the project site and the size of the earthquake the fault generates. The more distant the fault or the smaller the earthquake is, the less the effect of the event on the project site.

Faults are characterized by CGS as active, potentially active, or inactive, according to the last seismic activity of the fault. Active faults are faults that show evidence of surface displacement within Holocene time (i.e., the past 11,000 years). Potentially active faults are those that show evidence of surface displacement during Quaternary time (i.e., the past 1.6 million years). Inactive faults are those without recognized Holocene or Pleistocene Age activity. The Quaternary includes both the Pleistocene and Holocene eras of geologic history.

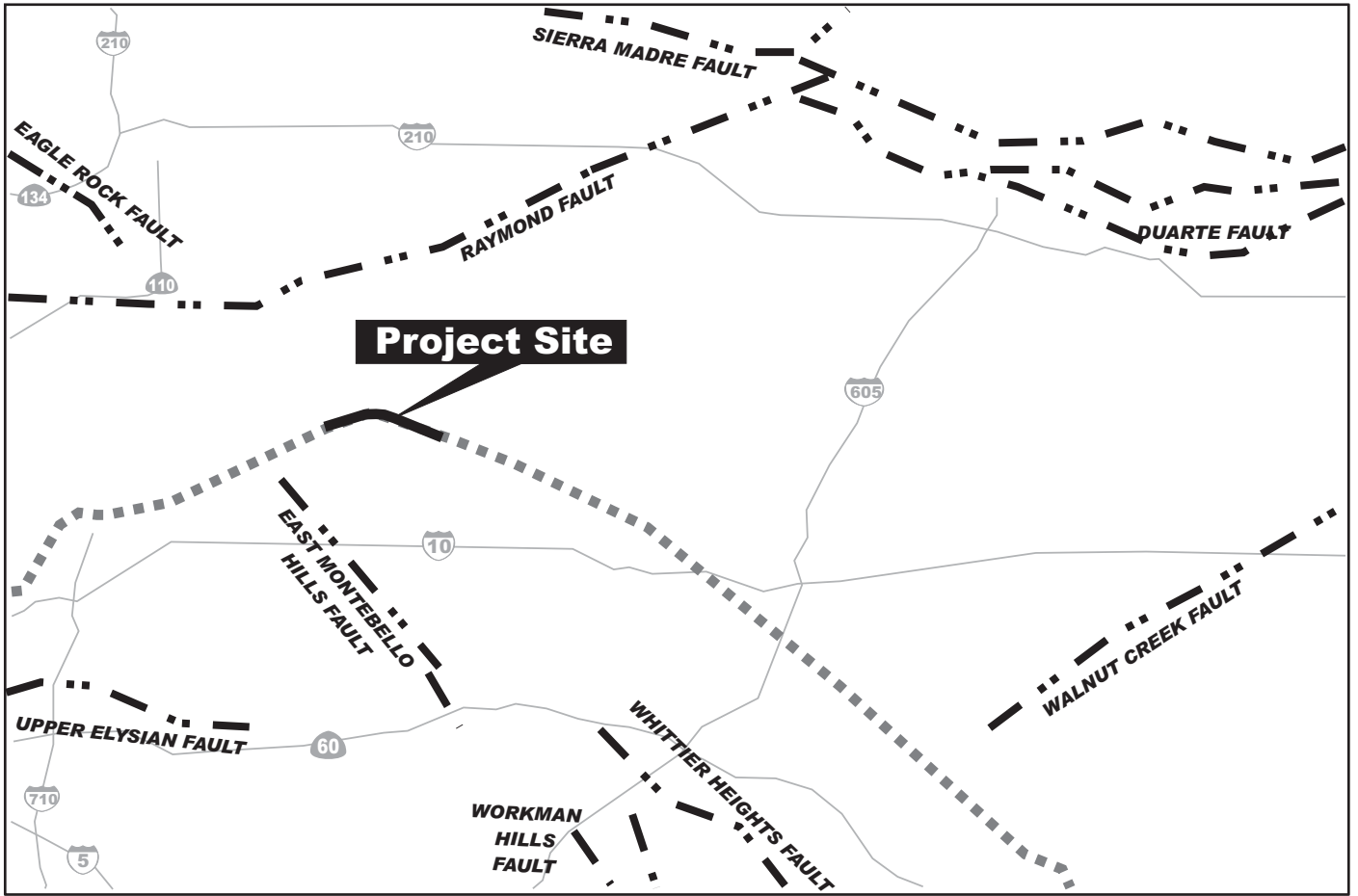
**Figure 2.2-1** identifies active and potentially active faults in the region and in the vicinity of the project area. None of these faults cross the project area.

The magnitude of an earthquake is measured on the Richter scale, a logarithmic scale of base ten, that calculates the amplitude of the largest seismic wave recorded. The intensity of an earthquake is measured by the Modified Mercalli Intensity scale, which ranges from I to XII. An earthquake has only one magnitude but can have many intensities depending on the distance from the epicenter. **Table 2.2-1** shows intensities that are typically observed near the epicenter of earthquakes of different magnitudes.

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<sup>51</sup>Delta Group Consultants, 1999, and Geological Society of America, 2004.

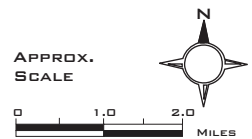
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LEGEND:

- Project Site
- Union Pacific Railroad - Alhambra Subdivision
- Fault

SOURCE: United States Geological Survey, Southern California Earthquake Data Center, & TAHA, 2009.



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<b>TABLE 2.2-1: MODIFIED MERCALLI INTENSITY SCALE</b>		
<b>Magnitude</b>	<b>Intensity</b>	<b>Description</b>
<b>1.0-3.0</b>	<b>I</b>	I. Not felt except by a very few.
<b>3.0-3.9</b>	<b>II-III</b>	II. Felt only by a few persons at rest, especially on upper floors of buildings. III. Felt quite noticeably by persons indoors, especially on upper floors of buildings. Vibrations similar to the passing of a truck.
<b>4.0-4.9</b>	<b>IV-V</b>	IV. Felt indoors by many, outdoors by few during the day. Dishes, windows, doors disturbed. Sensation like heavy truck striking building. V. Felt by nearly everyone. Some windows broken. Pendulum clocks may stop.
<b>5.0-5.9</b>	<b>VI-VII</b>	VI. Felt by all, many frightened. Some heavy furniture moved. Damage slight. VII. Damage negligible in buildings of good design and construction; considerable damage in poorly built or badly designed structures.
<b>6.0-6.9</b>	<b>VII-IX</b>	VIII. Damage slight in specifically designed structures. Damage great in poorly built structures. Fall of chimneys and walls. Heavy furniture overturned. IX. Damage considerable in specifically designed structures; Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations.
<b>7.0 and Higher</b>	<b>VIII or Higher</b>	X. Most masonry and frame structures destroyed with foundations. Rails bent. XI. Few structures remain standing. Bridges destroyed. Rails bent greatly. XII. Damage total. Lines of sight and level are distorted. Objects airborne.
<b>SOURCE:</b> California Department of Conservation, 1998.		

### Liquefaction

Liquefaction is a phenomenon where soil, saturated with water, behaves like liquid when shaken by an earthquake.<sup>52</sup> Liquefaction results in lateral spreading, ground settlement, sand boils, and soil falls. Liquefaction typically occurs in areas with a high groundwater table and low-density, fine sandy soils. Liquefaction also occurs with high-density ground motion. A designated liquefaction zone is located approximately one mile to the south of the project site, just south of Valley Boulevard. It extends from just east of San Gabriel Boulevard on the west to Walnut Grove Avenue on the east. The project site is not located with a designated liquefaction zone.<sup>53</sup> No groundwater was encountered during the soil borings performed at the project site to 80 feet bgs. Historically, groundwater levels in the vicinity of the project area are estimated to be deeper than 50 feet bgs.<sup>54</sup>

### Landslides

Landslides include a wide range of ground movement, such as rock falls, deep failure of slopes, and shallow debris flows.<sup>55</sup> Landslides begin as a result of rainfall, earthquakes, volcanic activity, changes in groundwater, disturbance and change of a slope by man-made construction activities, or any combination of these factors. Landslides occur in hillside areas with unstable geological conditions or soil types that would be susceptible to failure when saturated. The project site is relatively flat with an elevation of approximately 360 to 440 feet above mean sea level (amsl). The regional topography slopes gently to the southeast. No designated landslide areas are mapped in the vicinity of the project site.<sup>56</sup>

<sup>52</sup>United States Geological Survey, *About Liquefaction*, available at <http://geomaps.wr.usgs.gov/sfgeo/liquefaction/aboutliq.html>, accessed November 12, 2008.

<sup>53</sup>California Department of Conservation, *Seismic Hazard Zones, El Monte Quadrangle* (1999), available at <http://www.conservation.ca.gov/cgs/shzp/Pages/Index.aspx>, accessed November 12, 2008.

<sup>54</sup>Moffatt and Nichol, *Draft Preliminary Engineering Report (Advanced Engineering Concept Plan)*, September 3, 2008.

<sup>55</sup>United States Geological Survey, *Landslides Hazards Program*, available at <http://landslides.usgs.gov/learning/ls101.php>, accessed on November 12, 2008.

<sup>56</sup>California Department of Conservation, *Seismic Hazard Zones, El Monte Quadrangle* (1999), available at <http://www.conservation.ca.gov/cgs/shzp/Pages/Index.aspx>, accessed November 12, 2008.

## ***Environmental Consequences***

### **Geologic Materials and Soils**

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Alternative 1 would grade separate the existing Alhambra Subdivision of the UPRR in the Cities of San Gabriel, Alhambra, Rosemead and a portion of the County of Los Angeles. The grade separation at Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard would be achieved by lowering the track under these crossings in a trench and constructing bridges over the railroad at each location. The Rubio Wash would be lowered to accommodate the trench profile and a temporary shoofly bridge would be required at this location during construction. A railroad bridge or drainage structures would be constructed over the Alhambra Wash. Deep pile foundations would likely be utilized for the street and drainage crossings.<sup>57</sup> Ramona-Placentia and Hanford Association soils are moderate to well-drained and have a moderate to slight erosion hazard.<sup>58</sup> Because these soils drain relatively well, they have faster infiltration rates, higher levels of organic matter and improved soil structure. Soil boring activities performed at the project site encountered gravelly soils, sands, silty sands, hard silts and clays.<sup>59</sup> These are soil composition factors which result in greater resistance to soil erosion.

In addition to soil composition, climate and slope are factors in creating a potential for soil erosion. The project site is in a flat, urbanized area, with existing drainage systems and some impervious surfaces. A drainage system designed for a 100-year storm event would be implemented with Alternative 1, which would improve drainage on the project site. Runoff collected from the open trench area would be discharged to off-site storm drain facilities.<sup>60</sup> The project area is not subject to high levels of wind or rain, factors that may contribute to soil erosion. However, the construction of Alternative 1 would require extensive excavation activities reaching approximately 40 feet bgs. These excavation activities may result in the potential for soil to be exposed and eroded. Measures **GS1** through **GS3** are provided to reduce impacts related to soil erosion

#### **Alternative 2 – No Build Alternative**

Under Alternative 2, the project site would not be substantially altered from existing conditions. Therefore, no impacts are anticipated related to soil erosion.

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

During construction and excavation activities associated with Alternative 1, the potential exists for the release of fugitive dust, resulting in a temporary loss of topsoil. However, this loss would not be considered substantial with the implementation of Best Management Practices (BMPs), required as part of the National Pollutant Discharge Elimination System (NPDES) permit and application of South Coast Air Quality Management District (SCAQMD) Rule 403. Any soil that is excavated from the project site during construction would be transported to the appropriate location in accordance with local and State regulations. In addition, the project includes a drainage plan for both project construction and operation. As such, Alternative 1 would improve the existing drainage system and would not contribute to the loss of topsoil.

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2008. <sup>57</sup>Moffatt and Nichol, *Draft Preliminary Engineering Report (Advanced Engineering Concept Plan)*, September 3,

<sup>58</sup>Los Angeles County, General Soils Map and Document, 1969.

2008. <sup>59</sup>Moffatt and Nichol, *Draft Preliminary Engineering Report (Advanced Engineering Concept Plan)*, September 3,

<sup>60</sup>*Ibid.*



### **Alternative 2 – No Build Alternative**

Under Alternative 2, the project site would not be substantially altered from existing conditions. Therefore, no impacts are anticipated related to loss of topsoil.

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Ramona-Placentia and Hanford Association soils found in the project area are not known to be expansive and occur on gently sloping terraces and alluvial fans. Alternative 1 would not be located on expansive soil, which would create substantial risks to life or property. In addition, these soils do not erode easily, are not known to be expansive. In addition, the use of septic tanks or alternative wastewater disposal systems is not anticipated with the Alternative 1 as no buildings that would require such systems are proposed.

With implementation of all applicable engineering and design specifications, and compliance with applicable codes and current engineering practices, impacts related to the loss of topsoil, erosion, expansive soils would be minimal. However, to ensure that impacts remain less than significant, recommended mitigation measures are provided below.

### **Alternative 2 – No Build Alternative**

Under Alternative 2, the project site would not be substantially altered from existing conditions. Therefore, no impacts are anticipated related to expansive soil.

### **Seismicity**

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The project site is not located within an Alquist-Priolo Earthquake Fault Zone. However, the East Montebello Hills, Whittier Heights, Workman Hill, Elysian Park Thrust, Hollywood, Verdugo, Eagle Rock-San Rafael, Raymond, and Sierra Madre Faults are active or potentially active faults located within ten miles of the project site. Although the project area is not located within these faults, the impact of a large earthquake along these faults (or unknown trace faults in the area) would produce strong or intense ground motion in the project area, potentially resulting in fault rupture. However, this risk is present throughout the entire Southern California region. The proposed project would be required to comply with the seismic safety requirements established by the Uniform Building Code, applicable sections of the City of San Gabriel and City of Alhambra Municipal Codes, and the California Department of Conservation, CGS *Special Publications 117, Guidelines for Evaluating and Mitigating Seismic Hazards in California* (1997), which provides guidance for evaluation and mitigation of earthquake-related hazards. Although the project site is not located within a known fault zone, the implementation of all applicable engineering and design specifications, and compliance with applicable building codes and current engineering practices, would ensure that impacts would be minimal. However, to ensure that impacts remain minimal, recommended measures are provided below

#### **Alternative 2 – No Build Alternative**

Under Alternative 2, the project site would not be substantially altered from existing conditions. Therefore, no impacts are anticipated related to fault rupture.

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

As mentioned above, the project site is located within ten miles of active fault systems. Therefore, as with all of Southern California and Los Angeles County, the project area is susceptible to high-intensity ground shaking, this can affect any structure within the Cities of San Gabriel and Alhambra. Alternative 1 would be required to comply with the seismic safety requirements established by the Uniform Building Code, applicable sections of the City of San Gabriel and City of Alhambra Municipal Codes, and the California Department of Conservation, CGS *Special Publications 117, Guidelines for Evaluating and Mitigating Seismic Hazards in California* (1997), which provides guidance for evaluation and mitigation of earthquake-related hazards. With implementation of all applicable engineering and design specifications, and compliance with applicable building codes and current engineering practices, potential impacts related to strong ground shaking would be reduced. However, to ensure that impacts minimal, recommended measures are provided below.

### **Alternative 2 – No Build Alternative**

Under Alternative 2, the project site would not be substantially altered from existing conditions. Therefore, no impacts are anticipated related to ground shaking.

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Liquefaction involves the sudden loss in strength of a saturated, cohesionless soil (predominantly sand) caused by the build-up of pore water pressure during cyclic loading, such as that produced by an earthquake. This increase in pore water pressure can temporarily transform the soil into a fluid mass, resulting in vertical settlement and can also cause lateral ground deformations. Typically liquefaction occurs in areas where there are loose sands and the depth of groundwater is less than 50 feet from the surface. Seismic shaking can also cause soil compaction and ground settlement without liquefaction occurring including settlement of dry sands above the water table.

The project site is not located within a designated liquefaction zone and the construction of Alternative 1 is not anticipated to be subjected to liquefaction.<sup>61</sup> Groundwater depths beneath the project site have been found to be over 80 feet bgs.<sup>62</sup> However, it is possible to encounter wet conditions or perched water conditions during the rainy season or along the Alhambra and Rubio Washes. Planned construction and design should accommodate provisions for such consideration.<sup>63</sup> With the implementation of all applicable engineering and design specifications, and compliance with applicable building codes and current engineering practices, impacts would be minimized. However, to ensure that impacts remain minimal, recommended mitigation measures are provided below.

### **Alternative 2 – No Build Alternative**

Under Alternative 2, the project site would not be substantially altered from existing conditions. Therefore, no impacts are anticipated related to liquefaction.

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<sup>61</sup>California Department of Conservation, *Seismic Hazard Zones, El Monte Quadrangle* (1999), available at <http://www.conservation.ca.gov/cgs/shzp/Pages/Index.aspx>, accessed November 12, 2008.

<sup>62</sup>Moffatt and Nichol, *Draft Preliminary Engineering Report (Advanced Engineering Concept Plan)*, September 3, 2008.

<sup>63</sup>*Ibid.*

## **Landslides**

The project site has a flat terrain and is not in close proximity to any hillside area or within any designated slope stability or landslide area.<sup>64</sup> Therefore, the project site is not subject to earthquake-induced landslides and no impacts related to landslides are anticipated.

### Measures to Minimize Harm

- GS1** During final design, trench wall configurations and the areas of the trench near existing improvements shall be designed to include temporary struts, tieback anchors, ground improvement, temporary excavation support, temporary shoring, and/or other recommended installations detailed in the project Preliminary Engineering Report, to limit the lateral deflections of the trench walls.
- GS2** Soil testing shall be conducted during the final design phase, and should any localized expansive soils be identified, they shall be addressed by the final project design. The corrosion potential of project site soils shall also be evaluated. Expansive soils shall not be used as structure or permeable backfill. Appropriate geotechnical design techniques shall be implemented to address the potential for seismically-induced ground liquefaction and settlement, as well as provisions for wet conditions or perched water conditions along the Alhambra and Rubio Washes.
- GS3** Standard erosion control BMPs shall be used to minimize erosion during construction of the project. Retaining walls shall be constructed for long-term slope stabilization. Where appropriate, erosion prevention planting shall be used in conjunction with a geofabric.
- GS4** In order to minimize potential adverse impacts associated with seismic activity and liquefaction, design of the project shall incorporate current seismic design standards to withstand seismic ground shaking and liquefaction that would result from a maximum credible earthquake.

## **2.2.3 HAZARDOUS WASTE MATERIALS**

### ***Regulatory Setting***

Hazardous materials and hazardous wastes are regulated by many state and federal laws. These include not only specific statutes governing hazardous waste, but also a variety of laws regulating air and water quality, human health and land use.

The primary federal laws regulating hazardous wastes/materials are the Resource Conservation and Recovery Act of 1976 (RCRA) and the Comprehensive Environmental Response, Compensation and Liability Act of 1980 (CERCLA). The purpose of CERCLA, often referred to as Superfund, is to clean up contaminated sites so that public health and welfare are not compromised. RCRA provides for “cradle to grave” regulation of hazardous wastes. Other federal laws include:

- Community Environmental Response Facilitation Act (CERFA) of 1992
- Clean Water Act
- Clean Air Act
- Safe Drinking Water Act
- Occupational Safety and Health Act (OSHA)

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<sup>64</sup>California Department of Conservation, *Seismic Hazard Zones, El Monte Quadrangle* (1999), available at <http://www.conservation.ca.gov/cgs/shzp/Pages/Index.aspx>, accessed November 12, 2008.

- Atomic Energy Act
- Toxic Substances Control Act (TSCA)
- Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA)

In addition to the acts listed above, Executive Order 12088, Federal Compliance with Pollution Control, mandates that necessary actions be taken to prevent and control environmental pollution when federal activities or federal facilities are involved.

Hazardous waste in California is regulated primarily under the authority of the federal Resource Conservation and Recovery Act of 1976, and the California Health and Safety Code. Other California laws that affect hazardous waste are specific to handling, storage, transportation, disposal, treatment, reduction, cleanup and emergency planning.

Worker health and safety and public safety are key issues when dealing with hazardous materials that may affect human health and the environment. Proper disposal of hazardous material is vital if it is disturbed during project construction.

### ***Affected Environment***

This section describes the existing conditions for hazards and hazardous materials at or in the vicinity of the project site and evaluates the potential impacts associated with hazards and hazardous materials that could result from implementing the proposed project alternatives. Hazards and hazardous materials include those actions and materials affecting the health and safety of the public and the release of hazardous materials into the environment. Hazards discussed in this section include hazardous waste, hazardous building materials, soil contamination, airport hazards, interference with an emergency response/evacuation plan, and wildfires.

Information contained in this section was obtained from a Phase I Environmental Site Assessment (ESA) conducted by MAA Engineering Consultants (May 1999) which included an environmental records search and geotechnical assessment.<sup>65</sup> Additional information was obtained from a search of EPA's list of hazardous materials sites (Cortese List) as well as from supplemental soil sampling and testing that was conducted in March 2009.<sup>66</sup>

### **Hazardous Materials**

Certain chemical and physical properties of a substance may cause it to be considered hazardous. As defined by the California Code of Regulations (CCR), Title 22, Section 66084, a "hazardous material" is a "substance or combination of substances which, because of its quantity, concentration, physical, chemical, or infectious characteristics, may either (1) cause, or significantly contribute to, an increase in mortality or an increase in serious irreversible, or incapacitating reversible illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of or otherwise managed."

According to the California Health and Safety Code, Section 25124, a "hazardous waste" is any hazardous material that is abandoned, discarded or in storage prior to recycling. For example, excavated soil containing hazardous materials would be considered hazardous waste if the concentration of contaminants exceeded specific CCR Title 22 criteria.

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<sup>65</sup>MAA Engineering Consultants, *Phase I Environmental and Geotechnical Site Assessment*, May 1999.

<sup>66</sup>Kleinfelder, Limited Environmental Soil Sampling and Testing Report San Gabriel Trench Grade Separation Project, March 2009.

The project site currently consists of UPRR track that is approximately 100 feet wide and 2.1 miles long in the Cities of San Gabriel, Alhambra Rosemead and a portion of the County of Los Angeles. The site has been in continuous use by UPRR with limited usage by Amtrak and does not include any other uses. The Phase I ESA investigation prepared for the site indicates the presence of a hazardous waste site known as San Gabriel Valley Area #1 within a quarter-mile (0.4 kilometer) of the project site. This site is included on the National Priorities List (NPL), which is also known as the Superfund List. San Gabriel Valley #1 is a plume of contaminated groundwater that runs along the axis of the Rio Hondo Wash in the San Gabriel groundwater basin. Groundwater in this area is known to contain tetrachloroethylene (TCE), perchloroethylene (PCE), and chloroform.

Nine sites with underground storage tanks (USTs) were determined to be located within an eighth of a 1/8-mile (0.2 kilometer) of the four grade crossings. One potential impact UST site is located within 1/8-mile (0.2 kilometer) or closer to the Ramona Street crossing, and another located near the Mission Road crossing, three UST sites are located near to the Del Mar Avenue crossing, and four UST sites are located near the San Gabriel Boulevard crossing. **Table 2.2-2** shows hazardous waste sites located within a 1/8-mile radius of the project area.

<b>TABLE 2.2-2: HAZARDOUS WASTE SITES WITHIN 1/8 MILE OF PROJECT AREA</b>			
Owner	Chemical	Media	Comments
Park Uniform Rental Services 717 Junipero Serra Dr. San Gabriel, 91776	Unspecified Aqueous Solution	Not reported	None
Sing Tao Newspapers LA 333 W. Mission Dr. San Gabriel 91776	Photochemicals/photo Processing waste	Not reported	None
All Car Specialist, Inc. 330 S Del Mar Ave. San Gabriel 91776	Unspecified Aqueous Solution	Not reported	None
J&J Astro Body Shop 130 Augustino Rd. San Gabriel 91776	Unspecified Aqueous Solution	Not reported	None
Dickson Motor Service 220 Augustino Rd. San Gabriel 91776	Not reported	Not reported	Signed off, remedial action completed or deemed unnecessary, UST (waste oil unleased)
Union Oil 6996 Service Station 501 S. San Gabriel Blvd. San Gabriel 91776	Gasoline	Soil	Signed off, remedial action completed or deemed unnecessary, UST (waste oil unleased)
Jim's Body Works 421 San Gabriel Blvd. San Gabriel 91776	Oxygenated solvents (acetone, butanol, ethyl acetate, etc.)	Not reported	None
Schultz Products 855 Commercial Ave. San Gabriel 91776	Oil/water separation sludge	Not reported	None
824 Commercial Ave. San Gabriel 91776	Unspecified solvent mixture	Not reported	None
SOURCE: MAA Engineering Consultants, Inc., May 1999.			

The Department of Toxic Substances Control (DTSC) under California Environmental Protection Agency (CalEPA) maintains a list of potential hazardous waste sites, known as the Cortese List. The Cortese List contains information on hazardous waste facilities subject to corrective action (i.e., remediation), all land designated as hazardous waste property, all information received by DTSC on hazardous waste disposals on public lands, all sites listed pursuant to Section 25356 of the Health and Safety Code and all sites included in the Abandoned Site Assessment Program. Thirty sites within 1,000 feet of the project area are contained on the Cortese List<sup>67</sup> with a status of either undergoing assessment and ten are listed with a status of completed or closed. Generally the sites include industrial uses such as dry cleaners or gas stations.

### Asbestos Materials and Lead-Based Paint

Asbestos-containing materials (ACMs) were widely used in structures built between 1945 and 1980. Common ACMs include vinyl flooring and associated mastic, wallboard and associate joint compound, plaster, stucco, acoustic ceiling spray, ceiling tiles, heating system components, and roofing materials. Commercial/industrial structures are affected by asbestos regulations if damage occurs or if remodeling, renovation or demolition activities disturb ACMs. Lead-based paint was primarily utilized from the 1920s through 1978. Commercial/industrial structures are affected by lead-based paint regulations if the paint is in a deteriorated condition or if remodeling, renovation or demolition activities disturb lead-based paint surfaces.

The project area does not contain any structures, such as residences or commercial buildings that would typically contain asbestos materials or lead-based paint.

### Airport Hazards

The project site is located in City of San Gabriel. The nearest airport is El Monte Airport 4 miles east of the project site. El Monte Airport is a single runway public airport that generally caters to smaller aircraft, such as single engine planes. The nearest region airport, Bob Hope International Airport, is located more than 25 miles from the project site.

### Emergency Response/Evacuation Plan

The City of San Gabriel's Comprehensive Plan includes a Public and Environmental Safety Element that addresses emergency response. The City has also established a Multi-Hazard Functional Plan that establishes tactics to cope with local and regional hazards. The emergency operation center (EOC) was completed in 1989 to be the central command post in the event of a major disaster. Field exercises that mimic major disasters are staged to equip staff in case an incident ever occurs. The Plan indicates that there are two public safety facilities located in the vicinity of the project area, a Red Cross facility located at 415 McGroarty Street and the City Yard located at 121 Mission Road behind the police station.

In addition, the Public and Environmental Safety Element of the Comprehensive Plan identifies Ramona Street, Mission Road, Del Mar Avenue and San Gabriel Boulevard as main public safety access routes.

### Wildland Fires

The project site is located in an urbanized area comprised of primarily residential and commercial uses. The project site and surrounding uses are not located adjacent to wildlands which could increase fire

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<sup>67</sup>California Environmental Protection Agency Department of Toxic Substances Control, *Cortese List*, available at <http://www.calepa.ca.gov/sitecleanup/CorteseList/default.htm>, accessed November 20, 2008.

hazards. The Environmental and Public Safety Element of the City's General Plan indicates there are no wildfire hazard zones within the City.<sup>68</sup>

### ***Environmental Consequences***

#### **Hazardous Materials**

##### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The proposed project includes intersection improvements at four railroad crossing in the Cities of San Gabriel, Alhambra, Rosemead and the County of Los Angeles. It is possible that hazardous materials are currently transported along the UPRR railroad and would continue to be transported under the proposed project. However, with the addition of the proposed project, the potential for train/vehicle interactions or accidents would be eliminated and the risk of upset or accident conditions would be reduced. This would be a beneficial impact.

The proposed project is located within ¼-mile from San Gabriel High School, which is located at 801 Ramona Street in the City of San Gabriel. The proposed project includes the lowering of the UPRR railroad at the Ramona Street crossing and three other crossings in the City of San Gabriel. It would not emit hazardous emissions. As described above, it is possible that hazardous or acutely hazardous materials, substances or waste currently being transported along the UPRR Alhambra Subdivision would continue to be transported along this route. However, implementation of proposed project would eliminate the potential for accidental upset due to collision with a vehicle at the Ramona Street Crossing. This would be a beneficial impact.

As identified above, the project site is located within an eighth of a mile of hazardous waste sites and includes thirty sites that are undergoing assessment according to Cal/EPA's Cortese List. In addition, soil sampling performed at the site indicated the presence of hazardous materials at certain locations. As such, the potential for encountering contaminated soils and/or groundwater during the proposed project construction, particularly during excavation, exists. This exposure would not occur on a long-term basis but rather for a limited number of hours during the work days while the trenching and construction activities occur. Consequently, the potential for public exposure to hazardous materials and waste also exists, which would be considered an adverse effect on public health and safety. Measures that will be required include the preparation of a Phase II Assessment to determine the degree of contamination (if any) and a plan for handling removal and/or remediation during construction. ACE has developed Hazardous Waste Handling Plan to ensure proper handling and removal of any contaminated soils.<sup>69</sup> Measures, **HH1** through **HH5**, are included below. In addition, Measure **PS3** requires the development of an emergency response plan.

Once the project is constructed, operation of the project would not generate hazardous materials or wastes. No adverse impacts associated with the operation of the proposed project are anticipated.

##### **Alternative 2 – No Build Alternative**

Under the Alternative 2, no improvements would be made to the existing crossings. The potential for collisions between vehicles and trains at these four intersections would persist. However, measures such as crossing arms, alarms and train horns would be used to minimize potential impacts.

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<sup>68</sup>City of San Gabriel, *Comprehensive General Plan - Public and Environmental Safety Element*, February 2005.

<sup>69</sup> Kleinfelder, *Hazardous Waste Handling Plan, San Gabriel Trench Grade Separation Project*, March 2009

Alternative 2 would be located at the same site as Alternative 1. However, under the Alternative 2, no improvements would be made to the existing crossings. The potential for collisions between vehicles and trains at the Ramona Street intersection would persist. However, measures such as crossing arms, alarms and train horns would be used to minimize impacts.

Under the No Build Alternative, no excavation activities would occur. Impacts associated with hazardous materials would not occur under this alternative. The project area would remain in its existing condition and no development would occur. No impacts associated with hazardous materials are anticipated.

### **Airport Hazards**

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The project site is not located within two miles of a public airport. Additionally, the Project site is not located within the vicinity of any private airstrips. The walls associated with the trench would not be constructed at a height that would be high enough to pose a hazard to approaching airplanes, and thus, no hazard would occur. Therefore, no impact is anticipated.

#### **Alternative 2 – No Build Alternative**

Impacts associated with airport hazards are similar to Alternative 1, since Alternative 2 would be on the same site as Alternative 1. Alternative 2 would not create a trench and thus the existing conditions, which currently do not pose a hazard to any approaching airplanes, would persist. Therefore, no impact is anticipated.

### **Emergency Response/Evacuation Plan**

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Alternative 1 would temporarily alter evacuation/circulation patterns during construction activities. The intersections and Ramona Street, Mission Road and Del Mar Avenue would all be closed during construction, however, construction would not be concurrent, but rather would be phased to ensure access will be provided on nearby streets. Further, closure at Ramona Street would occur during the summer months to minimize potential impact related to access to the adjacent San Gabriel High School. In addition, San Gabriel Boulevard would remain open during construction with one travel lane in each direction. ACE has prepared a Draft Traffic Management Plan that includes detour routes, and will prepare an emergency response plan to ensure the project would not have a negative effect on emergency response. In addition, Measure **PS3** is provided. Once constructed, operation of the project would have a beneficial impact on emergency response/evaluation routes by eliminating delay at railroad crossings that currently exists.

#### **Alternative 2 – No Build Alternative**

Alternative 2 would be on the same site as Alternative 1, but would not include any construction activities. Therefore, no impacts would occur.

### **Wildland Fires**

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

According to the Public and Environmental Safety Element of the City of San Gabriel's Comprehensive Plan, no wildfire areas exist in the City. The Project site is located in an urbanized area comprised of



primarily railroad, residential and commercial uses. The Project site and surrounding uses are not located adjacent to wildlands, which could increase fire hazards. Thus, Alternative 1 would not expose people or structures to wildland fires, and no impacts are anticipated.

### **Alternative 2 – No Build Alternative**

Impacts associated with wildland fires are similar to Alternative 1 since Alternative 2 is on the same site as Alternative 1. As described above, no wildfire areas exist in the City. As such, no impact would occur.

### ***Measures to Minimize Harm***

**HH1** A Phase II ESA that shall further characterize hazardous waste potential at the project site, including the potential for encountering contaminated soils and/or groundwater will be prepared. In the event that contaminated soils and/or groundwater are identified as affecting the project, a remediation plan will be developed and submitted for review and approval to the affected cities and responsible agencies. No construction activities shall occur unless remediation to State exposure standards is possible and until approval of the remediation plan. All subsequent construction activities shall be conducted in accordance with the remediation plan.

**HH2** During excavation, a qualified environmental consultant approved by the city in which excavation shall occur, shall observe the exposed soil for visual evidence of contamination. If visual contamination indicators are observed during excavation or grading activities, all work shall stop and an investigation shall be designed and performed to verify the presence and extent of contamination at the site. A qualified and approved environmental consultant shall prepare a report detailing results and recommend actions to ensure compliance with State exposure standards. The recommendations shall be reviewed and approved by the Los Angeles County Fire Department Health Hazardous Materials Division or California Department of Toxic Substance Control (DTSC) prior to the resumption of grading and construction activity and all further activity, including remediation shall be in conformance with approved recommendations. The investigation shall include collecting samples for laboratory analysis and quantifying contaminant levels within the proposed excavation and surface disturbance areas. Subsurface investigation shall determine appropriate worker protection and hazardous material handling and disposal procedures appropriate for the subject site.

**HH3** Areas with contaminated soil determined to be hazardous waste shall be excavated by personnel who have been trained through the Occupational Safety and Health Administration (OSHA) recommended 40-hour safety program (29CFR1910.120), with an approved plan for excavation, control of contaminant releases to the air, and off-site transport or on-site treatment. Health and safety plans prepared by a qualified and approved industrial hygienist shall be developed to protect the public and all workers in the construction area. Health and safety plans shall be reviewed and approved by the appropriate agencies such as the Los Angeles County Fire Department Health Hazardous Materials Division or DTSC.

Although groundwater was not encountered at a depth of 80 feet below ground surface, the following measure shall be implemented.

**HH4** Excavations below the elevations of groundwater could experience strong seepage and require dewatering. The contractor shall observe the groundwater for visual evidence of contamination or unusual odors. The contractor shall comply with all applicable regulations and permit

requirements for construction dewatering. This may include laboratory testing, treatment of contaminated groundwater or other disposal options.

**HH5** The following plans shall be prepared and implemented prior to construction: health and safety plan, waste management plan, sampling and analysis plan, a plan for possible hazardous materials or emergencies during construction and a work plan for the remediation of any hazardous wastes encountered. The work plan shall include such measures as removal, on-site treatment if necessary, and safe transport of contaminated soils and materials to approved hazardous materials disposal sites.

## 2.2.4 AIR QUALITY

### *Regulatory Setting*

The Clean Air Act as amended in 1990 is the federal law that governs air quality. Its counterpart in California is the California Clean Air Act of 1988. These laws set standards for the quantity of pollutants that can be in the air. At the federal level, these standards are called National Ambient Air Quality Standards (NAAQS). Standards have been established for six criteria pollutants that have been linked to potential health concerns; the criteria pollutants are: carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), ozone (O<sub>3</sub>), particulate matter (PM), lead (Pb), and sulfur dioxide (SO<sub>2</sub>).

Under the 1990 Clean Air Act Amendments, the U.S. Department of Transportation cannot fund, authorize, or approve Federal actions to support programs or projects that are not first found to conform to State Implementation Plan for achieving the goals of the Clean Air Act requirements. Conformity with the Clean Air Act takes place on two levels—first, at the regional level and second, at the project level. The proposed project must conform at both levels to be approved.

Regional level conformity in California is concerned with how well the region is meeting the standards set for carbon monoxide (CO), nitrogen dioxide (NO<sub>2</sub>), ozone (O<sub>3</sub>), and particulate matter (PM). California is in attainment for the other criteria pollutants. At the regional level, Regional Transportation Plans (RTP) are developed that include all of the transportation projects planned for a region over a period of years, usually at least 20. Based on the projects included in the RTP, an air quality model is run to determine whether or not the implementation of those projects would conform to emission budgets or other tests showing that attainment requirements of the Clean Air Act are met. If the conformity analysis is successful, the regional planning organization, such as SCAG and the appropriate federal agencies, such as the Federal Highway Administration, make the determination that the RTP is in conformity with the State Implementation Plan for achieving the goals of the Clean Air Act. Otherwise, the projects in the RTP must be modified until conformity is attained. If the design and scope of the proposed transportation project are the same as described in the RTP, then the proposed project is deemed to meet regional conformity requirements for purposes of project-level analysis.

Conformity at the project-level also requires “hot spot” analysis if an area is “nonattainment” or “maintenance” for carbon monoxide (CO) and/or particulate matter. A region is a “nonattainment” area if one or more monitoring stations in the region fail to attain the relevant standard. Areas that were previously designated as nonattainment areas but have recently met the standard are called “maintenance” areas. “Hot spot” analysis is essentially the same, for technical purposes, as CO or particulate matter analysis performed for NEPA purposes. Conformity does include some specific standards for projects that require a hot spot analysis. In general, projects must not cause the CO standard to be violated, and in “nonattainment” areas the project must not cause any increase in the number and severity of violations. If a known CO or particulate matter violation is located in the project vicinity, the project must include measures to reduce or eliminate the existing violation(s) as well.

### Federal Regulations

The Clean Air Act (CAA) as amended in 1990 is the federal law that governs air quality. Its counterpart in California is the California Clean Air Act of 1988. These laws set standards for the quantity of pollutants that can be in the air. At the federal level, these standards are called National Ambient Air Quality Standards (NAAQS). Standards have been established for six criteria pollutants that have been linked to potential health concerns; the criteria pollutants are: CO, NO<sub>2</sub>, O<sub>3</sub>, PM, Pb, and SO<sub>2</sub>.

Under the 1990 Clean Air Act Amendments, the United States Department of Transportation cannot fund, authorize, or approve federal actions to support programs or projects that are not first found to conform to State Implementation Plan for achieving the goals of the Clean Air Act requirements. Conformity with the Clean Air Act takes place on two levels—first, at the regional level and second, at the project level. The proposed project must conform at both levels to be approved.

Regional level conformity in California is concerned with how well the region is meeting the standards set for CO, NO<sub>2</sub>, O<sub>3</sub>, and PM. California is in attainment for the other criteria pollutants. At the regional level, Regional Transportation Plans (RTP) are developed that include all of the transportation projects planned for a region over a period of years. Based on the projects included in the RTP, an air quality model is run to determine whether or not the implementation of those projects would conform to emission budgets or other tests showing that attainment requirements of the CAA are met. If the conformity analysis is successful, the regional planning organization, such as the Southern California Association of Governments and the appropriate federal agencies, such as the Federal Highway Administration, make the determination that the RTP is in conformity with the State Implementation Plan for achieving the goals of the CAA. Otherwise, the projects in the RTP must be modified until conformity is attained. If the design and scope of the proposed transportation project are the same as described in the RTP, then the proposed project is deemed to meet regional conformity requirements for purposes of project-level analysis.

Conformity at the project-level also requires “hot spot” analysis if an area is nonattainment or maintenance for CO and/or particulate matter. A region is a nonattainment area if one or more monitoring stations in the region fail to attain the relevant standard. Areas that were previously designated as nonattainment areas but have recently met the standard are called maintenance areas. Hot spot analysis is essentially the same, for technical purposes, as CO or PM analysis performed for National Environmental Policy Act purposes. Conformity does include some specific standards for projects that require a hot spot analysis. In general, projects must not cause the CO standard to be violated, and in “nonattainment” areas the project must not cause any increase in the number and severity of violations. If a known CO or particulate matter violation is located in the project vicinity, the project must include measures to reduce or eliminate the existing violation(s) as well.

### State Regulations

The California Air Resources Board (CARB), which became part of the California Environmental Protection Agency in 1991, is responsible for meeting the State requirements of the CAA. The CARB is responsible for setting emission standards for vehicles sold in California and for other emission sources, such as consumer products and certain off-road equipment. The CARB established passenger vehicle fuel specifications, which became effective in March 1996. CARB oversees the functions of local air pollution control districts and air quality management districts, which, in turn administer air quality activities at the regional and county level.

### Local Regulations

The SCAQMD monitors air quality within the project area. The SCAQMD has jurisdiction over an area of 10,743 square miles, consisting of Orange County; the non-desert portions of Los Angeles, Riverside, and San Bernardino counties; and the Riverside County portion of the Salton Sea Air Basin and Mojave Desert Air Basin. The 1977 Lewis Air Quality Management Act created SCAQMD to coordinate air quality planning efforts throughout Southern California. This Act merged four county air pollution control agencies into one regional district to better address the issue of improving air quality in Southern California. Under the Act, renamed the Lewis-Presley Air Quality Management Act in 1988, SCAQMD is the agency principally responsible for comprehensive air pollution control in the region. Specifically, SCAQMD is responsible for monitoring air quality, as well as planning, implementing, and enforcing programs designed to attain and maintain State and federal ambient air quality standards in the district. Programs that were developed include air quality rules and regulations that regulate stationary sources, area sources, point sources, and certain mobile source emissions. The SCAQMD is also responsible for establishing stationary source permitting requirements and for ensuring that new, modified, or relocated stationary sources do not create net emission increases.

The Basin is a subregion of the SCAQMD and covers an area of 6,745 square miles. The Basin includes all of Orange County and the non-desert portions of Los Angeles, Riverside, and San Bernardino counties. The Basin is bounded by the Pacific Ocean to the west; the San Gabriel, San Bernardino and San Jacinto mountains to the north and east; and the San Diego County line to the south (**Figure 2.2-2**).

#### National Ambient Air Quality Standards and Attainment Status

As required by the CAA, NAAQS have been established for seven major air pollutants: CO, NO<sub>2</sub>, O<sub>3</sub>, PM<sub>2.5</sub>, PM<sub>10</sub>, SO<sub>2</sub>, and Pb. The CAA requires United States Environmental Protection Agency (USEPA) to designate areas as attainment, nonattainment, or maintenance (previously nonattainment and currently attainment) for each criteria pollutant based on whether the NAAQS have been achieved. The federal standards are summarized in **Table 2.2-3**. The USEPA has classified the Basin as maintenance for CO and nonattainment for O<sub>3</sub>, PM<sub>2.5</sub>, and PM<sub>10</sub>.

This section examines the degree to which the proposed project may cause significant adverse changes to air quality and the long-term effects related to the ongoing operation of the proposed project. This analysis focuses on air pollution from two perspectives: daily emissions and pollutant concentrations. “Emissions” refer to the quantity of pollutant released into the air, measured in pounds per day (ppd). “Concentrations” refer to the amount of pollutant material per volumetric unit of air, measured in parts per million (ppm) or micrograms per cubic meter (µg/m<sup>3</sup>).

#### Pollutants and Effects

Criteria air pollutants are defined as pollutants for which the federal and State governments have established ambient air quality standards, or criteria, for outdoor concentrations to protect public health. The federal and State standards have been set at levels above which concentrations could be harmful to human health and welfare. These standards are designed to protect the most sensitive persons from illness or discomfort. Pollutants of concern include carbon monoxide (CO), ozone (O<sub>3</sub>), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>), particulate matter 2.5 microns or less in diameter (PM<sub>2.5</sub>), particulate matter 10 microns or less in diameter (PM<sub>10</sub>), and lead (Pb). These pollutants are discussed below.

**Carbon Monoxide.** CO is a colorless and odorless gas formed by the incomplete combustion of fossil fuels. CO is emitted almost exclusively from motor vehicles, power plants, refineries, industrial boilers, ships, aircraft, and trains. In urban areas such as the project location, automobile exhaust accounts for the majority of CO emissions. CO is a non-reactive air pollutant that dissipates relatively quickly, so ambient CO concentrations generally follow the spatial and temporal distributions of vehicular traffic. CO

concentrations are influenced by local meteorological conditions, primarily wind speed, topography, and atmospheric stability. CO from motor vehicle exhaust can become locally concentrated when surface-based temperature inversions are combined with calm atmospheric conditions, a typical situation at dusk in urban areas between November and February.<sup>70</sup> The highest levels of CO typically occur during the colder months of the year when inversion conditions are more frequent. In terms of health, CO competes with oxygen, often replacing it in the blood, thus reducing the blood's ability to transport oxygen to vital organs. The results of excess CO exposure can be dizziness, fatigue, and impairment of central nervous system functions.

**Ozone.** O<sub>3</sub> is a colorless gas that is formed in the atmosphere when reactive organic gases (ROG), which includes volatile organic compounds (VOC), and nitrogen oxides (NO<sub>x</sub>) react in the presence of ultraviolet sunlight. O<sub>3</sub> is not a primary pollutant; it is a secondary pollutant formed by complex interactions of two pollutants directly emitted into the atmosphere. The primary sources of ROG and NO<sub>x</sub>, the components of O<sub>3</sub>, are automobile exhaust and industrial sources. Meteorology and terrain play major roles in O<sub>3</sub> formation. Ideal conditions occur during summer and early autumn, on days with low wind speeds or stagnant air, warm temperatures, and cloudless skies. The greatest source of smog-producing gases is the automobile. Short-term exposure (lasting for a few hours) to O<sub>3</sub> at levels typically observed in Southern California can result in breathing pattern changes, reduction of breathing capacity, increased susceptibility to infections, inflammation of the lung tissue, and some immunological changes.

**Nitrogen Dioxide.** NO<sub>2</sub>, like O<sub>3</sub>, is not directly emitted into the atmosphere but is formed by an atmospheric chemical reaction between nitric oxide (NO) and atmospheric oxygen. NO and NO<sub>2</sub> are collectively referred to as NO<sub>x</sub> and are major contributors to O<sub>3</sub> formation. NO<sub>2</sub> also contributes to the formation of PM<sub>10</sub>. High concentrations of NO<sub>2</sub> can cause breathing difficulties and result in a brownish-red cast to the atmosphere with reduced visibility. There is some indication of a relationship between NO<sub>2</sub> and chronic pulmonary fibrosis. Some increase of bronchitis in children (two and three years old) has also been observed at concentrations below 0.3 ppm.

**Sulfur Dioxide.** SO<sub>2</sub> is a colorless, pungent gas formed primarily by the combustion of sulfur-containing fossil fuels. Main sources of SO<sub>2</sub> are coal and oil used in power plants and industries. Generally, the highest levels of SO<sub>2</sub> are found near large industrial complexes. In recent years, SO<sub>2</sub> concentrations have been reduced by the increasingly stringent controls placed on stationary source emissions of SO<sub>2</sub> and limits on the sulfur content of fuels. SO<sub>2</sub> is an irritant gas that attacks the throat and lungs. It can cause acute respiratory symptoms and diminished ventilator function in children. SO<sub>2</sub> can also yellow plant leaves and erode iron and steel.

**Particulate Matter.** Particulate matter pollution consists of very small liquid and solid particles floating in the air, which can include smoke, soot, dust, salts, acids, and metals. Particulate matter also forms when gases emitted from industries and motor vehicles undergo chemical reactions in the atmosphere. PM<sub>2.5</sub> and PM<sub>10</sub> represent fractions of particulate matter. Fine particulate matter, or PM<sub>2.5</sub>, is roughly 1/28 the diameter of a human hair. PM<sub>2.5</sub> results from fuel combustion (e.g. motor vehicles, power generation, and industrial facilities), residential fireplaces, and wood stoves. In addition, PM<sub>2.5</sub> can be formed in the atmosphere from gases such as SO<sub>2</sub>, NO<sub>x</sub>, and VOC. Inhalable particulate matter, or PM<sub>10</sub>, is about 1/7 the thickness of a human hair. Major sources of PM<sub>10</sub> include crushing or grinding operations; dust stirred up by vehicles traveling on roads; wood burning stoves and fireplaces; dust from construction, landfills, and agriculture; wildfires and brush/waste burning; industrial sources; windblown dust from open lands; and atmospheric chemical and photochemical reactions.

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<sup>70</sup>Inversion is an atmospheric condition in which a layer of warm air traps cooler air near the surface of the earth, preventing the normal rising of surface air.

PM<sub>2.5</sub> and PM<sub>10</sub> pose a greater health risk than larger-size particles. When inhaled, these tiny particles can penetrate the human respiratory system's natural defenses and damage the respiratory tract. PM<sub>2.5</sub> and PM<sub>10</sub> can increase the number and severity of asthma attacks, cause or aggravate bronchitis and other lung diseases, and reduce the body's ability to fight infections. Very small particles of substances, such as lead, sulfates, and nitrates can cause lung damage directly. These substances can be absorbed into the blood stream and cause damage elsewhere in the body. These substances can transport absorbed gases, such as chlorides or ammonium, into the lungs and cause injury. Whereas PM<sub>10</sub> tends to collect in the upper portion of the respiratory system, PM<sub>2.5</sub> is so tiny that it can penetrate deeper into the lungs and damage lung tissues. Suspended particulates also damage and discolor surfaces on which they settle, as well as produce haze and reduce regional visibility.

**Lead.** Pb in the atmosphere occurs as particulate matter. Sources of lead include leaded gasoline; the manufacturers of batteries, paint, ink, ceramics, and ammunition; and secondary lead smelters. Prior to 1978, mobile emissions were the primary source of atmospheric lead. Between 1978 and 1987, the phase-out of leaded gasoline reduced the overall inventory of airborne lead by nearly 95 percent. With the phase-out of leaded gasoline, secondary lead smelters, battery recycling, and manufacturing facilities have become lead-emission sources of greater concern.

Prolonged exposure to atmospheric lead poses a serious threat to human health. Health effects associated with exposure to lead include gastrointestinal disturbances, anemia, kidney disease, and in severe cases, neuromuscular and neurological dysfunction. Of particular concern are low-level lead exposures during infancy and childhood. Such exposures are associated with decrements in neurobehavioral performance, including intelligence quotient performance, psychomotor performance, reaction time, and growth.

**Toxic Air Contaminants.** A substance is considered toxic if it has the potential to cause adverse health effects in humans. A toxic substance released into the air is considered a toxic air contaminant (TAC). TACs are identified by State and federal agencies based on a review of available scientific evidence. In the State of California, TACs are identified through a two-step process that was established in 1983 under the Toxic Air Contaminant Identification and Control Act, Assembly Bill 1807, Tanner. This two-step process of risk identification and risk management was designed to protect residents from the health effects of toxic substances in the air.

The South Coast Air Quality Management District (SCAQMD) has a long and successful history of reducing air toxics and criteria emissions in the South Coast Air Basin (Basin). SCAQMD has an extensive control program, including traditional and innovative rules and policies. These policies can be viewed in the SCAQMD's *Air Toxics Control Plan for the Next Ten Years* (March 2000).

<b>TABLE 2.2-3: NATIONAL AMBIENT AIR QUALITY STANDARDS AND ATTAINMENT STATUS FOR THE SOUTH COAST AIR BASIN</b>			
<b>Pollutant</b>	<b>Averaging Period</b>	<b>Standards</b>	<b>Attainment Status</b>
Ozone (O <sub>3</sub> )	1-hour	--	--
	8-hour	0.075 ppm (147 µg/m <sup>3</sup> )	Nonattainment
Respirable Particulate Matter (PM <sub>10</sub> )	24-hour	150 µg/m <sup>3</sup>	Nonattainment
	Annual Arithmetic Mean	--	--
Fine Particulate Matter (PM <sub>2.5</sub> )	24-hour	35 µg/m <sup>3</sup>	Nonattainment
	Annual Arithmetic Mean	15.0 µg/m <sup>3</sup>	Nonattainment
Carbon Monoxide (CO)	8-hour	9 ppm (10 mg/m <sup>3</sup> )	Maintenance
	1-hour	35 ppm (40 mg/m <sup>3</sup> )	Maintenance
Nitrogen Dioxide (NO <sub>2</sub> )	Annual Arithmetic Mean	0.053 ppm (100 µg/m <sup>3</sup> )	Attainment
	1-hour	--	--
Sulfur Dioxide (SO <sub>2</sub> )	Annual Arithmetic Mean	0.030 ppm (80 µg/m <sup>3</sup> )	Attainment
	24-hour	0.14 ppm (365 µg/m <sup>3</sup> )	Attainment
	3-hour	--	--
	1-hour	--	--
Lead (Pb)	30-day average	--	--
	Calendar Quarter	0.15 µg/m <sup>3</sup>	Attainment

**SOURCE:** CARB, *Ambient Air Quality Standards*, November 17, 2008.

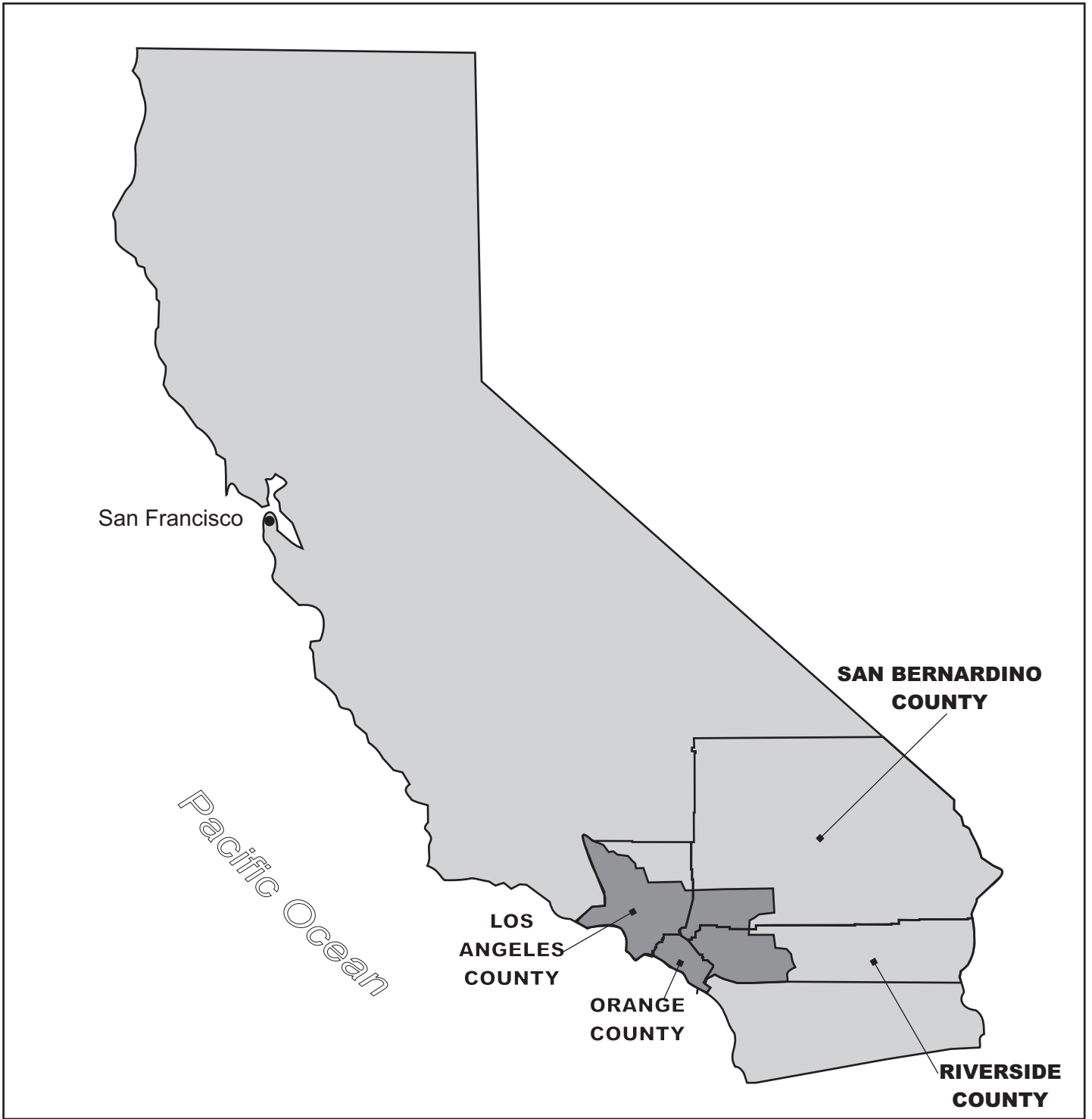
***Affected Environment***

The Basin is in an area of high air pollution potential due to its climate and topography. The general region lies in the semi-permanent high pressure zone of the eastern Pacific, resulting in a mild climate tempered by cool sea breezes with light average wind speeds. The Basin experiences warm summers, mild winters, infrequent rainfalls, light winds, and moderate humidity. This usually mild climatological pattern is interrupted infrequently by periods of extremely hot weather, winter storms, or Santa Ana winds. The Basin is a coastal plain with connecting broad valleys and low hills, bounded by the Pacific Ocean to the west and high mountains around the rest of its perimeter. The mountains and hills within the area contribute to the variation of rainfall, temperature, and winds throughout the region.

The Basin experiences frequent temperature inversions. Temperature typically decreases with height. However, under inversion conditions, temperature increases as altitude increases, thereby preventing air close to the ground from mixing with the air above it. As a result, air pollutants are trapped near the ground. During the summer, air quality problems are created due to the interaction between the ocean surface and the lower layer of the atmosphere. This interaction creates a moist marine layer. An upper layer of warm air mass forms over the cool marine layer, preventing air pollutants from dispersing upward. Additionally, hydrocarbons and NO<sub>2</sub> react under strong sunlight, creating smog. Light, daytime winds, predominantly from the west, further aggravate the condition by driving air pollutants inland, toward the mountains. During the fall and winter, air quality problems are created due to CO and NO<sub>2</sub> emissions. CO concentrations are generally worse in the morning and late evening (around 10:00 p.m.).

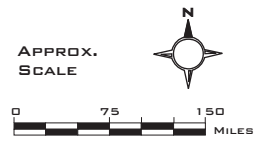
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LEGEND:

- South Coast Air Basin
- State of California
- County Borders



SOURCE: California Air Resources Board, State and Local Air Monitoring Network Plan, October 1998

FIGURE 2.2-2

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In the morning, CO levels are relatively high due to cold temperatures and the large number of cars traveling. High CO levels during the late evenings are a result of stagnant atmospheric conditions trapping CO in the area. Since CO emissions are produced almost entirely from automobiles, the highest CO concentrations in the Basin are associated with heavy traffic. NO<sub>2</sub> concentrations are also generally higher during fall and winter days.

Local Climate

The SCAQMD monitors air quality conditions at 38 locations throughout the Basin. The project site is located in SCAQMD’s West San Gabriel Valley Air Monitoring subregion, which is served by the Pasadena Monitoring Station, and is located approximately three miles north of the project corridor at 752 South Wilson Avenue in the City of Pasadena (Figure 2.2-3).

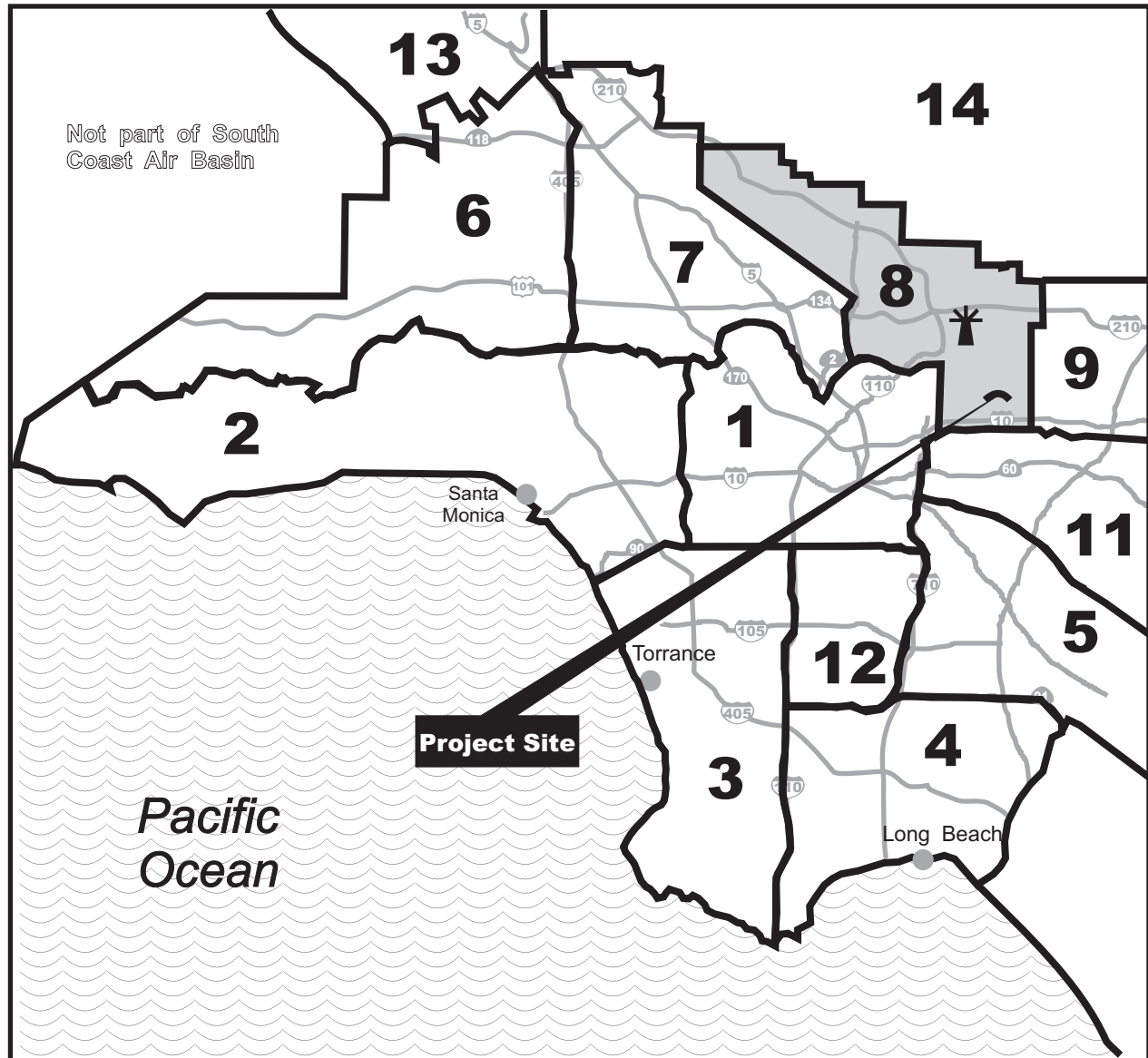
Historical data from the Pasadena Monitoring Station were used to characterize existing conditions in the vicinity of the project area. Criteria pollutants monitored at the Pasadena Monitoring Station include O<sub>3</sub>, CO, PM<sub>2.5</sub>, and NO<sub>2</sub>. This monitoring station does not monitor PM<sub>10</sub> or SO<sub>2</sub>. The nearest, most representative monitoring station that gathers PM<sub>10</sub> and SO<sub>2</sub> data is located approximately eight miles southwest of the project site at the Downtown Los Angeles Monitoring Station.

Table 2.2-4 shows pollutant levels, the federal standards, and the number of exceedances recorded at the Pasadena Monitoring Station from 2005 to 2007. The NAAQS for the criteria pollutants are also shown in the table. Criteria pollutants CO, NO<sub>2</sub>, PM<sub>10</sub>, and SO<sub>2</sub> did not exceed the federal standards during the 2005 through 2007 period. However, the eight-hour federal standard for O<sub>3</sub> was exceeded five to 11 times. Additionally, the 24-hour federal standard for PM<sub>2.5</sub> was exceeded one time in 2006 and three times in 2007 and the annual federal standard for PM<sub>2.5</sub> was exceeded in 2005.

TABLE 2.2-4: 2005-2007 AMBIENT AIR QUALITY DATA IN PROJECT VICINITY				
Pollutant	Pollutant Concentration & Standards	Number of Days Above Federal Standard		
		2005	2006	2007
Ozone	Maximum 8-hr Concentration (ppm)	0.11	0.12	0.10
	Days > 0.075 ppm (federal 8-hr standard)	5	7	11
Carbon Monoxide	Maximum 1-hr concentration (ppm)	4	4	3
	Days > 35 ppm (federal 1-hr standard)	0	0	0
	Maximum 8-hr concentration (ppm)	2.8	2.8	2.4
	Days > 9 ppm (federal 8-hr standard)	0	0	0
Nitrogen Dioxide	Annual Arithmetic Mean (ppm)	0.024	0.025	0.025
	Exceed Standard (0.053 μg/m <sup>3</sup> )?	0	0	0
PM <sub>10</sub> /a/	Maximum 24-hr concentration (μg/m <sup>3</sup> )	70	59	78
	Estimated Days > 150 μg/m <sup>3</sup> (24-hr standard)	0	0	0
PM <sub>2.5</sub>	Maximum 24-hr Concentration (μg/m <sup>3</sup> )	62.9	45.9	68.9
	Estimated > 35 μg/m <sup>3</sup> (24-hr standard)	0	1	3
	Annual Arithmetic Mean (μg/m <sup>3</sup> )	15.1	13.4	14.3
	Exceed Standard (15 μg/m <sup>3</sup> )?	Yes	No	No
Sulfur Dioxide/a/	Maximum 24-hr Concentration (ppm)	0.010	0.0064	0.003
	Days > 0.14 ppm (24-hr standard)	0	0	0

/a/ Data is from the Downtown Los Angeles Monitoring Station  
SOURCE: SCAQMD, Historical Data by Year, available at <http://www.aqmd.gov/smog/historicaldata.htm>, accessed December 8, 2008.

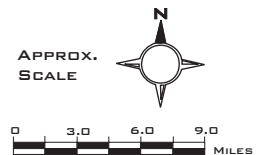
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LEGEND: \* Pasadena Monitoring Station      ~ Project Site

Air Monitoring Areas in Los Angeles County:

- |                                 |                               |
|---------------------------------|-------------------------------|
| 1. Central Los Angeles          | 9. East San Gabriel Valley    |
| 2. Northwest Coastal            | 10. Pomona/Walnut Valley      |
| 3. Southwest Coastal            | 11. South San Gabriel Valley  |
| 4. South Coastal                | 12. South Central Los Angeles |
| 5. Southeast Los Angeles County | 13. Santa Clarita Valley      |
| 6. West San Fernando Valley     | 14. Antelope Valley           |
| 7. East San Fernando Valley     | 15. San Gabriel Mountains     |
| 8. West San Gabriel Valley      |                               |



SOURCE: South Coast Air Quality Management District Air Monitoring Areas Map, 1989.

FIGURE 2.2-3

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Background Carbon Monoxide Conditions

The SCAQMD defines the ambient CO level as the highest reading over the past three years. A review of data from the Pasadena Monitoring Station for the 2005 to 2007 period indicates that the one- and eight-hour background concentrations are approximately 4 and 2.8 ppm, respectively. Accordingly, the existing background concentrations do not exceed the federal one- and eight-hour CO standards of 35 and 9 ppm, respectively.

Existing CO concentrations were modeled at intersections near the project site. The study intersections were selected to be representative of the project area and were based on traffic volume to capacity (V/C) ratio and the traffic level of service (LOS) as indicated in the traffic analysis.<sup>71,72</sup> The intersections were selected because they represent the busiest or most congested intersections analyzed in the traffic analysis.

The selected intersections are as follows:

- Mission Road/Del Mar Avenue - AM Peak Hour
- Mission Road/Garfield Avenue - PM Peak Hour
- Las Tunas Drive/San Gabriel Boulevard - AM Peak Hour
- Las Tunas Drive/San Gabriel Boulevard - PM Peak Hour

At each intersection, traffic-related CO contributions were added to background CO conditions. Traffic CO contributions were estimated using the USEPA CAL3QHC dispersion model, which utilizes traffic volume inputs and CARB EMFAC2007 emissions factors. Consistent with the California Department of Transportation (Caltrans) CO protocol, receptors for the analysis were located three meters (approximately ten feet) from each intersection corner.<sup>73</sup> Existing conditions at the study intersections are shown in **Table 2.2-5**. One-hour CO concentrations are approximately 5 ppm and eight-hour CO concentrations range from approximately 3.2 to 3.5 ppm. Presently, none of the study intersections exceed the federal one- and eight-hour CO standards of 35 and 9 ppm, respectively.

<b>TABLE 2.2-5: EXISTING CARBON MONOXIDE CONCENTRATIONS /a/</b>		
<b>Intersection</b>	<b>1-hour (parts per million)</b>	<b>8-hour (parts per million)</b>
Mission Road/Del Mar Avenue - AM Peak Hour	5	3.2
Mission Road/Garfield Avenue - PM Peak Hour	5	3.4
Las Tunas Drive/San Gabriel Boulevard - AM Peak Hour	5	3.4
Las Tunas Drive/San Gabriel Boulevard - PM Peak	5	3.5
<b>Federal Standard</b>	<b>35</b>	<b>9</b>
<i>/a/ All concentrations include one- and eight-hour ambient concentrations of 4 and 2.8 ppm, respectively.</i>		
<b>SOURCE:</b> TAHA, 2009.		

<sup>71</sup>Level of service is used to indicate the quality of traffic flow on roadway segments and at intersections. Level of service ranges from LOS A (free flow, little congestion) to LOS F (forced flow, extreme congestion).

<sup>72</sup>Iteris, *Traffic Study for the Alameda Corridor – East Construction Authority San Gabriel Railroad Trench Construction Conditions*, December 2008.

<sup>73</sup>Caltrans, *Transportation Project-Level Carbon Monoxide Protocol*, 1997.

## Sensitive Receptors

Some land uses are considered more sensitive to changes in air quality than others, depending on the population groups and the activities involved. CARB has identified the following typical groups who are most likely to be affected by air pollution: children under 14, the elderly over 65 years of age, athletes, and people with cardiovascular and chronic respiratory diseases. According to the SCAQMD, sensitive receptors include residences, schools, playgrounds, child care centers, athletic facilities, long-term health care facilities, rehabilitation centers, convalescent centers, and retirement homes. The project corridor extends for 2.6 miles through the Cities of San Gabriel and Alhambra. There are many sensitive receptors located along the corridor, including residences, recreational facilities, and schools (e.g., San Gabriel High School).

As shown in **Figure 2.2-4**, sensitive receptors near the project corridor include the following:

- Single- and multi-family residences located immediately to the north and south
- San Gabriel High School located adjacent to the south
- Alhambra Municipal Golf Course located adjacent to southeast
- Asian Youth Center located approximately 40 feet to the north
- San Gabriel Unified School District located approximately 100 feet to the north
- San Gabriel Mission located approximately 145 feet to the north
- Winston Smoyer Community Garden located approximately 100 feet to the north
- Vista Cove Care Center located approximately 100 feet to the north
- Mission Park located approximately 145 feet to the north
- West San Gabriel Valley YMCA located approximately 250 feet to the west
- Smith Park located approximately 300 feet to the north
- San Gabriel Mission Elementary School located approximately 400 feet to the northwest
- San Gabriel Branch of the Los Angeles County Public Library located approximately 500 feet to the south
- San Gabriel Mission High School located approximately 800 feet to the north
- Almansor Court located approximately 900 feet to the south
- San Gabriel Valley Medical Center located approximately 1,100 feet to the north
- Almansor Park located approximately 1,250 feet to the south
- La Casa de San Gabriel Community Center located 1,200 feet to the southeast
- Granada Elementary School located approximately 1,650 feet to the north

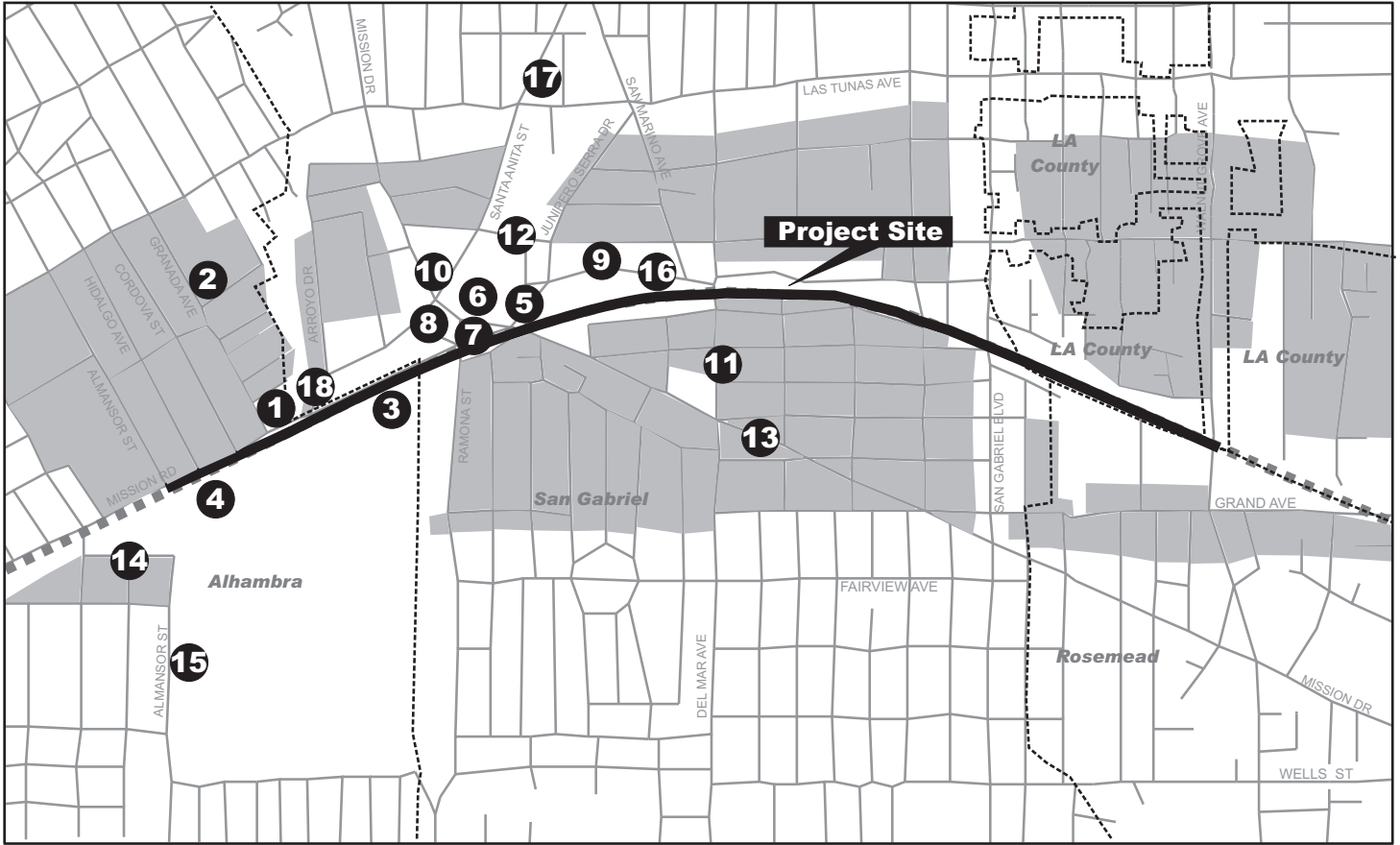
The above sensitive receptors represent the nearest sensitive land uses with the potential to be impacted by the proposed project. Additional sensitive receptors may be located near the project corridor. These unidentified sensitive receptors would experience similar impacts based on distance as the levels discussed for the identified receptors.

## *Environmental Consequences*





### Regional Impacts

EMFAC2007 is the latest emission inventory model that calculates emission inventories and emission rates for motor vehicles operating on roads in California. This model reflects the CARB's current understanding of how vehicles travel and how much they pollute. The EMFAC2007 model can be used to show how California motor vehicle emissions have changed over time and are projected to change in the future. Localized CO emissions were calculated utilizing the USEPA CAL3QHC dispersion model





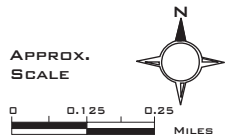
**LEGEND:**

-  Project Site
-  Union Pacific Railroad - Alhambra Subdivision
-  City/Community Boundary
-  Residential Sensitive Receptors  
Single- and Multi-Family Residences

**#** Non-residential Sensitive Receptor

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li><b>1.</b> Winston Smoyer Community Center</li> <li><b>2.</b> Granada Elementary School</li> <li><b>3.</b> San Gabriel High School</li> <li><b>4.</b> Alhambra Municipal Golf Course</li> <li><b>5.</b> San Gabriel Unified School District</li> <li><b>6.</b> San Gabriel Mission</li> <li><b>7.</b> Mission Park</li> <li><b>8.</b> San Gabriel City Hall</li> <li><b>9.</b> Smith Park</li> </ul> | <ul style="list-style-type: none"> <li><b>10.</b> San Gabriel Mission Elementary School</li> <li><b>11.</b> Los Angeles County Library - San Gabriel Branch</li> <li><b>12.</b> San Gabriel Mission High School</li> <li><b>13.</b> La Casa de San Gabriel Community Center</li> <li><b>14.</b> West San Gabriel YMCA</li> <li><b>15.</b> Almansor Park and Court</li> <li><b>16.</b> Asian Youth Center</li> <li><b>17.</b> San Gabriel Valley Medical Center</li> <li><b>18.</b> Vista Cove Care Center</li> </ul> |
|--|--|

SOURCE: TAHA, 2009.



**FIGURE 2.2-4**

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and the CARB EMFAC2007 model. CAL3QHC is a model developed by the USEPA to predict CO and other pollutant concentrations from motor vehicles at roadway intersections. The model uses a traffic algorithm for estimating vehicular queue lengths at signalized intersections.

The proposed project would result in an adverse operational air quality impact if:

- Daily operational emissions exceed the federal operational emissions thresholds listed in **Table 2.2-6**;

<b>TABLE 2.2-6: FEDERAL OPERATIONAL EMISSIONS THRESHOLDS</b>	
<b>Criteria Pollutant</b>	<b>Pounds Per Day</b>
Volatile Organic Compounds (VOC)	10
Nitrogen Oxides (NO <sub>x</sub> )	10
Carbon Monoxide (CO)	100
Fine Particulates (PM <sub>2.5</sub> )	70
Particulates (PM <sub>10</sub> )	70
<b>SOURCE:</b> SCAQMD, 2008.	

- Project-related traffic causes CO concentrations at study intersections to violate the NAAQS for either the one- or eight-hour period. The NAAQS for the one- and eight-hour periods are 35 and 9 ppm, respectively. If CO concentrations currently exceed the NAAQS, then an incremental increase of 1.0 ppm over “no-build” conditions for the one-hour period would be considered a significant impact. An incremental increase of 0.45 ppm over the “no-build” conditions for the eight-hour period would be considered significant;
- The proposed project would generate excess emissions of TACs;
- The proposed project would create an odor nuisance; or
- The proposed project would not comply with transportation conformity regulations

**Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Alternative 1 would not increase the frequency of train travel or change vehicle speeds on the railway. Train emissions would be identical to existing conditions. Regarding vehicles, Alternative 1 would not increase vehicle trips but would improve traffic flow by eliminating existing grade crossings. Regional emissions were calculated by quantifying the emissions that would be reduced from eliminating 1,744 hours of delay caused by the existing grade crossings. Regional operational emissions from the proposed project are shown in Table 2.2-7.

<b>TABLE 2.2-7: DAILY OPERATIONS EMISSIONS</b>					
	<b>Tons Per Year</b>				
	<b>VOC</b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>PM<sub>2.5</sub></b>	<b>PM<sub>10</sub></b>
<b>Project Emissions/a/</b>	(17)	(73)	(93)	(1)	(1)
<b>Federal Threshold</b>	<b>10</b>	<b>10</b>	<b>100</b>	<b>70</b>	<b>70</b>
<b>Exceed Threshold?</b>	No	No	No	No	No
/a/ A reduction in operational emissions is based on the elimination of 1,744 hours of delay attributable to the existing four grade crossings. <b>SOURCE:</b> TAHA, 2009.					

Alternative 1 would decrease mobile source emissions when compared to baseline conditions by 17 tpy for VOC, 73 tpy for NO<sub>x</sub>, 93 tpy for CO, less than one tpy for SO<sub>x</sub>, one tpy for PM<sub>2.5</sub>, and one tpy for PM<sub>10</sub>. Emissions associated with the Alternative 1 would not exceed the federal thresholds. Alternative 1 would not result in an adverse regional operational air quality impact.

**Alternative 2 – No Build Alternative**

The San Gabriel Trench would not be constructed under Alternative 2 and air quality would continue to deteriorate, as traffic congestion would persist at the site.

**Localized Impacts**

**Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The USEPA CAL3QHC micro-scale dispersion model was used to calculate CO concentrations for 2012 conditions. CO concentrations at the analyzed intersections are shown for the AM and PM peak hours in Tables 2.2-8. As indicated, one-hour CO concentrations under conditions would range from approximately 3 to 4 ppm at worst-case sidewalk receptors. Eight-hour CO concentrations under “project” conditions would range from approximately 2.4 to 2.6 ppm. The federal one- and eight-hour standards of 35 and 9 ppm, respectively, would not be exceeded at the analyzed intersections. In addition, Alternative 1 would eliminate vehicle idling associated CO emissions during train crossing. CO concentrations would be less with this alternative than with existing conditions. Alternative 1 would result in beneficial localized CO concentrations.

<b>TABLE 2.2-8: 2008 AND 2012 CARBON MONOXIDE CONCENTRATIONS/a/</b>		
<b>Intersection</b>	<b>1-hour (parts per million) Project (2012)</b>	<b>8-hour (parts per million) Project (2012)</b>
Mission Road/Del Mar Avenue - AM Peak Hour	3	2.4
Mission Road/Garfield Avenue - PM Peak Hour	4	2.6
Las Tunas Drive/San Gabriel Boulevard - AM Peak Hour	4	2.6
Las Tunas Drive/San Gabriel Boulevard - PM Peak	4	2.6
<b>Federal Standard</b>	<b>35</b>	<b>9</b>
/a/ Project concentrations include year 2012 one- and eight-hour ambient concentrations of 3 and 2.1 ppm, respectively. SOURCE: TAHA, 2009.		

**Alternative 2 – No Build Alternative**

The San Gabriel Trench would not be constructed under Alternative 2 as a result project intersection would continue to accumulate traffic and engine idling times would increase further exacerbating air quality.

**Toxic Air Contaminant Impacts**

**Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Regarding trains, Alternative 1 would not increase the frequency of train travel or change vehicle speeds on the railway. Train TAC emissions would be identical to existing conditions. Train TAC emissions would disperse into the atmosphere and would not accumulate within the trench. Train conductors would

not be exposed to reentrained or increased TAC emissions. Regarding automobiles, the Federal Highway Administration (FHWA) has published guidance for analyzing mobile source air toxic (MSAT) emissions. This guidance is designed for analyzing highway projects and is not compatible with the Alternative 1. MSAT (e.g., diesel particulate matter, benzene, formaldehyde, acetaldehyde, acrolein, and 1,3-butadiene) emissions are directly related to automobile vehicle miles traveled (VMT). Alternative 1 would not alter regional VMT and associated MSATs. TAC emissions would not increase and Alternative 1 would not result in an adverse TAC impact.

#### **Alternative 2 – No Build Alternative**

The San Gabriel Trench would not be constructed under Alternative 2 and no change in TACs would occur. Alternative 2 would not have an adverse TAC impact.

#### **Odors**

##### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Land uses and industrial operations that are associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies and fiberglass molding. Alternative 1 would not include any land use or activity that typically generates adverse odors and would not result in an adverse odor impact.

##### **Alternative 2 – No Build Alternative**

The San Gabriel Trench would not be constructed under Alternative 2 and no odors would occur. Alternative 2 would not have an adverse odor impact.

#### **Conformity**

##### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Under the 1990 Clean Air Act Amendments, the United States Department of Transportation cannot fund, authorize, or approve federal actions to support programs or projects that are not first found to conform to State Implementation Plan for achieving the goals of the Clean Air Act requirements. Title 40 of the Code of Federal regulations states the conformity requirements. Section 93.126 indicates that rail crossing projects are exempt from Title 40 conformity regulations. Alternative 1 is a rail crossing project designed to improve safety conditions, and Alternative 1 is exempt from conformity guidance.

##### **Alternative 2 – No Build Alternative**

The San Gabriel Trench would not be constructed under Alternative 2 and conformity guidance would not apply.

#### ***Measures to Minimize Harm***

##### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Operational air quality impacts would result in a benefit; as such abatement measures are not required.

## **Alternative 2 – No Build Alternative**

The San Gabriel Trench would not be constructed under Alternative 2 and no adverse impact would occur. No avoidance, minimization, or abatement measures are required.

### **2.2.5 NOISE**

This section evaluates noise and vibration impacts associated with the implementation of the proposed project. The noise and vibration analysis in this section assesses the following: existing noise and vibration conditions within the project area, as well as long-term operational noise and vibration impacts associated with the proposed project.

#### **Noise and Vibration Definitions**

Sound is technically described in terms of the loudness (amplitude) and frequency (pitch) of the sound. The standard unit of measurement for sound is the decibel (dB). The human ear is not equally sensitive to sound at all frequencies. The “A-weighted scale,” abbreviated dBA, reflects the normal hearing sensitivity range of the human ear. On this scale, the range of human hearing extends from approximately 3 to 140 dBA. Studies have shown that the smallest perceptible change in sound level for a person with normal hearing sensitivity is approximately 3 dBA. For areas with primarily daytime use that are not sensitive to nighttime noise, such as schools, noise impacts are evaluated based on changes in energy equivalent levels ( $L_{eq}$ ).  $L_{eq}$  measures the relative average noise level (in dBA) over a specified period (usually one hour).  $L_{90}$  is defined as the level of noise that is exceeded 90 percent of the measured interval and is generally regarded as background level.  $L_{max}$  is the maximum noise level achieved during a measured interval. Noise in residential areas is characterized by measuring the change in day-night sound level ( $L_{dn}$ ).  $L_{dn}$  measures the relative average noise level over a specified period (usually 24 hours), with a weighting of 10 dB applied to those noises occurring during nighttime (10:00 p.m. to 7:00 a.m.). The weighting makes one event during the nighttime hours equivalent to ten of the same events during the daytime in the calculation of  $L_{dn}$ . Sound Exposure Level (SEL) is a measure of total sound energy for an event. SEL measurements can be used to calculate noise contributions to the  $L_{eq}$  and  $L_{dn}$ .

Vibration is generated by both vehicular traffic and trains. The vibration from vehicular traffic is unlikely to be perceptible unless there are large potholes or other discontinuities in the road surface. This discussion, therefore, focuses on vibration from trains. Vibration from trains is characterized in terms of root-mean-square (RMS) amplitude. The threshold of vibration perception for most humans is about 65  $V_{db}$  (decibels with a reference quantity of 1 micro-inch per second).

#### ***Regulatory Setting***

The National Environmental Policy Act (NEPA) of 1969 and the California Environmental Quality Act (CEQA) provide the broad basis for analyzing and abating highway traffic noise effects. The intent of these laws is to promote the general welfare and to foster a healthy environment. The requirements for noise analysis and consideration of noise abatement and/or mitigation, however, differ between NEPA and CEQA.

#### **National Environmental Policy Act and 23 CFR 772**

For highway transportation projects with Federal Highway Administration (FHWA) involvement, the Federal-Aid Highway Act of 1970 and the associated implementing regulations (23 CFR 772) govern the analysis and abatement of traffic noise impacts. The regulations require that potential noise impacts in areas of frequent human use be identified during the planning and design of a highway project. The regulations contain noise abatement criteria (NAC) that are used to determine when a noise impact would

occur. The NAC differ depending on the type of land use under analysis. For example, the NAC for residences (67 dBA) is lower than the NAC for commercial areas (72 dBA). **Table 2.2-9** lists the noise abatement criteria for use in the NEPA-23 CFR 772 analysis.

<b>TABLE 2.2-9: NOISE ABATEMENT CRITERIA</b>		
<b>Activity Category</b>	<b>Noise Abatement Criteria (dBA) <math>L_{eq}</math></b>	<b>Description of Activity Category</b>
A	57 (Exterior)	Lands on which serenity and quiet are of extraordinary significance and serve an important public need and where the preservation of those qualities is essential if the area is to continue to serve its intended purpose.
B	67 (Exterior)	Picnic areas, recreation areas, playgrounds, active sports areas, parks, residences, motels, hotels, schools, churches, libraries, and hospitals.
C	72 (Exterior)	Developed lands, properties, or activities not included in Categories A or B above.
D	--	Undeveloped lands.
E	52 (Interior)	Residences, motels, hotels, public meeting rooms, schools, churches, libraries, hospitals, and auditoriums.
<b>SOURCE:</b> 23 CFR Part 772, 1997.		

### California Environmental Quality Act

CEQA requires a strictly baseline versus build analysis to assess whether a proposed project will have a noise impact. If a proposed project is determined to have a significant noise impact under CEQA, then CEQA dictates that mitigation measures must be incorporated into the project unless such measures are not feasible. The rest of this section will focus on the NEPA-23 CFR 772 noise analysis; please see Section 3.12 of this document for further information on noise analysis under CEQA.

### Train Noise Standards

The criteria in the Federal Railroad Administration (FRA) *High-Speed Ground Transportation Noise and Vibration Impact Assessment* were used to assess existing and future noise impacts from train noise.<sup>74</sup> These criteria are similar to those in the FTA *Transit Noise and Vibration Impact Assessment*.<sup>75</sup> These documents are founded on research on community reaction to noise and are based on change in noise exposure using a sliding scale. The amount that the transit project is allowed to change the overall noise environment is reduced with increasing levels of existing noise.

The FRA Noise Impact Criteria group noise sensitive land uses into the following categories:

- Category 1: Buildings or parks, where quiet is an essential element of their purpose;
- Category 2: Residences and buildings where people normally sleep. This includes residences, hospitals, and hotels where nighttime sensitivity is assumed to be of utmost importance; and
- Category 3: Institutional land uses with primarily daytime and evening use. This category includes schools, libraries, and churches.

<sup>74</sup>Federal Railway Administration, *High-Speed Ground Transportation Noise and Vibration Impact Assessment*, 2005.

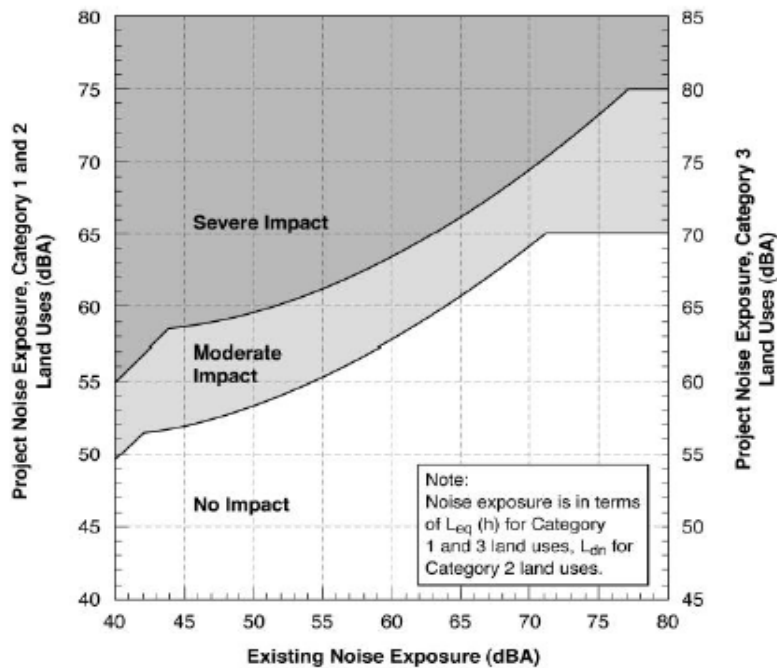
<sup>75</sup>Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, 2006.

$L_{dn}$  is used to characterize noise exposure for residential areas (Category 2). The maximum one-hour  $L_{eq}$  during the period that the facility is used for other noise sensitive land uses such as parks and school buildings (Categories 1 and 3, respectively).

There are two levels of impact included in the FTA criteria, as shown in **Figure 2.2-5**:

**Severe Impact:** Severe noise impacts are considered "adverse" as defined under NEPA and in implementing regulations. Noise mitigation will normally be specified for severe impact areas unless there is no practical method of mitigating the noise.

**Moderate Impact:** In this range, other project-specific factors must be considered to determine the magnitude of the impact and the need for mitigation. These other factors can include the predicted noise increase over existing noise levels, the types and number of noise-sensitive land uses affected, existing outdoor-indoor sound insulation, and the cost effectiveness of mitigating noise to more acceptable levels.



The noise impact criteria for rail operations are summarized in **Figure 2.2-5** and **Tables 2.2-10** and **2.2-11**. For residential areas, the horizontal axis in **Figure 2.2-5** is the existing  $L_{dn}$  without any proposed project noise and the vertical axis is the  $L_{dn}$  caused by the proposed project. The same information is given in tabular format in **Table 2.2-10**. **Table 2.2-11** displays the information from **Table 2.2-10** in terms of the allowable increase in cumulative noise exposure (noise from existing sources plus proposed project noise) as a function of existing noise exposure. The amount the proposed project is allowed to change the overall noise environment is based on a sliding scale. As the existing noise exposure increases, the amount of the allowable increase in the overall noise exposure caused by the proposed project decreases. Therefore, locations with existing noise levels less than 55 dBA are allowed a greater overall noise increase than locations with existing noise levels greater than 55 dBA. This is easiest to understand by examining **Table 2.2-11**. For a Category 1 or 2 land use with an existing ambient noise level of 50 dBA, an impact would occur when the cumulative noise exposure (existing plus project noise) increases by 5 dBA. However, a site with an existing ambient noise level of 56 dBA would reach impact with an increase of 3 dBA.



<b>TABLE 2.2-10: FTA NOISE IMPACT CRITERIA</b>				
Existing Noise Exposure $L_{eq}$ or $L_{dn}/a/$	Project Noise Exposure Impact Thresholds, $L_{dn}$ or $L_{eq}/a/$ (all noise levels in dBA)			
	Category 1 or 2 Sites		Category 3 Sites	
	Moderate Impact	Severe Impact	Moderate Impact	Severe Impact
<43	Ambient +10	Ambient +15	Ambient +15	Ambient +20
43	52	58	57	63
44	52	58	57	63
45	52	58	57	63
46	53	59	58	64
47	53	59	58	64
48	53	59	58	64
49	54	59	59	64
50	54	59	59	64
51	54	60	59	65
52	55	60	60	65
53	55	60	60	65
54	55	61	60	66
55	56	61	61	66
56	56	62	61	67
57	57	62	62	67
58	57	62	62	67
59	58	63	63	68
60	58	63	63	68
61	59	64	64	69
62	59	64	64	69
63	60	65	65	70
64	61	65	66	70
65	61	66	66	71
66	62	67	67	72
67	63	67	68	72
68	63	68	68	73
69	64	69	69	74
70	65	69	70	74
71	66	70	71	75
72	66	70	71	75
73	66	71	71	76
74	66	72	71	77
75	66	73	71	78
76	66	74	71	79
77	66	74	71	79
>77	66	75	71	80

*/a/*  $L_{dn}$  is used for land uses where nighttime sensitivity is a factor; Daytime  $L_{eq}$  is used for land use involving only daytime activities.  
SOURCE: Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, 2006.

**TABLE 2.2-11: INCREASES IN CUMULATIVE NOISE LEVELS ALLOWED BY FTA CRITERIA**

Existing Ambient Noise Level, $L_{eq}$ or $L_{dn}/a/$	Allowable Cumulative Noise Level Increases, $L_{eq}$ or $L_{dn}/a/$ (all noise levels in dBA)			
	Category 1 and 2 Sites		Category 3 Sites	
	Moderate Impact	Severe Impact	Moderate Impact	Severe Impact
45	8	13	12	18
46	8	13	12	18
47	7	12	11	17
48	6	11	10	16
49	6	10	10	15
50	5	10	10	14
51	5	10	9	14
52	5	9	9	13
53	4	8	8	12
54	4	8	7	12
55	4	7	7	11
56	3	7	6	11
57	3	6	6	10
58	3	5	5	10
59	3	5	5	10
60	2	5	5	9
61	2	5	5	9
62	2	4	4	8
63	2	4	4	8
64	2	4	4	7
65	1.5	4	4	7
66	1.5	4	4	7
67	1.5	3	4	6
68	1.2	3	3	6
69	1.2	3	3	6
70	1.2	3	3	5
71	1.2	3	3	5
72	1.0	2	3	5
73	0.8	2	2	5
74	0.6	2	2	5
75	0.5	2	1	5

/a/  $L_{dn}$  is used for land uses where nighttime sensitivity is a factor; Daytime  $L_{eq}$  is used for land use involving only daytime activities.  
**SOURCE:** Federal Transit Administration, *Transit Noise and Vibration Impact Assessment*, 2006; TAHA, 2008.

Noise from freight trains is generally divided into two components: the noise from steel wheels rolling on steel rails and exhaust and fan noise from the locomotives. Wheel and rail noise increases with increasing speed and is a function of the surface condition of the wheels and rails. Locomotive noise is primarily a function of the locomotive throttle setting. Noise from train horns is considered separately in the model of grade crossing noise.

The formulas used to model train noise are given in the FRA High-Speed Ground Transportation Noise and Vibration Assessment.<sup>76</sup> Table 2.2-12 summarizes the reference levels used in the formulas, which

<sup>76</sup>Federal Railway Administration, *High-Speed Ground Transportation Noise and Vibration Impact Assessment*, 2005.

are based on previous measurements of freight and passenger train noise. The reference levels are consistent with the levels of train noise measured during the monitoring program.

<b>TABLE 2.2-12: REFERENCE VALUES USED IN FORMULAS FOR TRAIN NOISE</b>	
<b>Locomotive Noise (Two Locomotives)</b>	
Throttle Setting	Notch 6
Distance from track centerline	100 feet
Ground Type	Soft
Maximum Sound Level ( $L_{max}$ )	90.4 dBA
<b>Freight and Passenger Car Noise (6,000 feet of Rail Cars)</b>	
Speed	40 miles per hour
Speed dependence	$30\log(\text{speed})$
Distance from track centerline	100 feet
Ground Type	Soft
Average Sound Level ( $L_{eq}$ )	76.6 dBA
<b>SOURCE:</b> Federal Railroad Administration, High-Speed Ground Transportation Noise and Vibration Assessment, 2005.	

Noise-generating mechanisms are the same for freight and passenger trains. However, there can be substantial differences in the noise generated by the freight and passenger trains because of the following: freight trains tend to be longer than passenger trains; passenger trains are usually powered by one locomotive while freight trains often have two or more locomotives; and passenger trains tend to travel at higher speeds than freight trains.

The typical freight train has been assumed to be 6,000 feet (approximately 1,830 meters) long and powered by two locomotives. The Amtrak and Metrolink passenger trains have been assumed to be an average of 600 feet (approximately 180 meters) long and powered by one locomotive. In developing the projections, it was further assumed that 70 percent of passenger and freight train operations occur during the hours of 7:00 a.m. to 10:00 p.m. and the remaining 30 percent of operations occur during the hours of 10:00 p.m. to 7:00 a.m.

Noise from rail at-grade crossings has the same train noise characteristics as other sections of track. In addition, most at-grade crossings have higher noise levels due to the required sounding of train horns. Train operators are required to sound the locomotive horn in a long-long-short-long sequence starting 0.25-mile (0.4 kilometer) prior to all at-grade crossings. Trains are required by FRA regulations to have warning devices that create a minimum sound level of 96 dBA at 100 feet (30.48 meters) in front of the locomotive. Many trains have horns that generate sound levels from 105 to 110 dBA at 100 feet. Because train horns are much louder than other types of train-related noise, adverse noise effects from at-grade crossings occur at a substantially greater distance from the tracks than on other parts of the tracks located more than 1/4-mile from at-grade crossings.

The noise model of train horn noise from at-grade crossings developed in the FRA High-Speed Ground Transportation Noise and Vibration Assessment was used to estimate community noise near the ACE at-grade crossings.<sup>77</sup> Following is the procedure used to estimate noise from train horns:

The average SEL is 106 dBA at an at-grade crossing where train horns are used. This SEL occurs at a distance of 100 feet (30.48 meters) from the tracks with no intervening buildings or features that provide

<sup>77</sup>Federal Railway Administration, *High-Speed Ground Transportation Noise and Vibration Impact Assessment*, 2005.

acoustic shielding. This SEL value is somewhat lower than the national average used in the FRA document. The lower value is more consistent with the noise monitoring results than the national average.

- The SEL is independent of train speed and varies as distance increases from the tracks. Uniform acoustic shielding was assumed for all areas with the amount of shielding only depending on the type of track as follows:
  - At-grade track: 3 dBA at 200 feet (61.0 meters) and then an additional 1.5 dB at each 200-foot interval up to 1000 feet (304.8 meters).
  - Track in deep trench: 10-dB shielding by the trench and an additional 1.5-dB shielding at 600, 800 and 1,000 feet (182.88, 243.84, and 304.8 meters). Train horn noise is uniform over the 0.25-mile (0.4 kilometer) horn-sounding zone prior to each at-grade crossing.

### Traffic Noise Standards

In accordance with the Caltrans *Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects* (Protocol), a noise impact occurs when the future noise level with the project results in a substantial increase in noise level (defined as a 12-dBA or more increase) or when the future noise level with the project approaches or exceeds the NAC.<sup>78</sup> Approaching the NAC is defined as coming within 1.0 dBA of the NAC. Refer to **Table 2.2-9** for a list of the NAC. If it is determined that the project will have noise impacts, then potential abatement measures must be considered. Noise abatement measures that are determined to be reasonable and feasible at the time of final design are incorporated into the project plans and specifications.

The Caltrans Protocol sets forth the criteria for determining when an abatement measure is reasonable and feasible. Feasibility of noise abatement is a result of engineering constraints. A minimum 5-dBA reduction in the future noise level must be achieved for an abatement measure to be considered feasible. Other considerations include topography, access requirements, reducing other noise sources and safety considerations. The reasonableness determination is basically a cost-benefit analysis. Factors used in determining whether a proposed noise abatement measure is reasonable include: residents acceptance, the absolute noise level, build versus existing noise, environmental impacts of abatement, public and local agencies input, newly constructed development versus development pre-dating 1978 and the cost per benefited residence.

### Vibration Standards

The FRA operational vibration standards are detailed in the *High-Speed Ground Transportation Noise and Vibration Impact Assessment*.<sup>79</sup> The criteria related to vibration causing human annoyance or interfering with the use of vibration-sensitive equipment are listed in **Tables 2.2-13** and **2.2-14**.

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<sup>78</sup>California Department of Transportation, *Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects*, August 2006

<sup>79</sup>Federal Railway Administration, *High-Speed Ground Transportation Noise and Vibration Impact Assessment*, 2005.

<b>TABLE 2.2-13: VIBRATION AND NOISE IMPACT CRITERIA</b>				
<b>Land Use Category</b>	<b>Vibration Impact Levels (VdB re 1 micro inch/sec)</b>		<b>Ground-Borne Noise Impact Levels (dB re 20 micro Pascals)</b>	
	<b>Frequent Events/a/</b>	<b>Infrequent Events/b/</b>	<b>Frequent Events/a/</b>	<b>Infrequent Events/b/</b>
<b>Category 1:</b> Buildings where vibration would interfere with interior operations.	65/c/	65/c/	N/A/d/	N/A/d/
<b>Category 2:</b> Residences and buildings where people normally sleep.	72	80	35	43
<b>Category 3:</b> Institutional land uses with primarily daytime use.	75	83	40	48

/a/ Frequent events are defined as more than 70 vibration events per day.  
 /b/ Infrequent events are defined as fewer than 70 vibration events per day.  
 /c/ This criterion limit is based on levels that are acceptable for most moderately sensitive equipment such as optical microscopes. Vibration-sensitive manufacturing or research will require detailed evaluation to define the acceptable vibration levels. Ensuring lower vibration levels in a building often requires special design of the HVAC systems and stiffened floors.  
 /d/ Vibration-sensitive equipment is not sensitive to ground-borne noise.  
**SOURCE:** Federal Railroad Administration, *High-Speed Ground Transportation Noise and Vibration Assessment*, 2005.

<b>TABLE 2.2-14: GROUND-BORNE VIBRATION AND NOISE IMPACT CRITERIA FOR SPECIAL BUILDINGS</b>				
<b>Type of Building or Room</b>	<b>Ground-Borne Vibration Impact Levels (VdB re 1 micro inch/sec)</b>		<b>Ground-Borne Noise Impact Levels (dB re 20 micro Pascals)</b>	
	<b>Frequent Events/a/</b>	<b>Infrequent Events/b/</b>	<b>Frequent Events/a/</b>	<b>Infrequent Events/b/</b>
Concert Halls	65	65	25	25
TV Studios	65	65	25	25
Recording Studios	65	65	25	25
Auditoriums	72	80	30	38
Theaters	72	80	35	43

/a/ Frequent events are defined as more than 70 vibration events per day.  
 /b/ Infrequent events are defined as fewer than 70 vibration events per day.  
**SOURCE:** Federal Railroad Administration, *High-Speed Ground Transportation Noise and Vibration Assessment*, 2005.

**Affected Environment**

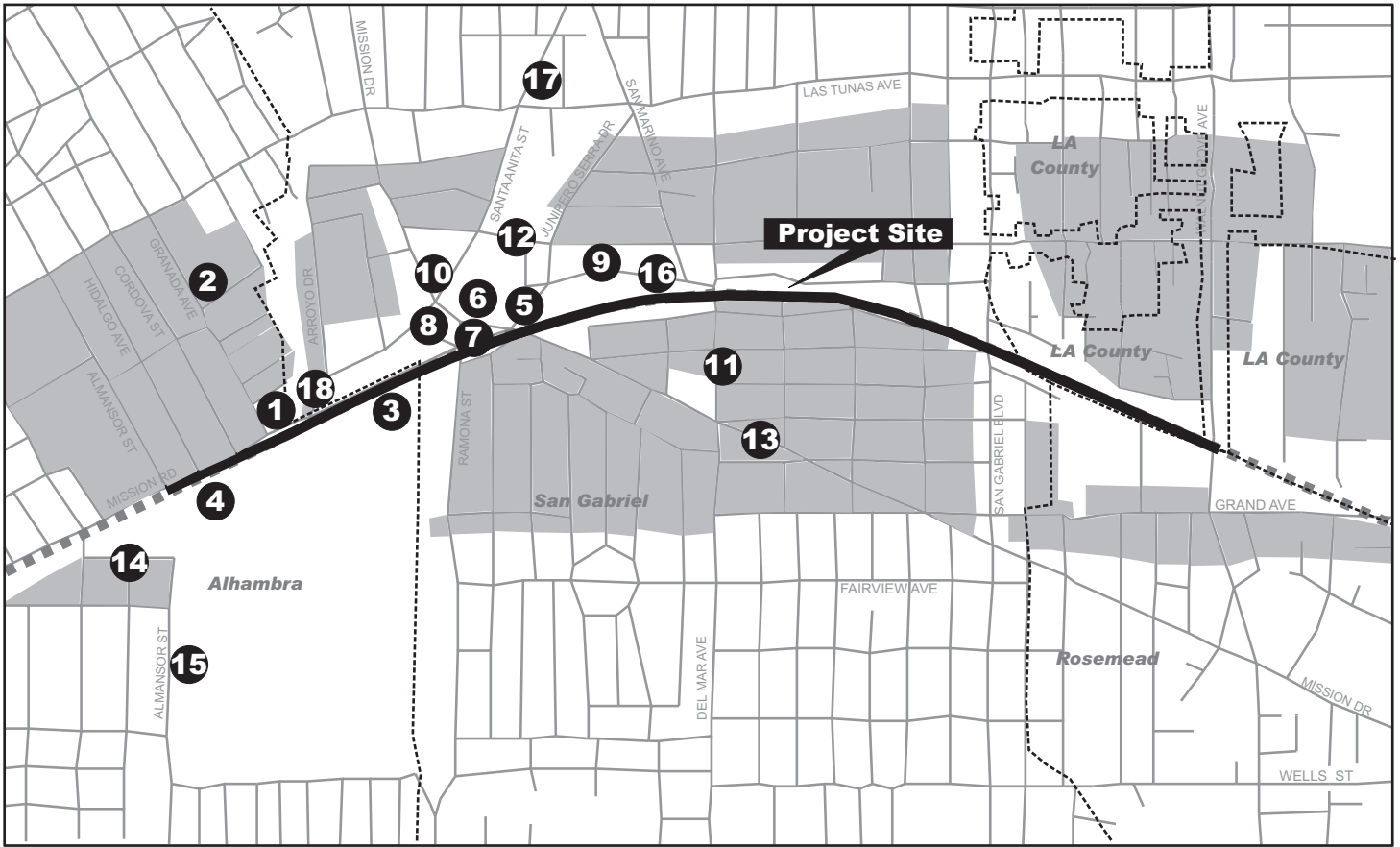
**Sensitive Receptors**

Noise- and vibration-sensitive land uses are locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Residences, schools, hospitals, guest lodging, libraries, and some passive recreation areas would each be considered noise- and vibration-sensitive and may warrant unique measures for protection from intruding noise.





As shown in **Figure 2.2-6**, sensitive receptors near the project corridor include the following:

- Single- and multi-family residences located immediately to the north and south
- San Gabriel High School located adjacent to the south
- Alhambra Municipal Golf Course located adjacent to the southeast
- Asian Youth Center located approximately 40 feet to the north

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**LEGEND:**

-  Project Site
-  Union Pacific Railroad - Alhambra Subdivision
-  City/Community Boundary
-  Residential Sensitive Receptors  
Single- and Multi-Family Residences

**#** Non-residential Sensitive Receptor

- |  |  |
|--|--|
| <ul style="list-style-type: none"> <li><b>1.</b> Winston Smoyer Community Center</li> <li><b>2.</b> Granada Elementary School</li> <li><b>3.</b> San Gabriel High School</li> <li><b>4.</b> Alhambra Municipal Golf Course</li> <li><b>5.</b> San Gabriel Unified School District</li> <li><b>6.</b> San Gabriel Mission</li> <li><b>7.</b> Mission Park</li> <li><b>8.</b> San Gabriel City Hall</li> <li><b>9.</b> Smith Park</li> </ul> | <ul style="list-style-type: none"> <li><b>10.</b> San Gabriel Mission Elementary School</li> <li><b>11.</b> Los Angeles County Library - San Gabriel Branch</li> <li><b>12.</b> San Gabriel Mission High School</li> <li><b>13.</b> La Casa de San Gabriel Community Center</li> <li><b>14.</b> West San Gabriel YMCA</li> <li><b>15.</b> Almansor Park and Court</li> <li><b>16.</b> Asian Youth Center</li> <li><b>17.</b> San Gabriel Valley Medical Center</li> <li><b>18.</b> Vista Cove Care Center</li> </ul> |
|--|--|

SOURCE: TAHA, 2009.

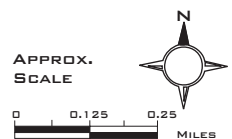


FIGURE 2.2-6

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- San Gabriel Mission located approximately 145 feet to the north
- San Gabriel Unified School District located approximately 100 feet to the north
- Winston Smoyer Community Garden located approximately 100 feet to the north
- Vista Cove Care Center located approximately 100 feet to the north
- Mission Park located approximately 145 feet to the north
- San Gabriel City Hall located approximately 200 feet to the north
- West San Gabriel Valley YMCA located approximately 250 feet to the west
- Smith Park located approximately 300 feet to the north
- San Gabriel Mission Elementary School located approximately 400 feet to the northwest
- San Gabriel Branch of the Los Angeles County Public Library located approximately 500 feet to the south
- San Gabriel Mission High School located approximately 800 feet to the north
- Almansor Court located approximately 900 feet to the south
- San Gabriel Valley Medical Center located approximately 1,100 feet to the north
- Almansor Park located approximately 1,250 feet to the south
- La Casa de San Gabriel Community Center located 1,200 feet to the southeast
- Granada Elementary School located approximately 1,650 feet to the north

The above sensitive receptors are a comprehensive representative sample of noise- and vibration-sensitive land uses near the project corridor. Additional sensitive receptors may be located near the project corridor. These unidentified sensitive receptors would experience similar noise and vibration levels based on distance as the levels discussed for the identified receptors.

### Existing Noise Measurements

A noise survey was conducted for several ACE projects, including the San Gabriel Trench Grade Separation Project.<sup>80</sup> The noise survey documents the existing noise environment in the various project areas and provided data that are needed to make accurate estimates of how the noise environment would change as a result of each ACE project.

This section describes the procedures used for the survey of existing noise conditions, presents the results of the survey at the San Gabriel Trench Grade Separation Project site and includes a general discussion of the observed noise environment at relevant measurement sites. Projections of noise impacts that would result from the proposed project are provided below.

Noise monitoring for the ACE Project included short-term (20- to 30-minute) measurements at nine sites near grade crossings, one of which is relevant to the proposed project. Long-term (24- to 48-hour) measurements were taken at six sites near grade crossings, one of which is relevant to the proposed project. These locations are listed in **Table 2.2-15**.

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<sup>80</sup>Parsons Engineering Science, *Alameda Corridor East Noise and Vibration Impacts Assessment Report*, September 7, 1999.

TABLE 2.2-15: SUMMARY OF RELEVANT NOISE MONITORING RESULTS						
Address	Date	Start Time	Noise Levels, dBA			
			L <sub>eq</sub>	L <sub>max</sub>	L <sub>90</sub>	L <sub>dn</sub>
420 Main Street, San Gabriel /a/	8/18/99	19:09	75	103	44	73
333 Main Street, San Gabriel /b/	8/20/99	13:46	50	70	44	-
/a/ Results from continuous 24-hour monitoring. /b/ Results from 20 to 30 minute measurements. <b>SOURCE:</b> Parsons Engineering Science, <i>Alameda Corridor East Noise and Vibration Impacts Assessment Report</i> , September 7, 1999.						

As shown in **Table 2.2-15**, the noise measurement site at 420 Main Street has a recorded L<sub>eq</sub> of 75 dBA and an L<sub>max</sub> of 103 dBA. The L<sub>max</sub> of 103 dBA is attributed to the trains sounding their horns as they approach the crossings. The noise measurement site at 333 Main Street also experiences a large difference between the L<sub>eq</sub> and L<sub>max</sub> due to train horns although it is located further from a grade crossing.

In addition, existing noise levels in the project corridor were documented through a series of long-term (minimum of 24 hours) and short-term (minimum of 30 minutes) noise measurements in 2007.<sup>81</sup> Supplemental short-term noise measurements were taken on August 26, 2009. The general locations of the measurement sites are also shown in **Figure 2.2-7**. The noise measurement locations were:

Long Term (LT)

**LT-1:** Side yard of a single-family residence on West Main Street directly opposite to the San Gabriel Mission

**LT-2:** Side yard of a single-family residence south of the tracks on East Main Street; and

**LT-3:** Front yard of a single-family residence on the north side of the tracks, near the intersection of Delta and Clanton Streets.

Short Term (ST)

**ST-1:** Small park area in front of the San Gabriel Mission

**ST-2:** On the sidewalk in front of a single-family residence on East Main Street; and

**ST-3:** Behind a self-storage unit at the intersection of West Main and Rosenda Streets.

**ST-4:** Almansor Park and Court

**ST-5:** West San Gabriel Valley YMCA

**ST-6:** Alhambra residences, Smoyer Community Garden, and Alhambra Municipal Golf Course

**ST-7:** Granada Elementary School

**ST-8:** San Gabriel High School

The summaries of the long-term and short-term measurements are shown in **Tables 2.2-16 through 2.2-18**.

<sup>81</sup>ATS Consulting, *Construction Noise and Vibration Impact Assessment, San Gabriel Trench Grade Separation*, November 2007.

TABLE 2.2-16: SUMMARY OF LONG-TERM NOISE MEASUREMENTS							
Location	Distance from Tracks (feet)	Number of Trains (per 24 hrs)	Measured Levels (dBA)		Trains Removed (dBA)		Average Train SEL (dBA)
			Maximum Hourly $L_{eq}$	$L_{dn}$	Maximum Hourly $L_{eq}$	$L_{dn}$	
LT-1	140	20	77	78	55	54	108
LT-2	140	16	76	77	56	54	106
LT-3	155	21	71	70	60	59	100

SOURCE: ATS Consulting, *Construction Noise and Vibration Impact Assessment, San Gabriel Trench Grade Separation, 2007.*

TABLE 2.2-17: SUMMARY OF SHORT-TERM NOISE MEASUREMENTS - 2007						
Location	Duration (hh:mm)	Distance from Tracks (feet)	Number of Trains	Average Train SEL (dBA)	Measured $L_{eq}$	
					Trains Included (dBA)	Trains Removed (dBA)
ST-1	02:25	155	3	105	71/a/	62/a/
ST-2	01:10	115	4	104	77	55
ST-3	00:30	190	0	N/A <sup>2</sup>	N/A/b/	63

/a/ The first train event started before the equipment was fully in place. Therefore, the first train has not been included in the measurement.  
/b/ No trains passed by during this measurement.  
SOURCE: ATS Consulting, *Construction Noise and Vibration Impact Assessment, San Gabriel Trench Grade Separation, 2007.*

TABLE 2.2-18: SUMMARY OF SHORT-TERM NOISE MEASUREMENTS – 2009		
Location	Noise Monitoring Location	Sound Level (dBA, $L_{eq}$ )
ST-4	Almanson Park and Court	59.3
ST-5	West San Gabriel Valley YMCA	65.8
ST-6	Alhambra residences, Smoyer Community Garden, and Alhambra Municipal Golf Course	65.3
ST-7	Granada Elementary School	57.2
ST-8	San Gabriel High School	69.0

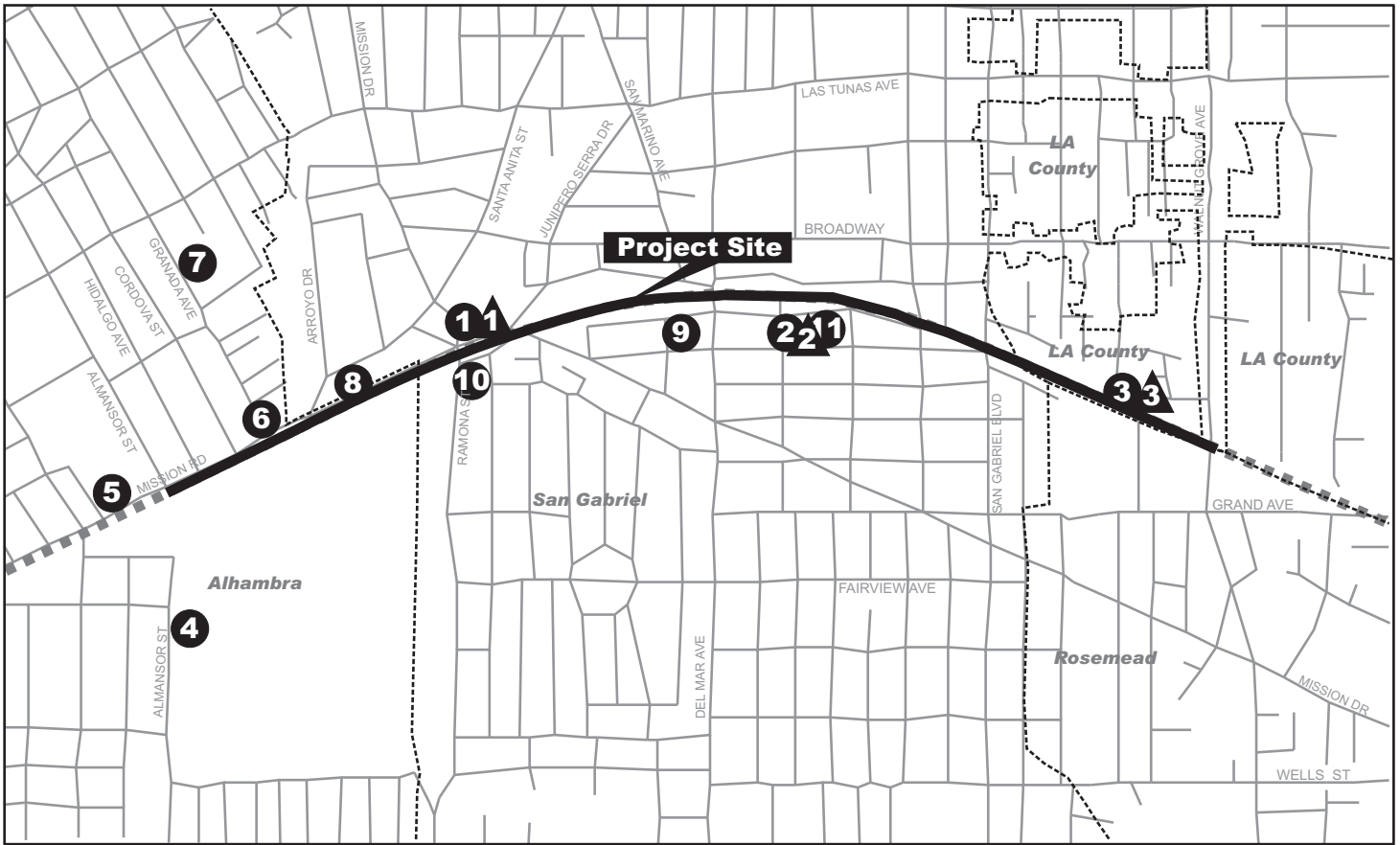
SOURCE: TAHA, 2009.

### Existing Vibration Measurements

Freight train operations are the primary existing source of vibration in the corridor. Detailed measurements of freight train vibration were performed the three locations shown in **Figure 2.2-7**. At each site, vibration was measured at three or four distances from the track. The three measurement sites were:

**San Gabriel Mission (V-1):** The measurements were made in the park area between the Mission and Junipero Serra Drive. The accelerometers were located at distances of 105, 130, 155, and 205 feet from the train tracks. The first accelerometer was at the approximate distance that the closest part of the Mission will be from the shoofly track.

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**LEGEND:**

- Project Site
- - -** Union Pacific Railroad - Alhambra Subdivision
- - -** City/Community Boundary

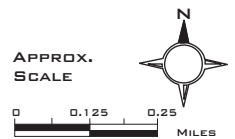
**#** Noise Monitoring Location

- 1.** ST-1: San Gabriel Plaza Park, along Mission Road
- 2.** ST-2: East of 333 E. Main Street
- 3.** ST-3: Delta Street/Clanton Street Intersection
- 4.** ST-4: Almansor Park and Court
- 5.** ST-5: West San Gabriel Valley YMCA
- 6.** ST-6: Alhambra residences, Smoyer Community Garden, and Alhambra Municipal Golf Course
- 7.** ST-7: Granada Elementary School
- 8.** ST-8: San Gabriel High School
- 9.** LT-1: Southeast corner of W. Main Street/ Rosenda Street Intersection
- 10.** LT-2: 510 W. Main Street
- 11.** LT-2: East of 333 E. Main Street

**#** Vibration Monitoring Location

- 1.** V-1: San Gabriel Plaza Park, along Mission Road
- 2.** V-2: East of 333 E. Main Street
- 3.** V-3: Delta Street/Clanton Street Intersection

SOURCE: ATS Consulting, 2007.



**FIGURE 2.2-7**

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**East Main Street (V-2):** This site is located south of the tracks in the residential area between Del Mar Avenue and San Gabriel Boulevard. There are a number of one-story single-family residences in this area that are adjacent to the rail right of way. The vibration measurements were made at distances of 25, 50, 75, and 115 feet from the existing tracks.

**Delta Street (V-3):** The vibration measurement was performed at the corner of Delta Street and Clanton Street west of Walnut Grove Avenue and east of Rubio Wash. Vibration was measured at distances of 25, 50, 100, and 125 feet from the existing tracks.

**Table 2.2-19** shows the existing vibration experienced at the measurement sites.

### ***Environmental Consequences***

#### **Train Noise**

##### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Alternative 1 would result in the substantial reduction of noise exposure near the tracks. The  $L_{dn}$  would be 15 to 20 dBA lower than existing noise levels at sensitive land uses closest to the railroad tracks. The reduced noise levels would be a combined result of the acoustic shielding provided by the trench and eliminating the requirement to sound train horns prior to the grade crossing. Alternative 1 would shift the existing train tracks approximately 20 feet to the south within the railroad right-of-way. This would not affect the majority of sensitive receptors as the trench would reduce noise exposure. The shift would move the tracks closer to Alhambra Municipal Golf Course, Almanson Park, and San Gabriel High School before the trench would reach full depth. The northern portion of the golf course would experience a marginal increase in noise levels and Almanson Park would not experience an audible increase in noise levels. The small noise increase associated with the 20-foot shift would not adversely affect golf course operations. San Gabriel High School would experience occasional increases in noise levels as the trench descends near the high school. The trench walls would act as a partial noise barrier until full depth is reached. Noise increases would be short-term and intermittent would not adversely affect the learning environment substantially more than existing train activity. Alternative 1 would not result in an adverse train noise impact.

##### **Alternative 2 – No Build Alternative**

Alternative 2 would not change the existing operations along the transportation corridor. Therefore, the No Build Alternative would not have an adverse train noise impact. However, existing train noise including horns, and crossing alarms would continue.

<b>TABLE 2.2-19: FREIGHT TRAIN VIBRATION LEVELS</b>												
Site	Train No.	Duration minutes	Vibration Level vs. Distance from Tracks (feet)									
			25	50	75	100	105	115	125	130	155	205
<b>Maximum Vibration (1-second averaging time, levels in VdB)</b>												
V-1	1	3					80			79	77	76
V-1	2	3					79			75	72	71
V-1	3	2					79			77	72	69
V-2	1	1	85	86	82			78				
V-2	2	3	86	87	81			79				
V-2	3	2	85	87	82			79				
V-2	4	3	86	87	83			80				
V-3	1A	4.5	83	78		75			77			
V-3	1B	2	77	81		67			69			
V-3	2	2	86	80		76			79			
V-3	3	3	86	81		79			78			
V-3	4	2	87	82		78			80			
<b>L<sub>eq</sub> (average RMS vibration over entire passby, levels in VdB)</b>												
V-1	1	3					74		73		71	69
V-1	2	3					72		71		68	66
V-1	3	2					69		68		66	63
V-2	1	1	n/a	n/a	n/a			n/a				
V-2	2	3	79	81	76			73				
V-2	3	2	75	76	73			70				
V-2	4	3	78	80	76			72				
V-3	1A	4.5	74	69		67			67			
V-3	1B	2	70	66		63			64			
V-3	2	2	82	77		74			76			
V-3	3	3	80	75		72			73			
V-3	4	2	78	74		71			72			
<b>Peak Particle Velocity (in/sec)</b>												
V-1	1	3					0.032		0.014		0.011	0.021
V-1	2	3					0.025		0.024		0.009	0.010
V-1	3	2					0.023		0.015		0.026	0.009
V-2	1	1	0.064	0.060	0.051			0.075				
V-2	2	3	0.066	0.061	0.072			0.072				
V-2	3	2	0.038	0.038	0.035			0.041				
V-2	4	3	0.023	0.027	0.026			0.031				
V-3	1A	4.5	0.038	0.018		0.012			0.014			
V-3	1B	2										
V-3	2	2	0.029	0.014		0.008			0.010			
V-3	3	3	0.074	0.036		0.026			0.027			
V-3	4	2	0.070	0.036		0.025			0.032			
<b>SOURCE:</b> ATS Consulting, <i>Construction Noise and Vibration Impact Assessment, San Gabriel Trench Grade Separation, 2007.</i>												



## **Traffic Noise**

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Alternative 1 would not substantially alter traffic patterns in the project area. The existing four crossings at Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard would remain in place. Removal of the grade crossings would increase the average vehicle speeds along the segments immediately adjacent to the tracks. However, the increase in average vehicle speed would not exceed existing maximum speeds and the general project area would experience similar mobile noise levels as existing conditions. In addition, the increased speeds near the grade crossing would be offset by decreased noise levels associated with engine acceleration from a stopped position during train crossings. Alternative 1 would not result in an adverse traffic noise impact.

### **Alternative 2 – No Build Alternative**

Alternative 2 would not change the existing operations along the transportation corridor. Therefore, the No Build Alternative would not have an adverse traffic noise impact.

## **Ground-borne Vibration**

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The railroad track associated with Alternative 1 would be in same location as the existing track. Alternative 1 would not result in increased train speeds and associated increased vibration through the corridor, and vibration levels would be similar to existing conditions. Alternative 1 would not result in an adverse vibration impact.

### **Alternative 2 – No Build Alternative**

Alternative 2 would not change the existing operations along the transportation corridor. Therefore, the No Build Alternative would not have an adverse ground-borne vibration impact.

### ***Measures to Minimize Harm***

Alternatives 1 and 2 would not result in adverse operational noise or vibration impacts. Avoidance, Minimization, and/or Abatement Measures are not required.

## **2.3 BIOLOGICAL ENVIRONMENT**

### **2.3.1 NATURAL COMMUNITIES AND WETLANDS**

This section of the document discusses natural communities of concern. The focus of this section is on biological communities, however, for sensitive species, individual plant or animal species are also considered. This section also includes information on wildlife corridors and habitat fragmentation. Wildlife corridors are areas of habitat used by wildlife for seasonal or daily migration. Habitat fragmentation involves the potential for dividing sensitive habitat and thereby lessening its biological value.

This section also includes information on critical habitat and wetlands. The California Natural Diversity Database (CNDDDB) was consulted to determine the potential for sensitive species to be located on or near the project site.

### ***Regulatory Setting***

#### Executive Order Pertaining to Wetlands

This order, issued in 1977, directs all federal agencies to avoid, if possible, adverse impacts to wetlands and to preserve and enhance the natural and beneficial values of wetlands. Each agency shall avoid undertaking or assisting in wetland construction projects unless the head of the agency determines that there is no practicable alternative to such construction and that the proposed action includes measures to minimize harm.

#### Executive Order Pertaining to Endangered Species

Adopted in 1973, this act requires federal agencies, in consultation with, and with the assistance of the Secretary of the Interior or of Commerce, as appropriate, to insure that actions they authorize, fund or carry out are not likely to jeopardize the continued existence of threatened or endangered species or result in the destruction or adverse modification of critical habitat for these species.

#### **Migratory Bird Treaty Act and California Fish and Game Code 3503**

The Federal Migratory Bird Treaty Act (MBTA), first enacted in 1916, prohibits any person to “pursue, hunt, take, capture, kill, attempt to take, capture, or kill, possess, offer for sale, sell, offer to barter, barter, offer to purchase, [or] purchase” any migratory bird. The list of migratory birds includes nearly all bird species native to the United States; non-native species such as European starlings are not included. The statute was extended in 1974 to include parts of birds, as well as eggs and nests. Thus, it is illegal under MBTA to directly kill or destroy a nest of nearly any bird species, not just endangered species. Activities that result in removal or destruction of an active nest (a nest with eggs or young being attended by one or more adults) would violate the MBTA. Removal of unoccupied nests, or bird mortality resulting indirectly from a project, is not considered a violation of the MBTA. California Fish and Game Code 3503, 3503.5, and 3512 also prohibit take of birds and active nests.

### ***Affected Environment***

#### **Wildlife Species and Habitat**

A sensitive habitat is one that is considered rare within the region, supports sensitive plants or animals, or provides connectivity between sensitive habitats. Plant and animal species are considered sensitive if they have been listed as such by federal, State, or local agencies, or by one or more special interest groups, such as the California Native Plant Society (CNPS). The California Department of Fish and Game (CDFG) publishes separate comprehensive lists for sensitive plants and animals within the CNDDDB.

The project area is located in the Southern California Coast region of the Transverse and Peninsular Ranges geomorphic province, which includes lands close enough to the Pacific Ocean for marine influences to modify the climate greatly. The mean annual precipitation is about 12 to 20 inches; summer fog is common. Mean annual temperature is about 58° to 64° F. The mean freeze-free period is about 300 to 350 days.<sup>82</sup> Elevations in the area range from approximately 380 to 430 feet above mean sea level. Lands within and adjacent to the project area are heavily urbanized, consisting of mixed commercial and residential development. Soils within the project area are highly disturbed and include alluvium as well as fill associated with construction of the railroad and public roadways.

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<sup>82</sup> SWCA, *Biological Resources Assessment Letter Report for the Alameda Corridor East San Gabriel Trench Grade Separation*, February 18, 2009.

The project area is located on alluviated lowlands once dominated by natural communities that included California sagebrush–California buckwheat series, mixed chaparral shrublands, coast live oak series, chamise series, valley oak series, and mixed sage series.<sup>83</sup> However, as a result of a long history of agriculture and urban development, native vegetation communities are no longer present in the immediate vicinity. Vegetation within the project area currently consists of ruderal herbaceous and shrub plant species adapted to high levels of disturbances as well as ornamental tree and shrub species associated with residences adjacent to the railroad corridor. This vegetation is subject to continuous vegetation management, including mowing and the application of broad-spectrum herbicides. Common mammals that may occur within the project area include coyotes (*Canis latrans*), striped skunk (*Mephitis mephitis*), raccoon (*Procyon lotor*), opossum (*Didelphis virginiana*), and California ground squirrel (*Spermophilus beecheyi*). Turkey vultures (*Cathartes aura*), red-tailed hawk (*Buteo jamaicensis*), mourning dove (*Zenaida macroura*), western scrub jay (*Aphelocoma californica*), and American crow (*Corvus brachyrhynchos*) are common avian species that occur in the vicinity. Other species that occur within the project area and adjacent lands include western fence lizard (*Sceloporus occidentalis*) and introduced Argentine ants (*Linepithema humile*).

### *Biotic Habitats*

Habitats identified within the project area are mapped in **Figure 2.3-1** and described in detail below. Full lists of plant and wildlife species observed within biotic habitats within the project area and on adjacent lands are included in the Biological Resources Assessment prepared for the San Gabriel Trench.

### **Developed Railway**

The developed railway and graveled areas within the project area are classified as “Urban” or “Built-up” lands<sup>84</sup> and are characterized by areas of intensive use with much of the land covered by structures or associated facilities. Included in this category are cities, transportation, power, and communications facilities. The habitat value of these lands is generally poor due to the high levels of activity on the sites and the lack of substantial vegetative cover. Approximately 1.42 acres of developed railway and associated graveled areas occurs within the project area from the center of the rails to approximately ten feet on both sides. This habitat is not considered to be sensitive, and no special-status species are expected to occur there.

### *Transitional Bare Area*

Transitional bare areas within the project area extend from the railway and graveled areas out to approximately 45 feet from the center of the rails. This habitat consists of approximately 15.94 acres and is characterized by bare ground that is actively managed to maintain the site in a weed-free condition through the use of herbicide treatments on vegetation. Plants observed in this habitat are highly adapted to frequent disturbances and include black mustard (*Brassica nigra*), Russian thistle (*Salsola tragus*), spotted spurge (*Euphorbia maculata*), redstem fillarree (*Erodium cicutarium*), smilgrass (*Piptatherum miliaceum*), Bermuda grass (*Cynodon dactylon*), and red brome (*Bromus madritensis*). Wildlife species observed here included Western fence lizard (*Sceloporus occidentalis*), Mourning dove (*Zenaida macroura*), and white-crowned sparrow (*Zonotrichia leucophrys*). This habitat is not considered to be sensitive, and no special-status species are expected to occur there.

### *Ruderal/Ornamental*

Ruderal/ornamental lands were identified throughout the project area but were more concentrated in areas further than 45 feet from the center of the railway. This habitat consists of 1.0 acre within the project area

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<sup>83</sup> *Ibid.*

<sup>84</sup> *Ibid.*

and is characterized by substantial vegetative cover consisting of ruderal vegetation, including black mustard, Russian thistle, red-stem filaree, Bermuda grass, and red brome as well as ornamental species planted in association with adjacent residences. Several individuals of oak trees were present on both the north and south sides of the railroad tracks between W. Mission Dr. and W Main St. Ornamental species observed within the project area included Brazilian peppertree (*Schinus terebinthifolius*), Peruvian peppertree (*Schinus molle*), oleander (*Nerium oleander*), Mission fig (*Ficus indica*), Mexican fan palm (*Washingtonia robusta*), and fruit trees. This habitat is not considered to be sensitive, and no special-status species are expected to occur there. Wildlife species observed here included western fence lizard, mourning dove, and American crow.

### **Roads/Bridges**

Roads/bridges within the project area are classified as “Urban” or “Built-up” lands and are characterized by areas of intensive use with much of the land covered by structures or associated facilities. Included in this category are cities, transportation, and power and communications facilities. The habitat value of these lands is generally poor due to the high levels of activity on the sites and the lack of substantial vegetative cover. Approximately 2.84 acres of urban or built-up land in the form of roads and bridges occurs within the project area primarily at the intersections of Mission Road, Del Mar Avenue, and San Gabriel Boulevard. This habitat is not considered to be sensitive, and no special-status species are expected to occur there.

### **Assessment of Special-status Biological Resources**

A list of special-status species known to occur within the vicinity of the study area was generated from the CNDDDB and the CNPS 2009 online Inventory of Rare and Endangered Plants of California. A total of 64 special-status species, including 31 plants and 33 wildlife species, as well as eight sensitive habitats were identified within the nine-quadrangle area in the vicinity of the project area.<sup>85</sup>

#### **Sensitive Habitats**

During the field survey, the potential for sensitive and potentially jurisdictional habitats was assessed within the project area. A search of the CNDDDB records for sensitive habitats identified eight sensitive habitats within the nine-quadrangle area, including California walnut woodland, canyon live oak ravine forest, open Engelmann oak woodland, Riversidian alluvial fan sage scrub, southern California arroyo chub/Santa Ana sucker stream, southern coast live oak riparian forest, southern sycamore alder riparian woodland, and walnut forest. None of these habitats were identified within the project area during the survey.

#### **Special-status Species**

##### *Special-status Plants*

During the field survey, habitats capable of supporting special-status plant species were evaluated within the project area. All of the plants identified in the CNDDDB and CNPS Rare Plant Inventory searches were determined to be “absent.” Therefore, no special-status plant species are expected to occur within the project area. In addition, no mature oak trees were identified within the project area.

##### *Special-status Wildlife*

During the field survey, habitats capable of supporting special-status wildlife species were evaluated within the project area. All of the wildlife were determined to be “absent” or “not likely to occur.” Therefore, no special-status wildlife species are expected to occur within the project area.

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<sup>85</sup> *Ibid.*

## **Wetlands**

Wetlands and other waters are protected under a number of laws and regulations. At the federal level, the Clean Water Act (CWA) (33 U.S.C. 1344) is the primary law regulating wetlands and waters. CWA regulates the discharge of dredged or fill material into waters of the United States, including wetlands. Waters of the United States include navigable waters, interstate waters, territorial seas and other waters that may be used in interstate or foreign commerce. To classify wetlands for the purposes of the CWA, a three-parameter approach is used that includes the presence of hydrophytic (water-loving) vegetation, wetland hydrology, and hydric soils (soils subject to saturation/inundation). All three parameters must be present, under normal circumstances, for an area to be designated as a jurisdictional wetland under the CWA.

Section 404 of the CWA establishes a regulatory program that provides that no discharge of dredged or fill material can be permitted if a practicable alternative exists that is less damaging to the aquatic environment or if the nation's waters would be significantly degraded. The Section 404 permit program is run by the U.S. Army Corps of Engineers (ACOE) with oversight by the Environmental Protection Agency (EPA).

The Executive Order for the Protection of Wetlands (E.O. 11990) also regulates the activities of federal agencies with regard to wetlands. Essentially, this executive order states that a federal agency, such as the Federal Highway Administration, cannot undertake or provide assistance for new construction located in wetlands unless the head of the agency finds: 1) that there is no practicable alternative to the construction and 2) the proposed project includes all practicable measures to minimize harm.

At the state level, wetlands and waters are regulated primarily by the Department of Fish and Game (CDFG) and the Regional Water Quality Control Boards (RWQCB). In certain circumstances, the Coastal Commission (or Bay Conservation and Development Commission) may also be involved. Sections 1600-1607 of the Fish and Game Code require any agency that proposes a project that will substantially divert or obstruct the natural flow of or substantially change the bed or bank of a river, stream, or lake to notify CDFG before beginning construction. If DFG determines that the project may substantially and adversely affect fish or wildlife resources, a Lake or Streambed Alteration Agreement will be required. The tops of the stream or lake banks, or the outer edge of riparian vegetation usually define CDFG jurisdictional limits. Wetlands under jurisdiction of the ACOE may or may not be included in the area covered by a Streambed Alteration Agreement obtained from the CDFG.

The Regional Water Quality Control Boards were established under the Porter-Cologne Water Quality Control Act to oversee water quality. The RWQCB also issues water quality certifications in compliance with Section 401 of CWA. Please see the Water Quality section for additional details.

## ***Environmental Consequences***

### **Wetlands**

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The project would not have a substantial adverse impact on federally protected wetlands because no part of the trench (such as walls or support structures) would be in areas defined as federally protected wetlands. In addition, neither the Alhambra nor Rubio washes are defined as federally protected wetlands. The project site and surrounding area do not contain wetlands or surface water bodies. Additionally, the Rubio Wash and Alhambra Wash are both concrete-lined flood control channels that do not support wetland habitats and are not considered wetlands by the USACOE or the CDFG. Compliance with existing regulations and the measures provided below would ensure impacts would not be adverse.

## **Alternative 2 – No Build Alternative**

Under the No Build Alternative, no construction activities would occur. As a result, no impacts would occur on wetlands.

## **Wildlife Species and Habitat**

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The project site contains a railroad right-of-way that is currently in use and two concrete channels that do not include habitat for fish, thus, project construction and operation would not interfere substantially with the movement of any native resident or migratory fish. Also, construction would not interfere substantially with established native resident or migratory wildlife corridors or impede the use of native wildlife nurseries.

No sensitive habitats listed by CNDDB were identified within the project area. Although habitats within the project area are not considered sensitive, they may provide suitable nesting or foraging habitat for a variety of birds. Also, no wetlands or other waters of the U. S. were identified within the project area.

No special-status plant or wildlife species were determined to occur within the project area. Therefore, no impacts to special-status species are expected as the result of implementation of the proposed project.

The project area likely provides nesting habitat for nesting avian species whose nests and young are protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Codes. Specifically, adult western scrub jays were observed feeding fledglings within the mixed ornamental-oak habitats adjacent to W. Main Street, indicating that this habitat is used for nesting activity. Construction activities associated with the proposed project that result in ground disturbance and/or the removal of vegetation could have both direct and indirect impacts to these sensitive resources.

The breeding season for birds generally occurs from February 1 through August 31; implementation of construction activities associated with the project during this period could result in both direct and indirect impacts to nesting avian species. Direct project impacts would include the destruction of active nests, eggs, or young located within vegetation removed within the proposed project. Indirect impacts would include noise and disturbance associated with the construction activities that cause birds in adjacent habitats to abandon their nests. Any impacts (direct or indirect) that result in the abandonment or destruction of an active nest or the destruction of eggs or young of any protected avian species, including special-status species, would be considered potentially adverse.

Direct mortality of some wildlife species such as lizards, opossum and gophers may occur during project construction. However, these species are well adapted to human habitats and fairly common.

Construction dust, noise, vibration and increases human presence and construction equipment may result in indirect effects on wildlife in the project vicinity and may result in temporary avoidance of these areas by some birds and other wildlife species. However, wildlife species using the project vicinity are generally species well adapted to human disturbances. Thus, indirect impacts due to project construction on wildlife would not be considered adverse.

No habitat conservation plans or other similar plan exists for the project vicinity. Thus the project would not conflict with any provisions of an adopted Habitat Conservation Plan, National Community Conservation plan, or other approved local, regional or state habitat conservation plan.

### **Alternative 2 – No Build Alternative**

No development would occur under this alternative. No impacts to wildlife species and habitat are anticipated.

### **Tree Preservation**

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Implementation of the proposed project would remove some landscape trees and non-native vegetation. However, most of the trees located on the project site generally consist of ornamental vegetation and are not protected by any tree preservation ordinance within the City of San Gabriel, Alhambra or Rosemead or the County of Los Angeles. Several individuals of coast live oak do occur on the project site, however; these trees occur within the railroad ROW, and therefore are not subject to any state, county, or city ordinances or regulations. Oak trees that fall within the limits of the city of San Gabriel are preserved under the Tree Protection and Preservation Regulations; Multiple Family, Commercial and Industrial Zones ordinance and removal of such trees requires specific permitting. If any oak trees that do not occur within the railroad ROW will be impacted or removed as a result of project construction, a certified arborist should be contracted to conduct a pre-construction survey and provide recommendations for mitigation ratios and permitting for species that need to be removed.

### **Alternative 2 – No Build Alternative**

No development would occur under this alternative. No trees would be removed. Therefore, no impact is anticipated.

### ***Measures to Minimize Harm***

Because the proposed project does not include placement of wall structures or other components within areas that would be defined by the USACOE as wetlands or waters of the United States or defined by CDFG as state streambeds, no direct project impacts on jurisdictional habitat are expected. However, to ensure indirect impacts would be avoided or minimized, the following mitigation measures shall be implemented.

- NC1** ACE shall comply with Section 402 of the Clean Water Act and National Pollutant Discharge Elimination System (NPDES) standards during and following construction to ensure that dirt, construction materials, pollutants, or other human associated materials are not discharged from the project area. A certification from the Regional Water Quality Control Board will be required prior to project construction.
- NC2** If new landscaping is provided as part of the project, planting of invasive species shall be avoided.
- NC3** Ground-disturbing and vegetation removal activities associated with construction of the project shall be performed outside of the breeding season for birds, or between September 1 and January 31. If these project activities cannot be implemented during this time period, the project applicant should retain a qualified biologist to perform preconstruction nest surveys to identify active nests within and adjacent to (up to 500 feet) the project area. If the preconstruction survey is conducted early in the nesting season (February 1–March 15) and nests are discovered, a qualified biologist may remove the nests only after it has been determined that the nest is not active (i.e., the nest does not contain eggs, nor is an adult actively brooding on the nest). Any active non-raptor nests identified within the project area or within 300 feet of the project area should be marked with a 300-foot buffer, and the buffer area would need to be avoided by construction activities until a

qualified biologist determines that the chicks have fledged. Active raptor nests within the project area or within 500 feet of the project area should be marked with a 500-foot buffer and the buffer avoided until a qualified biologist determines that the chicks have fledged. If the 300-foot buffer for non-raptor nests or 500-foot buffer for raptor nests cannot be avoided during construction of the project, the project applicant should retain a qualified biologist to monitor the nests on a daily basis during construction to ensure that the nests do not fail as the result of noise generated by the construction. The biological monitor shall be authorized to halt construction if the construction activities cause negative effects, such as the adults abandoning the nest or chicks falling from the nest.

## **2.4 CONSTRUCTION IMPACTS**

### **2.4.1 CONSTRUCTION AIR QUALITY**

This section examines the affected environment as it relates to construction activities for the proposed project. The conditions described in this section would be temporary and short-term.

#### ***Regulatory Setting***

Refer to Section 2.2.4 for a discussion of relevant regulatory information.

#### ***Affected Environment***

Refer to Section 2.3 for a description of the affected environment.

#### ***Environmental Consequences***

##### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

During construction, short-term degradation of air quality may occur due to the release of particulate emissions (airborne dust) generated by excavation, grading, hauling, and various other activities. Emissions from construction equipment also are anticipated and would include carbon monoxide (CO), nitrogen oxides (NO<sub>x</sub>), volatile organic compounds (VOC), directly-emitted particulate matter (PM<sub>2.5</sub> and PM<sub>10</sub>), and toxic air contaminants such as diesel exhaust particulate matter. Ozone is a regional pollutant that is derived from NO<sub>x</sub> and VOC in the presence of sunlight and heat.

Construction activity would involve clearing, cut-and-fill activities, grading, removing or improving existing roadways, and paving roadway surfaces. Construction-related effects on air quality from most highway projects would be greatest during the trenching phase because most dust and engine emissions are associated with the excavation, handling, and transport of soils to and from the site. If not properly controlled, these activities would temporarily generate CO, NO<sub>x</sub>, VOC, PM<sub>2.5</sub>, and PM<sub>10</sub>. Sources of fugitive dust would include disturbed soils at the construction site and trucks carrying uncovered loads of soils. Unless properly controlled, vehicles leaving the site would deposit mud on local streets, which could be an additional source of airborne dust after it dries. Fugitive dust emissions would vary from day to day, depending on the nature and magnitude of construction activity and local weather conditions. Fugitive dust emissions would depend on soil moisture, silt content of soil, wind speed, and the amount of equipment operating. Larger dust particles would settle near the source, while fine particles would be dispersed over greater distances from the construction site.

Construction activities for large development projects are estimated by the USEPA to add 1.09 tonne (1.2 tons) of fugitive dust per acre of soil disturbed per month of activity. If water or other soil stabilizers are used to control dust, the emissions can be reduced by up to 50 percent. Caltrans' Standard Specifications



(Section 10) pertaining to dust minimization requirements requires use of water or dust palliative compounds and will reduce potential fugitive dust emissions during construction.

In addition to fugitive dust emissions, heavy trucks and construction equipment powered by gasoline and diesel engines would generate CO, NO<sub>x</sub>, VOC and diesel particulate matter in exhaust emissions. If construction activities were to increase traffic congestion in the area, CO and other emissions from traffic would increase slightly while those vehicles are delayed. These emissions would be temporary and limited to the immediate area surrounding the construction site.

Sulfur dioxide (SO<sub>2</sub>) is generated by oxidation during combustion of organic sulfur compounds contained in diesel fuel. Off-road diesel fuel meeting federal standards can contain up to 5,000 parts per million (ppm) of sulfur, whereas on-road diesel is restricted to less than 15 ppm of sulfur. However, under California law and CARB regulations, off-road diesel fuel used in California must meet the same sulfur and other standards as on-road diesel fuel, as a result SO<sub>2</sub>-related issues due to diesel exhaust will be minimal. Some phases of construction, particularly asphalt paving, would result in short-term odors in the immediate area of each paving sites. Such odors would be quickly dispersed below detectable thresholds as distance from the sites increases.

It is common for the area around rail tracks to include soil contaminants such as arsenic. If airborne, these materials may cause a health hazard. No hazardous contamination has been identified in over 200 soil samples taken along the tracks. Airborne soil contaminants would result in a less-than-significant impact.

The proposed project also has the potential to increase localized CO concentrations associated with increased traffic at specific intersections during road closures. A localized CO analysis was completed to assess potential increases in concentrations. Based on the traffic study, the ten most congested intersections were analyzed for each of the three road closure scenarios. The USEPA CAL3QHC micro-scale dispersion model was used to calculate CO concentrations. Localized CO concentrations are shown in **Table 2.4-1** for the Ramona Street Closure, Mission Road Closure, Del Mar Avenue closure, and the San Gabriel Boulevard partial closure. The federal one- and eight-hour standards of 20 and 9.0 ppm, respectively, would not be exceeded at the analyzed intersections during any of the road closure scenarios. Localized CO concentrations would not result in an adverse impact.

<b>TABLE 2.4-1: CARBON MONOXIDE CONCENTRATIONS - CONSTRUCTION /a/</b>		
<b>Scenario and Intersection</b>	<b>1-hour (parts per million)</b>	<b>8-hour (parts per million)</b>
<b>Mission Road Closure</b>		
Del Mar Avenue/Broadway – PM Peak Hour	4	3.0
Mission Road/Del Mar Avenue – PM Peak Hour	5	3.2
Mission Road/Junipero Serra Drive – AM Peak Hour	4	2.9
Ramona Street/Junipero Serra Drive – PM Peak Hour	4	2.9
<b>Del Mar Avenue Closure</b>		
Broadway/San Gabriel Boulevard – PM Peak Hour	4	3.1
Del Mar Avenue/Mission Road – AM Peak Hour	4	2.9
Del Mar Avenue/Mission Road – PM Peak Hour	4	2.9
Mission Road/Junipero Serra Drive – PM Peak Hour	5	3.3
Mission Road/Ramona Street – PM Peak Hour	4	3.1
<b>Ramona Street Closure</b>		
Broadway/San Gabriel Boulevard – PM Peak Hour	5	3.2
Del Mar Avenue/Broadway – PM Peak Hour	4	3.0
Mission Road/Junipero Serra Drive – PM Peak Hour	5	3.3
Mission Road/Ramona Street – AM Peak Hour	4	2.9
Mission Road/San Gabriel Boulevard – AM Peak Hour	4	3.1
<b>San Gabriel Boulevard Closure</b>		
Del Mar Avenue/Broadway – AM Peak Hour	4	3.0
San Gabriel Boulevard/Broadway – PM Peak Hour	4	3.1
Walnut Grove Avenue/Broadway – AM Peak Hour	4	3.1
<b>State Standard</b>	<b>35</b>	<b>9</b>
/a/ Concentrations include year 2012 one- and eight-hour ambient concentrations of 3 and 2.8 ppm, respectively. <b>SOURCE:</b> TAHA, 2009.		

**Alternative 2 – No Build Alternative**

The San Gabriel Trench would not be constructed under Alternative 2. Alternative 2 would not have an adverse construction air quality impact.

**Measures to Minimize Harm**

The construction impacts to air quality are short-term in duration and, therefore, will not result in adverse or long-term conditions. Implementation of the following measures will reduce any air quality impacts resulting from construction activities:

- CAQ1** The construction contractor shall comply with Caltrans’ Standard Specifications Section 7-1.01F and Section 10 of Caltrans’ Standard Specifications. Section 7-1.01F specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including air pollution control district and air quality management district regulations and local ordinances. Section 10 is directed at controlling dust. If dust palliative materials other than water are to be used, material specifications are contained in Section 18.
- CAQ2** Water or dust palliative shall be applied to the site and equipment as frequently as necessary to control fugitive dust emissions.
- CAQ3** Soil binder shall be spread on any unpaved roads used for construction purposes, and all construction parking areas.
- CAQ4** Trucks shall be washed off as they leave the right of way as necessary to control fugitive dust emissions.

- CAQ5** Construction equipment and vehicles shall be properly tuned and maintained.
- CAQ6** Low-sulfur fuel shall be used in all construction equipment as provided in California Code of Regulations Title 17, Section 93114.
- CAQ7** A dust control plan shall be developed documenting sprinkling, temporary paving, speed limits, and expedited revegetation of disturbed slopes as needed to minimize construction impacts to existing communities.
- CAQ8** Equipment and materials storage sites shall be located as far away from residential and park uses as practical.
- CAQ9** Construction areas shall be kept clean and orderly.
- CAQ10** Environmentally sensitive areas shall be established for sensitive air receptors within which construction activities involving extended idling of diesel equipment would be prohibited.
- CAQ11** Track-out reduction measures such as gravel pads shall be used at project access points to minimize dust and mud deposits on roads affected by construction traffic.
- CAQ12** All transported loads of soils and wet materials shall be covered prior to transport to reduce deposition of particulate during transportation.
- CAQ13** Dust and mud that are deposited on paved, public roads due to construction activity and traffic shall be removed to decrease particulate matter.
- CAQ14** Construction traffic shall be routed and scheduled to reduce congestion and related air quality impacts caused by idling vehicles along local roads during peak travel times.
- CAQ15** Mulch or plant vegetation shall be installed as soon as practical after grading to reduce windblown particulate in the area.
- CAQ16** Contractors shall utilize electricity from power poles rather than temporary diesel or gasoline generators.
- CAQ17** Contractors shall utilize alternative fueled off-road equipment.
- CAQ18** Contractors shall configure construction parking to minimize traffic interference.
- CAQ19** Contractors shall provide temporary traffic controls, such as a flag person, during all phases of construction to maintain smooth traffic flows.
- CAQ20** Contractors shall provide dedicated turn lanes for movement of construction trucks and equipment on- and off-site.
- CAQ21** Contractors shall schedule construction activities that affect traffic flow on arterial system to off-peak hours.
- CAQ22** All diesel powered construction equipment in use shall require control equipment that meets, at a minimum, Tier III emissions requirements. In the event Tier III equipment is not available, diesel powered construction equipment in use shall require emissions control equipment with a minimum of Tier II diesel standards.

**CAQ23** During project construction, the developer shall require all contractors to turn off all construction equipment and delivery vehicles when not in use or prohibit idling in excess of five minutes.

## 2.4.2 CONSTRUCTION NOISE AND VIBRATION

This section evaluates noise and vibration impacts associated with the implementation of the proposed project. The noise and vibration analysis in this section assesses the following: existing noise and vibration conditions within the project area, as well as short-term construction noise and vibration impacts associated with the proposed project. Measures to minimize or avoid potential impacts are recommended where appropriate.

### Noise and Vibration Definitions

Sound is technically described in terms of the loudness (amplitude) and frequency (pitch) of the sound. The standard unit of measurement for sound is the decibel (dB). The human ear is not equally sensitive to sound at all frequencies. The “A-weighted scale,” abbreviated dBA, reflects the normal hearing sensitivity range of the human ear. On this scale, the range of human hearing extends from approximately three to 140 dBA. For areas with primarily daytime use that are not sensitive to nighttime noise, such as schools, noise impacts are evaluated based on changes in energy equivalent levels ( $L_{eq}$ ).  $L_{eq}$  measures the relative average noise level (in A-weighted decibels) over a certain period (usually one hour).  $L_{max}$  is the maximum noise level achieved during an interval. Noise in residential areas is characterized by measuring changes in day-night sound level ( $L_{dn}$ ).  $L_{dn}$  measures the relative average noise level over a certain period (usually 24 hours), with a weighting of 10 dB applied to those noises occurring during nighttime (10:00 p.m. to 7:00 a.m.; the weighting makes one event during the nighttime hours equivalent to ten of the same events during the daytime in the calculation of  $L_{dn}$ ).

There are several different methods that are used to quantify vibration. The peak particle velocity (PPV) is defined as the maximum instantaneous peak of the vibration signal. The PPV is most frequently used to describe vibration impacts to buildings and is usually measured in inches per second. The root mean square (RMS) amplitude is most frequently used to describe the effect of vibration on the human body. The RMS amplitude is defined as the average of the squared amplitude of the signal. Decibel notation (Vdb) is commonly used to measure RMS. The decibel notation acts to compress the range of numbers required to describe vibration.

### Regulatory Setting

#### Construction Noise Standards

The Federal Railroad Administration (FRA) and Federal Transit Administration (FTA) do not provide standardized criteria for construction noise. The FRA and FTA instead direct that criteria must be developed on a project-specific basis. However, the FRA and FTA do provide guidelines that can be used when appropriate limits are not included in local regulations and standards. The key FRA/FTA criteria that is applicable to the analysis of the Proposed Project is that an appropriate impact threshold for construction noise is a 30-day average  $L_{dn}$  of 75 dBA or ambient noise level plus 10 dBA, whichever is greater.

The cities of Alhambra, San Gabriel, Rosemead and the County of Los Angeles have noise ordinances that limit major construction in residential areas to the daytime hours. **Table 2.4-2** lists the municipal construction noise restrictions. Construction activity would generally occur in San Gabriel and Alhambra.

<b>TABLE 2.4-2: RESTRICTIONS ON CONSTRUCTION NOISE AND VIBRATION IN MUNICIPAL NOISE ORDINANCES</b>			
<b>Limitations on Hours</b>	<b>Hours</b>	<b>Comments</b>	<b>Section of Code</b>
Alhambra	8:00 p.m. to 7:00 a.m.	Construction is excluded for community noise limits except during these hours.	18.02.070(C)
San Gabriel	7:00 p.m. to 7:00 a.m.	--	150.003
Rosemead	8:00 p.m. to 7:00 a.m.	Includes a 65-dBA Limit	8.36.030 (3)
Los Angeles County	8:00 p.m. to 7:00 a.m.	Allowed noise levels are reduced during these hours.	12.08.440
<b>Applicable Noise Limits</b>	<b>Limits (dBA)</b>	<b>Comments</b>	<b>Section of Code</b>
Alhambra	50 dBA	Limits during nighttime hours only	18.02.050(A)
San Gabriel	--	No specific limits. Avoid unnecessary inconvenience to community.	130.09, 98.02, 100.058
Rosemead	65 dBA	--	8.36.030 (3)
Los Angeles County	75 to 80 dBA (day) 60 to 70 dBA (night)	L <sub>max</sub> limit Los Angeles County for intermittent noise.	12.08.440
	60 to 70 dBA (day) 50 to 60 dBA (night)	Limits for stationary equipment (equipment in place more than 10 days).	12.08.440
<b>Vibration Limits</b>	<b>Limits</b>	<b>Comments</b>	<b>Section of Code</b>
Alhambra	0.05 in/sec (RMS)	No vibration above perception threshold, which is defined as 0.05 in/sec RMS.	18.02.110
San Gabriel	--	Avoid unnecessary inconvenience to community.	100.058
Rosemead	--	No specific limits.	--
Los Angeles County	0.01 in/sec	No vibration above perception threshold, which is defined as 0.01 in/sec. Does not state whether this limit is PPV or RMS; RMS has been assumed for this analysis.	12.08.570

**SOURCE:** ATS Consulting, *Construction Noise and Vibration Impact Assessment, San Gabriel Trench Grade Separation, 2007.*

The impact threshold for noise is based on the FRA/FTA guidelines, which state that a reasonable impact threshold for residential areas is an L<sub>dn</sub> of 75 dBA or a 10 dB increase over existing L<sub>dn</sub>, whichever is greater. This standard would also apply to other sensitive land uses, such as school and youth centers. Given that the existing L<sub>dn</sub> at the closest residences is 70 to 78 dBA, following these guidelines would give impact thresholds of 80 to 88 dBA L<sub>dn</sub>. Because an L<sub>dn</sub> greater than 80 dBA represents an unusually high level of community noise, the impact threshold has been capped at 80 dBA. In summary, the impact threshold for residential land uses is:

- Existing L<sub>dn</sub> is less than 65 dBA: threshold is 75 dBA L<sub>dn</sub>
- Existing L<sub>dn</sub> is 65 to 70 dBA: threshold is existing L<sub>dn</sub> plus 10 dBA
- Existing L<sub>dn</sub> is greater than 70 dBA: threshold is 80 dBA L<sub>dn</sub>

The construction L<sub>dn</sub> includes the noise from train operations on the shoofly track and the construction activities. A similar approach has been used for institutional land use such as schools and churches except that the impact threshold is based on the daytime L<sub>eq</sub>. The thresholds based on daytime L<sub>eq</sub> are as follows:

- Existing L<sub>eq</sub> is less than 70 dBA: threshold is 80 dBA L<sub>eq</sub>
- Existing L<sub>eq</sub> is 70 to 75 dBA: threshold is existing L<sub>eq</sub> plus 10dBA
- Existing L<sub>eq</sub> is greater than 75 dBA: threshold is 85 dBA L<sub>eq</sub>

### Construction Vibration Standards

The FRA and FTA do not provide standardized criteria for construction vibration. The FRA and FTA state that the criteria must be developed on a project-specific basis. The FRA and FTA do provide

guidelines that can be used when appropriate limits are not included in local regulations and standards. The FRA/FTA has construction vibration standards based upon the Swiss Standard SN6403a for assessing potential damage. The Swiss Standard SN6403a includes some of the lowest construction vibration limits in common use. For assessing the potential for annoyance from construction vibration, FRA/FTA suggest applying criteria that are used to assess vibration impact from rail transit systems. The City of Alhambra vibration limit is summarized in **Table 2.4-2**.

**Construction Equipment Standards.** The impact threshold for annoyance from vibration at residential or institutional land uses is the existing average level of freight train vibration or the FRA/FTA criteria for frequent events, whichever is greater. The vibration impact threshold for the historic buildings related to the Mission is a PPV of 0.12 inches per second. This is based on the limit of Swiss Standard SN640312a applicable to fragile historic buildings, which is one of the most restrictive vibration limits in common use. For non-historic buildings including single-family residences and commercial buildings, the vibration limits is a PPV of 0.5 inches per second.

Regarding annoyance, an adverse impact would occur if daytime vibration levels at residential buildings exceed 0.022 inches per second PPV, nighttime vibration levels at residential buildings exceed 0.016 inches per second PPV, or vibration levels at office space, schools, churches, and other institutional land uses exceed 0.016 inches per second PPV.

**Train (Shoofly Track) Standards.** The FRA/FTA criteria for infrequent events have been used as the basis for assessing vibration annoyance. The FRA/FTA vibration criteria are based on the maximum RMS vibration level from a typical train. Because vibration from existing train traffic exceeds the FRA/FTA impact threshold at some sensitive receptors, for this project vibration impact from operations on the shoofly track are not considered to occur unless the predicted vibration levels exceed the applicable FRA/FTA impact threshold and the predicted vibration levels are at least 3 VdB greater than existing levels of freight train vibration. A 3 VdB increase represents a relatively small increase, although it is sufficient that many people may notice the change and the incidence of secondary effects such as rattling of windows and items on shelves may increase at some residences. In areas where the shoofly track will be close to existing structures, the impact criteria for construction vibration have been applied to assess potential for building damage.

### ***Affected Environment***

Noise- and vibration-sensitive land uses are locations where people reside or where the presence of unwanted sound could adversely affect the use of the land. Residences, schools, hospitals, guest lodging, libraries, and some passive recreation areas would each be considered noise- and vibration-sensitive and may warrant unique measures for protection from intruding noise.

As shown in **Figure 2.2-7** in Section 2.2 Physical Environment, sensitive receptors near the project corridor include the following:

- Single- and multi-family residences located immediately to the north and south
- San Gabriel High School located adjacent to the south
- Alhambra Municipal Golf Course located adjacent to the southeast
- Asian Youth Center located approximately 40 feet to the north
- San Gabriel Unified School District located approximately 100 feet to the north
- Winston Smoyer Community Garden located approximately 100 feet to the north
- Vista Cove Care Center located approximately 100 feet to the north
- San Gabriel Mission located approximately 145 feet to the north
- Mission Park located approximately 145 feet to the north
- San Gabriel City Hall located approximately 200 feet to the north

- West San Gabriel Valley YMCA located approximately 250 feet to the west
- Smith Park located approximately 300 feet to the north
- San Gabriel Mission Elementary School located approximately 400 feet to the northwest
- San Gabriel Branch of the Los Angeles County Public Library located approximately 500 feet to the south
- San Gabriel Mission High School located approximately 800 feet to the north
- Almansor Court located approximately 900 feet to the south
- San Gabriel Valley Medical Center located approximately 1,100 feet to the north
- Almansor Park located approximately 1,250 feet to the south
- La Casa de San Gabriel Community Center located 1,200 feet to the southeast
- Granada Elementary School located approximately 1,650 feet to the north

The above sensitive receptors are a comprehensive representative sample of noise- and vibration-sensitive land uses near the project corridor. Additional sensitive receptors may be located near the project corridor. These unidentified sensitive receptors would experience similar noise and vibration levels based on distance as the levels discussed for the identified receptors.

### Existing Noise Measurements

A noise survey was conducted for several ACE projects, including the San Gabriel Trench Grade Separation Project.<sup>86</sup> The noise survey documents the existing noise environment in the various project areas and provided data that are needed to make accurate estimates of how the noise environment would change as a result of each ACE project.

This section describes the procedures used for the survey of existing noise conditions, presents the results of the survey at the San Gabriel Trench project site and includes a general discussion of the observed noise environment at relevant measurement sites. Projections of noise impacts that would result from the proposed project are provided below.

Noise monitoring for the ACE Project included short-term (20- to 30-minute) measurements at nine sites near grade crossings, one of which is relevant to the proposed project. Long-term (24- to 48-hour) measurements were taken at six sites near grade crossings, one of which is relevant to the proposed project. These locations are listed in **Table 2.4-3**.

TABLE 2.4-3: SUMMARY OF RELEVANT NOISE MONITORING RESULTS						
Address	Date	Start Time	Noise Levels, dBA			
			L <sub>eq</sub>	L <sub>max</sub>	L <sub>90</sub>	L <sub>dn</sub>
420 Main Street, San Gabriel /a/	8/18/99	19:09	75	103	44	73
333 Main Street, San Gabriel /b/	8/20/99	13:46	50	70	44	-

/a/ Results from continuous 24-hour monitoring.  
/b/ Results from 20 to 30 minute measurements.  
**SOURCE:** Parsons Engineering Science, *Alameda Corridor East Noise and Vibration Impacts Assessment Report*, September 7, 1999.

As shown in **Table 2.4-3**, the noise measurement site at 420 Main Street has a recorded L<sub>eq</sub> of 75 dBA and an L<sub>max</sub> of 103 dBA. The L<sub>max</sub> of 103 dBA is attributed to the trains sounding their horns as they approach the crossings. The noise measurement site at 333 Main Street also experiences a large difference between the L<sub>eq</sub> and L<sub>max</sub> due to train horns although it is located further from a grade crossing.

<sup>86</sup>Parsons Engineering Science, *Alameda Corridor East Noise and Vibration Impacts Assessment Report*, September 7, 1999.

In addition, existing noise levels in the project corridor were documented through a series of long-term (minimum of 24 hours) and short-term (minimum of 30 minutes) noise measurements in 2007.<sup>87</sup> Supplemental short-term noise measurements were taken on August 26, 2009. The general locations of the measurement sites are also shown in **Figure 2.2-8** in Section 2.2 Physical Environment. The noise measurement locations were:

- **Long Term (LT)**
  - **LT-1:** Side yard of a single-family residence on the West Main Street directly opposite to the San Gabriel Mission
  - **LT-2:** Side yard of a single-family residence south of the tracks on East Main Street
  - **LT-3:** Front yard of a single-family residence on the north side of the tracks, near the intersection of Delta and Clanton Streets.
  
- **Short Term (ST)**
  - **ST-1:** Small park area in front of the San Gabriel Mission
  - **ST-2:** On the sidewalk in front of a single-family residence on East Main Street; and
  - **ST-3:** Behind a self-storage unit at the intersection of West Main and Rosenda Streets.
  - **ST-4:** Almansor Park and Court
  - **ST-5:** West San Gabriel Valley YMCA
  - **ST-6:** Alhambra residences, Smoyer Community Garden, and Alhambra Municipal Golf Course
  - **ST-7:** Granada Elementary School
  - **ST-8:** San Gabriel High School

The summaries of the long-term and short-term measurements are shown in **Tables 2.4-3** through **2.4-5**.

<b>TABLE 2.4-4: SUMMARY OF LONG-TERM NOISE MEASUREMENTS</b>							
<b>Location</b>	<b>Distance from Tracks (feet)</b>	<b>Number of Trains (per 24 hrs)</b>	<b>Measured Levels (dBA)</b>		<b>Trains Removed (dBA)</b>		<b>Average Train SEL (dBA)</b>
			<b>Maximum Hourly L<sub>eq</sub></b>	<b>L<sub>dn</sub></b>	<b>Maximum Hourly L<sub>eq</sub></b>	<b>L<sub>dn</sub></b>	
LT-1	140	20	77	78	55	54	108
LT-2	140	16	76	77	56	54	106
LT-3	155	21	71	70	60	59	100

**SOURCE:** ATS Consulting, *Construction Noise and Vibration Impact Assessment, San Gabriel Trench Grade Separation, 2007.*

<sup>87</sup>ATS Consulting, *Construction Noise and Vibration Impact Assessment, San Gabriel Trench Grade Separation, November 2007.*



**TABLE 2.4-5: SUMMARY OF SHORT-TERM NOISE MEASUREMENTS – 2007**

Location	Duration (hh:mm)	Distance from Tracks (feet)	Number of Trains	Average Train SEL (dBA)	Measured L <sub>eq</sub>	
					Trains Included (dBA)	Trains Removed (dBA)
ST-1	02:25	155	3	105	71 /a/	62 /a/
ST-2	01:10	115	4	104	77	55
ST-3	00:30	190	0	N/A <sup>2</sup>	N/A /b/	63

*/a/* The first train event started before the equipment was fully in place. Therefore, the first train has not been included in the measurement.  
*/b/* No trains passed by during this measurement.  
**SOURCE:** ATS Consulting, *Construction Noise and Vibration Impact Assessment, San Gabriel Trench Grade Separation, 2007.*

**TABLE 2.4-6: SUMMARY OF SHORT-TERM NOISE MEASUREMENTS – 2009**

Location	Noise Monitoring Location	Sound Level (dBA, L <sub>eq</sub> )
ST-4	Almanson Park and Court	59.3
ST-5	West San Gabriel Valley YMCA	65.8
ST-6	Alhambra residences, Smoyer Community Garden, and Alhambra Municipal Golf Course	65.3
ST-7	Granada Elementary School	57.2
ST-8	San Gabriel High School	69.0

**SOURCE:** TAHA, 2009.

Given the large amount of material that will be removed from the project site and transported elsewhere for disposal, it is important to consider the effect of truck noise along the potential haul routes for the project. Haul trucks would likely travel along San Gabriel Boulevard, Del Mar Avenue (north of Mission Road), Mission Road, and Main Street. Noise sensitive land uses along these roadways include single-family and multi-family residential, schools, and churches. These land uses were used as a representative sample of haul noise in the project corridor. Four short-term noise measurements were selected to characterize noise along potential haul routes. Noise levels at these locations were measured continuously for a minimum of 30 minutes. The existing noise measurements for these four sites are shown in **Table 2.4-7**.

**TABLE 2.4-7: SUMMARY OF SHORT –TERM NOISE MEASUREMENTS ALONG POTENTIAL HAUL ROUTES**

Location	Description	Distance from Tracks (miles)	Measured L <sub>eq</sub> (dBA)
ST-9	Del Mar Avenue	0.87	66
ST-10	San Gabriel Boulevard	0.93	67
ST-11	Main Street	0.03	50.7
ST-12	Mission Road	0.28	61.3

**SOURCE:** ATS Consulting, *Construction Noise and Vibration Impact Assessment, San Gabriel Trench Grade Separation, 2007* and TAHA, 2009.

### Existing Vibration Measurements

Freight train operations are the primary existing source of vibration in the corridor. Detailed measurements of freight train vibration were performed the three locations shown in **Figure 2.4-2**. At each site, vibration was measured at three or four distances from the track. The three measurement sites were:

- **San Gabriel Mission (V-1):** The measurements were made in the park area between the Mission and Junipero Serra Drive. The accelerometers were located at distances of 105, 130, 155, and 205 feet from the train tracks. The first accelerometer was at the approximate distance that the closest part of the Mission will be from the shoofly track.
- **East Main Street (V-2):** This site is located south of the tracks in the residential area between Del Mar Avenue and San Gabriel Boulevard. There are a number of one-story single-family residences in this area that are adjacent to the rail right of way. The vibration measurements were made at distances of 25, 50, 75, and 115 feet from the existing tracks.
- **Delta Street (V-3):** The vibration measurement was performed at the corner of Delta Street and Clanton Street west of Walnut Grove Avenue and east of Rubio Wash. Vibration was measured at distances of 25, 50, 100, and 125 feet from the existing tracks.

**Table 2.4-8** shows the existing vibration experienced at the measurement sites.

**TABLE 2.4-8: EXISTING FREIGHT TRAIN VIBRATION LEVELS**

Site	Train No. /a/	Duration (minutes)	Distance from Tracks (feet)										
			25	50	75	100	105	115	125	130	155	205	
<b>Maximum Vibration (one second averaging time, VdB)</b>													
V-1	1	3					80				79	77	76
V-1	2	3					79				75	72	71
V-1	3	2					79				77	72	69
V-2	1	1	85	86	82				78				
V-2	2	3	86	87	81				79				
V-2	3	2	85	87	82				79				
V-2	4	3	86	87	83				80				
V-3	1A	4.5	83	78		75				77			
V-3	1B	2	77	81		67				69			
V-3	2	2	86	80		76				79			
V-3	3	3	86	81		79				78			
V-3	4	2	87	82		78				80			
<b>L<sub>eq</sub> (average RMS vibration over entire passby, VdB)</b>													
V-1	1	3					74			73		71	69
V-1	2	3					72			71		68	66
V-1	3	2					69			68		66	63
V-2	1	1	N/A/a/	N/A/a/	N/A/a/				N/A/a/				
V-2	2	3	79	81	76				73				
V-2	3	2	75	76	73				70				
V-2	4	3	78	80	76				72				
V-3	1A	4.5	74	69		67				67			
V-3	1B	2	70	66		63				64			
V-3	2	2	82	77		74				76			
V-3	3	3	80	75		72				73			
V-3	4	2	78	74		71				72			
<b>Peak Particle Velocity (inches per second)</b>													
V-1	1	3					0.032			0.014		0.011	0.021
V-1	2	3					0.025			0.024		0.009	0.010
V-1	3	2					0.023			0.015		0.026	0.009
V-2	1	1	0.064	0.060	0.051				0.075				
V-2	2	3	0.066	0.061	0.072				0.072				
V-2	3	2	0.038	0.038	0.035				0.041				
V-2	4	3	0.023	0.027	0.026				0.031				
V-3	1A	4.5	0.038	0.018		0.012				0.014			
V-3	1B	2											
V-3	2	2	0.029	0.014		0.008				0.010			
V-3	3	3	0.074	0.036		0.026				0.027			
V-3	4	2	0.070	0.036		0.025				0.032			

/a/ All freight trains were traveling westbound.  
SOURCE: ATS Consulting, Construction Noise and Vibration Impact Assessment, San Gabriel Trench Grade Separation, 2007.

**Environmental Consequences**

**Construction Equipment and Shoofly Track Noise**

**Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Predictions of noise levels that would be generated during the construction process were based on the expected phasing of the construction, the types of equipment that would be used for each phase of the construction, and the location of the shoofly track. The average noise emissions of the different

categories of construction equipment were based on the levels given in the FHWA “Roadway Construction Noise Model” (RCNM, Ref. 3). The  $L_{eq}$  would typically range from 85 to 89 dBA at a distance of 50 feet from the active construction area. Construction noise is not constant and there will be wide day-to-day variations depending on equipment availability, progress of the construction, and coordination of the construction for the different parts of the alignment.

The noise from the shoofly track was added to the predicted noise from construction to obtain a total level of construction noise. The following discussion presents the methodology for analyzing noise generated by operations of the shoofly track.

Noise from train operations on the shoofly track would be similar to existing levels of train noise. However, the shoofly track would be approximately 35 feet north of the existing tracks, which means that train noise would be slightly higher at sensitive receptors north of the tracks and slightly lower south of the tracks. The procedures used to estimate noise from train operations on the shoofly track were:

- The SELs of all train events were extracted from the long-term measurement results. The average SELs at each site were:
  - Site 1: 108 dBA at 140 feet
  - Site 2: 106 dBA at 140 feet
  - Site 3: 100 dBA at 155 feet
- The number of trains per day during daytime and nighttime hours was assumed to be the same as the average number of train observed during the measurements. The values were 11 trains during the daytime hours (7:00 a.m. to 10:00 p.m.) and eight trains during the nighttime hours (10:00 p.m. to 7:00 a.m.).
- Daytime and nighttime  $L_{eq}$  at the measurement sites were estimated using the following formula:

$$L_{eq} = SEL_{AVG} + 10 \times \log(N_{Events}) - 10 \times \log(T)$$

$N_{Events}$  = number of trains during the time period

$SEL_{AVG}$  = Average freight train SEL at the measurement site

T = Length of time period in seconds

This relationship gives values slightly different from the measured values because the number of trains in daytime and nighttime hours and the total number trains varied from site to site. This process ensures that the predictions for the three measurement sites are comparable.

- The  $L_{dn}$  at each site was calculated using the relationship:

$$L_{dn} = SEL_{AVG} + 10 \times \log(N_{Day} + 10 \times N_{Night}) - 49.4$$

$N_{Day}$  = average number of trains during daytime hours (7:00 a.m. to 10:00 p.m.)

$N_{Night}$  = average number of trains during nighttime hours (10:00 p.m. to 7:00 a.m.)

- The  $L_{eq}$  and  $L_{dn}$  for each cluster of sensitive receptors was estimated using the relationship:

$$L_1 = L_0 + 10 \times \log\left(\frac{D_0}{D_1}\right)$$

$L_0$  = the  $L_{eq}$  or  $L_{dn}$  value from the closest of the 24-hour measurement sites,

$D_0$  = the distance of the measurement site from the tracks,

$L_1$  = the predicted  $L_{eq}$  or  $L_{dn}$  at the cluster, and  
 $D_1$  = the distance of the closest residence within the cluster to the shoofly track.

**Table 2.4-9** lists the existing  $L_{dn}$ , predicted construction noise (including operations of the shoofly track), impact thresholds, and impacts for residential and non-residential sensitive receptors. The predicted noise levels represent the worst case condition, which is expected to be during the excavation and slurry wall construction when the  $L_{eq}$  is predicted to be close to 90 dBA at the reference distance of 50 feet. The results indicate that construction equipment noise would result in an adverse impact at all of the closest residential land uses, the northern part of the San Gabriel High School campus, the San Gabriel Mission, the Asian Youth Center, and several other institutional land uses without mitigation.

<b>TABLE 2.4-9: SUMMARY OF CONSTRUCTION NOISE IMPACTS - UNMITIGATED</b>					
<b>Residential Receptors</b>	<b>Civil Station</b>	<b>Units</b>	<b>Projected <math>L_{dn}</math> (dBA)</b>	<b>Impact Threshold</b>	<b>Significant Impact</b>
Singles & Multi-Family Residences	5855+00	11	82	80	Yes
Singles & Multi-Family Residences	5885+00	5	84	80	Yes
Single-Family Residences	5893+00	2	79	80	No
Single-Family Residences	5890+00	6	83	80	Yes
Single-Family Residences	5915+00	21	90	80	Yes
Single-Family Residences	5915+00	19	79	80	No
Single-Family Residences	5946+00	4	86	80	Yes
Single-Family Residences	5921+00	6	84	80	Yes
Single-Family Residences	5950+00	6	86	80	Yes
Single-Family Residences	5925+00	10	84	80	Yes
Single-Family Residences	5953+00	9	82	80	Yes
Single-Family Residences	5930+00	4	87	80	Yes
Single-Family Residences (Adobe)	5887+00	1	72	80	No
Single-Family Residences (Adobe)	5887+00	1	73	80	No
Single-Family Residences (Adobe)	5887+00	1	75	80	No
Vista Cove Care Center	5880+00	1	82	80	Yes
<b>Non-Residential Receptors</b>	<b>Civil Station</b>	<b>Units</b>	<b>Projected <math>L_{dn}</math> (dBA)</b>	<b>Impact Threshold</b>	<b>Significant Impact</b>
West San Gabriel Valley YMCA	5847+00	1	76	80	No
San Gabriel High School	5880+00	1	86	80	Yes
Alhambra Municipal Golf Course	5880+00	1	86	80	Yes
Winston Smoyer Community Garden	5880+00	1	84	80	Yes
Almansor Park	5860+00	1	56 /a/	80	No
Almansor Court	5860+00	1	59 /a/	80	No
Granada Elementary School	5880+00	1	55 /b/	80	No
San Gabriel City Hall	5883+00	1	78	80	No
Mission Park	5885+00	1	82	80	Yes
San Gabriel Mission	5887+00	1	81	80	Yes
School District Headquarters	5900+00	1	83	80	Yes
Asian Youth Center	5905+05	1	91	85	Yes
Mission Elementary School	5885+00	1	74	80	No
Mission High School	5890+00	1	68	80	No
Smith Park	5903+00	1	75	80	No
Library	5905+00	1	71	80	No
Community Center	5915+00	1	63	80	No
San Gabriel Valley Medical Center	5890+00	1	63	80	No

Note: Projected construction noise includes both the noise from construction equipment and noise from train operations on the shoofly track.  
/a/ Projected Almansor Park and Court noise levels are based on a soft-site attenuation rate of 7.5 dBA for every doubling of distance.  
/b/ Projected Granada Elementary School noise levels include a 5-dBA reduction for intervening buildings between the School and the construction area.  
**SOURCE:** ATS Consulting, *Construction Noise and Vibration Impact Assessment, San Gabriel Trench Grade Separation*, 2007 and TAHA, 2009.

**Alternative 2 – No Build Alternative**

The San Gabriel Trench would not be constructed under Alternative 2. Alternative 2 would not have an adverse construction noise impact.

**Haul Route**

**Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Haul trucks would travel along Mission Road, Main Street, Del Mar Avenue (north of Mission Road), and San Gabriel Boulevard during the various phases of construction activity. The haul truck analysis assumed that Alternative 1 would result in 13 haul trucks per hour over a 12-hour period. **Table 2.4-10** summarizes the predicted noise level increase caused by haul truck activity. The increase in ambient noise levels along high-volume roadways such as Del Mar Avenue, Mission Road, and San Gabriel Boulevard would be less than 3 dBA, which is the perceptible change in sound level for a person with normal hearing sensitivity. However, haul trucks would also travel along residential low-volume roadways such as Main Street. The increase in ambient noise levels along these roadways would be approximately 7 dBA, which would be a noticeable change and would likely evoke a community reaction. Therefore, haul truck noise would result in a temporary and short-term adverse impact.

<b>TABLE 2.4-10: PREDICTED NOISE LEVELS ALONG HAUL ROUTES</b>			
<b>Location</b>	<b>Noise Level, Hourly L<sub>eq</sub> (dBA)</b>		
	<b>Existing</b>	<b>Predicted with Trucks</b>	<b>Predicted Increase</b>
Del Mar Ave. – Residences	66	66.5	0.5
San Gabriel Blvd. – Residences	67	67.4	0.4
San Gabriel High School	69	69.3	0.3
Main St. – Residences	51	57.8	6.7
Mission Rd. – Residences	61	62.4	1.4

**SOURCE:** TAHA, 2009.

**Alternative 2 – No Build Alternative**

The San Gabriel Trench would not be constructed under Alternative 2. Alternative 2 would not have an adverse construction noise impact.

**Vibration**

**Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The FRA/FTA manuals provide data on the upper range and typical vibrations of different classes of construction equipment. These vibration values are listed in **Table 2.4-11**. The PPV of 0.089 inches per second at a distance of 25 feet away from a bulldozer was used in evaluating the potential for vibration impacts.

<b>TABLE 2.4-11: VIBRATION SOURCE LEVELS FOR CONSTRUCTION EQUIPMENT</b>			
<b>Equipment</b>		<b>PPV at 25 ft (in/sec)</b>	<b>Approximate RMS at 25 feet (VdB) /a/</b>
Hydromill (slurry wall)	In soil	0.008	66
	In rock	0.017	75
Hoe Ram		0.089	87
Large bulldozer		0.089	87
Caisson drilling		0.089	87
Loaded trucks		0.076	86
Jackhammer		0.035	79
Small bulldozer		0.003	58

/a/ RMS velocity in decibels (VdB) re 1 μin/sec assuming a crest factor of 4.  
**SOURCE:** ATS Consulting, *Construction Noise and Vibration Impact Assessment, San Gabriel Trench Grade Separation, 2007.*

The impact thresholds for annoyance were calculated using FRA/FTA guidance. The annoyance impact thresholds for residential and institutional land uses are PPVs of 0.016 inches per second and 0.022 inches per second, respectively. The predicted damage and annoyance impacts, as well as their respective thresholds, are listed in **Table 2.4-12**.

<b>TABLE 2.4-12: SUMMARY OF PREDICTED CONSTRUCTION VIBRATION IMPACTS</b>								
Description	Units	Minimum Distance /a/ (feet)	Damage Impact /b/			Annoyance Impact /c/		
			Threshold (in/sec)	Maximum (in/sec)	Impact	Threshold (in/sec)	Typical (in/sec)	Impact
<b>Residential Land Uses South of Tracks</b>								
Single- & Multi-Family Residences	5	70	0.05	0.0190	No	0.0160	0.0111	No
Single -Family Residences	2	170	0.05	0.0050	No	0.0160	0.0039	No
Single -Family Residences	6	80	0.05	0.0155	No	0.0160	0.0096	No
Single -Family Residences	20	140	0.05	0.0067	No	0.0160	0.0050	No
Single -Family Residences	21	20	0.05	0.1244	No	<b>0.0160</b>	<b>0.0315</b>	<b>Yes</b>
Single -Family Residences	19	150	0.05	0.0060	No	0.0160	0.0046	No
Single -Family Residences	6	70	0.05	0.0190	No	0.0160	0.0111	No
Single -Family Residences	4	60	0.05	0.0239	No	0.0160	0.0130	No
Single -Family Residences	4	4	0.05	0.0440	No	<b>0.0160</b>	<b>0.0190</b>	<b>Yes</b>
Multi-Family Residences	5	150	0.05	0.0061	No	0.0160	0.0046	No
<b>Residential Land Uses North of Tracks</b>								
Single- & Multi-Family Residences	11	90	0.05	0.0130	No	0.0160	0.00895	No
Single -Family Residences	4	30	0.05	0.0377	No	<b>0.0160</b>	<b>0.0239</b>	<b>Yes</b>
Single -Family Residences	6	30	0.05	0.0677	No	<b>0.0160</b>	<b>0.0239</b>	<b>Yes</b>
Single -Family Residences	9	70	0.05	0.0190	No	0.0160	0.0111	No
Single-Family Residences (Adobe)	1	670	0.012	0.0006	No	0.0160	0.0006	No
Single-Family Residences (Adobe)	1	520	0.012	0.0009	No	0.0160	0.0006	No
Single Family Residences (Adobe)	1	345	0.012	0.0017	No	0.0160	0.0015	No
Vista Cove Care Center	1	90	0.05	0.0130	No	0.0160	0.00895	No
<b>Institutional Land Uses</b>								
West San Gabriel Valley YMCA	1	300	0.05	0.0021	No	0.0160	0.0016	No
San Gabriel High School	1	70	0.05	0.0190	No	0.0160	0.0111	No
Alhambra Municipal Golf Course	1	70	0.05	0.0190	No	0.0160	0.0111	No
Winston Smoyer Community Garden	1	100	0.05	0.0111	No	0.0160	0.0111	No
Almanson Park	1	1,250	0.05	0.0003	No	0.0160	0.0003	No
Almanson Court	1	900	0.05	0.0004	No	0.0160	0.0004	No
Granada Elementary School	1	1,650	0.05	0.0002	No	0.0160	0.0002	No
San Gabriel City Hall	3	200	0.05	0.0039	No	0.0160	0.0032	No
Mission Park	1	110	0.012	0.0096	No	0.0160	0.0067	No
San Gabriel Mission	1	145	0.012	0.0064	No	0.0160	0.0067	No
School District Headquarters	1	80	0.05	0.0155	No	0.0160	0.0096	No
Asian Youth Center	1	10	0.05	0.3518	No	<b>0.0160</b>	<b>0.0440</b>	<b>Yes</b>
Mission Elementary School	1	340	0.05	0.0018	No	0.0160	0.0016	No
Mission High School	1	800	0.05	0.0005	No	0.0160	0.0005	No
Smith Park	1	300	0.05	0.0021	No	0.0160	0.0016	No
Library	1	500	0.05	0.0010	No	0.0160	0.0009	No
Community Center	1	1,470	0.05	0.0002	No	0.0160	0.0002	No
San Gabriel Valley Medical Center	1	1,100	0.05	0.0004	No	0.0160	0.0004	No
/a/ Approximate distance from closest section of construction site, which is assumed to be 30 feet from the centerline of the construction site. /b/ Potential for damage impact is based on vibration from a large bulldozer located near the edge of the construction site. /c/ Annoyance from vibration that may continue for an extended period of time. The predictions are based on vibration from a tracked vehicle such as a bulldozer operating at the center of the construction site. The threshold is based on the RMS vibration, which has been converted to PPV assuming a crest factor of 4.								
<b>SOURCE:</b> ATS Consulting, <i>Construction Noise and Vibration Impact Assessment, San Gabriel Trench Grade Separation</i> , 2007 and TAHA, 2009.								



As summarized in **Table 2.4-12**, the vibration annoyance impact threshold would be exceeded at 35 residential land uses. In addition, the vibration thresholds would be exceeded at the Asian Youth Center. Construction-related vibration would result in an adverse impact.

Three adobes located north of the tracks were also evaluated. It was determined that at these adobes the threshold for damage or annoyance impacts would not be exceeded. The vibration impacts at the San Gabriel Mission would also not exceed the damage and annoyance impact thresholds. However, measures are included to ensure that construction does not exceed the damage and annoyance impact thresholds at the historically significant Mission or the adobes.

### **Alternative 2 – No Build Alternative**

The San Gabriel Trench would not be constructed under Alternative 2. Alternative 2 would not have an adverse construction vibration impact.

### **Shoofly Track Operations**

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Shoofly track operational activity would potentially increase vibration levels at nearby sensitive receptors. The PPV vibration value is typically used to assess the potential for building damage. The impact thresholds are 0.5 inches per second for normal buildings and 0.12 inches per second for fragile historic buildings. As shown in **Table 2.4-13**, the building damage thresholds would not be exceeded at any of the sensitive receptors. Operation of the shoofly track would not result in an adverse vibration building damage impact.

The RMS vibration value is typically used to assess the potential for annoyance from vibration to sensitive receptors. **Table 2.4-14** lists the predicted RMS vibration from trains operating on the shoofly track. None of the predicted RMS values for locomotives and railcars passing by the sensitive receptors exceeded their respective thresholds. Operation of the shoofly track would not result in an adverse vibration annoyance impact.

Moving the freight trains 35 feet to the north will increase train vibration at the historic buildings associated with the San Gabriel Mission. The most common vibration limit used to protect buildings from being damaged by construction vibration is a PPV of 2 inches per second. One of the most restrictive limits that are used to protect fragile historic buildings is a PPV of 0.12 inches per second. Based on the most recent vibration measurements, the PPV from train operations is currently 0.01 to 0.02 inches per second at the corner of the historic Mission building that is closest to the tracks. When trains are operating on the shoofly track, the PPV could increase to 0.02 to 0.03 inches per second. This is still well below the point where the vibration could cause damage to fragile historic structures.

The shoofly track would be located north of the existing track location and further from the West San Gabriel Valley YMCA, Almansor Park, and Almansor Court. Rail vibration on the shoofly track would generate less vibration than the existing track at these receptors. The portion of the tracks near Alhambra Golf Course, Winston Smoyer Community Garden, and Granada Elementary School would not require a shoofly track and existing vibration levels would not change at these receptors during construction.

### **Alternative 2 – No Build Alternative**

The San Gabriel Trench would not be constructed under Alternative 2. Alternative 2 would not have an adverse construction vibration impact.

**TABLE 2.4-13: PREDICTED PEAK PARTICLE VELOCITY FROM TRAIN OPERATIONS ON SHOOFLY TRACK**

Side of Track	Land Use	Units	Distance from Tracks (feet)		Impact Threshold (in/sec)	Predicted PPV (in/sec)	Exceed Threshold ?
			Existing Track	Proposed Shoofly			
<b>Residential Land Uses</b>							
N	Single- and Multi-Family Residences	11	120	100	0.5	0.024	No
S	Single- and Multi-Family Residences	5	100	135	0.5	0.018	No
S	Single –Family Residences	2	200	235	0.5	0.008	No
S	Single –Family Residences	6	110	145	0.5	0.016	No
S	Single –Family Residences	20	170	205	0.5	0.010	No
S	Single –Family Residences	21	50	85	0.5	0.028	No
S	Single –Family Residences	19	180	215	0.5	0.009	No
N	Single –Family Residences	4	60	30	0.5	0.052	No
S	Single –Family Residences	6	100	135	0.5	0.018	No
N	Single –Family Residences	6	60	30	0.5	0.052	No
S	Single –Family Residences	10	90	125	0.5	0.019	No
N	Single –Family Residences	9	100	70	0.5	0.033	No
S	Single –Family Residences	4	70	105	0.5	0.023	No
S	Multi-Family Residences	5	180	205	0.5	0.010	No
N	Single-Family Residences (Adobe)	1	700	730	0.12	0.001	No
S	Single-Family Residences (Adobe)	1	550	520	0.12	0.002	No
S	Single-Family Residences (Adobe)	1	375	400	0.12	0.003	No
N	Vista Cove Care Center	1	120	100	0.5	0.024	No
<b>Institutional and Other Land Uses</b>							
S	San Gabriel High School	1	100	135	0.5	0.018	No
S	Alhambra Municipal Golf Course	1	100	135	0.5	0.018	No
N	San Gabriel City Hall	3	230	200	0.5	0.011	No
N	Mission Park	1	140	105	0.12	0.023	No
N	San Gabriel Mission	1	140	105	0.12	0.023	No
N	School District Headquarters	1	110	75	0.5	0.032	No
N	Asian Youth Center	1	40	20	0.5	0.056	No
N	Mission Elementary School	1	370	335	0.5	0.005	No
N	Mission High School	1	830	790	0.5	0.001	No
N	Smith Park	1	300	270	0.5	0.007	No
S	Library	1	530	550	0.5	0.002	No
S	Community Center	1	1,500	1,500	0.5	0.000	No
N	San Gabriel Valley Medical Center	1	1,100	1,070	0.5	0.000	No

SOURCE: ATS Consulting, Construction Noise and Vibration Impact Assessment, San Gabriel Trench Grade Separation, 2007 and TAHA, 2009.

**TABLE 2.4-14: PREDICTED RMS VIBRATION FROM TRAIN OPERATIONS ON SHOOFLY TRACK**

Side of Track	Land Use	Units	Distance from Tracks (feet)		Locomotives (VdB) /a/			Railcars (VdB) /b/			
			Existing Tracks	Proposed Shoofly	Thresh- hold	Predicted	Impact?	Thresh- hold	Predicted	Impact?	
<b>Residential Land Uses</b>											
N	Single- & Multi-Family Residences	11	120	100	81	79	No	74	72	No	
S	Single- & Multi-Family Residences	5	100	135	82	76	No	75	70	No	
S	Single-Family Residences	2	200	235	80	70	No	72	65	No	
S	Single-Family Residences	6	110	145	81	76	No	75	69	No	
S	Single-Family Residences	20	170	205	80	72	No	72	66	No	
S	Single-Family Residences	21	50	85	87	81	No	79	73	No	
S	Single-Family Residences	19	180	215	80	71	No	72	66	No	
N	Single-Family Residences	4	60	30	86	85	No	78	78	No	
S	Single-Family Residences	6	100	135	82	76	No	75	70	No	
N	Single-Family Residences	6	60	30	86	85	No	78	78	No	
S	Single-Family Residences	10	90	125	83	77	No	76	71	No	
N	Single-Family Residences	9	100	70	82	82	No	75	75	No	
S	Single-Family Residences	4	70	105	85	79	No	78	72	No	
S	Multi-Family Residences	5	180	205	80	72	No	72	66	No	
N	Single-Family Residences (Adobe)	1	700	730	80	51	No	72	50	No	
S	Single-Family Residences (Adobe)	1	550	520	80	57	No	72	55	No	
S	Single-Family Residences (Adobe)	1	375	400	80	62	No	72	58	No	
N	Vista Cove Care Center	1	120	100	81	79	No	74	72	No	
<b>Institutional and Other Land Uses</b>											
S	San Gabriel High School	1	100	135	83	76	No	75	70	No	
S	Alhambra Municipal Golf Course	1	100	135	83	76	No	75	70	No	
N	Mission Park	1	140	105	80	79	No	73	72	No	
N	San Gabriel Mission	1	140	105	80	79	No	73	72	No	
N	San Gabriel City Hall	3	230	200	83	72	No	75	66	No	
N	School District Headquarters	1	110	75	83	81	No	75	74	No	
N	Asian Youth Center	1	40	20	88	86	No	80	78	No	
N	Mission Elementary School	1	370	335	83	65	No	75	61	No	
N	Mission High School	1	830	790	83	49	No	75	49	No	
N	Smith Park	1	300	270	83	68	No	75	63	No	
S	Library	1	530	550	83	56	No	75	54	No	
S	Community Center	1	1,500	1,500	83	35	No	75	38	No	
N	San Gabriel Valley Medical Center	1	1,100	1,070	83	42	No	75	43	No	

/a/ Maximum one-second RMS vibration, which usually occurs as locomotives pass.

/b/ Average RMS vibration after locomotives pass until end of train.

SOURCE: ATS Consulting, Construction Noise and Vibration Impact Assessment, San Gabriel Trench Grade Separation, 2007 and TAHA, 2009.

**Measures to Minimize Harm**

**Construction Noise Measures**

**CN1** The construction contractor shall utilize temporary noise barriers (e.g., solid walls or sound attenuation blankets) capable of reducing noise levels by 10 dBA to block construction noise at sensitive land uses. The locations of the noise barriers are shown in **Table 2.4-15**.

<b>TABLE 2.4-15: RECOMMENDED NOISE BARRIER LOCATIONS</b>					
Site	Side of Tracks	Civil Station		Length (feet)	Description
		Start	End		
1 A	South	5872 +00	5876 +00	400	Protects closest buildings on San Gabriel High School campus
1 B	South	5869 +00	5882 +00	1,300	Protects complete San Gabriel High School campus including areas where no impact is predicted
2	South	5883 +50	5891 +00	750	Protects residences on West Main Street
3	North	5884 +00	5890 +00	600	Protects San Gabriel Mission and small park/green area southwest of Mission Road
4	South	5909 +00	5933 +00	2,400	Protects residences along East Main Street between Del Mar Avenue and San Gabriel Boulevard
5 A	North	5946 +00	5951 +50	550	Protects residences east of Rubio Wash. East end of barrier would be at the industrial property at southwest corner of Walnut Grove Avenue and Clanton Street.
5 B	North	5943 +00	5945 +50	250	If feasible extend to 250 feet west Rubio Wash.
<b>TOTAL</b>				<b>4,950</b> <b>5,850</b>	Using shorter barrier (1A) at San Gabriel High School Protecting complete San Gabriel High School campus (1B)

**SOURCE:** ATS Consulting, *Construction Noise and Vibration Impact Assessment, San Gabriel Trench Grade Separation, 2007.*

**CN2** The construction contractor shall ensure that the construction noise levels at representative sensitive receptors do not exceed the limits detailed **Table 2.4-16**.

<b>TABLE 2.4-16: RECOMMENDED NOISE LIMITS FOR CONSTRUCTION NOISE</b>	
Location	Maximum 1-Hour Leq (7:00 a.m. to 7:00 p.m.) /a, b/
North of Mission Rd., Almansor to Alhambra Wash	80 dBA
San Gabriel High School	80 dBA
West Main Street, Ramona to Mission Road	80 dBA
San Gabriel Mission	80 dBA
West Main Street, Mission Road to Del Mar Avenue	80 dBA
East Main Street, Mission Road to San Gabriel Blvd.	82 dBA
North of Tracks, Rubio Wash to Walnut Grove Avenue	80 dBA

/a/ Sound level with noise from freight trains excluded.  
/b/ The noise limits should be reduced by 10 dB for any nighttime construction.

**SOURCE:** ATS Consulting, *Construction Noise and Vibration Impact Assessment, San Gabriel Trench Grade Separation, 2007.*

**CN3** A noise-monitoring program shall be performed under the direction of ACE or the construction contractor. The monitoring program shall be designed to demonstrate that the contractor is in compliance with the noise limits detailed in the construction contract specifications.

**CN4** The contractor shall be required to ensure that equipment is well maintained and equipped with mufflers.

**CN5** Low-noise construction procedures shall be implemented.

**CN6** Hauling shall be limited to between the hours of 7:00 a.m. and 7:00 p.m.

**CN7** The construction contractor shall submit a noise plan detailing how the construction will be performed in a manner that will not exceed the limits specified in **Table 2.4-16**. The plan

shall be prepared by a qualified acoustical engineer and should be approved by the resident engineer before construction is initiated. The noise control plan shall include an inventory of the equipment, the estimated noise level at 50 feet for each major piece of equipment, calculations of the noise levels at sensitive receptors, and, noise reduction measures for any locations where the predicted noise levels exceed the limits specified in **Table 2.4-16**.

### Construction Vibration Measures

- CV1** A standard pre-construction survey shall be performed to document the existing condition of all structures in the vicinity of the construction site.
- CV2** The following vibration limits shall be utilized to minimize the potential for damage to buildings and historic structures, and to reduce potential for intrusive vibration at sensitive receptors such as residences and schools especially during the nighttime hours when people are trying to sleep:
- Damage to normal buildings – 0.5 inches per second PPV;
  - Damage to historic buildings – 0.12 inches per second PPV;
  - Annoyance to residential buildings (daytime) – 0.022 inches per second PPV;
  - Annoyance to residential buildings (nighttime) – 0.016 inches per second PPV; and
  - Annoyance to office space, schools, churches, and other institutional land uses – 0.016 inches per second PPV
- CV3** Vibration monitoring should be completed during construction activity to verify that construction vibration limits are not exceeded. If vibration from the test hits approaches or exceeds the limits, equipment activity shall be reduced until the vibration amplitudes at all sensitive buildings are below the applicable limit.
- CV4** Low-vibration construction procedures shall be implemented (e.g., drilled holes instead of impact pile driving).
- CV5** If complaints are received and monitoring shows that the annoyance limit is being exceeded, the contractor shall implement an alternative approach that reduces the vibration level to below the applicable standards.

### Discussion

Measure **CN1** would reduce noise levels by 10 dBA and, as shown in **Table 2.4-17**, would eliminate most impacts. The exceptions would be the residences at the furthestmost west and east edges of construction activity and four institutional land uses. The residential land uses along with Alhambra Municipal Golf Course and Winston Smoyer Community Garden are generally in the transition area where the tracks will go from at-grade to the trench. The trench would be approximately ten feet deep at the Alhambra Wash. The construction in this area would be less intensive than at areas where the trench will be the full depth. Although not shown in **Table 2.4-17**, sufficient noise control would be achievable with Measures **CN2** through **CN7**. Specifically, Measure **CN7** is a performance standard that ensures a noise plan will be formulated prior to the initiation of construction that will ensure that sensitive receptors would not be exposed to noise levels that exceed the standards. Therefore, general construction noise would not result in an adverse impact.

A portion of the haul truck route would travel along residential streets such as Main Street. Haul truck activity would intermittently increase ambient noise levels by approximately 7 dBA. There is not feasible mitigation to avoid occasional haul truck activity on residential streets. As such, haul truck noise would result in an unavoidable short-term adverse impact.

**TABLE 2.4-17: SUMMARY OF CONSTRUCTION NOISE IMPACTS - MITIGATED**

<b>Residential Receptors</b>	<b>Civil Station</b>	<b>Units</b>	<b>Projected L<sub>dn</sub> (dBA)</b>	<b>Impact Threshold</b>	<b>Significant Impact? /a/</b>
Single- & Multi-Family Residences	5855+00	11	82	80	Yes
Single- & Multi-Family Residences	5885+00	5	84	80	Yes
Single-Family Residences	5893+00	2	79	80	No
Single-Family Residences	5890+00	6	72	80	No
Single-Family Residences	5915+00	21	80	80	No
Single-Family Residences	5915+00	19	79	80	No
Single-Family Residences	5946+00	4	76	80	No
Single-Family Residences	5921+00	6	74	80	No
Single-Family Residences	5950+00	6	76	80	No
Single-Family Residences	5925+00	10	74	80	No
Single-Family Residences	5953+00	9	82	80	<b>Yes</b>
Single-Family Residences	5930+00	4	77	80	No
Single-Family Residences (Adobe)	5887+00	1	72	80	No
Single-Family Residences (Adobe)	5887+00	1	73	80	No
Single-Family Residences (Adobe)	5887+00	1	75	80	No
Vista Cove Care Center	5855+00	1	82	80	Yes
<b>Non-Residential Receptors</b>	<b>Civil Station</b>	<b>Units</b>	<b>Projected L<sub>eq</sub> (dBA)</b>	<b>Impact Threshold</b>	<b>Significant Impact?</b>
YMCA	5847+00	1	76	80	No
San Gabriel High School	5880+00	1	76	80	No
Alhambra Municipal Golf Course	5880+00	1	86	80	Yes
Winston Smoyer Community Garden	5880+00	1	84	80	Yes
Almanson Park	5860+00	1	56 /b/	80	No
Almanson Court	5860+00	1	59 /b/	80	No
Granada Elementary School	5880+00	1	55 /c/	80	No
San Gabriel City Hall	5883+00	3	78	80	No
Mission Park	5885+00	1	72	80	No
San Gabriel Mission	5887+00	1	71	80	No
School District Headquarters	5900+00	1	83	80	<b>Yes</b>
Asian Youth Center	5905+05	1	91	85	<b>Yes</b>
Mission Elementary School	5885+00	1	74	80	No
Mission High School	5890+00	1	68	80	No
Smith Park	5903+00	1	75	80	No
Library	5905+00	1	71	80	No
Community Center	5915+00	1	63	80	No
San Gabriel Valley Medical Center	5890+00	1	65	80	No

Note: Projected construction noise includes both the noise from construction equipment and noise from train operations on the shoofly track.  
/a/ This table only demonstrates the noise reduction associated with Mitigation Measure **CN1**. Mitigation Measures **CN1** through **CN7** would eliminate the remaining impacts.  
/b/ Projected Almanson Park and Court noise levels are based on a soft-site attenuation rate of 7.5 dBA for every doubling of distance.  
/c/ Projected Granada Elementary School noise levels include a 5-dBA reduction for intervening buildings between the School and the construction area.  
**SOURCE:** ATS Consulting, *Construction Noise and Vibration Impact Assessment, San Gabriel Trench Grade Separation*, 2007 and TAHA, 2009.

Measures CV1 through CV5 would ensure that the vibration standards are not exceeded at sensitive receptors.

### 2.4.3 CONSTRUCTION TRAFFIC

This section examines the affected environment as it relates to construction activities for the proposed project. The conditions described in this section would be temporary and short-term.

#### *Regulatory Setting*

Refer to Section 2.2.8 for a discussion of relevant regulatory information.

#### *Affected Environment*

Refer to Section 2.2.8 for a description of the affected environment.

#### *Environmental Consequences*

This section provides an analysis of traffic impacts that would occur under detour routes during the project construction, as well as those caused by the addition of haul routes. Any significant traffic impacts that would be caused by these traffic shifts and haul routes were evaluated for the individual roadway closures that would occur during construction of the proposed project. The traffic analysis assumes that, in order to provide north-south access within the San Gabriel area during the construction period, north-south roadways would each be closed without closing an adjacent crossing at the same time. This closure pattern would allow for the other primary north-south roadways to remain open throughout the overall project construction period. Based on ACE construction planning efforts, it is anticipated that each full closure would be last approximately three months. Other partial closures may occur outside of this three-month period. Upon completion of construction, north-south access would be restored and traffic conditions would be improved with the removal of the four at-grade railroad crossings. All identified construction-related impacts would be temporary as they would be eliminated at the completion of the construction period.

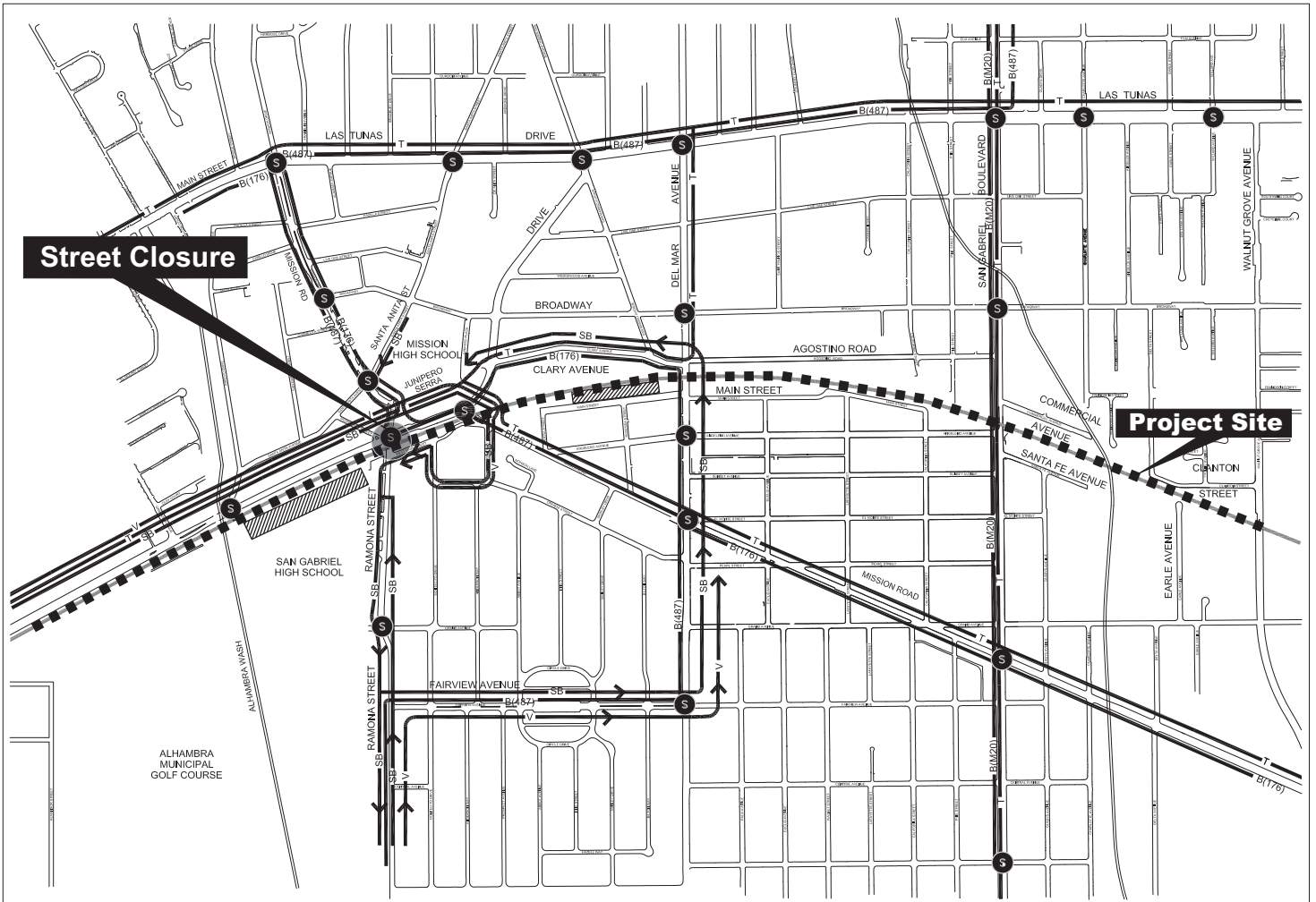
#### **Ramona Street Closure**

##### *Intersection Analysis*

Construction of the Ramona Street intersection would occur during the summer months to minimize impacts to nearby schools. In addition, the Alhambra School District has offered to relocate San Gabriel High School students to an alternate site during the summer to avoid construction activities. This relocation would result in a significant reduction in peak hour traffic during summer months. During construction of the bridge at Ramona Street traffic would be shifted eastward. This is due in part to the presence of San Gabriel High School and the Alhambra Golf Course to the west which would require circuitous detour routes on local residential streets. In addition to detouring traffic eastward along Fairview Avenue to Del Mar Avenue, northbound traffic would be detoured eastward at Valley Boulevard and the New Avenue/Ramona Street junction to safely guide traffic across the UPRR corridor (**Figure 2.4-1**). The Ramona Street crossing would be constructed during “Stage A” which also includes trench excavation from Mission Road to Del Mar Avenue, at this point the bridge structures at Mission Road and San Gabriel Boulevard would be completed. Haul trucks from the excavation of the trench (north side) would be directed from the project site northbound on Del Mar Avenue, east on Broadway and south on San Gabriel Boulevard to the San Bernardino Freeway. Haul trucks leaving the trench from the south side would travel south on Del Mar Avenue, south on Mission Road and south on San Gabriel Boulevard.

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**LEGEND:**

- Project Site
- ▨ Staging Areas
- Street Closure
- ⊙ S Signalized Intersection

**Routes**

- DT— Detoured Truck Routes
- T— Truck Routes
- B(#)— Bus Detour Routes
- SB— School Bus Detour Routes
- V→ Vehicle Detour Routes

SOURCE: Iteris and TAHA, 2009.



**FIGURE 2.4-1**

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To access the project site, trucks would travel north on Mission Road and north on Del Mar Avenue or Madera Street to access the site from Main Street.

The resulting LOS values at the study intersections for the Ramona Street closure (three months) construction period scenario are summarized in **Table 2.4-17** for the AM and PM peak hours. These totals include haul truck routes described above and assume a rate of 13 haul trucks per hour to be used for excavated materials. An intersection is considered to be adversely impacted if the proposed project would cause deterioration from an acceptable LOS (A through D) to an unacceptable LOS (E, F) or result in an increase in the average vehicle delay of five seconds or more if the intersection already operates at LOS E or worse under the future (2012) condition without project.

According to the analysis for the project one intersection would be significantly impacted. The Mission Road/Del Mar Avenue intersection would operate at an LOS D under normal conditions and at LOS E during project construction with an added delay of 1.7 second. This would be an adverse impact.

#### *Transit Service Impacts*

One transit line crosses the project site via Ramona Street. Metro Line 487 would be re-routed into the local area to continue service along the overall route during the closure of Ramona Street. **Figure 2.4-1** illustrates the current service route of Line 487 and the potential detour route. As illustrated, the southbound route of Line 487 would be redirected from Ramona Street to Mission Drive to Del Mar Avenue and Fairview Avenue. The northbound route would be redirected to Fairview Avenue, Del Mar Avenue, and Mission Road. This route would move as far as one-half mile. This distance is generally within the typical walking distance. Therefore, no adverse transit service impacts are anticipated during the closure of Ramona Street.

#### *Pedestrian Access*

Pedestrian access across the project construction at Ramona Street is important due to the location of cultural, educational, recreational, and civic resources north of the UPRR tracks and the location of San Gabriel High School south of the UPRR tracks. ACE will provide pedestrian gates/crossing guards and walkways across the project construction area during the closure of Ramona Street. This will ensure pedestrian access is maintained during construction. As such, no adverse impacts would occur.

#### *School Bus Access*

During the construction of the Ramona Street bridge school bus access to and from San Gabriel High School will be limited in the area north of the railroad corridor. The construction of the Ramona Street bridge is expected to occur in the summer of 2012, although some school activities do occur during the summer months, they would be limited. Access between northwest neighborhoods and the school site could occur via Ramona Street, Mission Road, or Del Mar Avenue (**Figure 2.4-1**). The length of some school bus routes would increase during this time period, but access to the school from the northern neighborhoods could continue via alternate routes. However, Alhambra Unified School District has agreed to move summer classes to an alternate site. As such, no impacts would occur.

### **Mission Road Closure**

#### *Intersection Analysis*

Mission Road would be the first intersection to undergo improvements. During the construction of the bridge at Mission Road, traffic would be detoured in an easterly direction onto Clary Avenue, Junipero Serra Drive, and Del Mar Avenue. Trench excavation would not occur during this stage of the project

and as such, no trench excavation haul routes are provided. However, trucks leaving the Mission Road bridge construction site from the north side of the UPRR tracks would travel north on Del Mar Avenue, east on Broadway and south on San Gabriel Boulevard to the San Bernardino Freeway. Trucks on the south side of Mission Road would travel east on Main Street, and south on Del Mar Avenue, and continue onto San Gabriel Boulevard to the San Bernardino Freeway (**Figure 2.4-2**).

The resulting LOS values at the study intersections for the Mission Road closure construction period scenario (lasting approximately three months) are summarized in **Table 2.4-18** for the AM and PM peak hours. An intersection is considered to be adversely impacted if the proposed project would cause deterioration from an acceptable LOS (A through D) to an unacceptable LOS (E, F) or result in an increase in the average vehicle delay of five seconds or more if the intersection already operates at LOS E or worse under the future (2012) condition without project.

According to the analysis for the AM peak hour during the Mission Road closure, conditions would not worsen at study intersection LOS values within LOS E or F to a significant extent. Therefore, no adverse impacts to traffic are anticipated during the PM peak hour during the Mission Road closure.

#### *Transit Service Impacts*

Metro Line 176 crosses the UPRR tracks via Mission Road and as such would need to be re-routed in the local area to continue service along the overall route during the closure of Mission Road. **Figure 2.4-2** shows the current service route of Metro Line 176 and the potential detour route during the construction of the bridge on Mission Road. As shown in **Figure 2.4-2**, Metro Line 176 would need to be re-routed in the local area to Del Mar Avenue to continue overall service during the closure of Mission Road. Southbound Lind 487 would continue along Ramona Street. Metro Line 176 would be redirected from Mission Road to Junipero Serra Drive, Clary Avenue and Del Mar Avenue. These changes would represent minor route changes. Therefore, no adverse transit service impacts are anticipated during the closure of Mission Road.

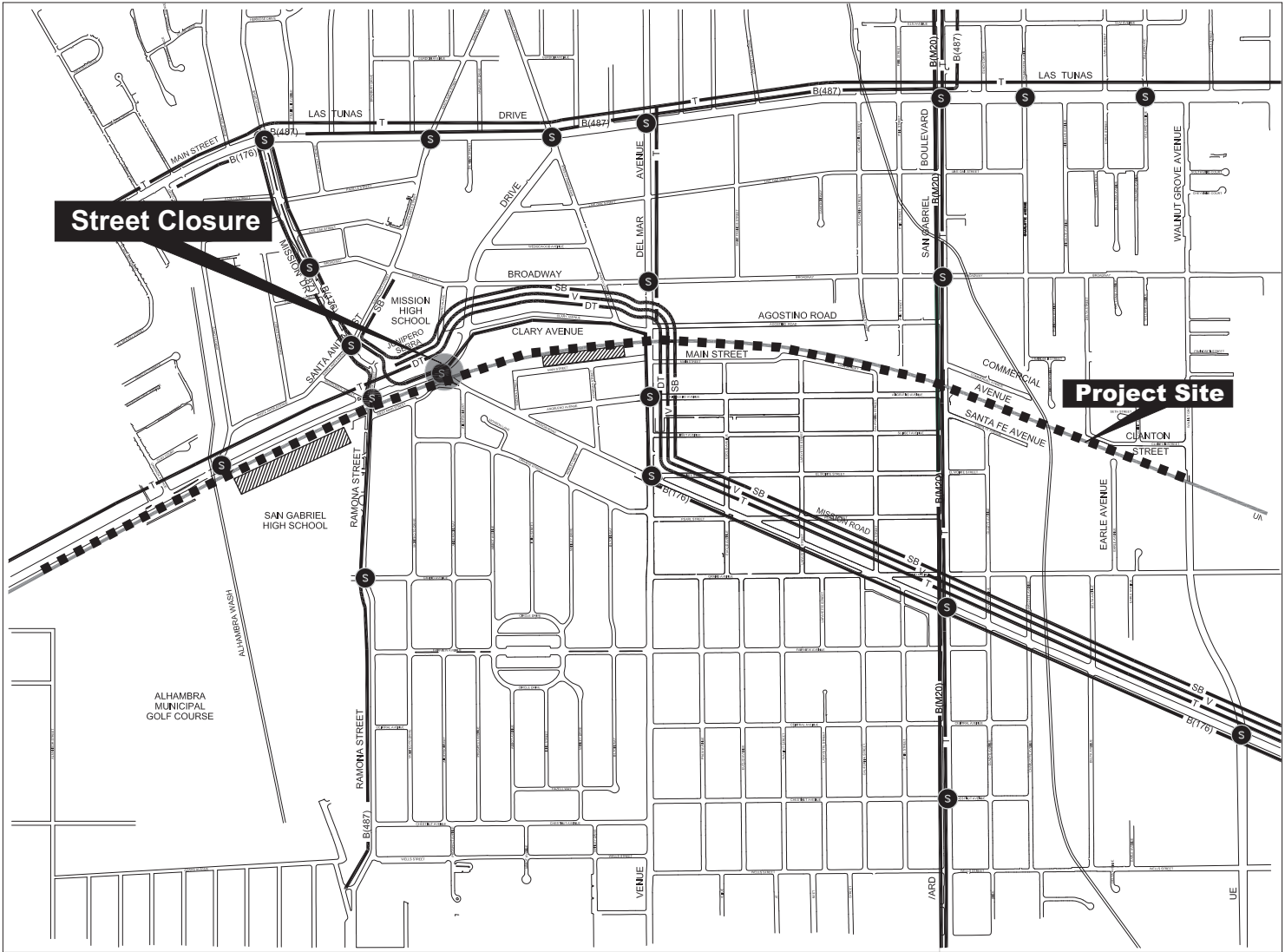
#### *Pedestrian Access*

ACE will provide pedestrian walkways across the project construction area during the closure of Mission Road to ensure pedestrian access across the railroad corridor. This access will consist of temporary bridges and/or channelized pathways that are separated from the construction area. As pedestrian access would be maintained, no impacts would occur.

### **Del Mar Avenue Closure**

#### *Intersection Analysis*

During the construction of the bridge at Del Mar Avenue, northbound traffic would be detoured at Mission Road, northwest to Junipero Serra Drive, northeast to Broadway, and east to Del Mar Avenue. The southbound traffic would use the same detour route, but reversed (**Figure 2.4-3**). Truck traffic would be detoured onto Clary Avenue, Junipero Serra Drive, and Mission Road. During the Del Mar Avenue closure, trench excavation would be occurring from San Gabriel Boulevard to Rubio Wash (Stage C). Haul truck traffic for this portion of the project would be routed from Sante Fe Avenue south along San Gabriel Boulevard when traveling south and the opposite would occur when traveling north. Excavation activities during Stage D (trench excavation from the west side of Alhambra Wash to Ramona Street) would require haul truck routes to leave the north side of the construction area and travel north along Del Mar Avenue, east on Broadway, and south on San Gabriel Boulevard to the San Bernardino Freeway. On the south side of the construction area, haul trucks would travel south along Del Mar Avenue, northwest on Mission Road, southeast on Junipero Serra Drive, east on Clary Avenue, east on Agostino Road, and



**LEGEND:**

- Project Site
- ▨ Staging Areas
- Street Closure
- ⊙ S Signalized Intersection

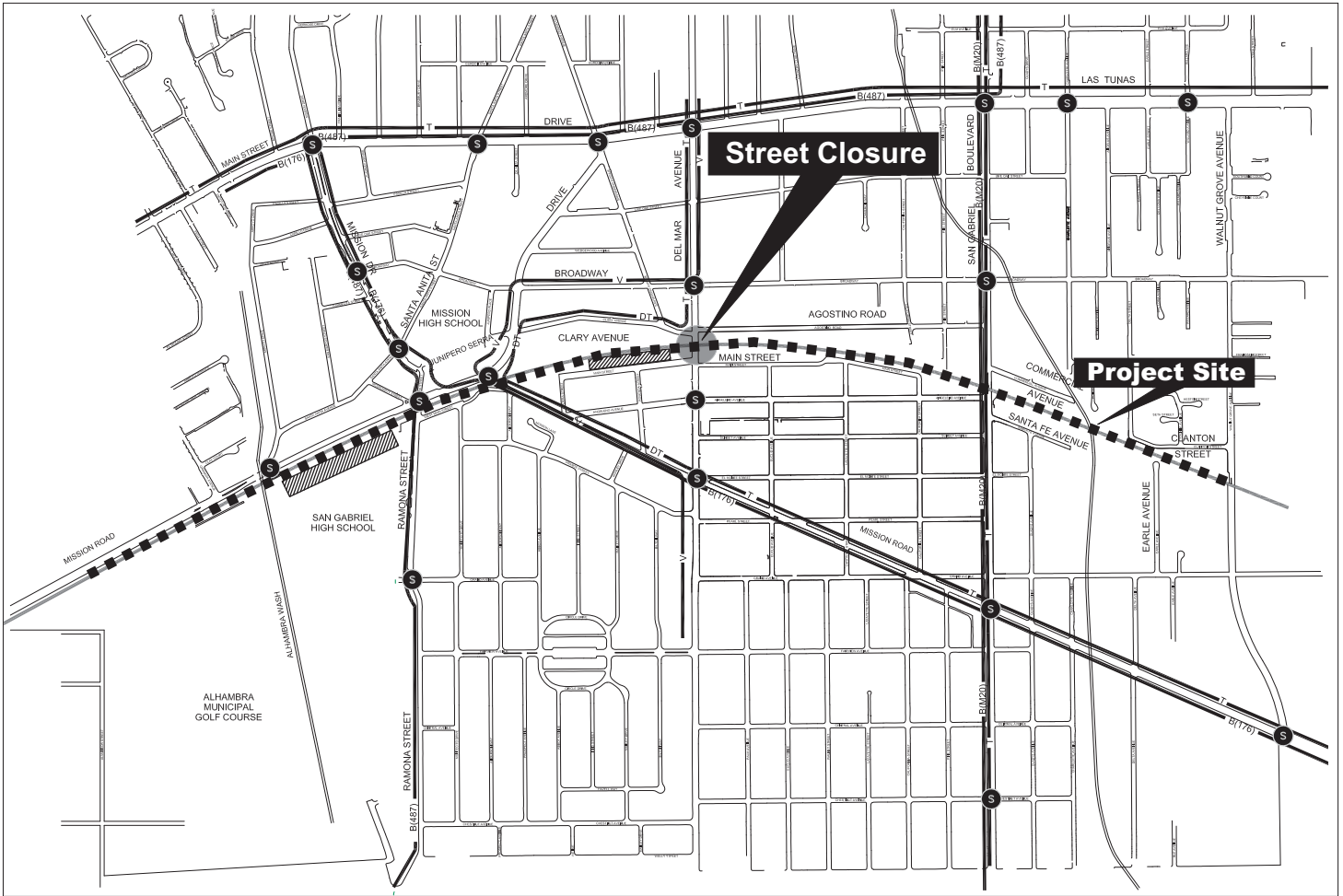
**Routes**

- DT— Detoured Truck Routes
- T— Truck Routes
- B(#)— Bus Detour Routes
- SB— School Bus Detour Routes
- V→ Vehicle Detour Routes

SOURCE: Iteris and TAHA, 2009.



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**LEGEND:**

- Project Site
- ▤ Staging Areas
- Street Closure
- ⊙ S Signalized Intersection

**Routes**

- DT— Detoured Truck Routes
- T— Truck Routes
- B(#)— Bus Detour Routes
- SB— School Bus Detour Routes
- V→ Vehicle Detour Routes

SOURCE: Iteris and TAHA, 2009.



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south on San Gabriel Boulevard to the San Bernardino Freeway Haul truck could also travel east along Main Street, along the southern boundary of the project site and south along San Gabriel Boulevard to the San Bernardino Freeway.

The resulting LOS values at the study intersections for the Del Mar Avenue closure construction period scenario (lasting approximately three months) are summarized in **Table 2.4-19** for the AM and PM peak hours. An intersection is considered to be adversely impacted if the proposed project would cause deterioration from an acceptable LOS (A through D) to an unacceptable LOS (E, F) or result in an increase in the average vehicle delay of five seconds or more if the intersection already operates at LOS E or worse under the future (2012) condition without project. Haul trucks were assumed to occur at a rate of 13 trucks per hour and are included in the LOS analysis.

According to the analysis for the AM peak hour during the Del Mar Avenue closure, the intersection of Mission Road/Del Mar Avenue would worsen from LOS D to LOS E under project construction conditions. The delay at this intersection would incrementally increase by 16.8 seconds. This would result in an adverse impact during the AM peak hour during the Del Mar Avenue closure.

#### *Transit Service Impacts*

There are no transit lines that cross the UPRR tracks at Del Mar Avenue. Additionally, there are no transit lines that utilize Del Mar Avenue as part of their routes in the vicinity of the project site. Therefore, no adverse impacts associated with re-routing of transit service are anticipated.

#### *Pedestrian Access*

ACE will provide pedestrian walkways across the project construction area during the closure of Del Mar Avenue to ensure pedestrian access across the railroad corridor. This access will consist of temporary bridges and/or channelized pathways that are separated from the construction area. As pedestrian access would be maintained, no impacts would occur.

<b>TABLE 2.4-18: INTERSECTION PERFORMANCE: FUTURE (2012) CONDITIONS WITH RAMONA STREET CLOSURE</b>																	
Intersection		2012 Pre Project (AM)			2012 Ramona Street Closure Conditions (AM)					2012 Pre Project Conditions (PM)			2012 Ramona Street Closure Conditions (PM)				
		LOS	Delay	V/C	LOS	Delay	V/C	Change	Sig	LOS	Delay	V/C	LOS	Delay	V/C	Change	Sig
1	Valley Boulevard/Garfield Avenue	C	24.7	0.68	C	24.7	0.68	0.00	NO	C	33.7	0.81	C	33.7	0.81	0.00	NO
2	Valley Boulevard/Ramona Street	C	28.5	0.78	C	28.5	0.78	0.00	NO	C	32.4	0.85	C	32.4	0.85	0.00	NO
3	Valley Boulevard/Del Mar Avenue	C	31.9	0.79	C	31.9	0.79	0.00	NO	D	44.6	0.85	D	44.6	0.85	0.00	NO
4	Valley Boulevard/San Gabriel Boulevard	C	30.6	0.76	c	31.8	0.76	0.00	NO	D	43.2	0.93	D	47.8	0.93	0.00	NO
5	Mission Road/San Gabriel Boulevard	C	22.0	0.83	C	26.0	0.83	0.00	NO	B	19.9	1.01	C	21.3	0.96	-0.05	NO
6	Mission Road/Del Mar Avenue	D	54.2	0.85	<b>E</b>	<b>55.9</b>	<b>0.89</b>	<b>0.04</b>	<b>Y</b>	C	32.0	0.76	C	30.1	0.77	0.01	NO
7	Mission Road/Junipero Serra Drive	C	27.5	0.63	C	20.4	0.78	0.15	NO	C	24.1	0.55	C	28.5	0.74	0.19	NO
8	Mission Road/Ramona Street	C	24.4	0.84	B	15.2	0.76	-0.08	NO	C	34.0	0.95	B	16.1	0.76	-0.19	NO
9	Mission Road/Chapel Avenue	C	26.7	0.77	C	26.7	0.77	0.00	NO	D	48.2	0.98	D	48.2	0.98	0.00	NO
10	Mission Road/Garfield Avenue	C	33.6	0.88	C	33.6	0.88	0.00	NO	<b>E</b>	<b>57.0</b>	<b>0.97</b>	<b>E</b>	<b>57.0</b>	<b>0.97</b>	0.00	NO
11	Las Tunas Drive/S. Mission Drive	C	21.1	0.62	B	19.6	0.62	0.00	NO	C	20.3	0.68	C	20.3	0.68	0.00	NO
12	Las Tunas Drive/San Marino Avenue	B	12.0	0.66	B	12.1	0.66	0.00	NO	B	15.0	0.66	B	15.0	0.66	0.00	NO
13	Las Tunas Drive/Del Mar Avenue	C	31.9	1.16	C	32.0	1.16	0.00	NO	D	38.6	0.96	D	38.6	0.96	0.00	NO
14	Las Tunas Drive/San Gabriel Boulevard	<b>E</b>	<b>57.0</b>	<b>0.98</b>	<b>E</b>	<b>57.5</b>	<b>0.94</b>	<b>-0.04</b>	NO	<b>F</b>	<b>98.5</b>	<b>1.15</b>	<b>F</b>	<b>98.6</b>	<b>1.15</b>	<b>0.00</b>	NO
15	Broadway/San Gabriel Boulevard	C	19.7	0.80	C	29.5	0.83	0.03	NO	C	21.8	0.91	C	26.6	0.92	0.01	NO
16	Santa Anita Avenue/Las Tunas Drive	C	14.5	0.56	B	14.7	0.56	0.00	NO	B	15.0	0.56	B	15.0	0.56	0.00	NO
17	S. Mission Drive/Broadway	A	4.7	0.34	A	4.7	0.34	0.00	NO	A	5.2	0.34	A	5.2	0.34	0.00	NO
18	Del Mar Avenue/Broadway	B	13.2	0.69	B	13.3	0.69	0.00	NO	B	13.6	0.66	B	13.6	0.66	0.00	NO
19	Walnut Grove Avenue/Broadway	B	18.9	0.85	B	18.9	0.85	0.00	NO	B	18.3	0.84	B	18.3	0.84	0.00	NO
20	Santa Anita Avenue/S. Mission Drive	A	9.8	0.40	A	9.8	0.40	0.00	NO	B	10.1	0.46	B	10.6	0.46	0.00	NO
21	Santa Anita Avenue/Mission Road	C	25.2	0.76	C	27.5	0.76	0.00	NO	B	17.7	0.55	B	17.7	0.55	0.00	NO
22	Mission Road/Grenada Street	D	27.4	N/A	D	27.4	N/A	N/A		C	18.5	N/A	C	18.5	N/A	N/A	NO

SOURCE: JMD, San Gabriel Trench Transportation Management Plan, 2009.

<b>TABLE 2.4-19: INTERSECTION PERFORMANCE: FUTURE (2012) CONDITIONS WITH MISSION ROAD CLOSURE</b>																	
Intersection		2012 Pre Project Conditions (AM)			2012 Mission Road Closure Conditions (AM)					2012 Pre Project Conditions (PM)			2012 Mission Road Closure Conditions (PM)				
		LOS	Delay	V/C	LOS	Delay	V/C	Change	Sig	LOS	Delay	V/C	LOS	Delay	V/C	Change	Sig
1	Valley Boulevard/Garfield Avenue	C	24.7	0.68	C	24.7	0.68	0.00	N	C	33.7	0.81	C	32.0	0.80	-0.01	N
2	Valley Boulevard/Ramona Street	C	28.5	0.78	C	28.5	0.78	0.00	N	C	32.4	0.85	C	34.0	0.84	-0.01	N
3	Valley Boulevard/Del Mar Avenue	C	31.9	0.79	C	31.9	0.79	0.00	N	D	44.6	0.85	D	39.8	0.86	0.01	N
4	Valley Boulevard/San Gabriel Boulevard	C	30.6	0.76	C	30.6	0.76	0.00	N	D	43.2	0.93	D	42.7	0.97	0.04	N
5	Mission Road/San Gabriel Boulevard	C	22.0	0.83	B	22.0	0.83	0.00	N	B	19.9	0.01	B	19.9	1.01	0.00	N
6	Mission Road/Del Mar Avenue	<b>D</b>	<b>54.2</b>	0.85	D	44.6	0.86	0.01	N	C	32.0	0.76	D	39.1	0.79	0.03	N
7	Mission Road/Junipero Serra Drive	C	27.5	0.63	A	5.6	0.49	-0.14	N	C	24.1	0.55	A	1.3	0.28	-0.27	N
8	Mission Road/Ramona Street	C	24.4	0.84	B	23.4	0.85	0.00	N	C	34.0	0.95	D	39.1	10.2	0.07	N
9	Mission Road/Chapel Avenue	C	26.7	0.77	C	26.7	0.77	0.00	N	D	48.2	0.98	D	48.2	0.98	0.00	N
10	Mission Road/Garfield Avenue	C	33.6	0.88	C	33.6	0.88	0.00	N	<b>E</b>	<b>57.0</b>	<b>0.97</b>	<b>E</b>	<b>57.0</b>	0.97	0.00	N
11	Las Tunas Drive/S. Mission Drive	C	21.1	0.62	B	18.9	0.62	0.00	N	C	20.3	0.68	C	20.3	0.68	0.00	N
12	Las Tunas Drive/San Marino Avenue	B	12.0	0.66	B	11.9	0.66	-0.01	N	B	15.0	0.66	B	15.0	0.66	0.00	N
13	Las Tunas Drive/Del Mar Avenue	C	31.9	1.16	C	33.0	1.15	-0.04	N	D	38.6	0.96	D	38.5	0.96	0.00	N
14	Las Tunas Drive/San Gabriel Boulevard	<b>E</b>	<b>57.0</b>	<b>0.98</b>	<b>E</b>	<b>59.4</b>	<b>0.94</b>	<b>0.00</b>	N	<b>F</b>	<b>98.5</b>	<b>1.15</b>	<b>F</b>	<b>98.5</b>	<b>1.15</b>	<b>0.00</b>	N
15	Broadway/San Gabriel Boulevard	B	19.7	0.80	C	19.7	0.80	0.00	N	C	21.8	0.91	C	21.0	0.91	0.00	N
16	Santa Anita Avenue/Las Tunas Drive	B	14.5	0.56	B	15.5	0.56	0.00	N	B	15.0	0.56	B	15.0	0.56	0.00	N
17	S. Mission Drive/Broadway	A	4.7	0.34	A	4.7	0.34	0.00	N	A	5.2	0.34	A	5.2	0.34	0.00	N
18	Del Mar Avenue/Broadway	B	13.2	0.69	B	13.2	0.69	0.00	N	B	13.6	0.66	B	15.7	0.68	0.02	N
19	Walnut Grove Avenue/Broadway	B	18.9	0.85	C	18.9	0.85	0.00	N	B	18.3	0.84	B	18.3	0.84	0.00	N
20	Santa Anita Avenue/S. Mission Drive	A	9.8	0.40	B	9.8	0.40	0.00	N	B	10.1	0.46	B	10.01	0.46	0.00	N
21	Santa Anita Avenue/Mission Road	C	25.2	0.76	C	25.2	0.76	0.00	N	B	17.7	0.55	B	17.7	0.55	0.00	N
22	Mission Road/Granada Street	D	27.4	N/A	D	27.4	N/A	N/A	N	C	18.5	N/A	C	18.5	N/A	0.00	N

SOURCE: JMD, San Gabriel Trench Transportation Management Plan, 2009.

<b>TABLE 2.4-20: INTERSECTION PERFORMANCE: FUTURE (2012) CONDITIONS WITH DEL MAR AVENUE CLOSURE</b>																	
Intersection		2012 Pre Project Conditions (AM)			2012 Del Mar Avenue Closure Conditions (AM)					2012 Pre Project Conditions (PM)			2012 Del Mar Avenue Closure Conditions (PM)				
		LOS	Delay	V/C	LOS	Delay	V/C	Change	Sig	LOS	Delay	V/C	LOS	Delay	V/C	Change	Sig
1	Valley Boulevard/Garfield Avenue	C	24.7	0.68	C	24.7	0.68	0.00	N	C	33.7	0.81	C	33.7	0.81	0.00	N
2	Valley Boulevard/Ramona Street	C	28.5	0.78	C	28.5	0.78	0.00	N	C	32.4	0.85	C	32.4	0.85	0.00	N
3	Valley Boulevard/Del Mar Avenue	C	31.9	0.79	C	31.9	0.79	0.00	N	D	44.6	0.85	D	44.6	0.85	0.00	N
4	Valley Boulevard/San Gabriel Boulevard	C	30.6	0.76	C	30.6	0.76	0.00	N	D	43.2	0.93	D	43.2	0.92	0.00	N
5	Mission Road/San Gabriel Boulevard	C	22.0	0.83	C	22.1	0.84	0.01	N	B	19.9	1.01	B	19.6	1.04	0.03	N
6	Mission Road/Del Mar Avenue	<b>D</b>	<b>54.2</b>	<b>0.85</b>	<b>E</b>	<b>71.0</b>	<b>1.01</b>	<b>0.16</b>	<b>Y</b>	D	32.0	0.76	D	48.1	1.02	0.32	N
7	Mission Road/Junipero Serra Drive	C	27.5	0.63	C	32.5	0.82	0.19	N	D	24.1	0.55	D	51.5	0.87	0.01	N
8	Mission Road/Ramona Street	C	24.4	0.84	C	25.8	0.85	0.01	N	D	34.0	0.95	D	35.3	0.96	0.00	N
9	Mission Road/Chapel Avenue	C	26.7	0.77	C	26.7	0.77	0.00	N	D	48.2	0.98	D	48.2	0.98	0.00	N
10	Mission Road/Garfield Avenue	C	33.6	0.88	C	33.6	0.88	0.00	N	<b>E</b>	<b>57.0</b>	<b>0.97</b>	<b>E</b>	<b>57.0</b>	0.97	0.00	N
11	Las Tunas Drive/S. Mission Drive	C	21.1	0.62	B	18.9	0.62	0.00	N	C	20.3	0.68	C	20.3	0.68	0.00	N
12	Las Tunas Drive/San Marino Avenue	B	12.0	0.66	B	11.9	0.66	0.00	N	B	15.0	0.66	B	15.0	0.66	0.00	N
13	Las Tunas Drive/Del Mar Avenue	C	31.9	1.16	C	33.0	1.15	-0.01	N	D	38.6	0.96	D	38.6	0.96	0.00	N
14	Las Tunas Drive/San Gabriel Boulevard	<b>E</b>	<b>57.0</b>	<b>0.98</b>	<b>E</b>	<b>59.3</b>	<b>0.94</b>	<b>-0.04</b>	N	<b>F</b>	<b>98.5</b>	<b>1.15</b>	<b>F</b>	<b>98.5</b>	1.15	0.00	N
15	Broadway/San Gabriel Boulevard	B	19.7	0.80	B	19.8	0.80	0.00	N	C	21.8	0.91	C	22.1	0.92	0.01	N
16	Santa Anita Avenue/Las Tunas Drive	B	14.5	0.56	B	15.5	0.56	0.00	N	B	15.0	0.56	B	15.0	0.56	0.00	N
17	S. Mission Drive/Broadway	A	4.7	0.34	A	4.7	0.34	0.00	N	A	5.2	0.34	A	5.2	0.34	0.31	N
18	Del Mar Avenue/Broadway	B	13.2	0.69	C	29.3	0.87	0.87	N	B	13.6	0.66	D	39.3	0.97	0.00	N
19	Walnut Grove Avenue/Broadway	B	18.9	0.85	B	19.8	0.85	0.00	N	B	18.3	0.84	B	18.3	0.84	0.00	N
20	Santa Anita Avenue/S. Mission Drive	A	9.8	0.40	A	9.8	0.40	0.00	N	B	10.1	0.46	B	10.1	0.46	0.00	N
21	Santa Anita Avenue/Mission Road	C	25.2	0.76	C	26.7	0.77	0.01	N	B	17.7	0.55	B	17.8	0.56	0.01	N
22	Mission Road/Grenada Street	D	27.4	N/A	D	28.1	N/A	N/A	N	C	18.5	N/A	C	18.7	N/A	N/A	N

SOURCE: JMD, San Gabriel Trench Transportation Management Plan, 2009

<b>TABLE 2.4-21: INTERSECTION PERFORMANCE: FUTURE (2012) CONDITIONS WITH SAN GABRIEL BOULEVARD PARTIAL CLOSURE</b>																	
Intersection		2012 Pre Project Conditions (AM)			2012 San Gabriel Boulevard Partial Closure Conditions (AM)					2012 Pre Project Conditions (PM)			2012 San Gabriel Boulevard Partial Closure Conditions (PM)				
		LOS	Delay	V/C	LOS	Delay	V/C	Change	Sig	LOS	Delay	V/C	LOS	Delay	V/C	Change	Sig
1	Valley Boulevard/Garfield Avenue	C	24.7	0.68	C	24.7	0.68	0.00	N	C	33.7	0.81	C	33.7	0.81	0.00	N
2	Valley Boulevard/Ramona Street	C	28.5	0.78	C	28.4	0.78	0.00	N	C	32.4	0.85	C	32.2	0.85	0.00	N
3	Valley Boulevard/Del Mar Avenue	C	31.9	0.79	C	32.2	0.80	0.01	N	D	44.6	0.85	D	43.0	0.85	0.00	N
4	Valley Boulevard/San Gabriel Boulevard	C	30.6	0.76	C	28.0	0.79	0.03	N	D	43.2	0.93	D	42.4	0.97	0.04	N
5	Mission Road/San Gabriel Boulevard	C	22.0	0.83	C	22.6	0.83	0.00	N	B	19.9	1.01	B	19.4	1.01	0.00	N
6	Mission Road/Del Mar Avenue	<b>D</b>	<b>54.2</b>	<b>0.85</b>	<b>D</b>	<b>54.2</b>	<b>0.85</b>	<b>0.00</b>	N	C	32.0	0.76	C	31.8	0.76	0.00	N
7	Mission Road/Junipero Serra Drive	B	17.8	0.47	B	17.8	0.47	0.00	N	C	24.1	0.55	C	27.2	0.55	0.00	N
8	Mission Road/Ramona Street	C	24.4	0.80	C	24.4	0.84	0.00	N	C	34.0	0.95	C	34.0	0.95	0.00	N
9	Mission Road/Chapel Avenue	C	26.7	0.77	C	26.7	0.77	0.00	N	D	48.2	0.98	D	48.2	0.98	0.00	N
10	Mission Road/Garfield Avenue	C	33.6	0.88	C	33.6	0.88	0.00	N	<b>E</b>	<b>57.0</b>	<b>0.97</b>	<b>E</b>	<b>57.0</b>	0.97	0.00	N
11	Las Tunas Drive/S. Mission Drive	C	21.1	0.62	B	18.7	0.62	0.00	N	C	20.3	0.68	C	20.3	0.68	0.00	N
12	Las Tunas Drive/San Marino Avenue	B	12.0	0.66	B	12.0	0.66	0.0	N	B	15.0	0.66	B	17.8	0.66	0.00	N
13	Las Tunas Drive/Del Mar Avenue	C	31.9	1.16	C	34.7	1.15	-0.01	N	D	38.6	0.96	D	41.4	1.00	0.04	N
14	Las Tunas Drive/San Gabriel Boulevard	<b>E</b>	<b>57.0</b>	<b>0.98</b>	<b>E</b>	<b>56.2</b>	<b>0.98</b>	<b>0.00</b>	N	<b>F</b>	<b>98.5</b>	<b>1.15</b>	<b>F</b>	<b>93.4</b>	<b>1.08</b>	<b>-0.07</b>	N
15	Broadway/San Gabriel Boulevard	B	19.7	0.80	B	14.8	0.69	-0.11	N	C	21.8	0.91	B	17.6	0.83	-0.08	N
16	Santa Anita Avenue/Las Tunas Drive	B	14.5	0.56	B	15.8	0.56	0.00	N	B	15.0	0.56	B	14.8	0.56	0.00	N
17	S. Mission Drive/Broadway	A	4.7	0.34	A	4.7	0.34	0.00	N	A	5.2	0.34	A	5.2	0.34	0.00	N
18	Del Mar Avenue/Broadway	B	13.2	0.69	B	18.0	0.82	0.13	N	B	13.6	0.66	B	17.5	0.82	0.16	N
19	Walnut Grove Avenue/Broadway	B	18.9	0.85	C	25.7	0.95	0.10	N	B	18.3	0.84	C	21.3	0.87	0.03	N
20	Santa Anita Avenue/S. Mission Drive	A	9.8	0.40	A	9.8	0.40	0.00	N	B	10.1	0.46	B	10.1	0.46	0.00	N
21	Santa Anita Avenue/Mission Road	C	25.2	0.76	C	25.2	0.76	0.00	N	B	17.7	0.55	B	17.7	0.55	0.00	N
22	Mission Road/Grenada Street	D	27.4	N/A	D	27.4	N/A	N/A	N	C	18.5	N/A	C	18.5	N/A	N/A	N

SOURCE: JMD, San Gabriel Trench Transportation Management Plan, 2009

## San Gabriel Boulevard Partial Closure

### *Intersection Analysis*

San Gabriel Boulevard is a major arterial in the project area. Therefore, it is anticipated that unlike the other grade separations, San Gabriel Boulevard would be built in two phases, with the roadway reduced to one lane of through traffic in each direction. While one half is closed, the other half can still provide one lane in each direction, separated by a barrier, with a sidewalk provided on one side. Each half is anticipated to be closed for three months. Construction will start on the east half of the overhead structure. Following completion of the first phase, traffic will be shifted to the new bridge structure (one lane each direction) and the rest of the bridge will be completed. Although traffic would be able to traverse the UPRR tracks at San Gabriel Boulevard, detour routes would be suggested to provide sufficient capacity. These detour routes include diverting southbound traffic from San Gabriel Boulevard at Broadway towards the east to Walnut Grove Avenue, then south on Walnut Grove Avenue to Grand Avenue, then west towards San Gabriel Boulevard to continue on northwards locally or southbound. Northbound traffic would be diverted westerly on Mission Road, north on Del Mar Avenue and east on Broadway to reconnect with San Gabriel Boulevard. Truck traffic would remain on San Gabriel Boulevard to minimize impacts to local residents (**Figure 2.4-4**).

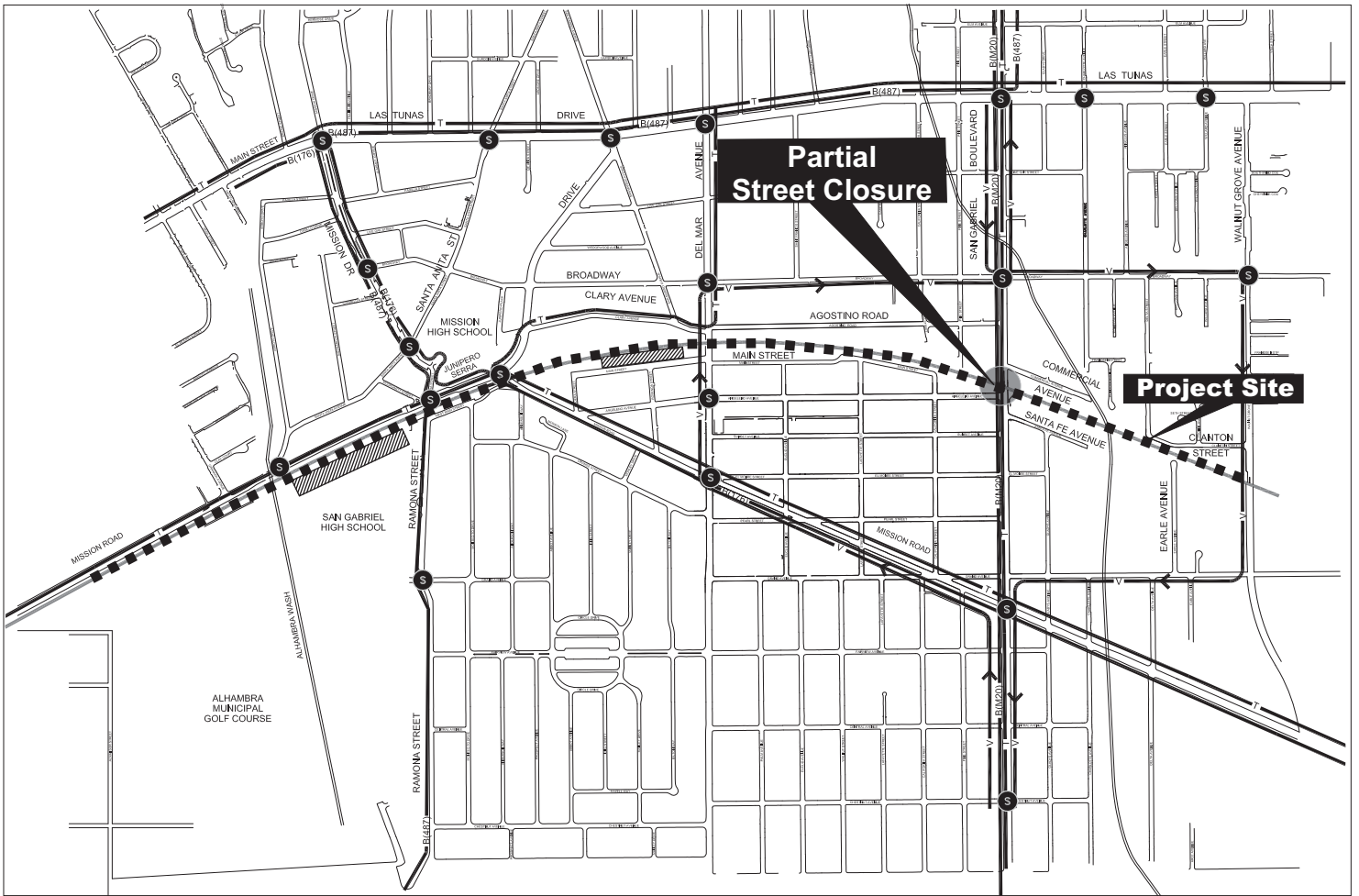
The resulting LOS values at the study intersections for the San Gabriel Boulevard partial closure construction scenario (lasting approximately three months per side) are summarized in **Table 2.4-20** for the AM and PM peak hours. Adverse traffic impacts would occur if the LOS at an intersection were to worsen to an unacceptable LOS (E or F) or if already operating at LOS E or F, if the delay would incrementally increase as measured in seconds.

The Las Tunas Drive/San Gabriel Boulevard intersection would operate at LOS E in the future with or without the San Gabriel Boulevard partial closure, and the delay at this intersection would not incrementally increase with the partial closure. Therefore, no adverse impacts to traffic are anticipated due to the San Gabriel Boulevard partial closure.

According to the analysis for the PM peak hour during the San Gabriel Boulevard partial closure, the intersection of Mission Road/Garfield Avenue would operate at LOS E in the future with or without the San Gabriel Boulevard partial closure, and the delay at this intersection would not incrementally increase. The intersection of Las Tunas Drive/San Gabriel Boulevard would operate at LOS F in the future with or without the San Gabriel Boulevard partial closure, and the delay at this intersection would not incrementally increase. Therefore, no adverse impacts to traffic are anticipated during the PM peak hour during the San Gabriel Boulevard partial closure.

### *Transit Service Impacts*

Montebello Transit Line 20 crosses the UPRR tracks via San Gabriel Boulevard (**Figure 2.4-4**). However, with a partial closure of San Gabriel Boulevard Montebello Bus Line 20 could remain on San Gabriel Boulevard with a possible relocation of stops near the construction area. This would allow Line 20 to continue service along the overall route during construction. Therefore, no adverse transit service impacts are anticipated during the partial closure of San Gabriel Boulevard.



**LEGEND:**

- Project Site
- ▨ Staging Areas
- Partial Street Closure
- ⊙ S Signalized Intersection

**Routes**

- DT— Detoured Truck Routes
- T— Truck Routes
- B(#)— Bus Detour Routes
- SB— School Bus Detour Routes
- V→ Vehicle Detour Routes

SOURCE: Iteris and TAHA, 2009.



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### *Pedestrian Access*

Pedestrian access across the San Gabriel Boulevard construction site would be maintained along with vehicular access. No adverse impacts associated with pedestrian access are anticipated. The project will provide temporary pedestrian walkways during the closure of San Gabriel Boulevard to maintain access to each side of the UPRR tracks.

### *Additional Trench Segment Haul Routes*

In addition to detour routes for crossing closures, the project will include haul routes needed for excavation activities between crossings. These haul routes will work together with crossing closure routes to facilitate circulation within local City streets and allow trucks to deliver exported materials from the trench to delivery destinations (e.g., landfills) outside City boundaries. These haul routes, illustrated in **Figures 2.4-5** through **2.4-12** correspond to eight possible construction stages for the project. The project is anticipated to be completed in eight stages consisting of the following:

- Stage A: Trench excavation from Mission Road to Del Mar Avenue
- Stage B: Trench excavation from Del Mar Avenue to San Gabriel Boulevard
- Stage C: Trench excavation from San Gabriel Boulevard to Rubio Wash
- Stage D: Trench excavation from the west side of Alhambra Wash East (south half of trench) to Ramona Street
- Stage E: Trench excavation from Ramona Street (south half of trench) to Mission Road
- Stage F: Trench excavation from west of Alhambra Wash (north side of trench)
- Stage G: Trench excavation from east of Alhambra Wash to Ramona Street (north side of trench)
- Stage H: Trench excavation from Rubio Wash to Walnut Grove Avenue

Road closures due to bridge construction would only occur during Stage A (Ramona Street bridge construction) and Stages C and D which would occur during the closure of Del Mar Avenue. As mentioned above, the analysis assumes a rate of 13 trucks per hour and where the haul truck overlap with the street closures (Stages A, C and D) haul truck trips were included in the LOS analysis above.

### *Measures to Minimize Harm*

#### **Ramona Street Closure**

##### *Detour Routes, Haul Routes, and Intersections*

**CT1** ACE shall prepare a detailed detour and haul route plan for the closures of Ramona Street and Mission Road. ACE shall consult the Cities of Alhambra, San Gabriel, Rosemead, and the County of Los Angeles regarding the most feasible automobile and school bus detour routes. Additionally, ACE shall consult these jurisdictions regarding haul routes that result in the least amount of queuing and left-turns. The recommended routes provided in the traffic study and TMP shall be submitted for review.

**CT2** In order to minimize the incrementally increased delay impacts at the intersection of Mission Road/Del Mar Avenue during the AM peak hour due to the closure of Del Mar Avenue at the UPRR tracks, signal phasing shall be modified. Modification of the signal phasing at this intersection during the AM peak hour shall include turning off the signal phase or closing the westbound approach of El Monte Street. This action would result in a delay of 21.3 seconds and operate at LOS C in the AM peak hour. The PM peak hour would result in a delay of 24.9 seconds and operate at an LOS C. Implementing this measure would result in no adverse impacts associated with intersection operation of Mission Road/Del Mar Avenue in the AM peak hour during the closure of Del Mar Avenue.

*Transit Service*

**CT3** ACE shall coordinate with Metro regarding the re-routing of Line 487 during the Ramona Street closure and of Line 176 during the Mission Road closure. Metro shall approve the detour route, which may include elements or be the same detour route described in this document. Ensuring that the route maintains most of the service prior to construction would result in no adverse impacts.

*Pedestrian Access*

None required.

*School Bus Access*

**CT4** ACE shall schedule the closing of Ramona Street to coincide with the summer months so as to avoid impacts to school bus routes to San Gabriel High School, Mission Elementary School and Mission High School. ACE shall coordinate with the Alhambra Unified School District and officials at San Gabriel High School, Mission Elementary School and Mission High School prepare a detour route that shall ensure minimal changes to bus schedules. The detour route shall be distributed to students and parents and made available to the public for refinement and consensus.

**Del Mar Avenue Closure**

*Detour Routes, Haul Routes, Intersections, and Transit Service Delays*

**CT5** ACE shall prepare a detailed detour and haul route plan for the closure of Del Mar Avenue. ACE shall consult the Cities of Alhambra, San Gabriel, Rosemead, and the County of Los Angeles regarding the most feasible automobile and truck detour routes. Additionally, ACE shall consult these jurisdictions regarding haul routes that result in the least amount of queuing and left-turns. The recommended routes provided in the traffic study shall be submitted for review.

**CT6** In order to minimize the incrementally increased delay impacts at the intersection of Mission Road/Del Mar Avenue during the AM peak hour due to the closure of Del Mar Avenue at the UPRR tracks, signal phasing shall be modified. Modification of the signal phasing at this intersection during the AM peak hour shall include turning off the signal phase or closing the westbound approach of El Monte Street. This action would result in a delay of 32.8 seconds and operate at LOS C in the AM peak hour. The PM peak hour delay would be 48.1 seconds and operate at a LOS D. Implementing this measure would result in no adverse impacts associated with intersection operation of Mission Road/Del Mar Avenue in the AM peak hour during the closure of Del Mar Avenue.

#### *Pedestrian Access*

None required

#### **San Gabriel Boulevard Partial Closure**

**CT7** ACE shall prepare a detailed detour and haul route plan for the partial closure of San Gabriel Boulevard. ACE shall consult the Cities of Alhambra, San Gabriel, Rosemead, and the County of Los Angeles regarding the most feasible detour routes. Additionally, ACE shall consult these jurisdictions regarding haul routes that result in the least amount of queuing and left-turns. The recommended routes provided in the traffic study shall be submitted for review.

## **2.5 CUMULATIVE IMPACTS**

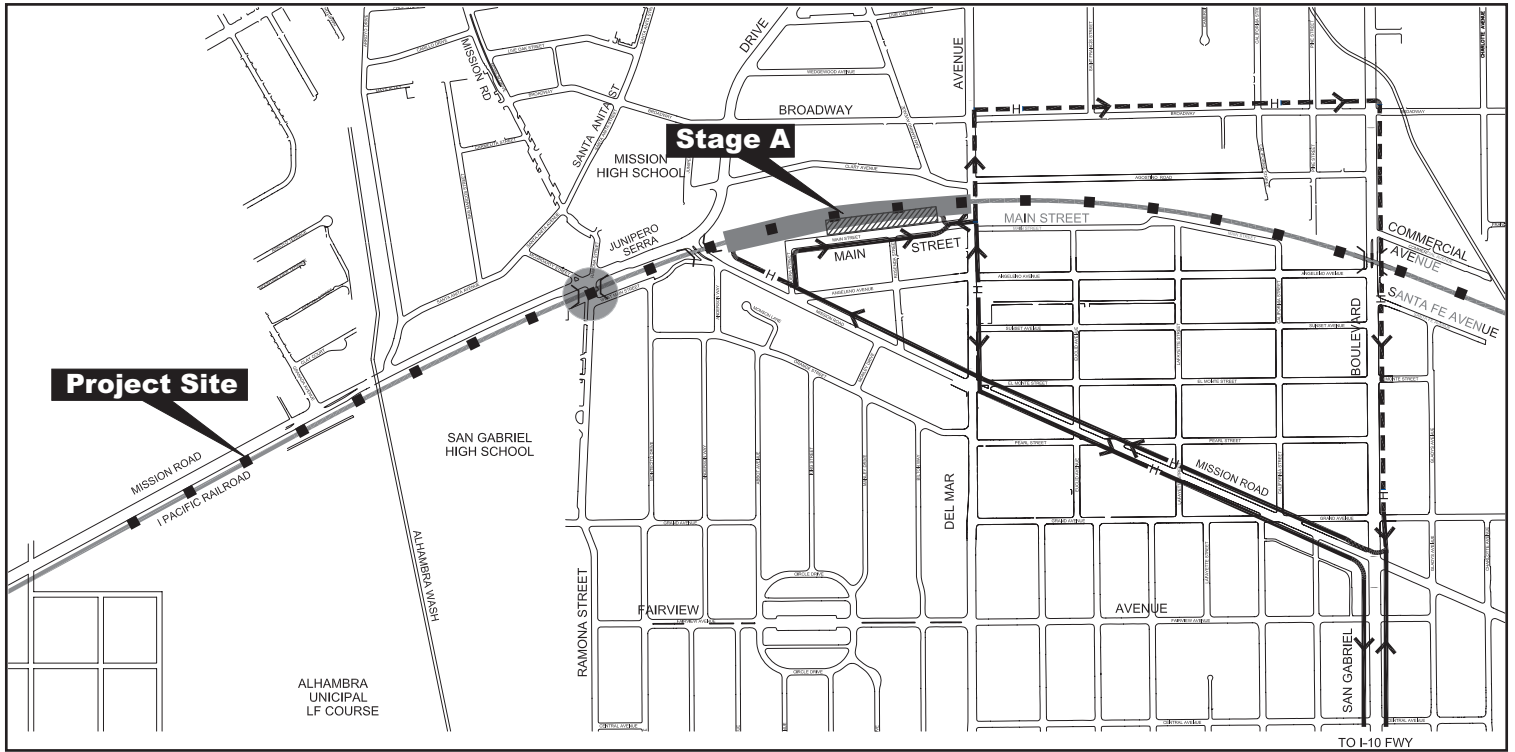
### **Regulatory Setting**

Cumulative impacts are those that result from past, present, and reasonably foreseeable future actions, combined with the potential impacts of this project. A cumulative effect assessment looks at the collective impacts posed by individual land use plans and projects. Cumulative impacts can result from individually minor, but collectively substantial impacts taking place over a period of time.

Cumulative impacts to resources in the project area may result from residential, commercial, industrial, and highway development, as well as from agricultural development and the conversion to more intensive types of agricultural cultivation. These land use activities can degrade habitat and species diversity through consequences such as displacement and fragmentation of habitats and populations, alteration of hydrology, contamination, erosion, sedimentation, disruption of migration corridors, changes in water quality, and introduction or promotion of predators. They can also contribute to potential community impacts identified for the project, such as changes in community character, traffic patterns, housing availability, and employment.

CEQA Guidelines, Section 15130, describes when a cumulative impact analysis is warranted and what elements are necessary for an adequate discussion of cumulative impacts. The definition of cumulative impacts, under CEQA, can be found in Section 15355 of the CEQA Guidelines. A definition of cumulative impacts, under NEPA, can be found in 40 CFR, Section 1508.7 of the CEQ Regulations.



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**LEGEND:**

-  Project Site
-  Staging Areas
-  Trench Excavation - Stage A
-  Street Construction

**Routes**

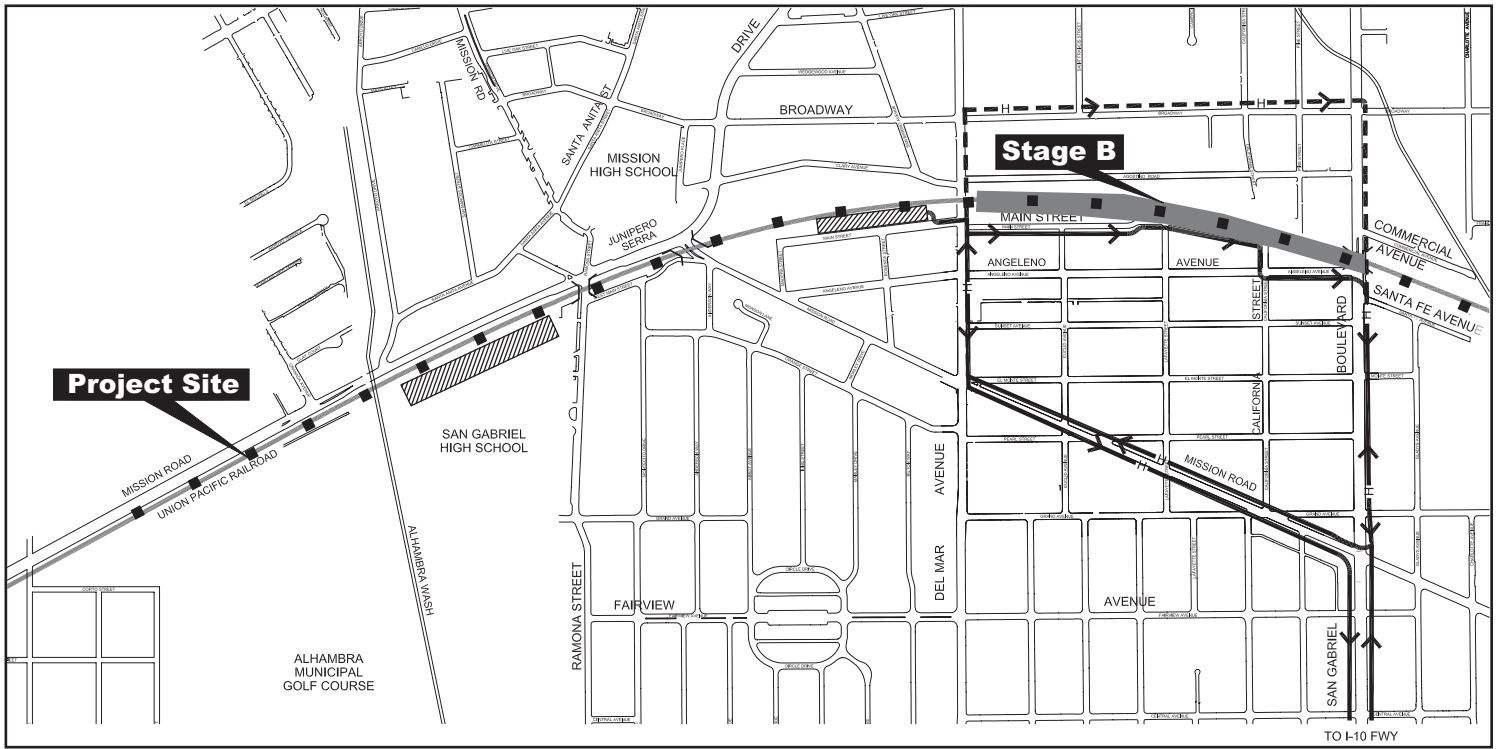
-  Haul Truck Routes
-  Haul Truck Route (Optional)

SOURCE: Iteris and TAHA, 2009.






FIGURE 2.4-5



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**LEGEND:**

-  Project Site
-  Staging Areas
-  Trench Excavation - Stage B

**Routes**

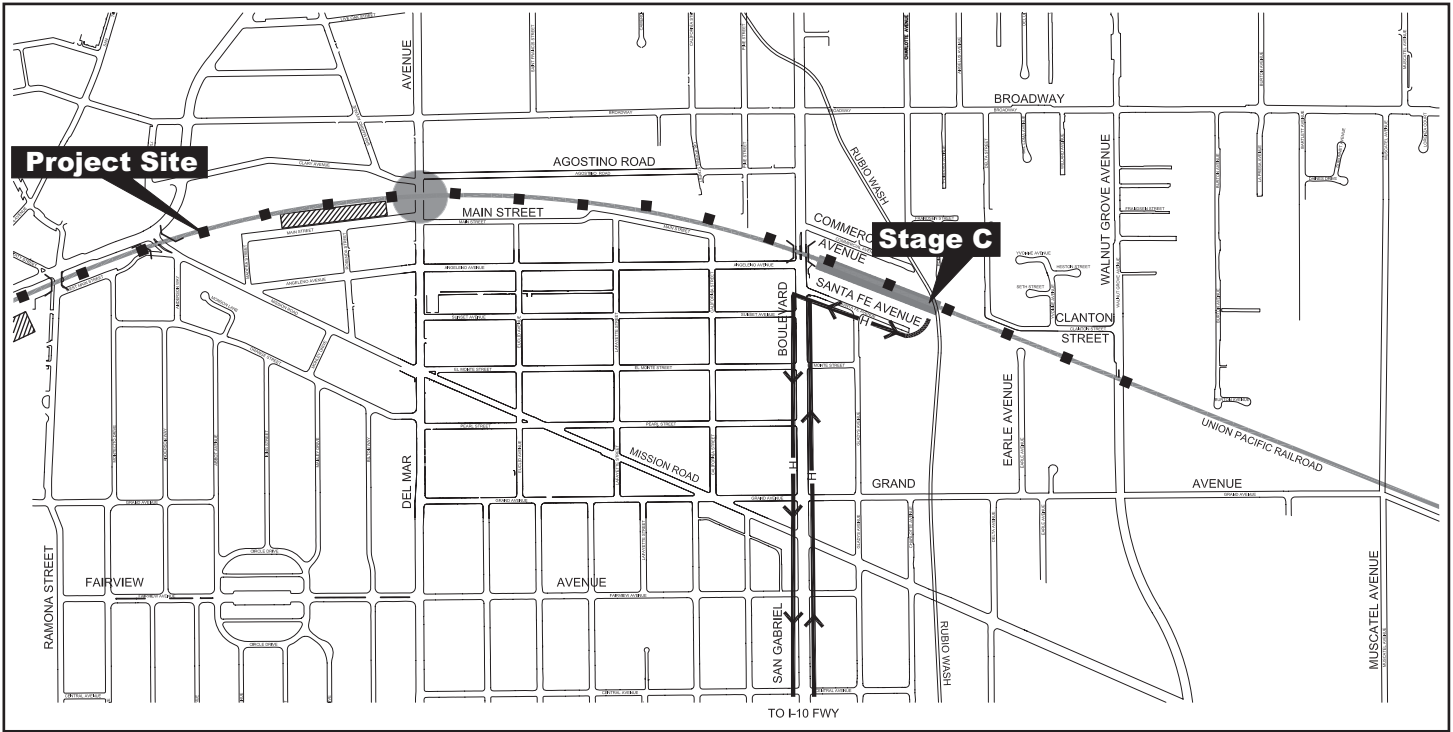
-  Haul Truck Routes
-  Haul Truck Route (Optional)

SOURCE: Iteris and TAHA, 2009.



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**LEGEND:**

-  Project Site
-  Staging Areas
-  Trench Excavation - Stage C
-  Street Construction

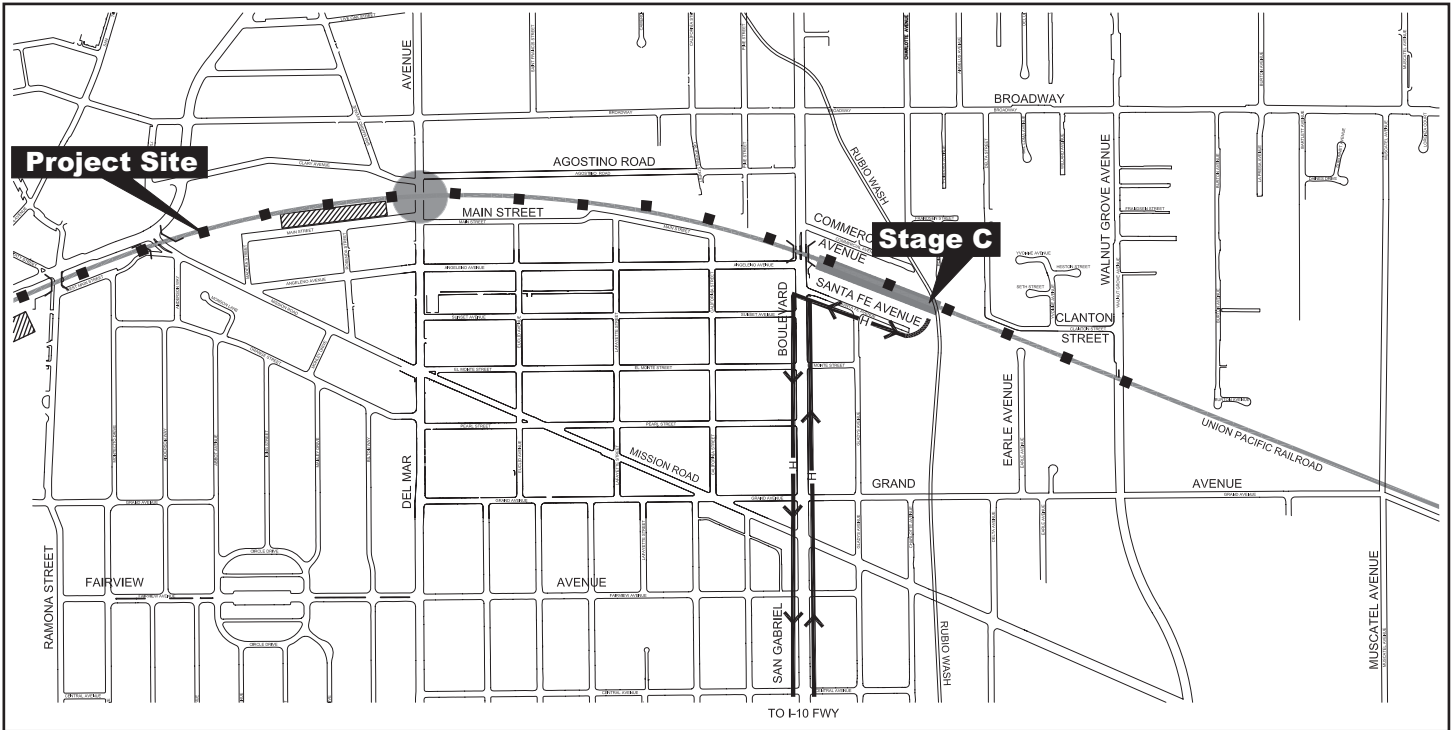
**Routes**

-  Haul Truck Routes

SOURCE: Iteris and TAHA, 2009.



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**LEGEND:**

-  Project Site
-  Staging Areas
-  Trench Excavation - Stage C
-  Street Construction

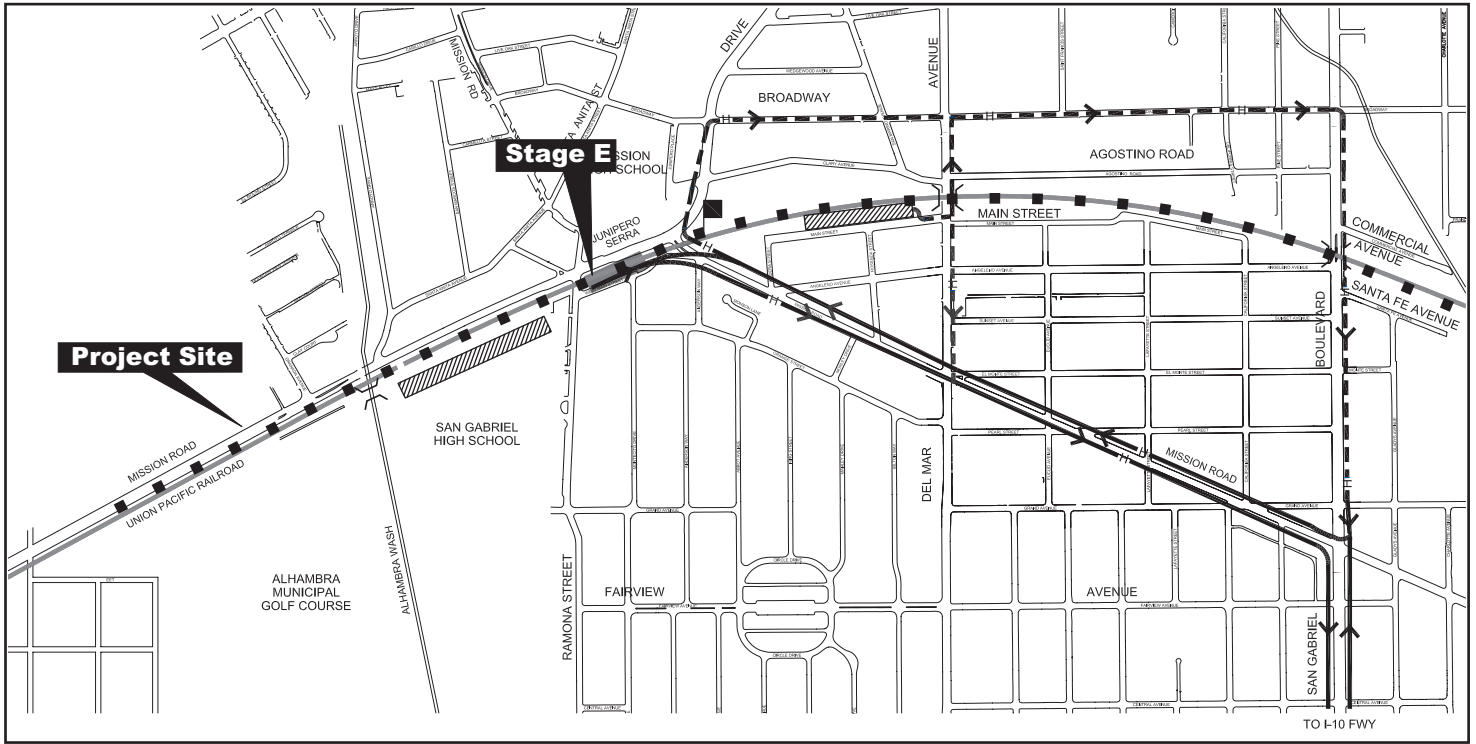
**Routes**

-  Haul Truck Routes

SOURCE: Iteris and TAHA, 2009.





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**LEGEND:**

-  Project Site
-  Staging Areas
-  Trench Excavation - Stage E
-  Flagger

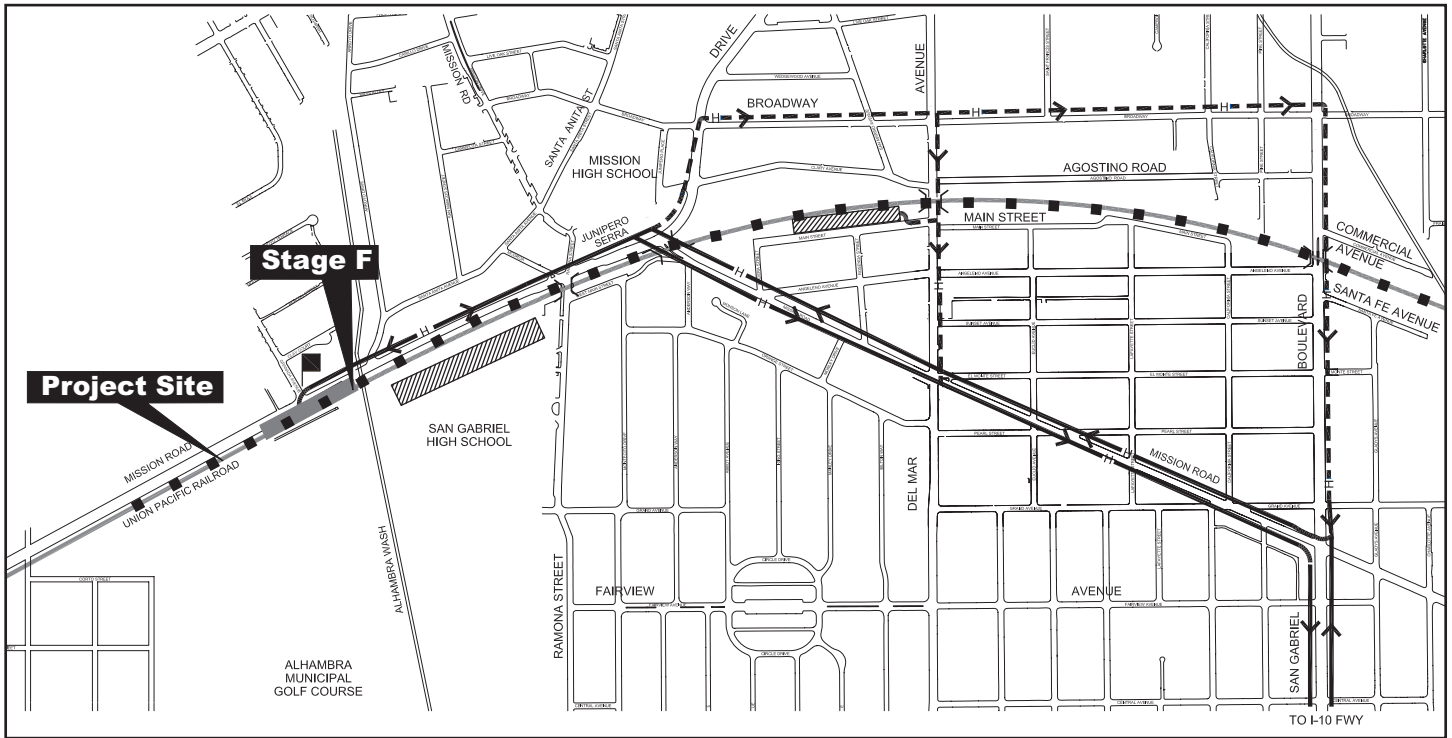
**Routes**

-  Haul Truck Routes
-  Haul Truck Route (Optional)

SOURCE: Iteris and TAHA, 2009.





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**LEGEND:**

-  Project Site
-  Staging Areas
-  Trench Excavation - Stage F
-  Flagger

**Routes**

-  Haul Truck Routes
-  Haul Truck Route (Optional)

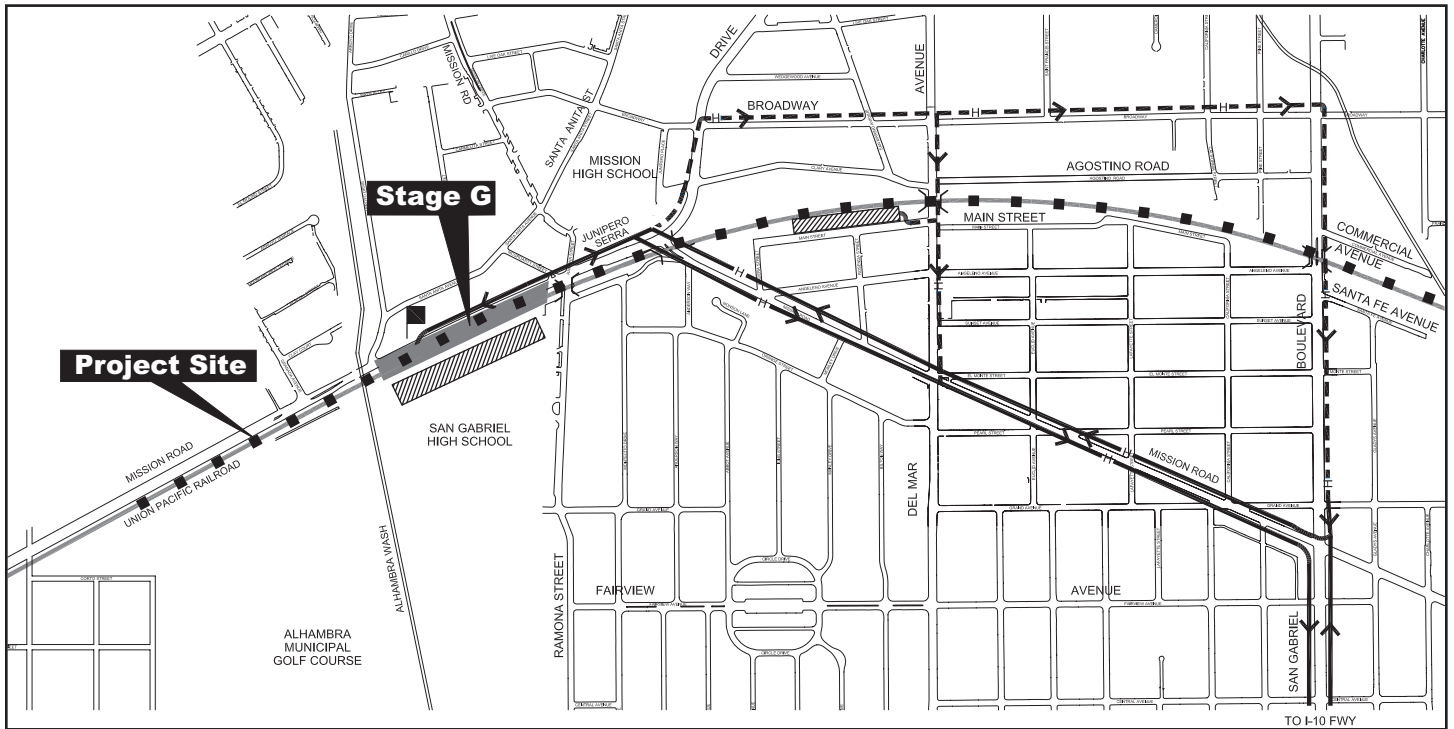
SOURCE: Iteris and TAHA, 2009.



FIGURE 2.4-10

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**LEGEND:**

-  Project Site
-  Staging Areas
-  Trench Excavation - Stage G
-  Flagger

**Routes**

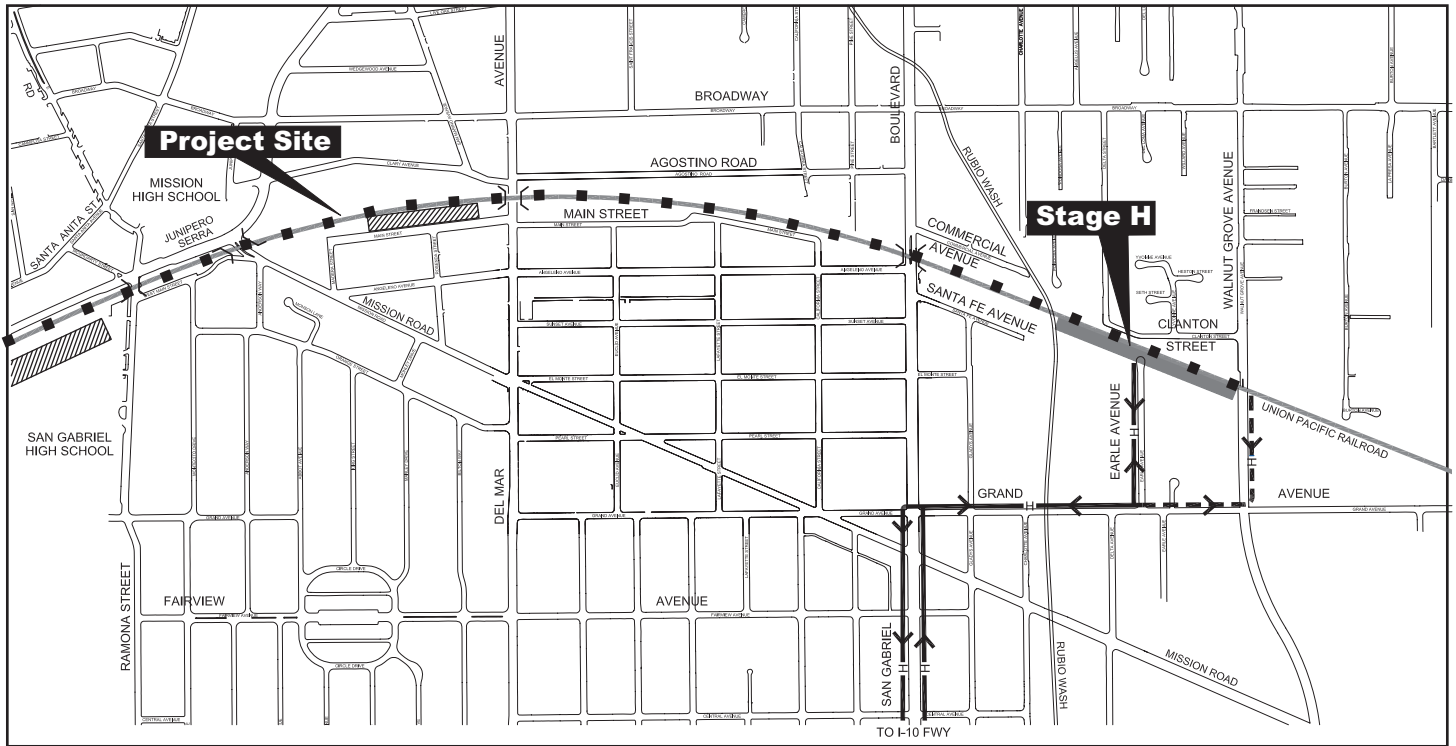
-  Haul Truck Routes
-  Haul Truck Route (Optional)

SOURCE: Iteris and TAHA, 2009.






FIGURE 2.4-11



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LEGEND:

-  Project Site
-  Staging Areas
-  Trench Excavation - Stage H

Routes

-  Haul Truck Routes
-  Haul Truck Route (Optional)

SOURCE: Iteris and TAHA, 2009.



FIGURE 2.4-12

HAUL ROUTE FOR TRENCH EXCAVATION  
 STAGE H

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An adequate discussion of significant adverse cumulative impacts can be accomplished by analyzing either (1) “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 (2) “a summary of projections contained in an adopted general plan or related planning document, or in a prior environmental document which has been adopted or certified, which described or evaluated regional or area wide conditions contributing to the cumulative impact.”<sup>88</sup>

A

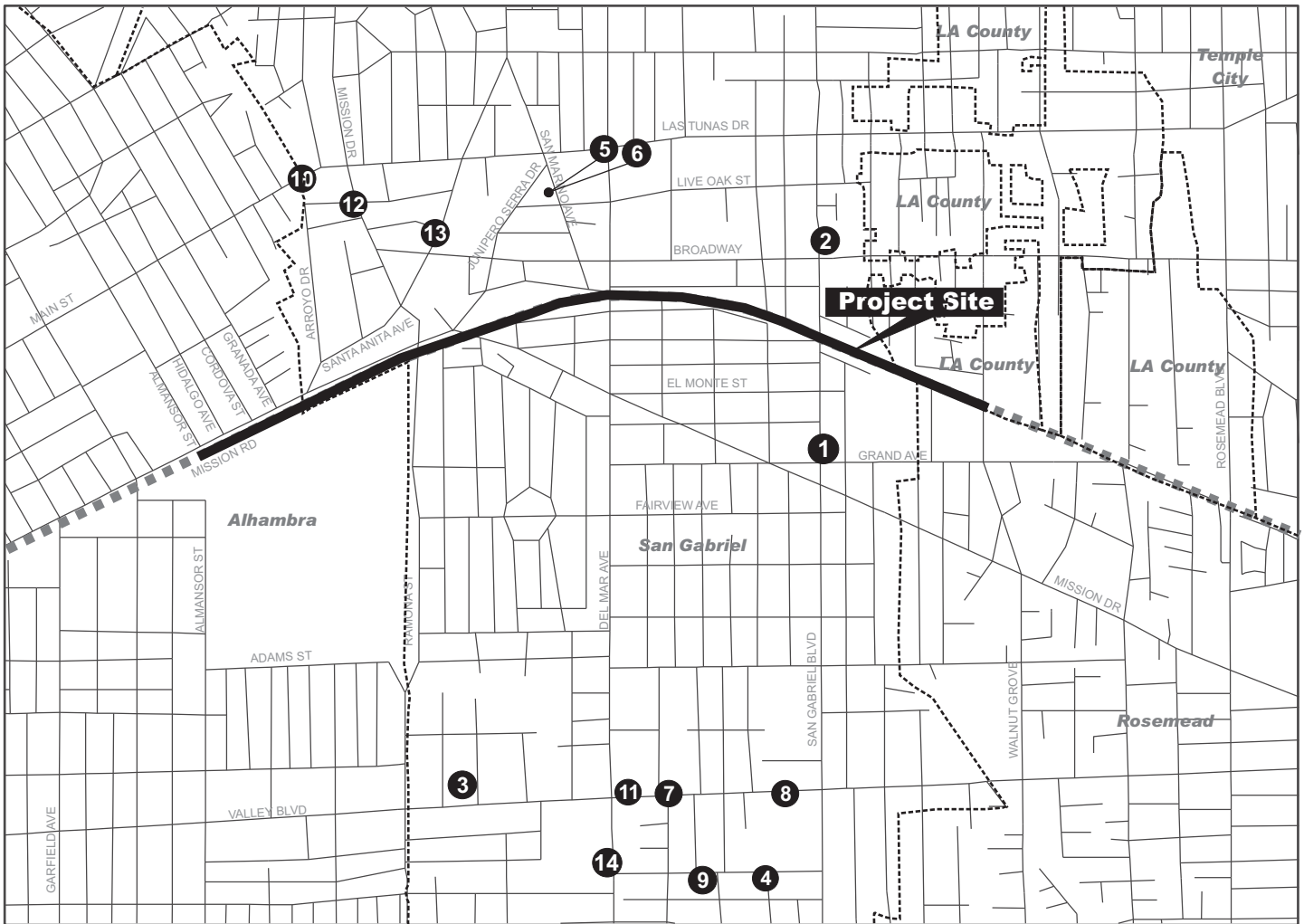
The list of applicable projects for this cumulative impacts analysis was obtained from the City of San Gabriel. These projects are listed in **Table 2.5-1**; **Figure 2.5-1** shows the location of the cumulative projects.

<b>TABLE 2.5-1: CUMULATIVE PROJECTS</b>				
<b>Description</b>		<b>Land Uses</b>	<b>Amount</b>	<b>Units</b>
1	823 S. San Gabriel Boulevard	Condominiums	4	Units
		Restaurant	3,000	Square Feet
		Office Space	3,300	Square Feet
2	402-404 S. San Gabriel Blvd.	Condominium	22	Units
3	1563 Prospect Avenue	Condominium	8	Units
4	1962 Denton Avenue	Condominium	4	Units
5	224 S. San Marino Avenue	Condominium	3	Units
6	238 S. San Marino Avenue	Condominium	5	Units
7	327 E. Valley Boulevard	Retail/Massage	1,400	Square Feet
8	529 E. Valley Boulevard	Retail/Massage	1,000	Square Feet
9	116 Marshall Street	Condominium	9	Units
10	35 Hampton Court	Senior Condos	12	Units
11	221 Valley Boulevard	Retail	20,000	Square Feet
		Condominium	149	Units
12	257-261 Mission Drive	Condominium	30	Units
		Hotel	56	Rooms
		Retail	15,160	Square Feet
13	235 Arroyo Drive	Senior Condos	75	Units
14	Del Mar Avenue and Bencamp Street	Retail	11,244	Square Feet
		Restaurants	3,357	Square Feet
		Office	7,030	Square Feet
		Condominium	21	Units

**SOURCE:** Iteris, *Draft Traffic Study Report for Construction Conditions for the San Gabriel Trench Grade Separation Project*, 2008.

<sup>88</sup>CEQA Guidelines, Section 15130 (b)(1).

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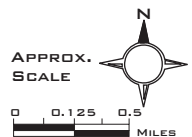
**LEGEND:**

- Project Site
- ■ ■** Union Pacific Railroad - Alhambra Subdivision
- - -** City/Community Boundary

**#** Related Projects

- |  |  |
|--|--|
| <b>1.</b> 823 S. San Gabriel Boulevard     | <b>8.</b> 529 E. Valley Boulevard            |
| <b>2.</b> 402-404 S. San Gabriel Boulevard | <b>9.</b> 116 Marshall Street                |
| <b>3.</b> 1563 Prospect Avenue             | <b>10.</b> 35 Hampton Court                  |
| <b>4.</b> 1962 Denton Avenue               | <b>11.</b> 21 Valley Boulevard               |
| <b>5.</b> 224 S. San Marino Avenue         | <b>12.</b> 257-261 Mission Drive             |
| <b>6.</b> 238 S. San Marino Avenue         | <b>13.</b> 235 Arroyo Drive                  |
| <b>7.</b> 327 E. Valley Boulevard          | <b>14.</b> Del Mar Avenue and Bencamp Street |

SOURCE: Iteris and TAHA, 2009.



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## **LAND USE**

Cumulative land use impacts from the proposed project and related development in the area could occur due to:

- Incompatibility between new development projects and existing sensitive land uses
- Substantial unplanned changes in the long-term pattern of land use

The first type of cumulative land use impact could potentially arise as construction activities associated with the proposed project and other related projects create temporary indirect effects, such as noise, vibration, air pollutant emissions, traffic congestion, and access disruptions.

Mitigation measures have been included in the proposed project to minimize or eliminate construction-related effects. It is unlikely that construction on all these projects would occur simultaneously. Also, residents adjacent to the project site would not be expected to have views of these other construction sites due to the intervening distance, topography, and vegetation. It is expected that most related projects would be required to comply with adopted land use plans and zoning requirements. It is also anticipated that related projects would generally be consistent with the overall land use policies and goals of the Cities of San Gabriel, Alhambra and Rosemead General Plans. The proposed project would not result in any changes in existing land use patterns or long-term land use patterns. Consequently, the proposed project and related developments are not expected to result in substantial unplanned changes in the long-term pattern of land use. No substantial cumulative land use impacts are anticipated with implementation of the proposed project.

## **POPULATION**

Implementation of the proposed project would result in construction of a trench for the UPRR. The trench would have the same capacity as the existing tracks and would not directly or indirectly induce growth; consequently, it would not contribute to cumulative population, housing, or employment impacts.

## **COMMUNITY IMPACTS**

Potential cumulative community impacts could occur if other projects in combination with the proposed project cumulatively contribute to the loss of community cohesion or character in the vicinity of the project. The related projects within one mile of the proposed trench are projects that are relatively small in scale and scope and do not have the potential to affect community cohesion. Also, none of the related projects would diminish north-south access across the trench and the trench itself would increase access.

## **UTILITIES**

### **Water Supply**

Construction of the trench would require minimal amounts of water on a daily basis. Since the incremental increase in water consumption would be short-term and water supplies in the near future are expected to be adequate to meet the demand generated by existing and proposed development in the service area, construction of the trench would not contribute to cumulatively considerable impacts to water resources.

### **Solid Waste**

Planned and pending development in the City would cumulatively increase the amount of solid waste sent to area landfills. It is anticipated that project excavation and demolition will generate approximately 874,500 cubic yards of debris and soil, all of the debris and soil would be hauled off-site by the contractor. It is anticipated that the haul trucks will deliver the debris and soil to the local landfill sites, including Sunshine Canyon Landfill and Puente Hills Landfill. Sunshine Canyon and Puente Hills anticipate having adequate capacity to accommodate cumulative solid waste generation in the near term. In accordance with State regulations, a minimum of 50 percent of the total amount of solid waste resulting from construction of the proposed project would be diverted. Both landfills would have sufficient capacity to dispose of the remaining debris. Thus, no impacts to solid waste disposal facilities would occur. Consequently, construction of the proposed project would not substantially contribute to an adverse impact on solid waste.

### **Water**

Cumulative development in the project area could increase the amount of impervious surfaces, which would result in additional stormwater runoff. This runoff could have an adverse cumulative impact if stormwater flows exceed the capacity of the storm drain systems in the area. However, the trench would not substantially increase the amount of stormwater at the project site and the flows for Alhambra and Rubio Washes would be maintained. The proposed project's contribution to cumulative drainage impacts would not be substantial, and would not exceed storm drain capacity.

### **Emergency Services**

Construction of the proposed trench would require the alternate closing of streets as the grade separations are completed. If related projects required closure of streets in the area, as well a cumulative impact could occur. However, the largest project that could require partial closure of a street is located one-quarter mile north of the project site on Mission Drive. This project is a development of residential and retail/hotel and is unlikely to require street closures. There are no other related projects in the vicinity of the proposed project that require the closure of any of the streets in the project area and, therefore, would not result in cumulative effects to police and fire access, school bus routes, or park access.

### **TRAFFIC**

#### **Construction**

Project construction would require the alternate closing of streets as the grade separations are completed, requiring local traffic to take alternative detour routes. The increased traffic on those alternative routes due to closures and resulting increased delay or congestion could be compounded by other construction projects occurring simultaneously in the immediate project vicinity, particularly if those other projects would result in lane or road closure during construction. One project, 261 Mission Drive, has the potential to undergo construction at the same time as the proposed project. However, this project is a hotel/retail center and is not likely to require street closures. Adverse impacts would not be expected to occur. Nonetheless, the following measures shall be implemented.

**CM1** ACE shall coordinate with the Cities of San Gabriel, Alhambra and Rosemead to obtain construction schedules for major projects in the project area. In addition, ACE shall furnish each city with anticipated construction schedules and notify the cities as changes occur.

**CM2** ACE shall prepare and implement a Transportation Management Plan during construction that identifies street closures and detour routes.

### **Operation**

The proposed project alternatives would not result in any operational impacts; thus, the proposed project would not contribute to cumulatively considerable operational traffic impacts.

### **AESTHETICS/VISUAL**

Potential cumulative visual impacts could occur if other projects in combination with the proposed project considerably contribute to the degradation or deterioration of the visual setting, or damage scenic views or vistas in the area. The study area for the cumulative visual impact analysis would consist of the general area in the immediate vicinity of the trench, including those areas that can be viewed from, or have views project site. Fourteen related projects are listed within approximately a one-mile radius of proposed project. A majority of the projects are relatively small in scale and scope and do not have design features that have the potential to result in significant adverse visual impacts. Consequently, the related projects are unlikely to result in the cumulative degradation of the area, specifically the San Gabriel Mission District.

### **WATER QUALITY**

Contamination of water bodies is generally a function of cumulative discharges. Point and nonpoint sources contribute various constituents in the form of effluent or stormwater runoff. EPA and the SWRCB have established several programs, including NPDES permits, to minimize polluted discharges. In the Los Angeles and San Gabriel Watershed, surface and groundwater resources are impaired for several contaminants. Stringent NPDES permit requirements for waste load locations and BMPs should begin to reduce the amount of constituents in the watershed's receiving waters. However, increasing development and urbanization will continue to cumulatively exert pressures on watershed health. Runoff from the growing urban areas—even with permits and BMP implementation—may continue to impair these rivers and watersheds and result in adverse cumulative water quality impacts. However, the proposed San Gabriel trench project would implement BMPs. It is anticipated that these BMPs would also be effective in meeting the Los Angeles Regional Water Quality Control Board's TMDL standards for removal of pollutants from stormwater discharged to the Los Angeles River and Watershed. Consequently, the proposed project's contribution to adverse cumulative water quality impacts would be minimal.

Additionally, because the project site and the surrounding area is already developed with low density uses, the potential of future development in the project area to increase impervious surfaces and increase runoff is negligible. Hence, the proposed project would not contribute to any cumulative adverse effects on local surface waters.

### **GEOLOGY**

The project area lies in the San Gabriel Valley portion of the Los Angeles Basin at the southernmost edge of the Transverse Ranges Geomorphic Province of California. The Transverse Ranges are characterized by a series of east-west-trending mountain ranges, including the San Gabriel Mountains north of the project area. Therefore, the appropriate study area for potential cumulative geologic impacts would be the Transverse Ranges Geologic province. Potential cumulative geologic impacts are limited to disturbance of unique geological features and exposure of people to seismic hazards.

There are no unique geological features that would be affected by related projects or the proposed project. Seismic hazards are mitigated on an individual project basis through sound engineering and adherence to geotechnical construction and operation standards. Consequently, the proposed project would not contribute to adverse cumulative impacts on unique geologic features, and it would not contribute to a cumulative increase in the risks posed by seismic hazards.

## HAZARDS

Cumulative hazardous materials impacts would occur when a population or resource is exposed to the cumulative adverse effects of hazardous materials released by the proposed project and one or more related projects. The geographic scope of the area affected by potential cumulative hazardous materials impacts would depend on the migration characteristics of the hazardous materials as they are released into the soil, air, or groundwater. Based on the characteristics of the proposed project, the study area for cumulative hazardous materials analysis would consist of the immediate project area.

The related projects are not expected to generate, individually or cumulatively, substantial amounts of hazardous materials. The potential for substantial cumulative impacts is further reduced if the related projects are constructed and operated in accordance with applicable hazardous materials laws, statutes, and regulations. Additionally, known existing sources of contamination in the project area are located far enough away from the project site that they are not expected to pose an environmental concern to the proposed project. Given that fact, as well as the information and analyses in the Phase I site assessment documenting the low probability of encountering substantial quantities of hazardous materials during construction and implementation of the proposed mitigation measures, construction of the proposed project would not contribute to an adverse cumulative hazardous materials impact. Operation of the proposed project would not require the use of hazardous materials, although the trench itself would permit the transport of hazardous materials. State and federal law would govern the movement of hazardous materials. Consequently, the incremental effects of the proposed project combined with the effects of other related projects would not contribute to an adverse cumulative hazardous materials impact.

## AIR QUALITY

The SCAQMD has indicated that a proposed project would contribute to a cumulative air quality impact if it would exceed the operational significance thresholds. The proposed project would reduce operational regional emissions by reducing idling and increasing average vehicle speeds at the existing railroad crossings. As a result, the proposed project would not contribute to any cumulative adverse air quality impact.

## CLIMATE CHANGE

While climate change has been a concern since at least 1988, as evidenced by the establishment of the United Nations and World Meteorological Organization's Intergovernmental Panel on Climate Change (IPCC), the efforts devoted to greenhouse gas (GHG) emissions reduction and climate change research and policy have increased dramatically in recent years.<sup>89</sup> In 2002, with the passage of Assembly Bill 1493 (AB 1493), California launched an innovative and pro-active approach to dealing with GHG emissions and climate change at the State level. AB 1493 requires the California Air Resources Board (CARB) to develop and implement regulations to reduce automobile and light truck GHG emissions; these regulations apply to automobiles and light trucks beginning with the 2009 model year.

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<sup>89</sup>Greenhouse gases related to human activity, as identified in AB 32, include: carbon dioxide, methane, nitrous oxide, tetrafluoromethane, hexafluoroethane, sulfur hexafluoride, HFC-23, HFC-134, and HFC-152.

On June 1, 2005, Governor Arnold Schwarzenegger signed Executive Order S-3-05. The goal of this Executive Order is to reduce California's GHG emissions to: 1) 2000 levels by 2010, 2) 1990 levels by the 2020 and 3) 80 percent below the 1990 levels by the year 2050. In 2006, this goal was further reinforced with the passage of Assembly Bill 32 (AB 32), the Global Warming Solutions Act of 2006. AB 32 sets the same overall GHG emissions reduction goals while further mandating that the CARB create a plan, which includes market mechanisms, and implement rules to achieve "real, quantifiable, cost-effective reductions of greenhouse gases." Executive Order S-20-06 further directs State agencies to begin implementing AB 32, including the recommendations made by the State's Climate Action Team. With Executive Order S-01-07, Governor Schwarzenegger set forth the low carbon fuel standard for California. Under this executive order, the carbon intensity of California's transportation fuels is to be reduced by at least ten percent by 2020.

Climate change and GHG reduction is also a concern at the federal level; at this time, no legislation or regulations have been enacted specifically addressing GHG emissions reductions and climate change. However, California, in conjunction with several environmental organizations and several other states, sued to force the United States Environmental Protection Agency (USEPA) to regulate GHGs as a pollutant under the Clean Air Act (*Massachusetts vs. Environmental Protection Agency et al.*, U.S. Supreme Court No. 05-1120. 549 U.S. Argued November 29, 2006—Decided April 2, 2007). The court ruled that GHGs do fit within the Clean Air Act's definition of a pollutant, and that the USEPA does have the authority to regulate GHGs. Despite the Supreme Court ruling, there are no promulgated federal regulations to date limiting GHG emissions.

According to a recent white paper by the Association of Environmental Professionals, "an individual project does not generate enough greenhouse gas emissions to significantly influence global climate change."<sup>90</sup> Global climate change is a cumulative impact; a project participates in this potential impact through its incremental contribution combined with the cumulative increase of all other sources of GHG. Caltrans and its parent agency, the Business, Transportation, and Housing Agency, have taken an active role in addressing GHG emission reduction and climate change. Recognizing that 98 percent of California's GHG emissions are from the burning of fossil fuels and 40 percent of all human made GHG emissions are from transportation, Caltrans has created and is implementing the *Climate Action Program at Caltrans*. Transportation's contribution to GHG emissions is dependent on three factors: the types of vehicles on the road, the type of fuel the vehicles use, and the time/distance the vehicles travel.

Caltrans is actively involved on the Governor's Climate Action Team as the CARB works to implement AB 1493 and AB 32. As part of the *Climate Action Program at Caltrans*, Caltrans is supporting efforts to reduce vehicle miles traveled by planning and implementing smart land use strategies: job/housing proximity, developing transit-oriented communities, and high density housing along transit corridors. Caltrans is working closely with local jurisdictions on planning activities; however, Caltrans does not have local land use planning authority. Caltrans is also supporting efforts to improve the energy efficiency of the transportation sector by increasing vehicle fuel economy in new cars, light and heavy-duty trucks. However it is important to note that the control of the fuel economy standards is held by the USEPA and the CARB. Lastly, the use of alternative fuels is also being considered; Caltrans is participating in funding for alternative fuel research at the University of California, Davis.

One of the main strategies in the Caltrans' Climate Action Program to reduce GHG emissions is to make California's transportation system more efficient. The highest levels of carbon dioxide from mobile sources, such as automobiles, occur at stop-and-go speeds (0 to 25 miles per hour) and speeds over 55

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<sup>90</sup>Hendrix, Micheal and Wilson, Cori. *Recommendations by the Association of Environmental Professionals (AEP) on How to Analyze Greenhouse Gas Emissions and Global Climate Change in CEQA Documents*, March 5, 2007.

mph; the most severe emissions occur from 0 to 25 miles per hour. Relieving congestion by enhancing operations and improving travel times in high congestion travel corridors will lead to an overall reduction in GHG emissions.

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Alternative 1 would not increase vehicle trips but would improve traffic flow by eliminating existing grade crossings. The improvement in overall average vehicle speed was assumed to be ten miles per hour (mph), from 15 to 25 mph. Regional emissions were calculated using the VMT and CARB EMFAC2007 emission factors at the improved average vehicle speed. Based on these assumptions, Alternative 1 would reduce regional GHG emissions by approximately 900 tons per year.<sup>91</sup> The reduction in GHG emissions would result in a beneficial climate change impact.

### **Alternative 2 – No Build Alternative**

The San Gabriel Trench would not be constructed under Alternative 2 and no change in operational activity would occur. Alternative 2 would result in a less-than-significant climate change impact.

### **NOISE**

The proposed project would result in the substantial reduction of noise exposure near the tracks due to trains. The  $L_{dn}$  would be 15 to 20 dBA lower than existing noise levels at sensitive land uses closest to the railroad tracks. The reduced noise levels would be a combined result of the acoustic shielding provided by the trench and eliminating the requirement to sound train horns prior to the grade crossing.

Removal of the grade crossings would increase the average vehicle speed along the segments immediately adjacent to the tracks for automobiles associated with related projects. In addition, the noise associated with increased speeds near the grade crossing would be offset by decreased noise levels associated with engine noise as the project would eliminate the need for vehicles to accelerate from a stopped position at the completion of train crossings. As a result, similar mobile noise levels as existing conditions would characterize the project area. The proposed project would not contribute to any cumulative adverse noise impact.

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<sup>91</sup>GHG emissions do not account for fuel mix, rate of acceleration, and the aerodynamics and efficiency of the vehicles.

### 3.0 CALIFORNIA ENVIRONMENTAL QUALITY ACT (CEQA) EVALUATION

This chapter describes the significance<sup>1</sup> of the proposed project's environmental impacts under the California Environmental Quality Act (CEQA) in accordance with the CEQA Guidelines. The reader is referred to Chapter 2.0 Affected Environment for a discussion of the affected environment and the environmental consequences of the proposed project required under NEPA<sup>2</sup>. Also provided in this chapter are other discussions required by CEQA, including growth inducement effects and the environmentally superior alternative.

#### DETERMINING SIGNIFICANCE UNDER CEQA

The project is subject to federal, as well as state environmental review requirements because ACE proposes the use of federal funds and/or the project requires a federal approval action. Project documentation, therefore, has been prepared in compliance with both the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). ACE is the project proponent and the lead agency under CEQA. FHWA's responsibility for environmental review, consultation, and any other action required in accordance with NEPA and other applicable Federal laws for this project is being, or has been, carried out by the Department under its assumption of responsibility pursuant to 23 U.S.C. 327.

One of the primary differences between NEPA and CEQA is the way significance is determined. Under NEPA, significance is used to determine whether an EIS, or some lower level of documentation, will be required. NEPA requires that an EIS be prepared when the proposed federal action (project) as a whole has the potential to "significantly affect the quality of the human environment." The determination of significance is based on context and intensity. Some impacts determined to be significant under CEQA may not be of sufficient magnitude to be determined significant under NEPA. Under NEPA, once a decision is made regarding the need for an EIS, it is the magnitude of the impact that is evaluated and no judgment of its individual significance is deemed important for the text. NEPA does not require that a determination of significant impacts be stated in the environmental documents.

CEQA, on the other hand, does require an identification of "significant effect on the environment" resulting from the project and ways to mitigate each significant effect. If the project may have a significant effect on any environmental resource, then an EIR must be prepared. Each and every significant effect on the environment must be disclosed in the EIR and mitigated if feasible. In addition, the CEQA Guidelines list a number of mandatory findings of significance, which also require the preparation of an EIR. There are no types of actions under NEPA that parallel the findings of mandatory significance of CEQA. This chapter discusses the effects of this project and CEQA significance.

Analysis of each environmental issue is organized within the following five subsections:

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<sup>1</sup>Section 15382 of the CEQA Guidelines defines a significant effect as "...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. An economic or social change by itself shall not be considered a significant effect on the environment. A social or economic change related to a physical change may be considered in determining whether the physical change is significant." Section 15064 states that "An ironclad definition of significant effect is not possible because the significance of an activity may vary with the setting. For example, an activity which may not be significant in an urban setting may be significant in a rural area."

<sup>2</sup>CEQA requires that a determination of significant impacts be stated in the environmental evaluation; NEPA does not. Under NEPA significance is used to determine whether an Environmental Impact Study (EIS) or some lower level of documentation will be required. Consequently, some impacts determined to be significant under CEQA may not be of sufficient magnitude to be determined significant under NEPA. Under NEPA, once a decision to prepare an EIS is made, it is the magnitude of the impact that is evaluated and no judgment of its significance is deemed important in the text. NEPA does not require that a determination of significant impacts be stated in the environmental document.

**EXISTING SETTING** - A description of existing conditions that precede the implementation of the proposed project.

**CEQA SIGNIFICANCE CRITERIA** - The CEQA criteria by which the components of the project alternatives are measured to determine if the Project alternatives would cause a substantial, or potentially substantial adverse change in the existing environmental conditions.

**IMPACTS** - An analysis of the beneficial and adverse effects of the project alternatives, including, where appropriate, assessments of the significance of potential adverse impacts relative to established thresholds (relative to existing conditions per CEQA).

**MITIGATION MEASURES** - Identification of appropriate and reasonable measures to avoid or minimize impacts to the extent feasible are provided wherever significant adverse impacts relative to existing conditions are identified in the Impacts subsection.

**LEVEL OF IMPACT AFTER MITIGATION** - A discussion of whether an unavoidable significant adverse impact would be reduced to a less-than-significant level or to no impact after mitigation under CEQA.

### 3.1 LAND USE

#### EXISTING SETTING

Please refer to Section 2.1.1, Land Use, for a detailed description of the environmental and regulatory setting.

#### CEQA SIGNIFICANCE CRITERIA

The proposed project would have a significant impact related to land use and planning if the project would:

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



## **IMPACTS**

### **Division of Established Community and Land Use Compatibility**

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Alternative 1 would grade separate the existing Alhambra Subdivision of the UPRR in portions of the Cities of San Gabriel, Alhambra Rosemead and the County of Los Angeles. The grade separation at Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard would be achieved by lowering the track under these crossings in a trench and constructing bridge structures over the railroad at each location. The Rubio Wash would be lowered to accommodate the trench profile and a box culvert or bridge structure would be required at this location during construction. A drainage culvert or railroad bridge would be constructed over the Alhambra Wash.

As mentioned in Section 2.1.1, the City of San Gabriel General Plan designates the project site as an “edge,” which separates different areas of the City. The project site functions as an edge between an older residential neighborhood and the San Gabriel Village District, to the south, and the Mission District and San Gabriel Mission, to the north. Because the project site currently divides these areas of the City, Alternative 1 would not increase or exacerbate the division of these areas. Alternative 1 would actually improve or reduce the effect of the project site as an edge due to the proposed change to the railroad configuration, from at-grade to below-grade or trench, which would eliminate disruptive at-grade crossings at Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard. Lowering the train would result in greater access from the north to south side and vice-versa by eliminating waiting and queuing during train crossings. In the City of Alhambra, the project site also currently functions as an edge between the Alhambra Municipal Golf Course to the south and a single-family residential area to the north. Alternative 1 would reduce the intensity of this edge in the City of Alhambra by lowering the railroad into a trench configuration thereby increasing ease of access between the two areas. Therefore, less-than-significant impacts are anticipated related to the division of an established community.

The project site currently functions as an at-grade railroad line and is located adjacent to primarily industrial, residential, and historic/civic land uses. Alternative 1 would lower the existing at-grade railroad crossing and lower the railroad into a trench configuration and construct overhead bridge structures at Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard. The use of the project site and these roadways would not be altered from existing conditions. Alternative 1 would improve the land use compatibility of the project site with the historic/civic buildings in the Mission District by eliminating four at-grade crossings, which currently cause traffic hazards particularly at Ramona Street and Mission Road. Therefore, less-than-significant impacts are anticipated related to land use compatibility.

#### **Alternative 2 – No Build Alternative**

Under Alternative 2, the project site would not be substantially altered from existing conditions. Alternative 2 would not lower the existing at-grade railroad into a trench configuration or alter the existing railroad to any other configuration. As a result, Alternative 2 would not reduce the function of the project site as an edge between different areas and would not improve the land use compatibility of the project site with existing surrounding land uses. However because uses at the site would not change, less-than-significant impacts are anticipated related to the division of an established community and land use compatibility.

## Local Land Use Plans and Policies

### Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)

Alternative 1 would lower the existing railroad tracks into a trench. The City of San Gabriel General Plan and the City of Alhambra General Plan do not assign a specific land use and/or zoning designation to the project site because it is an existing active railroad line. Therefore, Alternative 1 would not affect any land use designations of the project site and would not require a general plan amendment in either jurisdiction. Alternative 1 would be consistent with the goals and policies of the City of San Gabriel General Plan and the City of Alhambra General Plan.

Additionally, Alternative 1 would meet the goals and policies related to a safe, efficient, and environmentally sensitive transportation system for the movement of people and goods identified in the City of San Gabriel General Plan and the City of Alhambra General Plan (see Section 2.1.1). Alternative 1 is not anticipated to affect location, distribution, density, or growth rate of the human population, and it would not support large commercial or residential development.

As previously mentioned, a portion of the project site is located within the Mission District Specific Plan Area. The Mission District Specific Plan, adopted in 2004, provides guidelines for the design and preservation of the historic core of the City of San Gabriel.<sup>3</sup> The portion of the proposed project that is located in the Mission District Specific Plan Area includes the Ramona Street and the Mission Road (or Junipero Serra) crossings. The Specific Plan states that existing configuration of the at-grade crossings contribute to traffic queuing and congestion with each train traveling through the area. The Specific Plan supports future railroad improvements to establish grade-separated crossings to relieve traffic hazards and to enhance the unique visual elements of the Mission District.<sup>4</sup> Section 3.6 Aesthetics includes a mitigation measure that would ensure that Alternative 1 is consistent with the Mission District Specific Plan related to the installation of landscaping and other new visual elements. Therefore, the Alternative 1 would be consistent with the Mission District Specific Plan goals. Less-than-significant impacts are anticipated related to consistency with local land use plans and policies.

### Alternative 2 – No Build Alternative

Under Alternative 2, the project site would not be substantially altered from existing conditions. Alternative 2 would not require any general plan amendments or construct elements that would result in inconsistency with the Mission District Specific Plan. Alternative 2 would not lower the existing railroad tracks into a trench configuration and would not improve the traffic hazards that currently exist at the at-grade crossings in the southern portion of the Mission District Specific Plan Area. However, although Alternative 2 is inconsistent with several of the general plan policies, Alternative 2 represents baseline conditions and would not include any direct actions. Less-than-significant impacts are anticipated related to consistency with local land use plans and policies.

See **Table 2.1-2** in Section 2.1.1 of this EIR/EA for a comparison of the project alternative with the goals and policies of both of these general plan documents.

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<sup>3</sup>City of San Gabriel, *Mission District Specific Plan*, adopted 2004.

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

## Regional Plans and Policies

### Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)

Several RCPG and RTP policies are potentially applicable to Alternative 1. **Table 2.1-3** outlines the consistency of Alternative 1 with SCAG's adopted RCPG and RTP policies. As shown in the table, Alternative 1 would be consistent with the goals of the RCPG and RTP. Alternative 1 would not exceed the population parameters established by SCAG. Additionally, Alternative 1 would not result in any significant unmitigated impacts that would burden the local or regional transportation system. Alternative 1 would lower a portion of the Alhambra Subdivision of the UPRR from an at-grade configuration to a trench or below-grade configuration, eliminating four at-grade crossings. Traffic and transportation hazards at these at-grade crossings would be reduced with Alternative 1. Therefore, no impacts related to consistency with regional plans and policies are anticipated.

### Alternative 2 – No Build Alternative

**Table 2.1-3** in section 2.1.1 Land Use, of this EIR/EA outlines the consistency of Alternative 2 with SCAG's adopted RCPG and RTP policies. As shown in the table, Alternative 2 would be consistent with the goals of the RCPG and RTP. Alternative 2 would not exceed the population parameters established by SCAG. Therefore, no impacts related to consistency with regional plans and policies are anticipated.

## Habitat Conservation Plan or Natural Community Conservation Plan

### Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)

As previously stated, no rare or endangered plant or animal species are known or suspected to exist within the City of Alhambra due to the extent of the development of the City.<sup>5</sup> The City of San Gabriel is also highly developed. There are no habitat conservation plans or natural community conservation plans that apply to the project area. Therefore, no impacts are anticipated related to consistency with a habitat conservation plan or natural community plan.

### Alternative 2 – No Build Alternative

Under Alternative 2, the project site would not be substantially altered from existing conditions and a habitat conservation plan or natural community plan does not exist within the project area. Therefore, no impacts are anticipated related to consistency with a habitat conservation plan or natural community plan.

## MITIGATION MEASURES

No mitigation measures are required. However, Section 3.6 Aesthetics provides mitigation measures to ensure that Alternative 1 would comply with the City of San Gabriel Mission District Specific Plan.

## LEVEL OF IMPACT AFTER MITIGATION

### Division of Established Community and Land Use Compatibility.

Not applicable.

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<sup>5</sup>City of Alhambra, *City of Alhambra General Plan (1986)*.

**Local Land Use Plans and Policies.**

Not applicable.

**Regional Plans and Policies.**

Not applicable.

**Habitat Conservation Plan or Natural Community Conservation Plan.**

Not applicable.

## **3.2 PARKS AND RECREATIONAL FACILITIES**

### **EXISTING SETTING**

Please refer to Section 2.1.2, Recreation, for a detailed description of the environmental and regulatory setting.

### **CEQA SIGNIFICANCE CRITERIA**

The proposed project alternatives would have a significant impact if the proposed project alternatives:

- Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated; or
- Require the construction or expansion of recreational facilities, which might have an adverse physical effect on the environment.

### **IMPACTS**

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The proposed project would involve construction of a trench that would separate the train tracks from the at-grade roadways crossings at Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard. Currently, because these streets cross the UPRR tracks at-grade, queuing of traffic occurs when the trains are passing. Additionally, the at-grade crossings at Ramona Street and Del Mar Avenue are a safety hazard for pedestrians accessing the parks and recreation centers on the north side of the tracks. During construction of the bridge structures across each of the four at-grade crossings (Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard), streets would be alternately closed and traffic would be detoured onto adjacent streets. The closing of any of these streets, particularly Ramona Street and Del Mar Avenue, would impact pedestrian and vehicular access to the Plaza Park, Smith Park, Grapevine Picnic Area, Adult Recreation Center and Senior Center, and the Community Recreation Center, as well as the non-profit Asian Youth Center. However, sufficient alternate access would remain; in particular, pedestrian crossing would be available during construction to ensure access to recreational and school facilities during project construction. The disruption or loss of access to existing parks during project construction would be a potentially significant impact.

During operation of the proposed project, the provision of a grade separation of the four street crossings of the UPRR tracks would improve safety and reduce the potential for train-related incidents (pedestrian and vehicular) and improve pedestrian access to almost all of the parks and recreation centers listed in **Tables 2.1-4** and **2.1-5**. Less-than-significant impacts associated with access to parks and recreational facilities are anticipated.

There are six public parks, a municipal golf course, and a public community garden located within a half-mile of the project site (Table 2.1-4 in Section 2.1.1a). Additionally, there are four public recreation centers within a half-mile of the project site (Table 2.1-5 in Section 2.1.1a). However, as there are no residential elements associated with the proposed project (which would increase the resident population), increased demand for parks and recreational services is not anticipated. As such, no impacts associated with increased demand for parks and recreational services are anticipated.

### **Alternative 2 – No Build Alternative**

Under Alternative 2, the project site would not be substantially altered from existing conditions and no impacts are anticipated related to parks and recreational facilities.

### **MITIGATION MEASURES**

**RE1** Prior to project construction, ACE shall submit the street closure schedule and detour plan to the Departments of Parks and Recreation of the Cities of San Gabriel, Alhambra, and Rosemead.

**RE2** ACE shall consult with the City of San Gabriel Department of Parks and Recreation administration and the City of Alhambra regarding pedestrian and vehicle access routes. Pedestrians and vehicles shall be directed to use alternate routes during construction through clear, well-posted signage. The signage shall be posted prior to detour implementation. Additionally, detour information shall be made available to the public via all available media, including, but not limited to printed notices, the Internet, and local television and radio.

### **LEVEL OF IMPACT AFTER MITIGATION**

Impacts to parks and recreation centers are anticipated to be less-than-significant after implementation of Mitigation Measures **RE1** and **RE2**.

### **3.1.3 POPULATION, HOUSING AND EMPLOYMENT**

#### **EXISTING SETTING**

Please refer to Section 2.1.3 Population, Housing and Employment Growth, for a detailed description of the environmental and regulatory setting.

#### **CEQA SIGNIFICANCE CRITERIA**

The proposed project would have a significant impact if the proposed project would:

- Stimulate substantial population growth beyond levels anticipated in existing, long-term growth projections for the Cities of San Gabriel and Alhambra;
- Stimulate substantial housing growth beyond levels anticipated in existing, long-term growth projections for the Cities of San Gabriel and Alhambra;
- Stimulate substantial employment growth beyond levels anticipated in existing, long-term growth projections for the Cities of San Gabriel and Alhambra; and/or
- Displace population and/or demolish or remove housing units, convert housing units to market-rate, or result in a loss of affordable housing units.

**IMPACTS**

**Population**

**Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Implementation of the proposed project would include the construction of a depressed trench that would cross beneath four roadways in the City of San Gabriel. There is no housing associated with the new construction, and therefore, no potential increase in resident population. Therefore, less-than-significant impacts associated with population growth are anticipated.

The construction of the trench would involve the displacement of one single-family home that illegally encroaches into the UPRR right-of-way and one residence associated with a storage facility that will be removed to accommodate the proposed project. In addition, two single-family homes have ancillary structures, such as awnings or patios that encroach into the UPRR right-of-way. As the project will require use of the full 100-foot right-of-way, these ancillary structures will be removed to accommodate the proposed project. All of these residences are located in the City of San Gabriel (**Table 3-1**). Although it is unlikely that the residents of the structures where only a portion of the site will be removed will need to be relocated, this analysis assumes that all of the affected residences will be displaced. Of these four residences, three are currently occupied. According to the San Gabriel Trench Relocation Impact Report, there are at least three persons occupying two of the single-family residences.<sup>6</sup> However, the number of persons in the third occupied single-family home was not ascertained during the field inspection. Based on the 2000 U.S. Census, there are an average of 3.10 persons per household in the City of San Gabriel. Using this estimate, approximately three persons would occupy the third household to be displaced. In total, the number of residents that the proposed project would displace is six. Therefore, the proposed project would reduce the residential population by approximately six persons out of the total 44,605 projected in 2015 for the City of San Gabriel. As discussed in the Relocation Impact Report, there exists available replacement housing for the displaced residents within the City of San Gabriel, and, as projected by SCAG, an additional 760 units are anticipated in 2015. Therefore, with the implementation of the Relocation Assistance Program by ACE, less-than-significant impacts associated with population displacement are anticipated.

**Alternative 2 – No Build Alternative**

Under Alternative 2, the project site would not be substantially altered from existing conditions. No impacts related to population would occur.

<b>TABLE 3-1: PARCELS POTENTIALLY DISPLACED – RESIDENTIAL</b>			
<b>Assessor's Parcel Number</b>	<b>Parcel Location</b>	<b>Occupied or Vacant</b>	<b>Number of Occupants</b>
5368-001-006	313 E. Main Street	Occupied	1
5368-001-034	325 E. Main Street (partial)	Vacant	0
5368-001-003	327 E. Main Street (partial)	Occupied	2
5362-017-002	405 S. Del Mar Ave	Occupied	3 /a/
/a/ Estimated using the average household size per the 2000 U.S. Census (3.10 for the City of San Gabriel).			
SOURCE: Alameda Corridor-East Construction Authority, <i>Relocation Impact Report for San Gabriel Trench Project, City of San Gabriel</i> , 2003, Updated 2007.			

<sup>6</sup>Alameda Corridor-East Construction Authority, *Draft Relocation Impact Report for San Gabriel Trench Project City of San Gabriel*, August 2003, Revised September 28, 2007.

## Housing

### Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)

Implementation of the proposed project would include the construction of a depressed trench that would cross beneath four roadways in the City of San Gabriel. There is no housing associated with the new construction. Therefore, less-than-significant impacts associated with housing growth are anticipated.

The construction of the trench would involve the displacement of two residences (one single family home and one manager's unit associated with a storage facility). An additional two single-family homes may be impacted through the removal of ancillary structures that encroach into the UPRR right-of-way (**Table 3-1**). Of these four residences, three are currently occupied.<sup>7</sup> The loss of four units comprises less than one percent of the total housing that exists in the City of San Gabriel. Additionally, by 2015, SCAG estimates that there would be an additional 760 housing units available in the City of San Gabriel. None of the housing that would be displaced is subsidized housing. Therefore, with implementation of the Relocation Assistance Program, less-than-significant impacts associated with housing displacement are anticipated.

### Alternative 2 – No Build Alternative

Under Alternative 2, the project site would not be substantially altered from existing conditions. No impacts related to housing would occur.

## Employment

### Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)

Implementation of the proposed project would include the construction of a depressed trench that would cross beneath four roadways in the City of San Gabriel. The proposed project would generate construction employment opportunities for residents in the surrounding cities. As such, the proposed project would provide a benefit to the communities around the project site by increasing employment. However, these construction jobs would be temporary, lasting only as long as the proposed project is under construction, which is approximately five years. The additional employment created by the proposed project is not anticipated to comprise a large percentage of the SCAG estimated local employment. Therefore, less-than-significant impacts associated with employment growth are anticipated.

The construction of the trench would involve the displacement of three businesses in the City of San Gabriel (**Table 3-2**).<sup>8</sup> These three businesses are mostly light industrial, and they employ approximately 38 persons. This comprises approximately less than one percent of the existing employment in the City of San Gabriel. The Relocation Impact Report concluded (after the assessments conducted with the businesses that would be displaced) that most of these businesses would retain their entire staff upon relocation. As such, there would be no net loss of employment due to the displacement of most of the businesses. In order to facilitate this, the Relocation Assistance Program would be implemented. Additionally, by 2015, SCAG estimates that there would be an additional 642 jobs available in the City of San Gabriel, and 1,256 jobs in neighboring City of Alhambra. There are more jobs projected than number of jobs potentially lost due to the proposed project. Therefore, with implementation of the Relocation Assistance Program, less-than-significant impacts associated with employment displacement are anticipated.

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<sup>7</sup>Alameda Corridor-East Construction Authority, *Draft Relocation Impact Report for San Gabriel Trench Project City of San Gabriel*, August 2003, Revised September 28, 2007.

<sup>8</sup>Alameda Corridor-East Construction Authority, *Draft Relocation Impact Report for San Gabriel Trench Project City of San Gabriel*, August 2003, Revised September 28, 2007.

**Alternative 2 – No Build Alternative**

Under Alternative 2, the project site would not be substantially altered from existing conditions. No impacts related to employment would occur.

<b>TABLE 3-2: PARCELS POTENTIALLY DISPLACED – COMMERCIAL</b>				
<b>Assessor’s Parcel Number</b>	<b>Parcel Location</b>	<b>Businesses Displaced</b>	<b>Type of Business</b>	<b>Number of Employees</b>
5362-017-002	405 S. Del Mar Ave	1	Storage Units	14 /a/
5367-027-054	330 S. Del Mar Ave	1	Car Repair Shop	14
5367-027-057	130 Agostino Rd	2	Car Repair Shop	10
<b>Total Existing Businesses</b>		<b>3 /b/</b>	<b>Total Employees</b>	<b>38</b>
<small>/a/ Number of employees not known for storage units of 85,000 square feet or approximately 2 acres. The number of employees was calculated based on employee per acre relationship for Los Angeles County from the 2001 SCAG Employment Density Study. For a storage unit business, the standard is 7.04 employees per acre, which would result in approximately 14 employees.                      /b/ Total Existing Businesses excludes the three vacant parcels.  <b>SOURCE:</b> Del Richardson Associates, <i>Relocation Impact Report for San Gabriel Trench Project, City of San Gabriel, 2003, Updated 2007 and Southern California Association of Governments, Employment Density Study, 2001.</i> </small>				

**MITIGATION MEASURES**

**PHE1** ACE shall comply with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, in the relocation of the displaced residents and businesses. A Relocation Assistance Program will be developed for the displaced residents and businesses. The Relocation Assistance Program shall set forth procedures for the fair, uniform, and equitable treatment of persons and businesses displaced from their dwellings regardless of race, ethnicity, income, or age. Moving expenses will be reimbursed for actual and related costs incurred in moving. In cases where relocation will be necessary for right-of-way acquisition, a decision on relocation will be reviewed with each residence or business owner to ensure that they are aware of all of the opportunities. Suitable facilities for relocation existing in the general area will be sought. The following outlines the relocation process for business relocations:

- Take surveys to determine needs in a replacement site;
- Prepare and send general information notices;
- Search market for available sites;
- Prepare and send Letter of Eligibility advising displacee of relocation assistance;
- Take inventory of properties for moving estimates;
- Obtain moving bids, if displacee chooses a commercial move;
- Prepare claim forms for displacee’s signature;
- Have claim forms signed by displacee;
- Send a 90-day Notice to Vacate, if applicable;
- Prepare and route a check request for moving expenses; and
- Arrange for the property to be secured until demolition (fencing, boarding up).

**LEVEL OF IMPACT AFTER MITIGATION**

**Population**

Impacts associated with population growth were considered less-than-significant without mitigation.



### Housing

Impacts associated with population growth were considered less-than-significant without mitigation. After implementation of Mitigation Measure **PHE1**, the proposed project will have less-than-significant impacts associated with population displacement.

### Employment

Impacts associated with employment growth were considered less-than-significant without mitigation. After implementation of Mitigation Measure **PHE1**, the proposed project will have less-than-significant impacts associated with employment displacement.

## 3.3 PUBLIC SERVICES

### EXISTING SETTING

Please also refer to Section 2.1.6 Public Services for a detailed description of the environmental and regulatory setting.

<b>TABLE 3-3: PUBLIC SCHOOLS LOCATED WITHIN ½-MILE OF THE PROJECT SITE</b>		
<b>School Name</b>	<b>Location</b>	<b>School District</b>
<b>Elementary Schools</b>		
Roosevelt Elementary	401 S. Walnut Grove Avenue, San Gabriel	San Gabriel Unified
Granada Elementary	100 S. Granada Avenue, Alhambra	Alhambra Unified
Martha Baldwin Elementary	900 S. Almansor Street, Alhambra	Alhambra Unified
<b>High Schools</b>		
San Gabriel High School	801 S. Ramona Street, San Gabriel	Alhambra Unified
Del Mar High School	312 S. Del Mar Avenue, San Gabriel	San Gabriel Unified
<b>SOURCE:</b> Websites from the Alhambra Unified School District, and the San Gabriel Unified School District, and TAHA 2008.		

### Public Schools

Of the schools located in the vicinity of the proposed project, only San Gabriel High School is located adjacent to the UPRR ROW.

### Public Libraries

The project site is located primarily within the City of San Gabriel. However, construction activities would take place in the Cities of Alhambra, San Gabriel, and Rosemead. **Table 3-4** lists the libraries in these jurisdictions located in the vicinity of the project site. **Figure 2.1-3** shows the location of these libraries.

<b>TABLE 3-4: LIBRARIES LOCATED IN THE VICINITY OF THE PROJECT SITE</b>		
<b>Station</b>	<b>Location</b>	<b>Distance from Project Site (Miles)</b>
San Gabriel Public Library (Los Angeles County)	500 S. Del Mar Avenue, San Gabriel	0.13
Alhambra Civic Center Library	101 S. First Street, Alhambra	1.0
Rosemead Public Library (Los Angeles County)	8800 Valley Boulevard, Rosemead	1.22
Temple City Public Library (Los Angeles County)	5939 Golden West Avenue, Temple City	2.18
<b>SOURCE:</b> Websites from the City of Alhambra and the Los Angeles County Public Library, and TAHA 2008.		

The San Gabriel Public Library, which is part of the Los Angeles County Library system, is located less than one-quarter-mile from the proposed project. All other libraries in the vicinity of the proposed project are located at least one mile from the project site.

**CEQA SIGNIFICANCE CRITERIA**

The proposed project alternatives would have a significant impact if the proposed project alternatives:

- Result in the need for new or altered fire protection or paramedic services;
- Result in a need for new or altered police protection;
- Result in a need for new public schools; or
- Result in a need for other public facilities, such as libraries.

**IMPACTS**

**Fire Protection and Emergency Services**

**Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The proposed project would involve construction of a trench that would separate the train tracks from the at-grade roadways crossings at Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard. Currently, because these streets cross the UPRR tracks at-grade, queuing of traffic occurs when the trains are passing. During construction of the bridges across each of the four at-grade crossings (Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard), these streets would be alternately closed and traffic would be detoured onto adjacent streets. Although three of the four crossings would remain open during construction as part of this detour plan, potential impacts to response time could occur due to the increased congestion on the other streets that remain open. In particular, the closure of or detour onto Del Mar Avenue, which is where both SGFD fire stations are located, could potentially delay fire emergency response times. As such, potentially significant impacts associated with fire emergency response times are anticipated during construction of the proposed project.

During operation of the proposed project, the provision of a grade separation of the four street crossings of the UPRR tracks would enhance response times for fire emergency services by enabling emergency vehicles to cross over the railroad tracks in the project area at the same time that trains are passing through. As such, a less-than-significant impact associated with fire emergency response times is anticipated during operations of the proposed project.

There are seven fire stations within two miles of the proposed project (**Table 2.1-17**). As such, adequate fire emergency service facilities exist that would serve the proposed project. Additionally, there are no residential or commercial structures associated with the proposed project that would increase the resident population or the daytime employed population. Therefore, the need for additional fire emergency service facilities is not anticipated. It is anticipated that the proposed project will include safety and security

elements to restrict general access (fences) but allow emergency access to the trench (gates, ramps). Nevertheless, an Emergency Response Plan would be necessary to assist local fire emergency respondents in the event of emergencies within the trench. As such less-than-significant impacts associated with increased fire service facilities are anticipated.

### **Alternative 2 – No Build Alternative**

Under Alternative 2, the project site would not be substantially altered from existing conditions. No impacts related to fire protection and emergency services would occur.

### **Police Protection**

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The proposed project would involve construction of a trench that would separate the train tracks from the at-grade roadway crossings at Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard. Currently, because these streets cross the UPRR tracks at-grade, queuing of traffic occurs when the trains are passing. During construction of the bridges across each of the four at-grade crossings (Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard), these streets would be alternately closed and traffic would be detoured onto adjacent streets. Although three of the four crossings would remain open during construction as part of this detour plan, potential impacts to police response times could occur due to the increased congestion on the other streets that remain open. In particular, the closure of or detour onto Del Mar Avenue, which is where the SGPD headquarters is located, could potentially delay police emergency response times. As such, potentially significant impacts associated with police emergency response times are anticipated during construction of the proposed project.

During operation of the proposed project, the provision of a grade separation of the four street crossings of the UPRR tracks would enhance response times for police emergency services by enabling emergency vehicles to cross over the railroad tracks in the project area at the same time that trains are passing through. As such, a less-than-significant impact associated with police emergency response times is anticipated during operations of the proposed project.

There are three police jurisdictions within a mile from the proposed project (**Table 2.1-18**). As such, adequate police service facilities exist that would serve the proposed project. Additionally, there are no residential or commercial structures associated with the proposed project that would increase the resident population or the daytime employed population. Therefore, the need for additional police service facilities is not anticipated. It is anticipated that the proposed project will include safety and security elements to restrict general access (fences) but allow emergency access to the trench (gates, ramps). Nevertheless, an Emergency Response Plan would be necessary to assist local police emergency respondents in the event of emergencies within the trench. As such less-than-significant impacts associated with increased police service facilities are anticipated.

### **Alternative 2 – No Build Alternative**

Under Alternative 2, the project site would not be substantially altered from existing conditions. No impacts related to police protection would occur.

## **Public Schools**

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The proposed project would involve construction of a trench that would separate the train tracks from the at-grade roadways crossings at Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard. Currently, because these streets cross the UPRR tracks at-grade, queuing of traffic occurs when the trains are passing. Additionally, the at-grade crossing of Ramona Street is a safety hazard for the students at San Gabriel High School and school buses that utilize this street for dropping off and picking up students. During construction of the bridges across each of the four at-grade crossings (Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard), these streets would be alternately closed and traffic would be detoured onto adjacent streets. The closing of any of these streets, particularly Ramona Street, would impact student drop-off and pick-up, from private vehicles and school buses. Although vehicular access would be restricted during construction, pedestrian access would be maintained at each of the crossing sites. Nonetheless, potentially significant impacts associated with access to schools are anticipated during construction of the proposed project.

During operation of the proposed project, the provision of a grade separation of the four street crossings of the UPRR tracks would improve safety and reduce the potential for train-related incidents, pedestrian and vehicular. Additionally, the lack of queuing is anticipated to improve drop-off and pick-up operations at the school. As the trains would no longer need to sound their whistle when they approach the Ramona Street intersection, surrounding noise levels at the school would decrease. As such, a less-than-significant impact associated with access to schools is anticipated during operations of the proposed project.

There are three elementary schools and two high schools within a half-mile of the project site (**Table 3-3**). However, as there are no residential elements associated with the proposed project (which would increase the resident population), increased demand for school services is not anticipated. As such, no impacts associated with increased demand for schools are anticipated.

### **Alternative 2 – No Build Alternative**

Under Alternative 2, the project site would not be substantially altered from existing conditions. No impacts related to school services would occur.

## **Public Libraries**

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The proposed project would involve construction of a trench that would separate the train tracks from the at-grade roadways crossings at Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard. Currently, because these streets cross the UPRR tracks at-grade, queuing of traffic occurs when the trains are passing. Additionally, the at-grade crossing of Del Mar Avenue is a safety hazard for pedestrians accessing the San Gabriel Public Library. During construction of the bridges across each of the four at-grade crossings (Ramona Street, Del Mar Avenue, Mission Road, and San Gabriel Boulevard), these streets would be alternately closed and traffic would be detoured onto adjacent streets. The closing of any of these streets, particularly Del Mar Avenue, would impact access to the San Gabriel Public Library. Additionally, pedestrian access across the UPRR tracks would be impacted while the Del Mar Avenue bridge is being constructed. As such, potentially significant impacts associated with access to library services are anticipated during construction of the proposed project.

During operation of the proposed project, the provision of a grade separation of the four street crossings of the UPRR tracks would improve safety and reduce the potential for train-related incidents (pedestrian and vehicular) and improve pedestrian access to the San Gabriel Public Library. As the trains would no longer need to sound their whistle when they approach the Del Mar Avenue intersection, surrounding noise levels in the vicinity of the San Gabriel Public Library would decrease. As such, a less-than-significant impact associated with access to libraries is anticipated during operations of the proposed project.

There are three public libraries located within two miles of the project site (**Table 3-4**). However, as there are no residential elements associated with the proposed project (which would increase the resident population), increased demand for library services is not anticipated. As such, no impacts associated with increased demand for libraries are anticipated.

### **Alternative 2 – No Build Alternative**

Under Alternative 2, the project site would not be substantially altered from existing conditions. No impacts related to library services would occur.

## **MITIGATION MEASURES**

### **Fire Protection and Emergency Services**

- PS1** ACE shall submit for review and approval the construction plans to the San Gabriel Fire Department, the Alhambra Fire Department, and the Los Angeles County Fire Department.
- PS2** ACE shall submit for review and approval the detour plans and sequence of street closures to the San Gabriel Fire Department, the Alhambra Fire Department, and the Los Angeles County Fire Department. During construction of the proposed project, ACE shall remain in close contact with these Fire Departments and keep them apprised of work progress and any changes to the closure and detour plans and schedules.
- PS3** ACE shall create an Emergency Response Plan for the proposed project. ACE shall submit the Emergency Response Plan for review and approval to the San Gabriel Fire Department, the Alhambra Fire Department, and the Los Angeles County Fire Department.

### **Police Protection**

- PS4** ACE shall consult with the San Gabriel Police Department, the Alhambra Police Department, and the Los Angeles County Sheriff's Department regarding safety elements that can be implemented in the design of the proposed project.
- PS5** ACE shall submit for review and approval the detour plans and sequence of street closures to the San Gabriel Police Department, the Alhambra Police Department, and the Los Angeles County Sheriff's Department. During construction of the proposed project, ACE shall remain in close contact with these Police Departments and keep them apprised of work progress and any changes to the closure and detour plans and schedules.
- PS6** ACE shall create an Emergency Response Plan for the proposed project. ACE shall submit the Emergency Response Plan for review and approval to the San Gabriel Police Department, the Alhambra Police Department, and the Los Angeles County Sheriff's Department.

### Public Schools

**PS7** ACE shall submit the street closure schedule and detour plan to San Gabriel High School, as well as the Alhambra Unified School District and the San Gabriel Unified School District.

**PS8** Construction of the Ramona Street bridge shall be scheduled during the summer period when San Gabriel High School is not in session. If construction cannot be completed during this time period, ACE shall consult with San Gabriel High School administration regarding alternate pedestrian, vehicle, and school bus routes to school. Pedestrians, vehicles, and school buses shall be directed to use alternate routes during construction through clear, well-posted signage. The signage shall be posted prior to detour implementation. Additionally, San Gabriel High School students shall be educated and informed of the alternate routes prior to implementation of the detour routes.

### Public Libraries

**PS9** ACE shall submit the street closure schedule and detour plan to San Gabriel Public Library.

**PS10** ACE shall consult with the San Gabriel Public Library administration regarding alternate pedestrian and vehicle access routes. Pedestrians and vehicles shall be directed to use alternate routes during construction through clear, well-posted signage. The signage shall be posted prior to detour implementation. Additionally, detour information shall be made available to the public via all available media, including, but not limited to printed notices, the Internet, and local television and radio.

## LEVEL OF IMPACT AFTER MITIGATION

### Fire Protection and Emergency Services

Impacts are anticipated to be less-than-significant for fire emergency services after implementation of Mitigation Measures **PS1** through **PS3**.

### Police Protection

Impacts are anticipated to be less-than-significant for police protection services after implementation of Mitigation Measures **PS4** through **PS6**.

### Public Schools

Impacts to public schools are anticipated to be less-than-significant after implementation of Mitigation Measures **PS7** through **PS8**.

### Public Libraries

Impacts to public libraries are anticipated to be less-than-significant after implementation of Mitigation Measures **PS9** and **PS10**.

## 3.4 UTILITIES AND SERVICE SYSTEMS

### EXISTING SETTING

Please also refer to Section 2.1.7 Utilities for a detailed description of the environmental and regulatory setting.

## CEQA SIGNIFICANCE CRITERIA

The proposed project alternatives would have a significant impact if the proposed project would:

- Do not have sufficient water supplies available to serve them from existing entitlements and resources, or if new or expanded entitlements are needed;
- Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects;
- 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;
- Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board;
- Result in a determination by the wastewater treatment provider which 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;
- Would not be served by a landfill with sufficient permitted capacity to accommodate the proposed Project alternative's solid waste disposal needs; or
- Would not comply with federal, State, and local statutes and regulations related to solid waste.

## IMPACTS

### Water Supply

#### Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)

The proposed project would involve construction of a trench that would separate the train tracks from the at-grade roadways crossings at Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard. Neither construction nor operation of the proposed project would require infrastructure for the provision of water supply. Construction of the proposed project would be temporary and all water used for construction would be taken from existing water lines or imported onto the project site. During construction, water lines that cross the project site will need to be rerouted in order to maintain service. The rerouting of water lines would cause some disruption in water service, but this disruption would be temporary and done prior to major construction in the trench. However, water mains and lines and sewer/brine mains and lines owned by the City of Alhambra would not be relocated, as part of a Mitigation Agreement between ACE and the City of Alhambra. As such, Alhambra water mains and lines would not experience a disruption in service. The operation of the proposed project will not require water supply. Additionally, the proposed project does not include a housing element that would result in population growth and increased demand for water. Therefore, less-than-significant impacts related to water supply are anticipated.

#### Alternative 2 – No Build Alternative

Under Alternative 2, the project site would not be substantially altered from existing conditions. Water supply would not increase and infrastructure would not be disrupted or disturbed. No impacts related to water supply would occur.

## **Stormwater and Drainage**

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The proposed project would involve construction of a trench that would separate the train tracks from the at-grade roadways crossings at Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard. The proposed project is located in a fully developed, urbanized area and the construction of the proposed project would not add or reduce the amount of impervious surfaces to the area. Therefore, the proposed project would not increase substantially the amount of stormwater runoff in the project area. However, stormwater flow across the UPRR tracks would be disrupted by the proposed project during construction and operations. As stated above, the topography of the Cities of Alhambra and San Gabriel direct stormwater flow from north to south. The City of Alhambra has rerouted most of its drains towards the Alhambra Wash due to the depressed UPRR tracks and its associated trench structure. It is anticipated that the routing and collection of storm water and urban runoff within the basin tributary to Alhambra Wash will remain unchanged with the construction of the proposed project and no re-routing of existing storm drain systems will be required. However, there are two storm drain lines that cross the UPRR tracks in the City of San Gabriel. These storm drain lines are gravity-driven, and it is infeasible to redirect them beneath the trench. In order to maintain the drainage efficiency of these lines, new lines would need to be constructed that would bypass the trench and divert stormwater runoff directly to the Rubio Wash or the Alhambra Wash. This would be a potentially significant impact.

The Federal Clean Water Act, as amended, requires projects that disturb more than five acres of land to develop and implement a Stormwater Pollution Prevention Plan (SWPPP). The purpose of a SWPPP is to reduce the amount of construction-related pollutants that are transported by stormwater runoff to surface waters. During construction, the proposed project would implement a SWPPP to control stormwater runoff. Additionally, the proposed project would need to incorporate design elements in order to avoid flooding in the trench structure. As a result, impacts would be less-than-significant.

### **Alternative 2 – No Build Alternative**

Under Alternative 2, the project site would not be substantially altered from existing conditions. Stormwater and drainage patterns in the area would not be disrupted or disturbed. No impacts related to stormwater or drainage would occur.

## **Sewage and Wastewater Treatment**

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The proposed project would involve construction of a trench that would separate the train tracks from the at-grade roadways crossings at Ramona Street, Del Mar Avenue, Mission Road, and San Gabriel Boulevard. As mentioned earlier, the UPRR divides the City of San Gabriel into a northern and southern area and construction of the proposed project will restrict the ability of gravity utility systems, such as sanitary sewers, to convey sewage across the trench. The City of San Gabriel sanitary sewer systems currently conveys sewerage across the UPRR at the locations depicted in **Figure 2.1-4**. In addition, the LACSD has a main sewer trunk line located beneath Ramona Street that serves the City of San Marino to the north and an existing 27-inch diameter siphon that crosses Rubio Wash just north of the UPRR crossing of the Wash. Re-routing the sewer lines in a sewer main that parallels the trench to gravity flow around or under the proposed project is not practical and presents right of way and site constraints. Re-routing at the western end of the project site would result in sewer depths in excess of 25 to 35 feet and require approximately 2,500 to 3,000 lineal feet of deep sewer construction in existing streets before joining existing sewers south of the UPRR. Easements and/or ROW acquisition for the re-routing would be required. Similarly, re-routing at the eastern end of the project site would require agreements,



easements and/or ROW acquisition from Los Angeles County and the City of Rosemead as that portion near Walnut Grove Avenue, where the UPRR tracks would return at grade, is approximately a quarter-mile outside the City of San Gabriel city limits. The site conditions that constrain the re-routing approach include impacts to private property and the potential crossing of two major drainage channels (Alhambra & Rubio Washes). This would be a potentially significant impact.

The proposed project does not include a housing element, which would result in population growth and increased demand for wastewater infrastructure or wastewater treatment. Therefore, less-than-significant impacts are anticipated.

### **Alternative 2 – No Build Alternative**

Under Alternative 2, the project site would not be substantially altered from existing conditions. Sewage and wastewater patterns in the area would not be disrupted or disturbed. No impacts related to sewage or wastewater would occur.

### **Solid Waste**

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The proposed project would involve construction of a trench that would separate the train tracks from the at-grade roadways crossings at Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard. The proposed project is not anticipated to generate significant solid waste that would require additional disposal services either due to construction or operation. All debris that would be generated by the excavation and demolition of the proposed project would be hauled off-site by the contractor. Additionally, the proposed project does not include a housing element, which would result in population growth and increased demand for solid waste services. Impacts would be less-than-significant.

#### **Alternative 2 – No Build Alternative**

Under Alternative 2, the project site would not be substantially altered from existing conditions. No construction activities would occur that could generate solid waste. No impacts would occur.

### **MITIGATION MEASURES**

- US1** ACE shall work with affected utility companies to make use of available right-of-way as necessary. Relocation of utilities shall be scheduled to either precede construction or occur simultaneously. Customers shall be notified in advance of any disruptions to service.
- US2** Prior to project grading, in the event that City of Alhambra water lines to the Water Treatment Plant cross the UPRR tracks, ACE shall coordinate with the City of Alhambra to protect in place water mains and lines and sewer/brine lines owned by the City of Alhambra per the December 2009 Mitigation Agreement between the City of Alhambra and ACE.
- US3** ACE shall construct a new storm drain trunk line that will commence near Junipero Serra Drive and traverse easterly to Rubio Wash along Clary Avenue, Agostino Road and Commercial Ave. Portions of the proposed storm drain, particularly in the area of Clary Street to Agostino Road, will have depths ranging from 15 feet to 20 feet and new storm drains and inlet structures located near the north UPRR right of way will have reverse gradients in order to connect into the proposed trunk line.

**US4** ACE shall install a graded swale or earthen ditch between the UPRR northern right of way and south side of Mission Road between the Alhambra Wash and Ramona Street to ensure that a 100-year storm event does not impact the proposed project or Mission Road.

**US5** ACE shall install a sewer siphon system or a pump station system at strategic locations throughout the project area in order to connect the existing sewer lines on the northern side of the UPRR tracks with the southern side. ACE shall coordinate with the Cities of Alhambra and San Gabriel, as well as the Los Angeles County Sanitation Districts the exact location of these systems. ACE shall work closely with these agencies to ensure that efficient sewer capacity is achieved.

## **LEVEL OF IMPACT AFTER MITIGATION**

### **Water Supply**

Impacts associated with water supply would be less than significant.

### **Stormwater and Drainage**

Impacts associated with stormwater and drainage infrastructure would be considered less-than-significant after implementation of Mitigation Measures **US1**, **US3**, and **US4**.

### **Sewage and Wastewater**

Impacts associated with sewer infrastructure would be considered less-than-significant after implementation of Mitigation Measures **US1** and **US5**.

### **Solid Waste**

Not applicable.

## **3.5 TRAFFIC AND TRANSPORTATION**

### **EXISTING SETTING**

Please refer to Section 2.1.8, Traffic, for a detailed description of the environmental and regulatory setting.

### **CEQA SIGNIFICANCE CRITERIA**

The proposed project would result in a significant impact on traffic and parking if the following would occur:

- Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume-to-capacity ratio on roads, or congestion at intersections);
- Incrementally increase the V/C value on a roadway by 0.02 or higher or cause a worsening of LOS E or F;
- Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways;
- Result in inadequate parking capacity;

- Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, and bicycle racks);
- Remove or restrict pedestrian public access.

## **IMPACTS**

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The proposed project would eliminate four at-grade crossings in the City of San Gabriel. A trench and four overhead structures (i.e., road bridges) would be built to allow the train to pass under the roadway where it currently intersects with Ramona Street, Mission Road, Del Mar Avenue and San Gabriel Boulevard. Under the current configuration, vehicles traveling down each of these roads must stop to accommodate the train. As discussed previously, there is currently heavy traffic queuing in the project area on Mission Drive, Santa Anita Street, and Mission Road. The traffic queuing is further impacted by delays caused by trains traveling on the UPRR in its current at-grade configuration. Under current conditions, when traffic is stopped by a train traveling on the UPRR, the traffic queuing at Mission Drive and Mission Road extends past the Mission Drive/Santa Anita Street intersection. The intersections at Ramona Street, Del Mar Avenue and San Gabriel Boulevard experience similar queuing and delay. The length of time that a vehicle is stopped would vary and could range from just a few seconds (if they reach the intersection just as the train is departing) to several minutes (if they arrive at the intersection as crossing arms go down). This current configuration leads to vehicle delay and adds to total delay and congestion in the area. Implementation of the proposed project would eliminate this delay and alleviate congestion on surrounding streets. This would be a beneficial impact.

### **Alternative 2 – No Build Alternative**

Under Alternative 2, the proposed project would not be built. Existing conditions would continue to persist at the project site. As traffic on local roadways increases (as population increases and as development occurs), congestion at the four crossing would continue to deteriorate. As such, continued impacts associated with increased traffic volumes and congestion are anticipated for Alternative 2.

## **Congestion Management Program**

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

As discussed in the Existing Settings, the CMP traffic impact analysis guidelines require analyses of all CMP monitoring intersections where a project could add a total of 50 or more trips during either the AM or PM peak hours. Additionally, all freeway segments where a project could add 150 or more trips in either direction during the peak hours must be analyzed. The proposed project would involve construction of a trench that would separate the train tracks from the at-grade roadways crossings at Ramona Street, Del Mar Avenue, Mission Road, and San Gabriel Boulevard. The proposed project itself would not generate any additional trips. Therefore, no impacts associated with CMP analysis are anticipated for the proposed project.

### **Alternative 2 – No Build Alternative**

The No Project Alternative would not construct a trench to separate the train tracks from the at-grade roadways crossings at Ramona Street, Del Mar Avenue, Mission Road, and San Gabriel Boulevard. Therefore, further CMP analysis is not required.

## **Parking**

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The proposed project would involve construction of a trench that would separate the train tracks from the at-grade roadways crossings at Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard. The proposed project is not anticipated to permanently remove or restrict parking on any of the streets in the vicinity of the project area. Temporary closures of the at-grade intersections may restrict parking on some streets, but the parking would be made available upon completion of the proposed project. In addition, the proposed project does not include a residential or commercial aspect and would not provide a transit station. Thus, parking spaces are not required as part of the proposed project. Therefore, less-than-significant impacts associated with parking are anticipated for the proposed project.

### **Alternative 2 – No Build Alternative**

The No Build Alternative would not construct a trench to separate the train tracks from the at-grade roadways crossings at Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard. There is no construction associated with the No Build Alternative and, therefore, no street closures that could temporarily restrict parking. The No Build would not add parking to the project area. Therefore, no impacts associated with parking are anticipated for the No Build Alternative.

## **Transit Service**

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

As discussed in the existing settings, there are three transit lines (Metro Lines 176 and 487; Montebello Transit Line 20) that utilize some of the at-grade crossings that would be alternately closed during the proposed project construction. Specifically, Metro Line 487 would be affected by the temporary closure of Ramona Street, Metro Line 176 would be affected by the temporary closure of Mission Road, and Montebello Line 20 would be affected by the construction work on San Gabriel Boulevard. Ramona Street and Mission Road are anticipated to be full street closures and Metro Lines 176 and 487 would need to be re-routed to adjacent streets. San Gabriel Boulevard would be partially closed for construction, so Montebello Line 20 would not require detouring. The Draft Traffic Management Plan for the project evaluated this impact and determined passengers would have to walk a maximum distance of 1/2-mile. This would be within a typical walking distance. As such, impacts to transit service would be less-than-significant.

### **Alternative 2 – No Build Alternative**

The No Build Alternative would not construct a trench to separate the train tracks from the at-grade roadways crossings at Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard. There is no construction associated with the No Build Alternative and, therefore, no street closures that would affect existing transit service. Therefore, no impacts associated with transit service are anticipated for the No Build Alternative.

## **Pedestrian Access**

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The proposed project would involve construction of a trench that would separate the train tracks from the at-grade roadways crossings at Ramona Street, Del Mar Avenue, Mission Road, and San Gabriel Boulevard. During construction, it is anticipated that one of these crossings would be alternately closed

to vehicular traffic. Pedestrian access would be maintained at each of the crossings during construction. As such, impacts would be less-than-significant.

During operation of the proposed project, pedestrian access would be improved due to the elimination of the at-grade crossings and the potential conflicts between trains and pedestrians. Also, formal sidewalks would be installed separating pedestrian traffic from vehicular traffic. Therefore, beneficial impacts to pedestrian access are anticipated for the proposed project.

### **Alternative 2 – No Build Alternative**

The No Build Alternative would not construct a trench to separate the train tracks from the at-grade roadways crossings at Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard. There is no construction associated with the No Build Alternative and, therefore, no street closures that would affect pedestrian access. Therefore, no impacts associated with pedestrian access are anticipated for the No Build Alternative.

### **MITIGATION MEASURES**

- TT1** ACE shall develop a transit detour plan for Metro Lines 176 and 487 in close consultation with Metro to ensure minimal disruption to services. In particular, it is probable that students at San Gabriel High School and other schools in the area use these routes. Construction of at least one of these streets should be scheduled for the summer period, when school is not in session.
- TT2** ACE shall develop either a transit detour plan or a reduced frequency plan for Montebello Line 20 in close consultation with the City of Montebello to ensure minimal disruption to services.
- TT3** ACE shall provide pedestrian access across Ramona Street, Mission Road, Del Mar Avenue, San Gabriel Boulevard, and Walnut Grove Avenue during construction. Safe crossing measures shall be incorporated such as crossing warning signals, gates, and signage. Pedestrian access shall be maintained throughout the construction of the intersections.

### **LEVEL OF IMPACT AFTER MITIGATION**

#### **Intersection Analysis**

Impacts associated with traffic congestion are anticipated to be beneficial for the proposed project.

#### **Congestion Management Program**

Not applicable.

#### **Parking**

Not applicable.

#### **Transit Service**

Impacts associated with transit service are anticipated to be less-than-significant after implementation of Mitigation Measures **TT1** and **TT2**.

## **Pedestrian Access**

Impacts associated with pedestrian access during operation of the proposed project are considered to be beneficial.

## **3.6 AESTHETICS**

### **EXISTING SETTING**

Please refer to Section 2.1.9, Visual/Aesthetic Resources, for a detailed description of the environmental and regulatory setting.

### **CEQA SIGNIFICANCE CRITERIA**

The proposed project would have a significant impact related to aesthetics if the project would:

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

### **IMPACTS**

#### **Visual Character**

##### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Alternative 1 would grade separate the existing Alhambra Subdivision of the UPRR in the Cities of San Gabriel and Alhambra. The grade separation at Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard would be achieved by lowering the track under these crossings in a trench and constructing bridges over the railroad at each location. The Rubio Wash would be lowered to accommodate the trench profile and a box culvert would be required at this location during construction. A railroad bridge or box culvert would be constructed over the Alhambra Wash.

Alternative 1 would not introduce substantial new visual elements that would alter or contrast with the visual character of the project area. An approximately two-foot tall concrete barrier and four-foot tall fence would be installed at-grade on both sides of the proposed trench. This would be similar to the fences and concrete walls that currently divide the UPRR right-of-way from adjacent industrial and residential properties. Although existing landscaping within the UPRR right-of-way would likely be removed with Alternative 1, new landscaping and other visual amenities would be included at-grade with Alternative 2, which would improve the visual character of the UPRR right-of-way to be more consistent with the visual character of the Mission District.

The overhead bridge structures proposed at Ramona Street, Mission Road, Del Mar Avenue, San Gabriel Boulevard, and the Alhambra Wash would be at-grade or street level and would be virtually flat with no noticeable crest. Each vehicular bridge structure would include ample public sidewalk space of at least 11 feet in width. Sidewalks for the overhead structures proposed at Ramona Street and Mission Road would be up to three feet wider than the existing public sidewalks at these locations.

Alternative 1 would not result in a visual contrast with the existing buildings and the visual character in the project area. In addition, Alternative 1 would be consistent with the City of San Gabriel General Plan, City of San Gabriel Mission District Specific Plan, and City of Alhambra General Plan, which support the

grade separation of the UPRR railroad in order to improve traffic conditions and visual character. With implementation of all applicable engineering and design specifications, less-than-significant impacts related to visual character are anticipated. However, to ensure that impacts remain less-than-significant, and that Alternative 1 is constructed in compliance with the City of San Gabriel Mission District Specific Plan, recommended mitigation measures are provided below.

### **Alternative 2 – No Build Alternative**

Under Alternative 2, the project site would not be substantially altered from existing conditions. Therefore, no impacts are anticipated related to visual character.

### **Views and Vistas**

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The primary view of interest from the project area consists of the San Gabriel Mountains located six miles north of the project site. As previously mentioned, the existing view corridors of the San Gabriel Mountains are located along Ramona Street, Del Mar Avenue, San Gabriel Boulevard, and Walnut Grove Avenue in the project area. A significant change to the view corridors is not anticipated because Alternative 1 would not construct any new structures that would be of sufficient height to block existing north-facing views. As previously mentioned, Alternative 1 would include an approximately two-foot tall concrete barrier and six-foot tall fence located at-grade on both sides of the proposed trench. These new elements would not be tall enough to block or disrupt the existing view of the San Gabriel Mountains. In addition, the existing disrupted view of the San Gabriel Mission from the single-family residential area located south of the project site would be improved with the likely removal of existing landscaping and bushes in the right-of-way. However, the new landscaping installed with Alternative 1 may disrupt this view, which would not be a substantial change of existing conditions. Alternative 1 would not introduce new visual elements at-grade that would block or disrupt the view of the Alhambra Municipal Golf Course from motorists and pedestrians on Mission Road, as well as the residential neighborhood located to the north. Therefore, less-than-significant impacts are anticipated related to view and vistas.

### **Alternative 2 – No Build Alternative**

Under Alternative 2, the project site would not be substantially altered from existing conditions. Therefore, no impacts are anticipated related to views and vistas.

### **Scenic Resources**

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

As previously mentioned, the nearest scenic highway to the project site is State Route 2, north of State Route 210 in La Canada Flintridge, located approximately nine miles northwest of the project site. Therefore, Alternative 1 would not degrade any scenic resources within a state scenic highway. The San Gabriel Mission and Alhambra Municipal Golf Course are considered to be scenic resources, although they are not located within a scenic highway. However, as described above, views of these scenic resources would not be substantially altered from existing conditions. The view corridors in the project area mentioned above would be considered a scenic resource. However, as previously discussed, the proposed project would not significantly impact these existing view corridors. Therefore, no impact to a scenic resource within a State scenic highway, or any scenic resources in the project area are anticipated.

### **Alternative 2 – No Build Alternative**

Under Alternative 2, the project site would not be substantially altered from existing conditions. Therefore, no impacts are anticipated related to scenic resources.

#### **Light and Glare**

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The project site is located in an industrial and residential section of the Cities of San Gabriel and Alhambra. The project area currently has a high level of ambient lighting. The proposed project would include security lighting within the trench. The street lighting on the new bridges would be compatible with the surrounding urban area and typical of street lighting in the vicinity and would not expose the surrounding areas to spillover light. In accordance with the City of San Gabriel Mission District Specific Plan, the overhead structure proposed at Ramona Street would include pedestrian level lamppost lighting similar to the existing pedestrian level lighting in the Mission District, adjacent to the San Gabriel Mission and San Gabriel City Hall complexes. With implementation of all applicable local requirements related to exterior lighting and/or railroad trench security lighting, any potential lighting impacts would be less-than-significant levels. However, to ensure that impacts remain less-than-significant, and that lighting provided with Alternative 1 is in compliance with the City of San Gabriel Mission District Specific Plan, recommended mitigation measures are provided below.

It is anticipated that exterior building materials, such as concrete and plaster, would be used in the construction of the proposed project. When installed properly, these types of exterior building materials are not considered to be reflective. Exterior building materials associated with proposed project would be installed in compliance with all applicable local standards related to the use of non-reflective materials. In addition, a majority of the proposed project would be located below-grade and not within view of pedestrians and motorists. With implementation of all applicable local requirements related to the use of non-reflective exterior building materials, any glare impacts would be less-than-significant.

### **Alternative 2 – No Build Alternative**

Under Alternative 2, the project site would not be substantially altered from existing conditions. Therefore, no impacts are anticipated related to light and glare.

#### **Shade and Shadow**

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Shadow impacts are directly attributable to the building height, massing, and the location of a project relative to shadow-sensitive, off-site land uses. The significance of such impacts is measured by the extent and duration of shading, the type of impacted land use, and the resulting functional effects (the extent and duration, combined with and measured against the use and design of the affected premises). Alternative 1 would lower the existing Alhambra Subdivision of the UPRR to a trench configuration and would not include any structures located at-grade that would potentially cast shadows onto shade-sensitive uses. Therefore, no impacts are anticipated related to shadows.

### **Alternative 2 – No Build Alternative**

Under Alternative 2, the project site would not be substantially altered from existing conditions. Therefore, no impacts are anticipated related to shade and shadow.



## MITIGATION MEASURES

- A1** ACE shall coordinate with Cities of San Gabriel and Alhambra to ensure that landscaping and any other visual elements installed with the proposed project are consistent with the existing built environment and the City of San Gabriel Mission District Specific Plan. Design elements related to the City of San Gabriel shall be included in the MOU between the City of San Gabriel and ACE. Design elements related to the City of Alhambra will be subject to the review and approval of the City.
- A2** The lighting on the Ramona Street and Mission Road overhead structures shall incorporate design elements as specified in the Mission District Specific Plan.

## LEVEL OF IMPACT AFTER MITIGATION

### Visual Character

Implementation of Mitigation Measures **A1** and **A2** would ensure that landscaping, other new visual elements, and lighting installed with the Alternative 1 would be consistent with the existing built environment and the City of San Gabriel Mission District Specific Plan. Therefore, a less-than-significant impact is anticipated.

### Views and Vistas

Not applicable.

### Scenic Resources

Not applicable.

### Light and Glare

Implementation of Mitigation Measure **A2** would ensure that lighting installed on the new Ramona Street and Mission Road overhead structures would be consistent with the existing built environment and the City of San Gabriel Mission District Specific Plan. Therefore, a less-than-significant impact is anticipated.

### Shade and Shadow

Not applicable.

## 3.7 CULTURAL RESOURCES

### EXISTING SETTING

Please refer to Section 2.1.10 Cultural Resources and 2.11 Paleontological Resources for a detailed description of the environmental and regulatory setting.

### Local Significance

In addition to federal and State requirements, The Alhambra Wash is described as a cultural landscape and noted in the City of San Gabriel General Plan and “Common Ground” the regional watershed preservation plan of the San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy. The

City includes the following goal and targets in the Cultural Resources Chapter of the San Gabriel General Plan that relate to the Alhambra Wash:

- Goal 11.9** *Preserve and protect our cultural landscapes from damage and degradation.*  
**Target 11.9.1** *Protect and preserve bridges and other engineering features of merit.*  
**Target 11.9.2** *Protect and preserve historic and cultural landscapes*

## CEQA SIGNIFICANCE CRITERIA

The proposed project alternatives would have a significant impact on cultural resources if proposed project would:

- Physically demolish, destroy, relocate, or alter a historical resource or its immediate surroundings such that the significance of a historical resource would be materially impaired;
- Cause a substantial adverse change in the significance criteria of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines;
- Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature; or
- Disturb any human remains, including those interred outside of formal cemeteries.

## IMPACTS

### Archaeology

#### Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)

The proposed project would involve construction of a trench that would separate the existing UPRR tracks from the at-grade roadway crossings at Ramona Street, Del Mar Avenue, Mission Road, and San Gabriel Boulevard. The western part of the project area has been documented as an area of high historical and archaeological sensitivity, primarily due to the presence of the San Gabriel Mission. As such, construction of the proposed project could adverse impacts associated with these resources without mitigation. The following archaeological resources may potentially be impacted by the construction of the proposed project.

#### San Gabriel Mission Site (CA-LAN-184H)

An archaeological component of the San Gabriel Mission site, including portions of a garden wall, a grist mill, and a substantial artifact deposit, is located within the direct APE. This component is likely to yield important to historical information. The loss or displacement of these artifacts and features that are related to the Mission would result in a significant impact.

#### Railroads

Results of the field research indicate that structures and features that once existed within the APE associated with historical train operations may potentially exist as archeological deposits. These structures and features are associated with the operation and maintenance of the SPRR circa 1910-1940 and include the Spruance Fruit Company Warehouse, two concrete pipe culverts, and the SPRR Depot. As described above, due to the location of these resources it was not possible to test for their presence either during the XPI or Phase II. Further testing of these resources will be required. It is anticipated that this testing will occur once construction activities or utility relocations are underway. The discovery and destruction of these potential resources would result in significant impact.

Operation of the trains on the trench would not result in a direct impact on any known archaeological

resources. However, this would be because any remaining archeological resources that are currently located within the APE resources would likely have been removed during the construction of the trench.

### **Alternative 2 – No Build Alternative**

The No Build Alternative would not create a trench structure. No construction activities would be associated with the No Build Alternative and, therefore, no impacts associated with archaeological resources are anticipated.

### **Architectural History**

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The proposed project would involve construction of a trench that would separate the existing UPRR tracks from the at-grade roadway crossings at Ramona Street, Del Mar Avenue, Mission Road, and San Gabriel Boulevard. The western part of the project area has been documented as an area of high cultural sensitivity, primarily due to the presence of the San Gabriel Mission. As such, construction of the proposed project would have adverse impacts associated with these resources without mitigation. As described above, 17 resources within the project APE were determined to be eligible for listing on the NRHP or the CRHP.

The FOE determined that 14 built resources would be adversely effected: Mission San Gabriel Arcángel, San Gabriel Mission Elementary School, La Casa Vieja De Lopez Adobe, San Gabriel City Hall, Arcade Shops, 403-407 South Mission Drive Building, Raya Building San Gabriel Mission Museum, San Gabriel Mission Campo Santo and Work Area, Ortega-Vigare Adobe Rancho, Las Tunas Adobe, Mission San Gabriel Arcángel Historic District (nine contributing properties), San Gabriel Adobes Historic District (three contributing properties), and San Gabriel Civic Center Historic District (five contributing properties). Compliance with mitigation and avoidance measures identified in the Finding of Effect would ensure impacts would remain less-than-significant.

Improvements associated with the trench would result in a more visually appealing environment for many of the historic resources in the indirect APE, as passing trains would be hidden from view. In addition, traffic flow and congestion would be improved allowing greater access to the San Gabriel Mission and other cultural sites in the area. Therefore, operation of the trench would result in less-than-significant impacts to historical resources.

### **Alternative 2 – No Build Alternative**

The No Build Alternative would not create a trench structure. Although potential construction related impacts would not occur, existing conditions at the site including noise, traffic and visual annoyances would persist.

## **Paleontological Resources**

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Surficial and/or very shallow excavations within Quaternary younger alluvial deposits are unlikely to result in adverse impacts to significant paleontological resources; however, deeper excavations into this unit and any excavations within previously undisturbed Quaternary older alluvial deposits may have an adverse impact to paleontological resources. The proposed project includes four grade separations that would include excavation and disturbance of soils to construct the trench and its associated structures (walls, etc.). It is estimated that older alluvial deposits may be present underlying younger alluvial deposits at a depth of 14 feet or greater below ground surface based on previous discoveries in the general area.<sup>9</sup> The destruction of fossils as a result of human-caused ground disturbance has a significant cumulative impact, as it makes biological records of ancient life permanently unavailable for study by scientists.

Operation of the trains on the trench would not directly impact any paleontological resources as there are trains already operating on the at-grade tracks. Therefore, less-than-significant impacts associated with paleontological resources are anticipated during operations of the proposed project.

### **Alternative 2 – No Build Alternative**

The No Build Alternative would not create a trench structure. No construction activities would be associated with the No Build Alternative and, therefore, no impacts associated with paleontological resources are anticipated.

## **Human Remains**

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The project site is not part of a formal cemetery. However, due to the history of the project area, it is likely that there are informal cemeteries in the APE or in the vicinity of the APE. Therefore, it is highly likely that human remains exist on or in the vicinity of the project site. Construction activities (e.g., demolition, grading, etc.) may potentially result in the disturbance and possible loss of these resources, which would result in a significant impact.

Operation of the trains on the trench would not directly impact any human remains as there are trains already operating on the at-grade tracks and there are no formal cemeteries in the vicinity of the project area. Therefore, less-than-significant impacts associated with disturbance of human remains are anticipated during operations of the proposed project.

### **Alternative 2 – No Build Alternative**

The No Build Alternative would not create a trench structure. No construction activities would be associated with the No Build Alternative and, therefore, no impacts associated with disturbance of human remains are anticipated.

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<sup>9</sup>SWCA Environmental Consultants, *Paleontological Resources Assessment of the San Gabriel Trench Separation Project*, September 2009.

## MITIGATION MEASURES

### Historical and Archaeological Resources

**CR1** A Treatment Plan has been developed to address four archaeological resources: San Gabriel Mission archaeological site (CA-LAN-184H), former location of the SPRR San Gabriel Depot, and two historic culverts. The project's archaeological resources fall into two broad thematic categories: California mission archaeology and railroad archaeology. A Data Recovery Plan (Phase III) is proposed as part of the treatment of these resources. The San Gabriel Mission archaeological site (CA-LAN-184H) contains data that can be used to answer research questions regarding site function and chronology; Native American health, status, and ethnicity; and Mission period architecture and engineering practices. The three potential archaeological resources, if present, may contain data pertinent to research questions regarding site formation processes, chronology, function, and affiliation. Proposed data recovery methods include manual excavation, mechanical excavation, remote sensing, archaeological monitoring, archival research, and the physical relocation of Chapman's Mill and Millrace, as well as numerous specialized laboratory analyses.

Large, diagnostic, or otherwise interesting artifacts will be mapped in situ. Most artifacts and all ecofacts from will be counted and described, placed into zip-top plastic bags labeled with the provenience information, date, excavators, and other pertinent information, and submitted to the archaeological laboratory for cleaning, analysis, and curation preparation. Because bulky building materials such as bricks (*ladrillos*), tiles (*tejas*), rocks, and cement are ubiquitous at CA-LAN-184H, these non-diagnostic artifacts will be volumetrically quantified using a graduated bucket and stockpiled separately on site during the excavation. The Union Pacific Railroad Museum, San Gabriel Mission Arcángel Musuem, San Gabriel Historical Association, and or the Ramona Museum will be allowed to select a representative sample of the materials for public education purposes. The Union Pacific Railroad Museum has first right of refusal. If none of the museums express an interest in curating the materials, they may be distributed to local schools as comparative material to be used as a learning aid for the California Fourth Grade Mission Project studies module or similar purposes. Because there is a potentially large amount of building materials present, SWCA recommends that each organization consider the quantity of materials (e.g. number of buckets, boxes, etc.) that they would like to receive prior to the start of excavation to assist the archaeologists in ensuring that these building materials are properly stockpiled. Because of their limited data potential and the expense of long-term curation, surplus examples of undiagnostic materials will be discarded if the aforementioned groups refuse them.

Archaeological monitoring will be employed for all areas containing buried cultural material as identified by the XPI and Phase II investigations. Archaeological monitoring shall be restricted to sensitive areas, specifically, the upper 10 feet of the broader Mission San Gabriel archaeological site and in the immediate vicinity of the SPRR San Gabriel Depot and two historic culvert locations. The treatment plan also includes public outreach and Native American coordination, and curation plans, along with a description of the study's anticipated personnel, scope, and schedule.

The treatment plan shall also include an acknowledgment that the proposed mitigation measures and any unanticipated discoveries, including human remains will avoid interfering with UPRR railroad operations. The UPRR has also expressed an interest in observing archaeological excavations. Prior to the start of field work, the UPRR will be notified of the anticipated field schedule to allow railroad personnel to observe the excavations.

- CR2** Prior to and for the duration of ground disturbance, ACE shall provide cultural resources training to key personnel or supervisors (including but not limited to engineers, inspectors, contractor representatives, laborers, operators, foremen, and utility workers) prior to the start of any excavations. The training shall be prepared by an archaeologist and or architectural historian who meet the *Secretary of the Interior's Professional Qualifications Standards*, it may be conducted by any member of the cultural resources team or the Resident Engineer, and may be presented in the form of a video. The training may be discontinued when ground disturbance, including landscaping, is completed.

The training shall describe appropriate measures for treatment and protection in compliance with the *Secretary of the Interior's Standards for the Treatment of Historic Properties*. It shall include a discussion of applicable laws and penalties under the law, samples or visual representations of artifacts that might be found in the project vicinity. The training will outline the steps that must be taken in the event that cultural resources are encountered during project construction, including the authority of archaeological monitors to halt construction in the area of a discovery to an extent sufficient to ensure that the resource is protected from further impacts.

- CR3** The Native American monitoring services of a preapproved Native American Monitor of the Gabrieleno/Tongva Tribal Council of San Gabriel, selected by Caltrans and the City of San Gabriel will be retained for the Data Recovery (Phase III) program. The Native American Monitor(s) will ensure that Native American cultural resources will be treated appropriately and will draw from their extensive knowledge of the ethnographic and historic occupation and development of the San Gabriel Mission and the City of San Gabriel. Native American monitoring will occur along the full horizontal extent of the 2.2-mile long direct APE between Post Miles 489.4 to 491.6 to a moderate depth (0-10 feet). The purpose of this monitoring will be to identify unmarked human remains out side of archaeological sites, if any are present. If sensitive Native American cultural materials are identified during the Data Recovery (Phase III) program, archaeologists will coordinate with Native Americans to ensure proper treatment and disposition of the materials

- CR4** If human remains are unearthed during construction, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the human remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). Caltrans District 7 Environmental Planning Branch shall be notified immediately. A detailed plan for the discovery of human remains is outlined in the Treatment Plan (Attachment 3). The plan

shall include provisions for preferred removal technique, storage and re-internment to the extent feasible. The plan shall also include an acknowledgment that the plan shall accommodate ongoing rail operations and minimize any potential interference to rail service.

- CR-5** Following the documentation of Chapman’s Mill and Millrace, the most intact portion(s) of the feature will be physically relocated to one or more locations for the purpose of public display and interpretation. The relocation of this heavy and unreinforced masonry feature will be logistically challenging. Relocation and rehabilitation of Chapman’s Millrace shall be undertaken in consultation with the qualified structural engineer, in collaboration with a qualified archaeologist, historic architect, or architectural historian (hereinafter qualified consultant team). A Relocation Feasibility Study of the Millrace resource shall be prepared by the qualified consultant team as a baseline, with the intention of determining a specific relocation methodology, identifying receiver sites, and analyzing other factors relevant to the mill and millrace relocation.

If feasible, the features will be housed in a secure and environmentally stable temporary storage facility until their display locations are identified and available. The details of the relocation process, including the destination(s) of the relocated features, will be finalized prior to excavation of the trench. The resulting relocation of Chapman’s Mill and Millrace shall be within the existing UPRR right-of-way or in another location between Ramona Street and Mission Road/Junipero Serra that is acceptable to both ACE and the City of San Gabriel. The mill and millrace relocation shall be oriented in the same compass orientation as it is currently. Potential destinations for mill/millrace segments include open space within the project APE, on property owned by the City of San Gabriel (City Hall), or at the Mission San Gabriel Arcángel. If those locations are not feasible due to space constraints, the Millrace shall be relocated to an appropriate substitute receiver site, such as property owned by the Old Mill Foundation (El Molino Viejo), identified prior to construction. Conditions of the sale or transfer of title (e.g., protective covenants, stipulations for the moving process, recordation prior to the move, standards for documentation of the property, re-evaluation of the property in its new location) shall be subject to review and approval by SHPO.

To mitigate effects or impacts to Chapman’s Mill and Millrace prior to relocation, the feature will be documented and recorded to Historic American Engineering Record (HAER) standards prior to any construction activities that will directly impact this resource. Recordation of the adversely affected archeological resource is recommended to ensure a permanent record of the feature’s appearance and context in its original (donor) site. The resulting HAER documentation will be offered to the Library of Congress, with copies provided to the City of San Gabriel, the San Gabriel Library, and the San Gabriel Historical Association. The HAER report will include a narrative history and context statement for the Millrace.

- CR-6** The public outreach plan referenced in the Treatment Plan (Attachment 3) will include disseminating the results of the archaeological data recovery program to professionals and to the public in the form of a technical report for professionals and a modified version of this report for the public. The professional report will be submitted to the South Central Coastal Information Center (SCCIC) at California State University,

Fullerton. SWCA will also submit an article using a portion of the data to an archaeological publication and give presentations at the Society for California Archaeology Annual Meeting. The public report will be made available to the City of San Gabriel, San Gabriel Historical Association, Union Pacific Railroad Museum, San Gabriel Arcángel Mission Museum, San Gabriel Historical Association Museum, Ramona Museum, San Gabriel Library, City of Alhambra Public Library, County of Los Angeles Public Library, Rosemead Branch, City of San Marino Public Library, and the City of Pasadena Public Library. In addition, a public display focusing on Chapman's Mill and Millrace will be created to accompany the millrace in its permanent display location.

In regard to the Mission San Gabriel Arcángel and other eligible buildings, interpretive displays of photographs and drawings produced during the course of built environment studies shall be produced for public exhibition, museum exhibits, or historic image reproduction as part of project public outreach efforts. An appropriate number of interpretive signs or other media (e.g. permanent pole signs, monument signs, or decorative tiles), subject to review and approval by City of San Gabriel, shall be erected in or immediately adjacent to the project area to commemorate and describe the history of historic districts and separate historic properties in the project APE. Details of an acceptable standard height will be negotiated with the City. These measures will mitigate effects/impacts on historic properties, setting, and changes in views from properties in the project area.

**CR-7** Reports documenting the condition of all historic properties that are expected to be affected by vibration and thus have the potential for damage or differential settlement as a result of the proposed project shall be undertaken prior to the commencement of any construction or demolition activities associated with the proposed project. Those specified properties are: Mission San Gabriel Arcángel, San Gabriel City Hall, Arcade Shops, 403-407 South Mission Drive Building, Raya Building, San Gabriel Mission Museum, Old Kitchen in the San Gabriel Campo Santo and Work Area, La Casa Vieja De Lopez Adobe, Ortega-Vigare Adobe, and Rancho Las Tunas Adobe. Pre-Construction surveys will be conducted subject to approval of the property owners.

Pre-Construction Surveys shall be prepared by a qualified structural engineer with more than five years' experience in successful investment tax credit projects (including seismic retrofit, hereinafter "qualified structural engineer"), subject to approval and collaboration by an architect or architectural historian qualified under the Secretary of the Interior's *Professional Qualifications Standards* in Architecture, Architectural History or History (hereinafter "qualified architectural historian"), and the City of San Gabriel. The Pre-Construction survey prepared for each property is required in order to establish a baseline, and shall contain written descriptions of each property's existing condition, along with photographs and measured drawings, sketches, or CAD drawings of all cracks, walls with particular attention paid to cracks, bulges and planes in and out of plumb, floors in and out of level, openings and roof planes, as needed. The types of drawings deemed appropriate shall be at the discretion of the qualified structural engineer, with consultation by the project qualified architectural historian and the City of San Gabriel. The resulting Pre-Construction surveys shall be made available to property



owners and stewards, on request, and shall be retained on file for a minimum of 15 years after project completion at the at the City of San Gabriel Planning Department due to the sensitive nature of the materials.

- CR-8** Prior to issuance of construction permits, updated documentation of San Gabriel Mission Arcángel shall be completed in accordance with Historic American Buildings Survey (HABS) Guidelines and Standards, in compliance with the Secretary of the Interior's Standards for Architectural and Engineering Documentation. The resulting HABS report shall include narrative discussion of the significance of the building in context, its physical conditions, historic and updated measured drawings, historic maps and current locator mapping, historic with large-format current-condition photographs, and a historic context statement documenting the history and significance of the resource. The documentation shall be prepared by a qualified historic architect, with the services of a qualified architectural historian. The original archival-quality documentation shall be offered material to the Historic American Buildings Survey for inclusion in the permanent collection of the Library of Congress. Archival copies of the documentation shall be donated to local repositories, including the main San Gabriel Library, the City of San Gabriel, and local historic preservation advocacy groups. This mitigation measure shall be completed prior to commencement of construction activities.
- CR-9** A noise management and monitoring plan shall be adopted for the proposed project with measures such as maximum noise limits and specified hours for noisier construction activities. The adopted noise management plan should include provisions for continuous noise monitoring throughout the duration of the project. It shall be undertaken in consultation with a registered engineer, experienced in noise and vibration control studies with demonstrated success in transit projects (hereinafter, qualified noise and vibration consultant). The Noise Management and Monitoring Plan will be consistent with Chapter 9: Noise of the City of San Gabriel's General Plan. Noise thresholds shall be clearly expressed in project construction specifications, under direction of the qualified noise and vibration consultant, subject to review by qualified structural engineer and incorporated in any applicable project construction cost estimates. If noise studies indicate significant effects on historic properties, temporary soundwalls shall be erected to reduce the level of effect to less than significant.
- CR-10** A vibration management and continuous monitoring plan shall be developed and adopted to protect historic resources and ensure against damage caused by vibration or differential settlement caused by vibration during project construction and operation activities. The vibration management and monitoring plan shall include continuous vibration monitoring through the duration of the project and for a period of no less than one year following project completion. It shall be undertaken in consultation with a registered engineer, experienced in noise and vibration control studies with demonstrated success in transit projects (hereinafter, qualified noise and vibration consultant).

The vibration management and continuous monitoring plan shall constitute a blended approach, setting up survey targets on the building's crack monitors across existing cracks at the direction of the qualified structural engineer, in order to observe displacements. The use of survey targets and crack monitors will be coupled with continuous vibration monitoring. Continuous monitoring protocol shall include electronic

monitoring equipment specified by the noise and vibration consultant at specified historic properties during construction and after, to continuously measure whether ground displacement during construction and operation is approaching the levels at which damage to the historic resources may be anticipated.

Measurement of vibration would be undertaken using specialized monitors with instrumentation “seismographs” capable of recording both ground and airborne vibration. The seismographs or other measuring devices may be left unattended, set to trigger an emission level exceeding a predetermined, set level. Vibration event reports would be reviewed continuously in the first week of construction and demolition activity; with appropriate durations (e.g. alternating days, bi-weekly or weekly) established in consultation with the qualified noise and vibration consultant, in consultation with the qualified structural engineer.

Construction shall be halted if levels of vibrations are found to exceed levels established in the Vibration Management and Monitoring Plan. The resident engineer must stop work in the immediate vicinity if significant vibration levels are reached. Construction may continue elsewhere as long as vibration levels remain below the thresholds established in the Vibration Management and Monitoring Plan. ACE will notify specific property owners in the event that significant vibration levels are reached. Such levels shall be clearly expressed in project construction specifications, under direction of the qualified noise and vibration consultant, subject to review by qualified structural engineer and incorporated in any applicable project construction cost estimates.

If necessary, repair of inadvertent damage caused by differential settlement, vibration, or project construction shall be performed in compliance with the *Standards for Treatment* under the direction of a qualified structural engineer in consultation with, and subject to review and approval by, a qualified historic architect or architectural historian and the City of San Gabriel Planning Department. The cost of such repairs shall be borne by ACE. ACE is not responsible for damage caused by natural events such as earthquakes.

**CR-11** Post-construction surveys, commensurate with and parallel to the level of effort in project Pre-Construction surveys shall be prepared to document condition of the specified historic properties, commenced within the first two months of project completion. The project Resident Engineer shall notify the qualified structural engineer and qualified architectural historian, once the project is substantially completed (e.g., rail traffic is operational in trench). If the Resident Engineer fails to notify the qualified structural engineer and architectural historian, those parties shall notify ACE and shall commence preparation of Post-Construction Surveys.

If, at the discretion of the qualified structural engineer in consultation with the qualified architectural historian, it is found that damage has occurred as a result of project-related activities, repair of that damage shall be undertaken in conformance with the *Standards for Treatment* under the direction of a qualified structural engineer in consultation with a qualified historic architect or architectural historian. The cost of such repairs shall be borne by ACE.

**CR-12** All visible project-related features in the vicinity of the historic properties identified in the project clearance documentation, subject to review and approval by SHPO (including, walls, barriers, and fences), shall be reviewed by a qualified historic architect or architectural historian for conformance with the *Standards for Treatment*, as they relate to setting and effects to districts and neighborhoods. The resulting project designs shall be subject to courtesy review and comment by representatives of the City of San Gabriel Planning Department and interested historic preservation advocacy groups.

**CR-13** Subject to owner consent, to mitigate effects and impacts to the Mission San Gabriel Arcángel, preparation and submittal of a National Historic Landmark (NHL) application for the Mission San Gabriel Arcángel shall be undertaken by a qualified architectural historian. ACE shall ensure that the NHL Nomination is submitted to SHPO and the National Park Service and oversee amendments or modifications to the application until it is either designated or rejected by the National Park System Advisory Board and Secretary of the Interior. The nomination shall be prepared in collaboration with local historic preservation advocacy groups, as identified by the qualified architectural historian in consultation with the City of San Gabriel.

#### Operational Mitigation Measures

**CR-14** Continuous noise and vibration monitoring for a minimum of the first one year of operation shall be undertaken by the qualified noise and vibration consultant, with collaboration by the qualified structural engineer (see Stipulation IV.H above). The duration and frequency of operational monitoring shall be at the discretion of the qualified noise and vibration consultant, with collaboration by the qualified structural engineer, but shall be no less frequent than the first week of operation, and unless vibrations levels are found to be harmful, after one month, then bi-monthly, etc.

**CR-15** Repair of damage caused by vibration related to the proposed project to specified properties, during construction or the three years following, shall be undertaken as undertaken in conformance with the *Standards for Treatment* under the direction of qualified structural engineer in consultation with a qualified historic architect or architectural historian. The cost of such repairs shall be borne by ACE.

#### **Paleontological Resources**

**PR1** All project-related ground disturbances that could potentially affect Quaternary older alluvial deposits will be monitored by a qualified paleontological monitor on a full-time basis, as this geologic unit is determined to have a high paleontological sensitivity. Project-related excavations that occur in surficial sediments and younger Quaternary alluvium (estimated to be present at ground surface to a depth of 14 feet or less) will be spot-checked by the project paleontologist to ensure that underlying sensitive sediments are not being impacted.

**PR2** A qualified paleontologist will be retained to supervise monitoring of construction excavations. Paleontological resource monitoring will include inspection of exposed rock units during active excavations within sensitive geologic sediments. The monitor will have authority to temporarily divert grading away from exposed fossils to professionally and efficiently recover the fossil specimens and collect associated data. The qualified paleontologist will prepare monthly progress reports to be filed with ACE (if requested).

- PR3** At each fossil locality, field data forms will be used to record pertinent geologic data, stratigraphic sections will be measured, and appropriate sediment samples will be collected and submitted for analysis.
- PR4** Recovered fossils will be prepared to the point of curation, identified by qualified experts, listed in a database to facilitate analysis, and repositied in a designated paleontological curation facility. The most likely repository is the LACM.
- PR5** The qualified paleontologist will prepare a final monitoring and mitigation report to be filed with ACE and the repository.

## LEVEL OF IMPACT AFTER MITIGATION

### Historic and Archaeological Resources

A significant impact to an identified historic property may be considered to be mitigated to a less-than-significant level if the mitigation measure requires preservation, rehabilitation, restoration, or reconstruction of historic properties, in conformance with *the Secretary of the Interior's Standards for the Treatment of Historic Properties* [14 CCR §15126.4(b)(1)].

Implementation of CR-1 (Treatment Plan), CR-2 (Construction Worker Training), CR-3 (Native American Coordination and Monitoring), CR-4 (Treatment of Human Remains), CR-5 (Relocation of Chapman's Millrace), and CR-6 (Public Outreach Plan) would resolve adverse effects to the San Gabriel Mission archaeological site (CA-LAN-184H), SPRR San Gabriel Depot, and the two culverts in accordance with Stipulation XI.A. of Attachment 6 the Caltrans Section 106 PA.

Implementation of Mitigation Measures **CR-2**, **CR-6** through **CR-15** are expected to reduce impacts to historic properties related to substantial adverse change in the significance of these resources to less-than-significant levels. Successful performance of Mitigation Measures **CR-6** through **CR-15** would reduce project-related adverse effects findings to no adverse effect. The National and California Register levels of significance and aspects of integrity for these properties would remain the same or be enhanced, rather than be reduced, following implementation of the proposed project mitigation measures. If, for any reason, any one of these mitigation measures were not carried out in accordance with the stipulations in the project Memorandum of Agreement, effects findings for this project would need to be revisited as adverse effects may result from the omission, substitution or incomplete performance of a required mitigation measure.

### Paleontological Resources

Impacts associated with paleontological resources would be considered less-than-significant after implementation of Mitigation Measures **PR1** through **PR5**.

## 3.8 HYDROLOGY AND WATER QUALITY

### EXISTING SETTING

Please refer to Section 2.2.1 Hydrology and Water Quality for a detailed description of the environmental and regulatory setting.

### CEQA SIGNIFICANCE CRITERIA

The proposed project alternatives would have a significant impact on hydrology and water quality if the proposed project alternatives:

- Violate any water quality standards or waste discharge requirements;
- Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner, which would result in substantial erosion or siltation on- or off-site;
- Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;
- Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff;
- 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; or
- Expose people or structures to a significant risk of loss, injury or death involving inundation by seiche, tsunami, or mudflow.

## IMPACTS

### Surface Waters

#### Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)

Construction of the San Gabriel Trench would result in construction activities that have the potential to cause erosion, sedimentation and the discharge of non-stormwater from the project site. Clearing of vegetation and grading activities, for example, would lead to exposed or stockpiled soils susceptible to peak stormwater runoff flows. Also, the compaction of soils by heavy equipment may minimally reduce the infiltration capacity of soils (exposed during construction) and increase runoff and erosion potential. Construction activities and the presence of raw materials for trench construction, such as concrete may also lead to stormwater runoff contamination. If uncontrolled, these materials could lead to water quality problems, including sediment-laden runoff prohibited non-stormwater discharges and ultimately the degradation of downstream receiving water bodies such as the Rio Honda Watershed and ultimately the Los Angeles River. However, BMPs will be implemented in accordance with NPDES permit requirements to control construction erosion and discharges into the Rio Honda channel. With implementation of these measures, impacts would be less-than-significant.

Alternative 1 would not entail any activity or process that would degrade water quality and would not increase vehicle traffic which could result in an increase in nonpoint-source pollutants or long-term degradation of local surface water quality. Additionally, the proposed project would not substantially change the area of impervious surfaces. The proposed project would impede the conveyance of local storm water and surface runoff from the north side of the UPRR to the south side. The existing storm drain collection systems would need to be re-routed, or new systems or pump stations constructed to avoid surface runoff from collecting and potentially flooding areas around the trench. This would be a potentially significant impact.

### **Alternative 2 – No Build Alternative**

Alternative 2 consists of the No Project Alternative; under this alternative the project site would remain as is, no construction would occur. As such, water quality impacts would not be expected to occur.

#### **Groundwater**

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The project site is developed primarily with industrial uses consisting of UPRR. Groundwater is not known to exist above a depth of 80 feet below ground surface.<sup>10</sup> It is, however, possible to encounter wet conditions or perched water conditions during the rainy season or along the Alhambra and Rubio Washes and in irrigated areas such as the Alhambra Golf Course. Planned construction and design should accommodate provisions for such consideration. Construction of Alternative 1 would require grading and excavation. Maximum excavation for the proposed project would be approximately 30 feet (9.14 meters). However, these activities would not interfere with or degrade groundwater supplies, as no areas of shallow groundwater are known to be present within the project site or its immediate vicinity. The types of development proposed for Alternative 1 (i.e., the trench) also would not interfere with or degrade groundwater supplies. Therefore, Alternative 1 would not substantially deplete or degrade groundwater resources or result in a demonstrable reduction in groundwater recharge capacity. No impacts are anticipated.

### **Alternative 2 – No Build Alternative**

Alternative 2, the No Project Alternative, would not include the proposed grade separations included under Alternative 1. No new construction would occur under Alternative 2. Therefore no impacts to groundwater would result under this alternative.

#### **Flooding and Inundation**

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The proposed project is not located within a 100-year flood hazard area. There would be no placement of structures in a 100-year flood hazard area. During construction, temporary disruption of storm drains in the area could result in flooding upstream from the proposed project. BMPs will be implemented to reduce potential impacts.

### **Alternative 2 – No Build Alternative**

Impacts associated with flooding and inundation for Alternative 2 would not occur as no development would occur under this alternative. Existing conditions would remain under this alternative. Therefore, no impacts associated with flooding and inundation are anticipated.

## **MITIGATION MEASURES**

### **Drainage and Stormwater Runoff**

See Section 2.1.7 Utilities for Mitigation Measures **US2** through **US4** related to stormwater runoff and drainage.

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<sup>10</sup>Moffatt and Nichol, *Draft Preliminary Engineering Report (Advanced Engineering Concept Plan)*, September 3, 2008.

## Water Quality/Groundwater

**HW1** In the event groundwater is encountered, the project site shall be dewatered during construction. This shall involve the short-term removal of minor amounts of groundwater and would not affect groundwater supplies. Construction staging plans shall include provisions for the diversion of stormwater to avoid upstream flooding. The design of the proposed project shall include a permanent drainage and pump system to remove the water from the depressed railroad alignment; in order to minimize impacts of flooding that may occur during heavy storm events.

## Flooding and Inundation

**HW2** Under the statewide NPDES General Construction Permit, the project proponent, ACE, must submit an NOI to the SWRCB prior to commencement of construction activities. In addition, an SWPPP must be prepared and implemented at the project site and revised as necessary as administrative or physical conditions change. The SWPPP will include BMPs that address source reduction and provide measures and controls necessary to mitigate potential pollutant sources. The SWPPP will be available to the public under Section 308(b) of the CWA and will be made available to the SWRCB upon request. Required elements of the SWPPP include:

- A site description addressing the elements and characteristics specific to the site;
- Descriptions of BMPs for erosion and sediment control;
- BMPs for construction waste handling and disposal;
- Implementation of approved local plans;
- Proposed post-construction controls, including a description of local post-construction erosion and sediment control requirements; and
- Non-stormwater management.

Recommended BMPs for the construction phase include proper stockpiling and disposal of demolition debris, concrete, and soil; protecting existing storm drain inlets; stabilizing disturbed areas; erosion controls; proper management of construction materials; waste management; aggressive litter control; and sediment controls.

**HW3** ACE shall coordinate with USACE to ensure construction of the rail bridge over Alhambra Wash is built to maintain existing flow capacity.

**HW4** ACE shall coordinate with LACDPW to ensure the lowered Rubio Wash is built to maintain existing flow capacity.

**HW5** A flood permit from the Los Angeles Flood Control District and a Section 1601 Streambed Alteration Agreement from CDFG may be required. In addition, a Section 404 Nationwide Permit from the USACOE and a Section 401 Water Quality Certification from the RWQCB may also be required for the proposed project. Consultation shall be conducted with the San Gabriel and Los Angeles RMC, CDFG, RWQCB, and USACOE to identify any permit requirements for the lowering of the Rubio Wash and the potential impacts to the Alhambra Wash.

## LEVEL OF IMPACT AFTER MITIGATION

### Drainage and Stormwater Runoff

With implementation of Mitigation Measures **US2** through **US4**, impacts to drainage and stormwater runoff would be less than significant.

### **Water Quality/Groundwater**

With implementation of Mitigation Measure **HW1**, impacts to water quality and groundwater would be less than-significant.

### **Flooding and Inundation**

With implementation of Mitigation Measures **HW2** through **HW5**, impacts to flooding and inundation would be less than significant.

## **3.9 GEOLOGY AND SOILS**

### **EXISTING SETTING**

Please refer to Section 2.2.2 Geology and Soils for a detailed description of the environmental and regulatory setting.

### **CEQA SIGNIFICANCE CRITERIA**

The project alternatives would result in a significant impact related to geology, soils, and seismicity if it would:

- Result in substantial soil erosion or the loss of topsoil;
- Be located on expansive soil creating substantial risks to life or property;
- Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the proposed project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse;
- Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater; and/or
- 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; and/or
  - Strong seismic ground shaking, seismic-related ground failure (i.e., liquefaction), and landslides.

### **IMPACTS**

#### **Geologic Materials and Soils**

##### ***Potential for Soil Erosion***

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Alternative 1 would grade separate the existing Alhambra Subdivision of the Union Pacific Railroad (UPRR) in the Cities of San Gabriel and Alhambra. The grade separation at Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard would be achieved by lowering the track under these crossings in a trench and constructing bridges over the railroad at each location. The Rubio Wash would be lowered to accommodate the trench profile and a temporary bridge would be required at this location during construction. A railroad bridge would be constructed over the Alhambra Wash. Deep pile



foundations would likely be utilized for the street and drainage crossings.<sup>11</sup> Ramona-Placentia and Hanford Association soils are moderate to well-drained and have a moderate to slight erosion hazard.<sup>12</sup> Because these soils drain relatively well, they have faster infiltration rates, higher levels of organic matter and improved soil structure. Soil boring activities performed at the project site encountered gravelly soils, sands, silty sands, hard silts and clays.<sup>13</sup> These are soil composition factors which result in greater resistance to soil erosion.

In addition to soil composition, climate and slope are factors in creating a potential for soil erosion. The project site is in a flat, urbanized area, with existing drainage systems and some impervious surfaces. A drainage system (a dual, open channel trough system) designed for a 100-year storm event, would be implemented with Alternative 1, which would improve drainage on the project site. Runoff collected from the open trench area would be discharged to off-site storm drain facilities via a pump station.<sup>14</sup> The project area is not subject to high levels of wind or rain, factors that may contribute to soil erosion. However, the construction of Alternative 1, would require extensive excavation activities reaching approximately 41 feet bsg. These excavation activities may result in the potential for soil to be exposed and eroded.

#### **Alternative 2 – No Build Alternative**

Under Alternative 2, the project site would not be substantially altered from existing conditions. Therefore, no impacts are anticipated related to soil erosion.

#### ***Loss of Topsoil***

##### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

During construction and excavation activities associated with Alternative 1, the potential exists for the release of fugitive dust, resulting in a temporary loss of topsoil. However, this loss would not be considered substantial with the implementation of BMPs, required as part of the National Pollutant Discharge Elimination System (NPDES) permit and application of South Coast Air Quality Management District (SCAQMD) Rule 403. Any soil that is excavated from the project site during construction would be transported to the appropriate location in accordance with local and State regulations. Alternative 1 would include a full-paved railroad trench that would not substantially change the amount of impervious surface at the project area and would include a drainage plan. As such, Alternative 1 would improve the existing drainage system and would not contribute to the loss of topsoil. Impacts would be less-than-significant. However, to ensure impacts would remain less-than-significant, recommended mitigation measures are provided below.

#### **Alternative 2 – No Build Alternative**

Under Alternative 2, the project site would not be substantially altered from existing conditions. Therefore, no impacts are anticipated related to loss of topsoil.

#### ***Expansive Soil***

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<sup>11</sup>Moffatt and Nichol, *Draft Preliminary Engineering Report (Advanced Engineering Concept Plan)*, September 3, 2008.

<sup>12</sup>Los Angeles County, *General Soils Map and Document*, 1969.

<sup>13</sup>Moffatt and Nichol, *Draft Preliminary Engineering Report (Advanced Engineering Concept Plan)*, September 3, 2008.

<sup>14</sup>*Ibid.*

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Ramona-Placentia and Hanford Association soils found in the project area are not known to be expansive and occur on gently sloping terraces and alluvial fans. Alternative 1 would not be located on expansive soil, which would create substantial risks to life or property. In addition, these soils do not erode easily, are not known to be expansive. In addition, the use of septic tanks or alternative wastewater disposal systems is not anticipated with the Alternative 1 due to the lack of buildings proposed with Alternative 1, which would likely require sewer lines to be utilized.

With implementation of all applicable engineering and design specifications, and compliance with applicable codes and current engineering practices, less-than-significant impacts related to the loss of topsoil, erosion, expansive soils, and the support of the use of septic tanks or alternative wastewater disposal systems, are anticipated. However, to ensure that impacts remain less-than-significant, recommended mitigation measures are provided below.

### **Alternative 2 – No Build Alternative**

Under Alternative 2, the project site would not be substantially altered from existing conditions. Therefore, no impacts are anticipated related to expansive soil.

## **Seismicity**

### ***Fault Rupture***

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The project site is not located within an Alquist-Priolo Earthquake Fault Zone. However, the East Montebello Hills, Whittier Heights, Workman Hill, Elysian Park Thrust, Hollywood, Verdugo, Eagle Rock-San Rafael, Raymond, and Sierra Madre Faults are active or potentially active faults located within ten miles of the project site. Although the project area is not located within these faults, the impact of a large earthquake along these faults (or unknown trace faults in the area) would produce strong or intense ground motion in the project area, potentially resulting in fault rupture. However, this risk is present throughout the entire Southern California region. The proposed project would be required to comply with the seismic safety requirements established by the Uniform Building Code, applicable sections of the City of San Gabriel and City of Alhambra Municipal Codes, and the California Department of Conservation, CGS *Special Publications 117, Guidelines for Evaluating and Mitigating Seismic Hazards in California* (1997), which provides guidance for evaluation and mitigation of earthquake-related hazards. Although the project site is not located within a known fault zone, the implementation of all applicable engineering and design specifications, and compliance with applicable building codes and current engineering practices, would ensure that the design of Alternative 1, would reduce potential fault rupture impacts to less-than-significant levels.

### **Alternative 2 – No Build Alternative**

Under Alternative 2, the project site would not be substantially altered from existing conditions. Therefore, no impacts are anticipated related to fault rupture.

### ***Ground Shaking***

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

As mentioned above, the project site is located within ten miles of active fault systems, Therefore, as with all of Southern California and Los Angeles County, the project area is susceptible to high-intensity ground shaking, which can affect any structure within the Cities of San Gabriel and Alhambra. Alternative 1 would be required to comply with the seismic safety requirements established by the Uniform Building Code, applicable sections of the City of San Gabriel and City of Alhambra Municipal Codes, and the California Department of Conservation, CGS *Special Publications 117, Guidelines for Evaluating and Mitigating Seismic Hazards in California* (1997), which provides guidance for evaluation and mitigation of earthquake-related hazards. With implementation of all applicable engineering and design specifications, and compliance with applicable building codes and current engineering practices, potential impacts related to strong ground shaking would be reduced to less-than-significant levels. However, to ensure that impacts remain less-than-significant, recommended mitigation measures are provided below.

#### **Alternative 2 – No Build Alternative**

Under Alternative 2, the project site would not be substantially altered from existing conditions. Therefore, no impacts are anticipated related to ground shaking.

#### ***Liquefaction***

##### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Liquefaction involves the sudden loss in strength of a saturated, cohesionless soil (predominantly sand) caused by the build-up of pore water pressure during cyclic loading, such as that produced by an earthquake. This increase in pore water pressure can temporarily transform the soil into a fluid mass, resulting in vertical settlement and can also cause lateral ground deformations. Typically liquefaction occurs in areas where there are loose sands and the depth of groundwater is less than 50 feet from the surface. Seismic shaking can also cause soil compaction and ground settlement without liquefaction occurring including settlement of dry sands above the water table.

The project site is not located within a designated liquefaction zone and the construction of Alternative 1 is not anticipated to be subjected to liquefaction.<sup>15</sup> Groundwater depths beneath the project site have been found to be over 80 feet bgs.<sup>16</sup> However, it is possible to encounter wet conditions or perched water conditions during the rainy season or along the Alhambra and Rubio Washes. Planned construction and design should accommodate provisions for such consideration.<sup>17</sup> With the implementation of all applicable engineering and design specifications, and compliance with applicable building codes and current engineering practices, impacts would be less-than-significant. However, to ensure that impacts remain less-than-significant, recommended mitigation measures are provided below.

#### **Alternative 2 – No Build Alternative**

Under Alternative 2, the project site would not be substantially altered from existing conditions. Therefore, no impacts are anticipated related to liquefaction.

#### ***Landslides***

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<sup>15</sup>California Department of Conservation, *Seismic Hazard Zones, El Monte Quadrangle* (1999), available at <http://www.conservation.ca.gov/cgs/shzp/Pages/Index.aspx>, accessed November 12, 2008.

<sup>16</sup>Moffatt and Nichol, *Draft Preliminary Engineering Report (Advanced Engineering Concept Plan)*, September 3, 2008.

<sup>17</sup>*Ibid.*

### Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)

The project site has a flat terrain and is not in close proximity to any hillside area or within any designated slope stability or landslide area.<sup>18</sup> Therefore, the project site is not subject to earthquake-induced landslides and no impacts related to landslides are anticipated.

### Alternative 2 – No Build Alternative

Under Alternative 2, the project site would not be substantially altered from existing conditions. Therefore, no impacts are anticipated related to landslides.

## MITIGATION MEASURES

- GS1** During final design, trench wall configurations and the areas of the trench near existing improvements shall be designed to include temporary struts, tieback anchors, ground improvement, temporary excavation support, temporary shoring, and/or other recommended installations detailed in the project Preliminary Engineering Report, to limit the lateral deflections of the trench walls.
- GS2** Soil testing shall be conducted during the final design phase, and should any localized expansive soils be identified, they shall be addressed by the final project design. The corrosion potential of project site soils shall also be evaluated. Expansive soils shall not be used as structure or permeable backfill. Appropriate geotechnical design techniques shall be implemented to address the potential for seismically-induced ground liquefaction and settlement, as well as provisions for wet conditions or perched water conditions along the Alhambra and Rubio Washes.
- GS3** Standard erosion control BMPs shall be used to minimize erosion during construction of the project. Retaining walls shall be constructed for long-term slope stabilization. Where appropriate, erosion prevention planting shall be used in conjunction with a geofabric.
- GS4** In order to minimize potential adverse impacts associated with seismic activity and liquefaction, design of the project shall incorporate current seismic design standards to withstand seismic ground shaking and liquefaction that would result from a maximum credible earthquake.

## LEVEL OF IMPACT AFTER MITIGATION

### Geologic Materials and Soils

Implementation of Mitigation Measures **GS1** through **GS3** would ensure the reduction of soil erosion, loss of topsoil, and potential effects of expansive soils from grading and excavation associated with the construction of Alternative 1. Therefore, a less-than-significant impact is anticipated.

### Seismicity

Alternative 1 would comply with seismic standards and criteria set forth by the California Building Code and the Structural Engineers Association, reducing impacts related to ground shaking and liquefaction. After implementation of Mitigation Measures **GS2** and **GS4**, liquefaction and ground-shaking impacts would be reduced. Therefore, less-than-significant impacts are anticipated.

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<sup>18</sup>California Department of Conservation, *Seismic Hazard Zones, El Monte Quadrangle* (1999), available at <http://www.conservation.ca.gov/cgs/shzp/Pages/Index.aspx>, accessed November 12, 2008.

## **3.10 HAZARDS AND HAZARDOUS MATERIALS**

### **EXISTING SETTING**

Please refer to Section 2.2.3 Hazards and Hazardous Materials for a detailed description of the environmental and regulatory setting.

### **CEQA SIGNIFICANCE CRITERIA**

The proposed project alternatives would have a significant impact on hazards and hazardous materials if the proposed project alternatives:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create significant hazards to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school;
- Be located on a site which is included on a list of hazardous materials site compiled pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment;
- Result in a safety hazard for people residing or working in the project area if the project is located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport;
- Result in a safety hazard for people residing or working in the project area if the project is within the vicinity of a private airstrip;
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan; 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.

### **IMPACTS**

#### **Hazardous Materials**

##### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The proposed project includes intersection improvements at four railroad crossing in the Cities of San Gabriel and Alhambra. At these four intersections (Ramona Street, Mission Road, Del Mar Avenue and San Gabriel Boulevard) the existing UPRR track would be depressed and new vehicle crossings (i.e., bridges) would be created. In addition, the Rubio Wash would be lowered to accommodate the trench profile and a temporary bridge would be constructed over the Alhambra Wash to maintain operation of the track during construction. It is possible that hazardous materials are currently transported along the UPRR railroad and would continue to be transported under the proposed project. However, with the addition of the proposed project, the potential for train/vehicle interactions or accidents would be eliminated and the risk of upset or accident conditions would be reduced. This would be a beneficial impact.

### **Alternative 2 – No Build Alternative**

Under the Alternative 2, no improvements would be made to the existing crossings. The potential for collisions between vehicles and trains at these four intersections would persist. However, measures such as crossing arms, alarms and train horns would be used to minimize impacts. As such, impacts would be less-than-significant.

#### ***Emit hazardous emissions within one-quarter mile of a school***

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The proposed project is located within ¼-mile from San Gabriel High School, which is located at 801 Ramona Street in the City of San Gabriel. The proposed project includes the lower of the UPRR railroad at the Ramona Street crossing and three other crossings in the City of San Gabriel. It would not emit hazardous emissions. As described above, it is possible that hazardous or acutely hazardous materials, substances or waste that are currently being transported along the UPRR Alhambra Subdivision would continue to be transported along this route. However, implementation of proposed project would eliminate the potential for accidental upset due to collision with a vehicle at the Ramona Street Crossing. This would be a beneficial impact.

### **Alternative 2 – No Build Alternative**

Alternative 2 would be located at the same site as Alternative 1. However, under the Alternative 2, no improvements would be made to the existing crossings. The potential for collisions between vehicles and trains at the Ramona Street intersection would persist. However, measures such as crossing arms, alarms and train horns would be used to minimize impacts. As such, impacts would be less-than-significant.

#### ***Included on a list of hazardous materials site***

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

As identified above, the project site is located within an eighth of a mile of hazardous waste sites and includes thirty sites that are undergoing assessment according to Cal/EPA's Cortese List. As such, the potential for encountering contaminated soils and/or groundwater during the proposed project construction, particularly during excavation, exists. Consequently, the potential for public exposure to hazardous materials and waste also exists, which would be considered an adverse effect on public health and safety. Mitigation measures that will be required include the preparation of a Phase II Assessment to determine the degree of contamination (if any) and a plan for handling and remediation during construction. With implementation of these mitigation measures impacts would be less-than-significant.

Once the project is constructed, operation of the project would not generate hazardous materials or wastes. Less-than-significant impacts are anticipated.

### **Alternative 2 – No Build Alternative**

Under the No Build Alternative, no excavation activities would occur. Impacts associated with hazardous materials would not occur under this alternative. The project area would remain in its existing condition and no development would occur. No impacts associated with hazardous materials are anticipated.

## **Airport Hazards**

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The project site is not located within two miles of a public airport. Additionally, the project site is not located within the vicinity of any private airstrips. The walls associated with the trench would not be built to a height that would be high enough to pose a hazard to approaching airplanes, and thus, no hazard would occur. Therefore, no impact is anticipated.

### **Alternative 2 – No Build Alternative**

Alternative 2 would not create a trench and, thus, the existing conditions, which currently do not pose a hazard to any approaching airplanes, would persist. Therefore, no impact is anticipated.

## **Emergency Response/Evacuation Plan**

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Alternative 1 would temporarily alter evacuation circulation patterns during construction activities. The intersections and Ramona Street, Mission Road and Del Mar Avenue would all be closed during construction, however, construction would not be concurrent, but rather would be phased to ensure access will be provided on nearby streets. Closure at Ramona Street would occur during the summer months to allow access to the adjacent San Gabriel High School. In addition, the crossing at San Gabriel Boulevard is anticipated to remain open during construction with one travel lane in each direction. With the phased construction described, impacts to emergency response/evacuation routes during construction would be less-than-significant.

Once constructed, operation of the project would have a beneficial impact on emergency response/evaluation routes by eliminating delay at railroad crossings that currently exists.

### **Alternative 2 – No Build Alternative**

Alternative 2 would be on the same site as Alternative 1, but would not include any construction activities. Therefore, no impacts would occur.

## **Wildland Fires**

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

According to the Public and Environmental Safety Element of the City of San Gabriel's Comprehensive Plan, no wildfire areas exist in the City. The project site is located in an urbanized area comprised of primarily railroad, residential and commercial uses. The project site and surrounding uses are not located adjacent to wildlands, which could increase fire hazards. Thus, Alternative 1 would not expose people or structures to wildland fires, and no impacts are anticipated.

### **Alternative 2 – No Build Alternative**

As described above, no wildfire areas exist in the City. As such, no impact would occur.

## **MITIGATION MEASURES**

- HH1** A Phase II ESA that shall further characterize hazardous waste potential at the project site, including the potential for encountering contaminated soils and/or groundwater will be prepared. In the event that contaminated soils and/or groundwater are identified as affecting the project, a remediation plan will be developed and submitted for review and approval to the affected cities and responsible agencies. No construction activities shall occur unless remediation to State exposure standards is possible and until approval of the remediation plan. All subsequent construction activities shall be conducted in accordance with the remediation plan.
- HH2** During excavation, a qualified environmental consultant approved by the city in which excavation shall occur, shall observe the exposed soil for visual evidence of contamination. If visual contamination indicators are observed during excavation or grading activities, all work shall stop and an investigation shall be designed and performed to verify the presence and extent of contamination at the site. A qualified and approved environmental consultant shall prepare a report detailing results and recommend actions to ensure compliance with State exposure standards. The recommendations shall be reviewed and approved by the Los Angeles County Fire Department Health Hazardous Materials Division or California Department of Toxic Substance Control (DTSC) prior to the resumption of grading and construction activity and all further activity, including remediation shall be in conformance with approved recommendations. The investigation shall include collecting samples for laboratory analysis and quantifying contaminant levels within the proposed excavation and surface disturbance areas. Subsurface investigation shall determine appropriate worker protection and hazardous material handling and disposal procedures appropriate for the subject site.
- HH3** Areas with contaminated soil determined to be hazardous waste shall be excavated by personnel who have been trained through the Occupational Safety and Health Administration (OSHA) recommended 40-hour safety program (29CFR1910.120), with an approved plan for excavation, control of contaminant releases to the air, and off-site transport or on-site treatment. Health and safety plans prepared by a qualified and approved industrial hygienist shall be developed to protect the public and all workers in the construction area. Health and safety plans shall be reviewed and approved by the appropriate agencies such as the Los Angeles County Fire Department Health Hazardous Materials Division or DTSC.

Although groundwater was not encountered at a depth of 80 feet below ground surface, the following measure shall be implemented.

- HH4** Excavations below the elevations of groundwater could experience strong seepage and require dewatering. The contractor shall observe the groundwater for visual evidence of contamination or unusual odors. The contractor shall comply with all applicable regulations and permit requirements for construction dewatering. This may include laboratory testing, treatment of contaminated groundwater or other disposal options.
- HH5** The following plans shall be prepared and implemented prior to construction: health and safety plan, waste management plan, sampling and analysis plan, and a work plan for the remediation of any hazardous wastes encountered. The work plan shall include such measures as removal, on-site treatment if necessary, and safe transport of contaminated soils and materials to approved hazardous materials disposal sites.



## LEVEL OF IMPACT AFTER MITIGATION

### Hazardous Materials.

Hazardous Materials. Implementation of Mitigation Measures **HH1** through **HH5** would ensure the reduction of potential effects related to use transport or accidental upset conditions of hazardous materials. Therefore, a less-than-significant impact is anticipated.

### Airport Hazards.

Not applicable.

### Emergency Response.

Not applicable.

### Wildland Fires.

Not applicable.

## 3.11 NOISE

This section describes the procedures used for the survey of existing noise conditions, presents the results of the survey at the San Gabriel Trench Grade Separation Project site and includes a general discussion of the observed noise environment at relevant measurement sites. Projections of noise impacts that would result from the proposed project are provided below.

### EXISTING SETTING

Please refer to Section 2.2.5 Noise for a detailed description of the environmental setting and operational noise and vibration federal regulations.

### REGULATORY SETTING

#### City of Alhambra Municipal Code

The City of Alhambra Municipal Code (AMC) includes noise regulations for addressing specific types of noise sources.<sup>19</sup> **Table 3-5** lists the AMC construction noise restrictions. The AMC also provides measures for protecting different land uses, which are assigned noise zones and corresponding noise limits (exterior and interior), as shown in **Table 3-6**.

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<sup>19</sup>City of Alhambra Municipal Code Section 18.02 Noise and Vibration Control Regulations, [http://www.amlegal.com/alhambra\\_ca/](http://www.amlegal.com/alhambra_ca/), last accessed December 10, 2008.

<b>TABLE 3-5: RESTRICTIONS ON CONSTRUCTION NOISE AND VIBRATION IN MUNICIPAL NOISE ORDINANCES</b>			
<b>Limitations on Hours</b>	<b>Hours</b>	<b>Comments</b>	<b>Section of Code</b>
Alhambra	8:00 p.m. to 7:00 a.m.	Construction is excluded for community noise limits except during these hours.	18.02.070(C)
San Gabriel	7:00 p.m. to 7:00 a.m.	--	150.003
Rosemead	8:00 p.m. to 7:00 a.m.	Includes a 65-dBA Limit	8.36.030 (3)
Los Angeles County	8:00 p.m. to 7:00 a.m.	Allowed noise levels are reduced during these hours.	12.08.440
<b>Applicable Noise Limits</b>	<b>Limits (dBA)</b>	<b>Comments</b>	<b>Section of Code</b>
Alhambra	50 dBA	Limits during nighttime hours only	18.02.050(A)
San Gabriel	--	No specific limits. Avoid unnecessary inconvenience to community.	130.09, 98.02, 100.058
Rosemead	65 dBA	--	8.36.030 (3)
Los Angeles County	75 to 80 dBA (day) 60 to 70 dBA (night)	L <sub>max</sub> limit Los Angeles County for intermittent noise.	12.08.440
	60 to 70 dBA (day) 50 to 60 dBA (night)	Limits for stationary equipment (equipment in place more than 10 days).	12.08.440
<b>Vibration Limits</b>	<b>Limits</b>	<b>Comments</b>	<b>Section of Code</b>
Alhambra	0.05 in/sec (RMS)	No vibration above perception threshold, which is defined as 0.05 in/sec RMS.	18.02.110
San Gabriel	--	Avoid unnecessary inconvenience to community.	100.058
Rosemead	--	No specific limits.	--
Los Angeles County	0.01 in/sec	No vibration above perception threshold, which is defined as 0.01 in/sec. Does not state whether this limit is PPV or RMS; RMS has been assumed for this analysis.	12.08.570

**SOURCE:** ATS Consulting, *Construction Noise and Vibration Impact Assessment, San Gabriel Trench Grade Separation, 2007.*

Noise associated with construction is exempt from provisions in the AMC so long as construction activity occurs only between the hours of 7:00 a.m. and 8:00 p.m. Monday through Saturday, and does not occur at any time on Sunday or a federal holiday, and provided the noise standard of 65 dBA plus the limits specified in AMC Section 18.02.050(B) as measured on residential property and any vibration created does not endanger the public health, welfare and safety.

<b>TABLE 3-6: CITY OF ALHAMBRA EXTERIOR AND INTERIOR NOISE STANDARDS</b>						
Noise District	Time Interval	Allowable L <sub>eq</sub>				
		Standard	15 Mins/Hr	5 Mins/Hr	1 Min/Hr	Any Period
<b>Exterior</b>						
I	10:00 p.m. to 7:00 a.m.	50 dBA	55 dBA	60 dBA	65 dBA	70 dBA
	7:00 a.m. to 10:00 p.m.	55 dBA	60 dBA	65 dBA	70 dBA	75 dBA
II	10:00 p.m. to 7:00 a.m.	60 dBA	65 dBA	70 dBA	75 dBA	80 dBA
	7:00 a.m. to 10:00 p.m.	65 dBA	70 dBA	75 dBA	80 dBA	85 dBA
III	Anytime	70 dBA	75 dBA	80 dBA	85 dBA	90 dBA
<b>Interior</b>						
I	10:00 p.m. to 7:00 a.m.	45 dBA	N/A	N/A	50 dBA	60 dBA
	7:00 a.m. to 10:00 p.m.	50 dBA			55 dBA	65 dBA
<b>SOURCE:</b> City of Alhambra Municipal Code, Section 18.02.050 (Exterior Noise Standards) and Section 18.02.060 (Interior Noise Standards), last accessed December 10, 2008.						

City of San Gabriel

**Table 3-5** also lists the San Gabriel Municipal Code (SGMC) construction noise restrictions. Section 150.003 of the SGMC states that no construction shall take place within the City of San Gabriel except between the hours of 7:00 a.m. and 7:00 p.m., Monday through Friday and between the hours of 8:00 a.m. and 4:00 p.m. on Saturday. This restriction on construction hours does not apply to emergency repairs, or to a residential property owner and or members of his immediate family, performing work on his personal property.

In addition to construction activity, SGMC Section 130.09 requires any machinery which causes loud, excessive, unnecessary, or unusual continued or intermittent noise, or any noise which annoys, disturbs, injures, or endangers the comfort, repose, health, peace, or safety of others within the city. Equipment is required to utilize mufflers or similar apparatus in constant operation to help reduce noise impacts, and where possible, machinery should be enclosed within a room, building or similar enclosure to reduce noise disturbances.

**CEQA SIGNIFICANCE CRITERIA**

The majority of construction activity would occur in San Gabriel and Alhambra. Therefore, a significant impact would result if construction and operational vibration noise levels would exceed the standards listed in the Cities of Alhambra and San Gabriel Municipal Codes. If not applicable, FHWA guidelines were used to determine the level of significance.

**IMPACTS**

**Construction Noise**

*Construction Equipment and Shoofly Track Noise*

**Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Predictions of noise levels that would be generated during the construction process were based on the expected phasing of the construction, the types of equipment that would be used for each phase of the construction, and the location of the shoofly track. The average noise emissions of the different categories of construction equipment were based on the levels given in the FHWA “Roadway

Construction Noise Model” (RCNM, Ref. 3). The  $L_{eq}$  would typically range from 85 to 89 dBA at a distance of 50 feet from the active construction area. Construction noise is not constant and there will be wide day-to-day variations depending on equipment availability, progress of the construction, and coordination of the construction for the different parts of the alignment.

The noise from the shoofly track was added to the predicted noise from construction to obtain a total level of construction noise. The following discussion presents the methodology for analyzing noise generated by operations of the shoofly track.

Noise from train operations on the shoofly track would be similar to existing levels of train noise. However, the shoofly track would be approximately 35 feet north of the existing tracks, which means that train noise will be slightly higher at sensitive receptors north of the tracks and slightly lower south of the tracks. The procedures used to estimate noise from train operations on the shoofly track were:

- The SELs of all train events were extracted from the long-term measurement results. The average SELs at each site were:  
 Site 1: 108 dBA at 140 feet  
 Site 2: 106 dBA at 140 feet  
 Site 3: 100 dBA at 155 feet
- The number of trains per day during daytime and nighttime hours was assumed to be the same as the average number of train observed during the measurements. The values were 11 trains during the daytime hours (7:00 a.m. to 10:00 p.m.) and 8 trains during the nighttime hours (10:00 p.m. to 7:00 a.m.).
- Daytime and nighttime  $Leq$  at the measurement sites were estimated using the following formula:

$$Leq = SEL_{AVG} + 10 \times \log(N_{Events}) - 10 \times \log(T)$$

$N_{Events}$  = number of trains during the time period  
 $SEL_{AVG}$  = Average freight train SEL at the measurement site  
 $T$  = Length of time period in seconds

This relationship gives values slightly different from the measured values because the number of trains in daytime and nighttime hours and the total number trains varied from site to site. This process ensures that the predictions for the three measurement sites are comparable.

- The  $L_{dn}$  at each site was calculated using the relationship:

$$L_{dn} = SEL_{AVG} + 10 \times \log(N_{Day} + 10 \times N_{Night}) - 49.4$$

$N_{Day}$  = average number of trains during daytime hours (7:00 a.m. to 10:00 p.m.)  
 $N_{Night}$  = average number of trains during nighttime hours (10:00 p.m. to 7:00 a.m.)

- The  $L_{eq}$  and  $L_{dn}$  for each cluster of sensitive receptors was estimated using the relationship:

$$L_1 = L_0 + 10 \times \log\left(\frac{D_0}{D_1}\right)$$

$L_0$  = the  $Leq$  or  $L_{dn}$  value from the closest of the 24-hour measurement sites,  
 $D_0$  = the distance of the measurement site from the tracks,  
 $L_1$  = the predicted  $Leq$  or  $L_{dn}$  at the cluster, and

$D_1$  = the distance of the closest residence within the cluster to the shoofly track.

**Table 3-7** lists the existing  $L_{dn}$ , predicted construction noise (including operations of the shoofly track), impact thresholds, and impacts for residential and non-residential sensitive receptors. The predicted noise levels represent the worst case condition, which is expected to be during the excavation and slurry wall construction when the  $L_{eq}$  is predicted to be close to 90 dBA at the reference distance of 50 feet. The City of San Gabriel does not have a quantitative construction noise standard. Ambient noise levels in the project vicinity without project construction exceed the City of Alhambra ambient construction noise standards. Therefore, the determination of significance was based on a 3-dBA incremental ambient noise level increase. The results indicate that construction equipment noise would result in a significant impact at all of the closest residential land uses, the northern part of the San Gabriel High School campus, the San Gabriel Mission, the Asian Youth Center, and several other institutional land uses without mitigation.

#### **Alternative 2 – No Build Alternative**

The San Gabriel Trench would not be constructed under Alternative 2. Alternative 2 would result in a less-than-significant construction noise impact.

**TABLE 3-7: SUMMARY OF CONSTRUCTION NOISE IMPACTS - UNMITIGATED**

<b>Residential Receptors</b>	<b>Civil Station</b>	<b>Units</b>	<b>Existing L<sub>dn</sub> (dBA)</b>	<b>Projected L<sub>dn</sub> (dBA)</b>	<b>L<sub>dn</sub> Increase</b>	<b>Significant Impact?</b>
Single- and Multi-Family Residences	5855+00	11	79	82	3	Yes
Single- and Multi-Family Residences	5885+00	5	79	84	5	Yes
Single-Family Residences	5893+00	2	76	79	3	Yes
Single-Family Residences	5890+00	6	79	83	4	Yes
Single-Family Residences	5915+00	21	81	90	9	Yes
Single-Family Residences	5915+00	19	75	79	4	Yes
Single-Family Residences	5946+00	4	75	86	11	Yes
Single-Family Residences	5921+00	6	78	84	6	Yes
Single-Family Residences	5950+00	6	75	86	11	Yes
Single-Family Residences	5925+00	10	78	84	6	Yes
Single-Family Residences	5953+00	9	72	82	10	Yes
Single-Family Residences	5930+00	4	80	87	7	Yes
Single-Family Residences (Adobe)	5887+00	1	71	72	1	No
Single-Family Residences (Adobe)	5887+00	1	72	73	1	No
Single-Family Residences (Adobe)	5887+00	1	74	75	1	No
Vista Cove Care Center	5880+00	1	79	82	3	Yes
<b>Non-Residential Receptors</b>	<b>Civil Station</b>	<b>Units</b>	<b>Existing L<sub>eq</sub> (dBA)</b>	<b>Projected L<sub>eq</sub> (dBA)</b>	<b>L<sub>eq</sub> Increase</b>	<b>Significant Impact?</b>
YMCA	5847+00	1	66	76	10	Yes
San Gabriel High School	5880+00	1	72	86	14	Yes
Alhambra Municipal Golf Course	5880+00	1	72	86	14	Yes
Winston Smoyer Community Garden	5880+00	1	65	84	19	Yes
Almansor Park	5860+00	1	59	59	0	No
Almansor Court	5860+00	1	59	59	0	No
Granada Elementary School	5880+00	1	57	57	0	No
San Gabriel City Hall	5883+00	3	69	78	9	Yes
Mission Park	5885+00	1	72	82	10	Yes
San Gabriel Mission	5887+00	1	71	81	10	Yes
School District Headquarters	5900+00	1	70	83	13	Yes
Asian Youth Center	5905+00	1	75	91	16	Yes
Mission Elementary School	5885+00	1	67	74	8	Yes
Mission High School	5890+00	1	63	68	5	Yes
Smith Park	5903+00	1	66	75	9	Yes
Library	5905+00	1	64	71	8	Yes
Community Center	5915+00	1	59	63	4	Yes
San Gabriel Valley Medical Center	5890+00	1	63	63	0	No

Note: Projected construction noise includes both the noise from construction equipment and noise from train operations on the shoofly track.  
/a/ Projected Almansor Park and Court noise levels are based on a soft-site attenuation rate of 7.5 dBA for every doubling of distance.  
/b/ Projected Granada Elementary School noise levels include a 5-dBA reduction for intervening buildings between the School and the construction area.  
**SOURCE:** ATS Consulting, *Construction Noise and Vibration Impact Assessment, San Gabriel Trench Grade Separation*, 2007 and TAHA, 2009.

**Haul Route**

**Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Haul trucks would travel along Mission Road, Main Street, Del Mar Avenue (north of Mission Road), and San Gabriel Boulevard during the various phases of construction activity. The haul truck analysis assumed that Alternative 1 would result in 13 haul trucks per hour over a 12-hour period. **Table 3-8** summarizes the predicted noise level increase caused by haul truck activity. The increase in ambient noise levels along high-volume roadways such as Del Mar Avenue, Mission Road, and San Gabriel Boulevard would be less than 3 dBA, which is the perceptible change in sound level for a person with normal hearing sensitivity. However, haul trucks would also travel along residential low-volume roadways such as Main Street. However, haul trucks would also travel along residential low-volume roadways such as Main Street. The increase in ambient noise levels along these roadways would be approximately 7 dBA, which would be a noticeable change and would likely evoke a community reaction. Therefore, haul truck noise would result in a less-than-significant impact.

**Alternative 2 – No Build Alternative**

The San Gabriel Trench would not be constructed under Alternative 2. Alternative 2 would result in a less-than-significant construction noise impact.

<b>TABLE 3-8: PREDICTED NOISE LEVELS ALONG HAUL ROUTES</b>			
<b>Location</b>	<b>Noise Level, Hourly <math>L_{eq}</math> (dBA)</b>		
	<b>Existing</b>	<b>Predicted with Trucks</b>	<b>Predicted Increase</b>
Del Mar Ave. – Residences	66	66.5	0.5
San Gabriel Blvd. – Residences	67	67.4	0.4
San Gabriel High School	69	69.3	0.3
Main St. – Residences	51	57.8	6.7
Mission Rd. – Residences	61	62.4	1.4
<b>SOURCE: TAHA, 2009.</b>			

Construction Vibration

**Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The Cities of Alhambra and San Gabriel do not have quantitative thresholds for construction vibration. Therefore, the FHWA guidelines were utilized to determine significance. Refer to Section 2.3-2 Construction Impacts for a complete construction vibration analysis. Based on the FHWA analysis, construction vibration would result in a significant impact without mitigation.

**Alternative 2 – No Build Alternative**

The San Gabriel Trench would not be constructed under Alternative 2. Alternative 2 would result in a less-than-significant construction vibration impact.

Operational Noise

**Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Operational activity associated with Alternative 1 would potentially increase rail and traffic noise in the project area. Regarding rail noise, Alternative 1 would result in the substantial reduction of noise

exposure near the tracks. The  $L_{dn}$  would be 15 to 20 dBA lower than existing noise levels at sensitive land uses closest to the railroad tracks. The reduced noise levels would be a combined result of the acoustic shielding provided by the trench and eliminating the requirement to sound train horns prior to the grade crossing. Alternative 1 would shift the existing train tracks approximately 20 feet to the south within the railroad right-of-way. This would not affect the majority of sensitive receptors as the trench would reduce noise exposure. The shift would move the tracks closer to Alhambra Municipal Golf Course, Almanson Park, and San Gabriel High School before the trench would reach full depth. The northern portion of the golf course would experience a marginal increase in noise levels and Almanson Park would not experience an audible increase in noise levels. The small noise increase associated with the 20-foot shift would not adversely affect golf course operations. San Gabriel High School would experience occasional increases in noise levels as the trench descends near the high school. The trench walls would act as a partial noise barrier until full depth is reached. Noise increases would be short-term and intermittent would not adversely affect the learning environment substantially more than existing train activity. Alternative 1 would result in a beneficial impact.

Regarding traffic noise, Alternative 1 would not substantially alter traffic patterns in the project area. The existing four crossings at Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard would remain in place. Removal of the grade crossings would increase the average vehicle speed along the segments immediately adjacent to the tracks. Substantial speed increases would result in increased noise; however, the speed increases associated with the proposed project would not exceed the existing maximum speeds and would not be expected to result in a perceptible difference. In addition, the noise associated with increased speeds near the grade crossing would be offset by decreased noise levels associated with engine noise as the project would eliminate the need for vehicles to accelerate from a stopped position at the completion of train crossings. As a result, similar mobile noise levels as existing conditions would characterize the project area. Alternative 1 would result in a less-than-significant traffic noise impact.

#### **Alternative 2 – No Build Alternative**

The San Gabriel Trench would not be constructed under Alternative 2 and operational activity would not be different than existing conditions. Alternative 2 would result in a less-than-significant operational noise impact.

#### Operational Vibration

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The railroad track associated with Alternative 1 would be located in same location as the existing track. Alternative 1 would not result in increased train speeds and associated increased vibration through the corridor, and vibration levels would be identical to existing conditions. Alternative 1 would result in a less-than-significant operational vibration impact.

#### **Alternative 2 – No Build Alternative**

The San Gabriel Trench would not be constructed under Alternative 2 and operational activity would not be different than existing conditions. Alternative 2 would result in a less-than-significant operational vibration impact.



**MITIGATION MEASURES**

**Construction Noise Measures**

**N1** The construction contractor shall utilize temporary noise barriers (e.g., solid walls or sound attenuation blankets) capable of reducing noise levels by 10 dBA to block construction noise at sensitive land uses. The locations of the noise barriers are shown in **Table 3-9**.

<b>TABLE 3-9: RECOMMENDED NOISE BARRIER LOCATIONS</b>					
Site	Side of Tracks	Civil Station		Length (feet)	Description
		Start	End		
1A	South	5872+00	5876+00	400	Protects closest buildings on San Gabriel High School campus
1B	South	5869+00	5882+00	1,300	Protects complete San Gabriel High School campus including areas where no impact is predicted
2	South	5883+50	5891+00	750	Protects residences on West Main Street
3	North	5884+00	5890+00	600	Protects San Gabriel Mission and small park/green area southwest of Mission Road
4	South	5909+00	5933+00	2,400	Protects residences along East Main Street between Del Mar Avenue and San Gabriel Boulevard
5A	North	5946+00	5951+50	550	Protects residences east of Rubio Wash. East end of barrier would be at the industrial property at southwest corner of Walnut Grove Avenue and Clanton Street.
5B	North	5943+00	5945+50	250	If feasible extend to 250 feet west Rubio Wash.
<b>TOTAL</b>				<b>4,950</b> <b>5,850</b>	Using shorter barrier (1A) at San Gabriel High School Protecting complete San Gabriel High School campus (1B)
<b>SOURCE:</b> ATS Consulting, <i>Construction Noise and Vibration Impact Assessment, San Gabriel Trench Grade Separation, 2007.</i>					

**N2** The construction contractor shall ensure that the construction noise levels at representative sensitive receptors do not exceed the limits detailed **Table 3-10**.

<b>TABLE 3-10: RECOMMENDED NOISE LIMITS FOR CONSTRUCTION NOISE</b>	
Location	Maximum 1-Hour Leq (7:00 a.m. to 7:00 p.m.) /a, b/
North of Mission Rd., Almansor to Alhambra Wash	80 dBA
San Gabriel High School	80 dBA
West Main Street, Ramona to Mission Road	80 dBA
San Gabriel Mission	80 dBA
West Main Street, Mission Road to Del Mar Avenue	80 dBA
East Main Street, Mission Road to San Gabriel Blvd.	82 dBA
North of Tracks, Rubio Wash to Walnut Grove Avenue	80 dBA
/a/ Sound level with noise from freight trains excluded. /b/ The noise limits should be reduced by 10 dB for any nighttime construction.	
<b>SOURCE:</b> ATS Consulting, <i>Construction Noise and Vibration Impact Assessment, San Gabriel Trench Grade Separation, 2007.</i>	

**N3** A noise-monitoring program shall be performed under the direction of ACE or the construction contractor. The monitoring program shall be designed to demonstrate that the contractor is in compliance with the noise limits detailed in the construction contract specifications.

- N4 The contractor shall be required to ensure that equipment is well maintained and equipped with mufflers.
- N5 Low-noise construction procedures shall be implemented.
- N6 Hauling shall be limited to between the hours of 7:00 a.m. and 7:00 p.m.
- N7 The construction contractor shall submit a noise plan detailing how the construction will be performed in a manner that will not exceed the limits specified in **Table 3-10**. The plan shall be prepared by a qualified acoustical engineer and should be approved by the resident engineer before construction is initiated. The noise control plan shall include an inventory of the equipment, the estimated noise level at 50 feet for each major piece of equipment, calculations of the noise levels at sensitive receptors, and, noise reduction measures for any locations where the predicted noise levels exceed the limits specified in **Table 3-10**.

**TABLE 3-11: SUMMARY OF CONSTRUCTION NOISE IMPACTS - MITIGATED**

<b>Residential Receptors</b>	<b>Civil Station</b>	<b>Units</b>	<b>Existing L<sub>dn</sub> (dBA)</b>	<b>Projected L<sub>dn</sub> (dBA)</b>	<b>L<sub>dn</sub> Increase</b>	<b>Significant Impact?</b>
Single- and Multi-Family Residences	5855+00	11	79	82	3	Yes
Single- and Multi-Family Residences	5885+00	5	79	84	5	Yes
Single-Family Residences	5893+00	2	76	76	0	No
Single-Family Residences	5890+00	6	79	79	0	No
Single-Family Residences	5915+00	21	81	81	0	No
Single-Family Residences	5915+00	19	75	75	0	No
Single-Family Residences	5946+00	4	75	76	1	No
Single-Family Residences	5921+00	6	78	78	0	No
Single-Family Residences	5950+00	6	75	76	1	No
Single-Family Residences	5925+00	10	78	78	0	No
Single-Family Residences	5953+00	9	72	82	10	Yes
Single-Family Residences	5930+00	4	80	80	0	No
Single-Family Residences (Adobe)	5887+00	1	71	72	1	No
Single-Family Residences (Adobe)	5887+00	1	72	73	1	No
Single-Family Residences (Adobe)	5887+00	1	74	75	1	No
Vista Cove Care Center	5880+00	1	79	82	3	Yes
<b>Non-Residential Receptors</b>	<b>Civil Station</b>	<b>Units</b>	<b>Existing L<sub>eq</sub> (dBA)</b>	<b>Projected L<sub>eq</sub> (dBA)</b>	<b>L<sub>eq</sub> Increase</b>	<b>Significant Impact?</b>
West San Gabriel Valley YMCA	5847+00	1	66	66	0	No
San Gabriel High School	5880+00	1	72	76	4	Yes
Alhambra Municipal Golf Course	5880+00	1	72	86	14	Yes
Winston Smoyer Community Garden	5880+00	1	65	84	19	Yes
Almansor Park	5860+00	1	59	56 /b/	0	No
Almansor Court	5860+00	1	59	59/b/	0	No
Granada Elementary School	5880+00	1	57	55 /c/	0	No
San Gabriel City Hall	5883+00	3	69	69	0	No
Mission Park	5885+00	1	72	72	0	No
San Gabriel Mission	5887+00	1	71	71	0	No
School District Headquarters	5900+00	1	70	83	13	Yes
Asian Youth Center	5905+00	1	75	91	16	Yes
Mission Elementary School	5885+00	1	67	67	0	No
Mission High School	5890+00	1	63	63	0	No
Smith Park	5903+00	1	66	66	0	No
Library	5905+00	1	64	64	0	No
Community Center	5915+00	1	59	59	0	No
San Gabriel Valley Medical Center	5890+00	1	63	58	0	No

Note: Projected construction noise includes both the noise from construction equipment and noise from train operations on the shoofly track.  
/a/ This table only demonstrates the noise reduction associated with Mitigation Measure N1. Mitigation Measures N1 through N7 would eliminate the remaining impacts.  
/b/ Projected Almansor Park and Court noise levels are based on a soft-site attenuation rate of 7.5 dBA for every doubling of distance.  
/c/ Projected Granada Elementary School noise levels include a 5-dBA reduction for intervening buildings between the School and the construction area.  
**SOURCE:** ATS Consulting, *Construction Noise and Vibration Impact Assessment, San Gabriel Trench Grade Separation*, 2007 and TAHA, 2009.

### Construction Vibration Measures

- V1** A standard pre-construction survey shall be performed to document the existing condition of all structures in the vicinity of the construction site.
- V2** The following vibration limits shall be utilized to minimize the potential for damage to buildings and historic structures, and to reduce potential for intrusive vibration at sensitive receptors such as residences and schools especially during the nighttime hours when people are trying to sleep:
- Damage to normal buildings – 0.5 inches per second PPV;
  - Damage to historic buildings – 0.12 inches per second PPV;
  - Annoyance to residential buildings (daytime) – 0.022 inches per second PPV;
  - Annoyance to residential buildings (nighttime) – 0.016 inches per second PPV; and
  - Annoyance to office space, schools, churches, and other institutional land uses – 0.016 inches per second PPV
- V3** Vibration monitoring should be completed during construction activity to verify that construction vibration limits are not exceeded. If vibration from the test hits approaches or exceeds the limits, equipment activity shall be reduced until the vibration amplitudes at all sensitive buildings are below the applicable limit.
- V4** Low-vibration construction procedures shall be implemented (e.g., drilled holes instead of impact pile driving).
- V5** If complaints are received and monitoring shows that the annoyance limit is being exceeded, the contractor shall implement an alternative approach that reduces the vibration level to below the applicable standards.

### LEVEL OF IMPACT AFTER MITIGATION

Mitigation Measure **N1** would reduce noise levels by 10 dBA and, as shown in **Table 3-11**, would eliminate most impacts. The exceptions would be the residences at the furthestmost west and east edges of construction activity and various institutional land uses. The residential land uses along with Alhambra Municipal Golf Course and Winston Smoyer Community Garden are generally in the transition area where the tracks will go from at-grade to the trench. The trench would be approximately ten feet deep at the Alhambra Wash. The construction in this area would be less intensive than at areas where the trench will be the full depth. Although not shown in **Table 3-11**, sufficient noise control would be achievable with Mitigation Measures **N2** through **N7**. Specifically, Mitigation Measure **N7** is a performance standard that ensures a noise plan will be formulated prior to the initiation of construction that will ensure that sensitive receptors would not be exposed to noise levels that exceed the standards. Therefore, general construction noise would not result in a significant impact.

A portion of the haul truck route would travel along residential streets such as Main Street. Haul truck activity would intermittently increase ambient noise levels by approximately 7 dBA. There is not feasible mitigation to avoid occasional haul truck activity on residential streets. As such, haul truck noise would result in an unavoidable significant impact.

Mitigation Measures **V1** through **V5** would ensure that the vibration standards are not exceeded at sensitive receptors.

### 3.12 AIR QUALITY

This section examines the degree to which the proposed project may cause significant impacts to air quality. Both short-term construction emissions occurring from activities, such as site grading and haul truck trips, and long-term effects related to the ongoing operation of the proposed project are discussed in this section. This analysis focuses on air pollution from two perspectives: daily emissions and pollutant concentrations. “Emissions” refer to the quantity of pollutant released into the air, measured in pounds per day (ppd). “Concentrations” refer to the amount of pollutant material per volumetric unit of air, measured in parts per million (ppm) or micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ).

#### EXISTING SETTING

Please refer to Section 2.2.4 Air Quality for background air quality information and a detailed discussion of the environmental setting and federal regulations.

#### California Ambient Air Quality Standards and Attainment Status

As discussed in Section 2.2.4 Air Quality, the California Ambient Air Quality Standards (CAAQS) are generally more stringent than the corresponding National Ambient Air Quality Standards (NAAQS), and are used as the comparative standard in the air quality analysis contained in this report. The State standards are summarized in **Table 3-12**. These standards are designed to protect the most sensitive persons from illness or discomfort. Pollutants of concern include carbon monoxide (CO), ozone ( $\text{O}_3$ ), nitrogen dioxide ( $\text{NO}_2$ ), sulfur dioxide ( $\text{SO}_2$ ), particulate matter 2.5 microns or less in diameter ( $\text{PM}_{2.5}$ ), particulate matter 10 microns or less in diameter ( $\text{PM}_{10}$ ), and lead (Pb).

TABLE 3-12: STATE AMBIENT AIR QUALITY STANDARDS AND ATTAINMENT STATUS FOR THE SOUTH COAST AIR BASIN			
Pollutant	Averaging Period	California	
		Standards	Attainment Status
Ozone ( $\text{O}_3$ )	1-hour	0.09 ppm ( $180 \mu\text{g}/\text{m}^3$ )	Nonattainment
	8-hour	0.070 ppm ( $137 \mu\text{g}/\text{m}^3$ )	n/a
Respirable Particulate Matter ( $\text{PM}_{10}$ )	24-hour	$50 \mu\text{g}/\text{m}^3$	Nonattainment
	Annual Arithmetic Mean	$20 \mu\text{g}/\text{m}^3$	Nonattainment
Fine Particulate Matter ( $\text{PM}_{2.5}$ )	24-hour	--	--
	Annual Arithmetic Mean	$12 \mu\text{g}/\text{m}^3$	Nonattainment
Carbon Monoxide (CO)	8-hour	9.0 ppm ( $10 \text{mg}/\text{m}^3$ )	Attainment
	1-hour	20 ppm ( $23 \text{mg}/\text{m}^3$ )	Attainment
Nitrogen Dioxide ( $\text{NO}_2$ )	Annual Arithmetic Mean	0.030 ppm ( $57 \mu\text{g}/\text{m}^3$ )	Attainment
	1-hour	0.18 ppm ( $338 \mu\text{g}/\text{m}^3$ )	Attainment
Sulfur Dioxide ( $\text{SO}_2$ )	Annual Arithmetic Mean	--	--
	24-hour	0.04 ppm ( $105 \mu\text{g}/\text{m}^3$ )	Attainment
	3-hour	--	--
Lead (Pb)	1-hour	0.25 ppm ( $655 \mu\text{g}/\text{m}^3$ )	Attainment
	30-day average Calendar Quarter	$1.5 \mu\text{g}/\text{m}^3$	Attainment
n/a = not available			
SOURCE: CARB, <i>Ambient Air Quality Standards</i> , November 17, 2008.			

The California Clean Air Act (CCAA) requires the California Air Resources Board (CARB) to designate 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 shows 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. Under the CCAA, the Los Angeles County portion of the Basin is designated as a nonattainment area for O<sub>3</sub>, PM<sub>2.5</sub>, and PM<sub>10</sub>.<sup>20</sup>

### **Air Quality Management Plan**

All areas designated as nonattainment under the CCAA are required to prepare plans showing how the area would meet the State air quality standards by its attainment dates. The AQMP is the region's plan for improving air quality in the region. It addresses CAA and CCAA requirements and demonstrates attainment with State and federal ambient air quality standards. The AQMP is prepared by the South Coast Air Quality Management District (SCAQMD) and the Southern California Association of Governments (SCAG). The AQMP provides policies and control measures that reduce emissions to attain both State and federal ambient air quality standards by their applicable deadlines. Environmental review of individual projects within the Basin must demonstrate that daily construction and operational emissions thresholds, as established by the SCAQMD, would not be exceeded. The environmental review must also demonstrate that individual projects would not increase the number or severity of existing air quality violations.

The 2007 AQMP was adopted by the SCAQMD on June 1, 2007. The 2007 AQMP proposes attainment demonstration of the federal PM<sub>2.5</sub> standards through a more focused control of sulfur oxides (SO<sub>x</sub>), directly-emitted PM<sub>2.5</sub>, and nitrogen oxides (NO<sub>x</sub>) supplemented with VOC by 2015. The eight-hour ozone control strategy builds upon the PM<sub>2.5</sub> strategy, augmented with additional NO<sub>x</sub> and VOC reductions to meet the standard by 2024. The 2007 AQMP also addresses several federal planning requirements and incorporates significant new scientific data, primarily in the form of updated emissions inventories, ambient measurements, new meteorological episodes, and new air quality modeling tools. The 2007 AQMP is consistent with and builds upon the approaches taken in the 2003 AQMP. However, the 2007 AQMP highlights the significant amount of reductions needed and the urgent need to identify additional strategies, especially in the area of mobile sources, to meet all federal criteria pollutant standards within the time frames allowed under the CAA.

The SCAQMD monitors air quality conditions at 38 locations throughout the Basin. The project site is located in SCAQMD's West San Gabriel Valley Air Monitoring Subregion, which is served by the Pasadena Monitoring Station, and is located approximately three miles north of the project corridor 752 South Wilson Avenue in the City of Pasadena.

Historical data from the Pasadena Monitoring Station were used to characterize existing conditions in the vicinity of the project area. Criteria pollutants monitored at the Pasadena Monitoring Station include O<sub>3</sub>, CO, PM<sub>2.5</sub>, and NO<sub>2</sub>. However, this monitoring station does not monitor PM<sub>10</sub> or SO<sub>2</sub>. The nearest, most representative monitoring station that gathers PM<sub>10</sub> and SO<sub>2</sub> data is located approximately eight miles southwest of the project site at the Downtown Los Angeles Monitoring Station.

### **Local Climate**

**Table 3-13** shows pollutant levels, the State standards, and the number of exceedances recorded at the Pasadena Monitoring Station from 2005 to 2007. The CAAQS for the criteria pollutants are also shown

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<sup>20</sup>CARB, Area Designation Maps, available at <http://www.arb.ca.gov/desig/adm/adm.htm>, accessed December 9, 2008.

in the table. Criteria pollutants CO, NO<sub>2</sub>, and SO<sub>2</sub> did not exceed the State standards during the 2005 through 2007 period. However, the one-hour State standard for O<sub>3</sub> was exceeded 13 to 25 times during this period, and the eight-hour State standard for O<sub>3</sub> was exceeded 12 to 24 times. Additionally, the 24-hour State standard for PM<sub>10</sub> was exceeded four times in 2005 and three times in 2006 and five times in 2007. The annual State standard for PM<sub>2.5</sub> was exceeded in 2005, 2006, and 2007.

<b>TABLE 3-13: SCAQMD DAILY CONSTRUCTION EMISSIONS THRESHOLDS</b>		
<b>Criteria Pollutant</b>	<b>Regional Emissions (Pounds Per Day)</b>	<b>Localized Emissions (Pounds Per Day)/a/</b>
Volatile Organic Compounds (VOC)	75	--
Nitrogen Oxides (NO <sub>x</sub> )	100	69
Carbon Monoxide (CO)	550	535
Sulfur Oxides (SO <sub>x</sub> )	150	--
Fine Particulates (PM <sub>2.5</sub> )	55	3
Particulates (PM <sub>10</sub> )	150	4
/a/ The localized significance thresholds were developed using a one-acre project site and a 25-meter (82-foot) receptor distance. <b>SOURCE:</b> SCAQMD, 2008.		

### CEQA SIGNIFICANCE CRITERIA

The following are the significance criteria SCAQMD has established to determine project impacts.

#### Construction Phase Significance Criteria

The proposed project would have a significant impact if:

- Daily regional and localized construction emissions were to exceed SCAQMD construction emissions thresholds for volatile organic compounds (VOC), NO<sub>x</sub>, CO, SO<sub>x</sub>, PM<sub>2.5</sub>, or PM<sub>10</sub>, as presented in **Table 3-14**;
- The proposed project would generate significant emissions of TACs; and/or
- The proposed project would create an odor nuisance.

<b>TABLE 3-14: SCAQMD DAILY CONSTRUCTION EMISSIONS THRESHOLDS</b>		
<b>Criteria Pollutant</b>	<b>Regional Emissions (Pounds Per Day)</b>	<b>Localized Emissions (Pounds Per Day)/a/</b>
Volatile Organic Compounds (VOC)	75	--
Nitrogen Oxides (NO <sub>x</sub> )	100	69
Carbon Monoxide (CO)	550	535
Sulfur Oxides (SO <sub>x</sub> )	150	--
Fine Particulates (PM <sub>2.5</sub> )	55	3
Particulates (PM <sub>10</sub> )	150	4
/a/ The localized significance thresholds were developed using a one-acre project site and a 25-meter (82-foot) receptor distance. <b>SOURCE:</b> SCAQMD, 2009.		

### Operations Phase Significance Criteria

The proposed project would have a significant impact if:

- Daily operational emissions were to exceed SCAQMD operational emissions thresholds for VOC, NO<sub>x</sub>, CO, SO<sub>x</sub>, PM<sub>2.5</sub>, or PM<sub>10</sub>, as presented in **Table 3-15**;

<b>TABLE 3-15: SCAQMD DAILY OPERATIONAL EMISSIONS THRESHOLDS</b>	
<b>Criteria Pollutant</b>	<b>Pounds Per Day</b>
Volatile Organic Compounds (VOC)	55
Nitrogen Oxides (NO <sub>x</sub> )	55
Carbon Monoxide (CO)	550
Sulfur Oxides (SO <sub>x</sub> )	150
Fine Particulates (PM <sub>2.5</sub> )	55
Particulates (PM <sub>10</sub> )	150
<b>SOURCE:</b> SCAQMD, 2009.	

- Project-related traffic causes CO concentrations at study intersections to violate the CAAQS for either the one- or eight-hour period. The CAAQS for the one- and eight-hour periods are 20 ppm and 9.0 ppm, respectively. If CO concentrations currently exceed the CAAQS, then an incremental increase of 1.0 ppm over “no project” conditions for the one-hour period would be considered a significant impact. An incremental increase of 0.45 ppm over the “no project” conditions for the eight-hour period would be considered significant;<sup>21</sup>
- The proposed project would generate significant emissions of TACs;
- The proposed project would create an odor nuisance; and/or
- The proposed project would not be consistent with the AQMP.

### IMPACTS

This air quality analysis is consistent with the methods described in the SCAQMD CEQA Air Quality Handbook (1993 edition), as well as the updates to the CEQA Air Quality Handbook, as provided on the SCAQMD website.<sup>22</sup>

#### Construction Impacts

#### **Regional Emissions**

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

**Table 3-16** shows the estimated daily emissions associated with each construction phase. As shown, daily construction emissions would not exceed the SCAQMD regional significance thresholds for VOC, CO, SO<sub>x</sub>, PM<sub>2.5</sub>, or PM<sub>10</sub>. However, NO<sub>x</sub> construction emissions would exceed the SCAQMD regional significance threshold. The proposed project would result in a significant regional construction impact without mitigation.

<sup>21</sup>Consistent with the SCAQMD Regulation XIII definition of a significant impact.

<sup>22</sup>SCAQMD, <http://www.aqmd.gov/ceqa/hdbk.html>, accessed December 9, 2008.



<b>TABLE 3-16: DAILY CONSTRUCTION EMISSIONS –UNMITIGATED</b>						
<b>Construction Phase</b>	<b>Pounds Per Day</b>					
	<b>VOC</b>	<b>NO<sub>x</sub></b>	<b>CO</b>	<b>SO<sub>x</sub></b>	<b>PM<sub>2.5/a/</sub></b>	<b>PM<sub>10/a/</sub></b>
<b>Utility Relocation and Reconstruction</b>						
On-Site	1	10	4	<1	3	11
Off-Site	1	14	7	<1	<1	1
<i>Total</i>	2	24	11	<1	3	12
<b>Temporary Shoofly Bridge/Grade Crossing Construction</b>						
On-Site	1	2	2	<1	2	10
Off-Site	1	14	6	<1	1	1
<i>Total</i>	2	16	8	<1	3	11
<b>Temporary Shoofly Track Construction</b>						
On-Site	2	18	8	<1	3	11
Off-Site	3	30	14	<1	1	1
<i>Total</i>	5	48	22	<1	4	13
<b>Demolish Existing Track</b>						
On-Site	1	8	4	<1	3	11
Off-Site	<1	2	1	<1	<1	<1
<i>Total</i>	1	10	5	<1	3	11
<b>Roadway Overhead Structures/Bridges/Trench</b>						
On-Site	8	82	31	<1	5	14
Off-Site	9	103	46	<1	4	4
<i>Total</i>	17	185	77	<1	9	18
<b>Main Track Construction</b>						
On-Site	1	4	3	<1	2	11
Off-Site	<1	2	1	<1	<1	<1
<i>Total</i>	1	6	4	<1	2	11
<b>Remove Shoofly/Paving Street Construction</b>						
On-Site	2	14	7	<1	1	1
Off-Site	<1	<1	2	<1	<1	<1
<i>Total</i>	2	14	9	<1	1	1
<b>Maximum Regional Total</b>	<b>17</b>	<b>185</b>	<b>77</b>	<b>&lt;1</b>	<b>9</b>	<b>18</b>
<b>Regional Significance Threshold</b>	<b>75</b>	<b>100</b>	<b>550</b>	<b>150</b>	<b>55</b>	<b>150</b>
Exceed Threshold?	No	Yes	No	No	No	No
<b>Maximum On-Site Total</b>	<b>8</b>	<b>82</b>	<b>31</b>	<b>&lt;1</b>	<b>5</b>	<b>14</b>
<b>Localized Significance Threshold /b/</b>	<b>--</b>	<b>69</b>	<b>535</b>	<b>--</b>	<b>3</b>	<b>4</b>
Exceed Threshold?	--	Yes	No	--	Yes	Yes

*/a/* URBEMIS2007 emissions for fugitive dust were adjusted to account for a 61 percent control efficiency associated with SCAQMD Rule 403.  
*/b/* LSTs were developed based on a one-acre project site and a 25-meter (82-foot) receptor distance.  
**SOURCE:** TAHA, 2009.

## Alternative 2 – No Build Alternative

The San Gabriel Trench would not be constructed under Alternative 2. Alternative 2 would have a less-than-significant regional air quality construction impact. However, traffic congestion at the site would continue and air quality would be expected to worsen.

## Localized Emissions

### Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)

Emissions for the localized construction air quality analysis of PM<sub>2.5</sub>, PM<sub>10</sub>, CO, and NO<sub>2</sub> were compiled using localized significance threshold (LST) methodology promulgated by the SCAQMD.<sup>23</sup> Localized on-site emissions were calculated using similar methodology as the regional emission calculations. LSTs were developed based upon the size or total area of the emissions source, the ambient air quality in each source receptor area, and the distance to the sensitive receptor. LSTs for CO and NO<sub>2</sub> were derived by using an air quality dispersion model to back-calculate the emissions per day that would cause or contribute to a violation of any ambient air quality standard for a particular source receptor area. The construction PM<sub>10</sub> LST was derived using a dispersion model to back-calculate the emissions necessary to exceed a concentration equivalent to 50 µg/m<sup>3</sup> over five hours, which is the SCAQMD Rule 403 control requirement. **Table 3-16** shows the estimated daily localized emissions associated with each construction phase. Daily construction emissions would exceed the SCAQMD localized thresholds for PM<sub>2.5</sub> and PM<sub>10</sub>, and localized construction emissions would result in a significant impact without mitigation.

In addition to the above screening analysis, a detailed localized analysis was completed for San Gabriel High School, the West San Gabriel Valley YMCA, Alhambra Municipal Golf Course, City of Alhambra residential area located nearest to construction activity, Granada Elementary School, Martha Baldwin Elementary School, Winston Smoyer Community Garden, and Almansor Park and Court. Localized concentrations were predicted using the Industrial Source Complex – AERMOD dispersion model and SCAQMD methodology. The predicted concentrations include emissions from construction equipment, on-site haul truck activity, and fugitive dust. As shown in **Table 3-17**, localized concentrations would exceed the State standards at multiple receptor locations. As previously stated, localized construction emissions would result in a significant impact without mitigation.

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<sup>23</sup>The concentrations of SO<sub>2</sub> are not estimated because construction activities would generate a small amount of SO<sub>x</sub> emissions. No State standard exists for VOC. As such, concentrations for VOC were not estimated.

<b>TABLE 3-17: DETAILED LOCALIZED CONSTRUCTION EMISSIONS ANALYSIS</b>					
<b>Receptor</b>	<b>Pollutant and Concentration</b>				
	<b>CO 1-Hour (ppm)</b>	<b>CO 8-Hour (ppm)</b>	<b>NO<sub>2</sub> (ppm)</b>	<b>PM<sub>2.5</sub> (µg/m<sup>3</sup>)</b>	<b>PM<sub>10</sub> (µg/m<sup>3</sup>)</b>
San Gabriel High School	1	0.3	0.16	20.7	58.4
West San Gabriel Valley YMCA	<1	<0.1	0.01	0.4	1.4
Alhambra Municipal Golf Course	<1	0.1	0.08	10.0	26.7
Alhambra Residential Area	<1	0.1	0.10	7.4	20.3
Granada Elementary School	<1	<0.1	0.01	0.5	1.1
Martha Baldwin Elementary School	<1	<0.1	0.01	0.3	0.9
Winston Smoyer Community Garden	<1	0.1	0.10	5.2	27.7
Almanson Park	<1	<0.1	0.01	0.4	1.3
Almanson Court	<1	<0.1	0.01	0.6	1.7
<b>LST Significance Thresholds</b>	<b>20</b>	<b>9.0</b>	<b>0.18</b>	<b>10.4</b>	<b>10.4</b>
<b>Exceed Threshold</b>	<b>No</b>	<b>No</b>	<b>No</b>	<b>Yes</b>	<b>Yes</b>
<b>SOURCE:</b> TAHA, 2009.					

The proposed project also has the potential to increase localized CO concentrations associated with increased traffic at specific intersections during road closures. A localized CO analysis was completed to assess potential increased in concentrations. Based on the traffic study, the ten most congested intersections were analyzed for each of the three road closure scenarios. The United States Environmental Protection Agency (USEPA) CAL3QHC micro-scale dispersion model was used to calculate CO concentrations. Localized CO concentrations are shown in **Table 3-18** for the Mission Road Closure, the Del Mar Avenue closure, and the San Gabriel Boulevard closure. The State one- and eight-hour standards of 20 and 9.0 ppm, respectively, would not be exceeded at the analyzed intersections during any of the road closure scenarios. Localized CO concentrations would result in a less-than-significant impact.

**Alternative 2 – No Build Alternative**

The San Gabriel Trench would not be constructed under Alternative 2. Alternative 2 would have a less-than-significant localized air quality construction impact. However, traffic congestion at the site would continue and air quality would be expected to worsen.

<b>TABLE 3-18: CARBON MONOXIDE CONCENTRATIONS – CONSTRUCTION /a/</b>		
<b>Scenario and Intersection</b>	<b>1-hour (parts per million)</b>	<b>8-hour (parts per million)</b>
<b>Mission Road Closure</b>		
Del Mar Avenue/Broadway – PM Peak Hour	4	3.0
Mission Road/Del Mar Avenue – PM Peak Hour	5	3.2
Mission Road/Junipero Serra Drive – AM Peak Hour	4	2.9
Ramona Street/Junipero Serra Drive – PM Peak Hour	4	2.9
<b>Del Mar Avenue Closure</b>		
Broadway/San Gabriel Boulevard – PM Peak Hour	4	3.1
Del Mar Avenue/Mission Road – AM Peak Hour	4	2.9
Del Mar Avenue/Mission Road – PM Peak Hour	4	2.9
Mission Road/Junipero Serra Drive – PM Peak Hour	5	3.3
Mission Road/Ramona Street – PM Peak Hour	4	3.1
<b>Ramona Street Closure</b>		
Broadway/San Gabriel Boulevard – PM Peak Hour	5	3.2
Del Mar Avenue/Broadway – PM Peak Hour	4	3.0
Mission Road/Junipero Serra Drive – PM Peak Hour	5	3.3
Mission Road/Ramona Street – AM Peak Hour	4	2.9
Mission Road/San Gabriel Boulevard – AM Peak Hour	4	3.1
<b>San Gabriel Boulevard Closure</b>		
Del Mar Avenue/Broadway – AM Peak Hour	4	3.0
San Gabriel Boulevard/Broadway – PM Peak Hour	4	3.1
Walnut Grove Avenue/Broadway – AM Peak Hour	4	3.1
<b>State Standard</b>	<b>20</b>	<b>9.0</b>
/a/ Concentrations include year 2012 one- and eight-hour ambient concentrations of 3 and 2.8 ppm, respectively. <b>SOURCE:</b> TAHA, 2009.		

## Toxic Air Contaminant Emissions

### Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)

The greatest potential for TAC emissions during construction would be diesel particulate emissions associated with heavy equipment operations. According to SCAQMD methodology, health effects from carcinogenic air toxics are usually described in terms of individual cancer risk. “Individual Cancer Risk” is the likelihood that a person continuously exposed to concentrations of TACs over a 70-year lifetime will contract cancer based on the use of standard risk assessment methodology. Given the short-term construction schedule of approximately three years, Alternative 1 would not result in a long-term (i.e., 70 years) source of TAC emissions. No residual emissions and corresponding individual cancer risk are anticipated after construction. Because there is such a short-term exposure period (36 out of 840 months), Alternative 1 construction TAC emission would result in a less-than-significant impact.

It is common for the area around rail tracks to include soil contaminants such as arsenic. If airborne, these materials may cause a health hazard. No hazardous contamination has been identified in over 200 soil samples taken along the tracks. Airborne soil contaminants would result in a less-than-significant impact.

### **Alternative 2 – No Build Alternative**

The San Gabriel Trench would not be constructed under Alternative 2. Alternative 2 would have a less-than-significant TAC air quality construction impact.

### **Odors**

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Potential sources that may emit odors during construction activities include equipment exhaust and paving activity. Odors from these sources would be localized and generally confined to the immediate area surrounding the project site. The proposed project would utilize typical construction techniques, and the odors would be typical of most construction sites and temporary in nature. Proposed project construction would not cause an odor nuisance, and construction odors would be considered less-than-significant.

#### **Alternative 2 – No Build Alternative**

The San Gabriel Trench would not be constructed under Alternative 2. Alternative 2 would have a less-than-significant construction odor impact.

### Operational Impacts

#### **Regional Emissions**

EMFAC2007 was used to calculate operational emissions and localized CO emissions were calculated utilizing USEPA's CAL3QHC dispersion model and the California Air Resources Board's (CARB) EMFAC2007 model. EMFAC2007 is the latest emission inventory model for motor vehicles operating on roads in California. This model reflects the CARB's current understanding of how vehicles travel and how much they pollute. The EMFAC2007 model can be used to show how California motor vehicle emissions have changed over time and are projected to change in the future. CAL3QHC is a model developed by USEPA to predict CO and other pollutant concentrations from motor vehicle emissions at roadway intersections. The model uses a traffic algorithm for estimating vehicular queue lengths at signalized intersections.

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The proposed project would not add any additional trains or increase the volume or frequency of train travel, it would improve the traffic flow at the existing grade crossings. Regional emissions were calculated by quantifying the emissions that would be reduced from eliminating 1,744 hours of delay caused by the existing grade crossings. Regional operational emissions from the proposed project are shown in **Table 3-19**.

Alternative 1 would decrease mobile source emissions when compared to baseline conditions by 93 ppb for VOC, 401 ppb for NO<sub>x</sub>, 511 ppb for CO, less than 1 ppb for SO<sub>x</sub>, 5 ppb for PM<sub>2.5</sub>, and 6 ppb for PM<sub>10</sub>. Emissions associated with the Alternative 1 would not exceed the SCAQMD thresholds. Alternative 1 would result in a beneficial air quality impact.

<b>TABLE 3-19: DAILY OPERATIONS EMISSIONS</b>						
	Pounds per Day					
	VOC	NO <sub>x</sub>	CO	SO <sub>x</sub>	PM <sub>2.5</sub>	PM <sub>10</sub>
Project Emissions/a/	(93)	(401)	(511)	(<1)	(5)	(6)
<b>SCAQMD Threshold</b>	<b>55</b>	<b>55</b>	<b>550</b>	<b>150</b>	<b>55</b>	<b>150</b>
Exceed Threshold?	No	No	No	No	No	No
/a/ A reduction in operational emissions is based on the elimination of 1,744 hours of delay attributable to the existing four grade crossings. <b>SOURCE:</b> TAHA, 2009.						

**Alternative 2 – No Build Alternative**

The San Gabriel Trench would not be constructed under Alternative 2 and no change in operational activity would occur. Alternative 2 would result in a less-than-significant operational air quality impact.

**Localized Emissions**

The State one- and eight-hour CO standards may potentially be exceeded at congested intersections with high traffic volumes. An exceedance of the State CO standards at an intersection is referred to as a CO hotspot. The SCAQMD recommends a CO hotspot evaluation of potential localized CO impacts when V/C ratios are increased by two percent at intersections with a LOS of D or worse. SCAQMD also recommends a CO hotspot evaluation when an intersection decreases in LOS by one level beginning when LOS changes from C to D.

**Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

CO concentrations at the analyzed intersections are shown for the AM and PM peak hours in **Table 3-20**. As indicated, one-hour CO concentrations would range from approximately 3 to 4 ppm at worst-case sidewalk receptors. Eight-hour CO concentrations would range from approximately 2.4 to 2.6 ppm. The State one- and eight-hour standards of 20 and 9.0 ppm, respectively, would not be exceeded at the analyzed intersections. In addition, Alternative 1 would eliminate vehicle idling associated CO emissions during train crossing. CO concentrations would be less with this alternative than with existing conditions. Alternative 1 would result in beneficial localized CO concentrations.

<b>TABLE 3-20: 2008 AND 2012 CARBON MONOXIDE CONCENTRATIONS/a/</b>		
Intersection	1-hour (parts per million)	8-hour (parts per million)
	Project (2012)	Project (2012)
Mission Road/Del Mar Avenue - AM Peak Hour	3	2.4
Mission Road/Garfield Avenue - PM Peak Hour	4	2.6
Las Tunas Drive/San Gabriel Boulevard - AM Peak Hour	4	2.6
Las Tunas Drive/San Gabriel Boulevard - PM Peak	4	2.6
<b>State Standard</b>	<b>20</b>	<b>9.0</b>
/a/ Project concentrations include year 2012 one- and eight-hour ambient concentrations of 3 and 2.1 ppm, respectively. <b>SOURCE:</b> TAHA, 2009.		

### **Alternative 2 – No Build Alternative**

The San Gabriel Trench would not be constructed under Alternative 2 and no change in operational activity would occur. Alternative 2 would result in a less-than-significant localized operational air quality impact.

### **Toxic Air Contaminant Emissions**

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Regarding trains, Alternative 1 would not increase the frequency of train travel or change vehicle speeds on the railway. Train TAC emissions would be identical to existing conditions. Train TAC emissions would disperse into the atmosphere and would not accumulate within the trench. Train conductors would not be exposed to reentrained or increased TAC emissions. Regarding automobiles, Alternative 1 would not alter regional VMT and associated TACs. TAC emissions would not increase and Alternative 1 would result in a less-than-significant impact.

#### **Alternative 2 – No Build Alternative**

The San Gabriel Trench would not be constructed under Alternative 2 and no change in operational activity would occur. Alternative 2 would result in a less-than-significant operational air quality TAC impact.

### **Odors**

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Land uses and industrial operations that are associated with odor complaints include agricultural uses, wastewater treatment plants, food processing plants, chemical plants, composting, refineries, landfills, dairies and fiberglass molding. Alternative 1 would not include any land use or activity that typically generates adverse odors and would result in a less-than-significant operational odor impact.

#### **Alternative 2 – No Build Alternative**

The San Gabriel Trench would not be constructed under Alternative 2 and no change in operational activity would occur. Alternative 2 would result in a less-than-significant operational odor impact.

### **AQMP Consistency**

The AQMP is the region's plan for improving air quality in the region. It addresses CAA and CCAA requirements and demonstrates attainment with State and federal ambient air quality standards. The AQMP is focused on long-term solutions to improving regional air quality.

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Alternative 1 would be consistent with the AQMP because it would reduce regional emissions in the Basin and would not exceed the SCAQMD operational significance thresholds. Alternative 1 would result in a less-than-significant impact regarding AQMP consistency.

## **Alternative 2 – No Build Alternative**

The San Gabriel Trench would not be constructed under Alternative 2 and no change in operational activity would occur. Alternative 2 would result in a less-than-significant impact regarding AQMP consistency.

### **MITIGATION MEASURES**

- AQ1** The construction contractor shall comply with Caltrans' Standard Specifications Section 7-1.01F and Section 10 of Caltrans' Standard Specifications. Section 7-1.01F specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including air pollution control district and air quality management district regulations and local ordinances. Section 10 is directed at controlling dust. If dust palliative materials other than water are to be used, material specifications are contained in Section 18.
- AQ2** Water or dust palliative shall be applied to the site and equipment as frequently as necessary to control fugitive dust emissions.
- AQ3** Soil binder shall be spread on any unpaved roads used for construction purposes, and all construction parking areas.
- AQ4** Trucks shall be washed off as they leave the right of way as necessary to control fugitive dust emissions.
- AQ5** Construction equipment and vehicles shall be properly tuned and maintained.
- AQ6** Low-sulfur fuel shall be used in all construction equipment as provided in California Code of Regulations Title 17, Section 93114.
- AQ7** A dust control plan shall be developed documenting sprinkling, temporary paving, speed limits, and expedited revegetation of disturbed slopes as needed to minimize construction impacts to existing communities.
- AQ8** Equipment and materials storage sites shall be located as far away from residential and park uses as practical.
- AQ9** Construction areas shall be kept clean and orderly.
- AQ10** Environmentally sensitive areas shall be established for sensitive air receptors within which construction activities involving extended idling of diesel equipment would be prohibited.
- AQ11** Track-out reduction measures such as gravel pads shall be used at project access points to minimize dust and mud deposits on roads affected by construction traffic.
- AQ12** All transported loads of soils and wet materials shall be covered prior to transport to reduce deposition of particulate during transportation.
- AQ13** Dust and mud that are deposited on paved, public roads due to construction activity and traffic shall be removed to decrease particulate matter.
- AQ14** Construction traffic shall be routed and scheduled to reduce congestion and related air quality impacts caused by idling vehicles along local roads during peak travel times.



- AQ15** Mulch or plant vegetation shall be installed as soon as practical after grading to reduce windblown particulate in the area.
- AQ16** Contractors shall utilize electricity from power poles rather than temporary diesel or gasoline generators.
- AQ17** Contractors shall utilize alternative fueled off-road equipment.
- AQ18** Contractors shall configure construction parking to minimize traffic interference.
- AQ19** Contractors shall provide temporary traffic controls, such as a flag person, during all phases of construction to maintain smooth traffic flows.
- AQ20** Contractors shall provide dedicated turn lanes for movement of construction trucks and equipment on- and off-site.
- AQ21** Contractors shall schedule construction activities that affect traffic flow on arterial system to off-peak hours.
- AQ22** All diesel powered construction equipment in use shall require control equipment that meets, at a minimum, Tier III emissions requirements. In the event Tier III equipment is not available, diesel powered construction equipment in use shall require emissions control equipment with a minimum of Tier II diesel standards.
- AQ23** During project construction, the developer shall require all contractors to turn off all construction equipment and delivery vehicles when not in use or prohibit idling in excess of five minutes.

## **LEVEL OF IMPACT AFTER MITIGATION**

### **Construction Air Quality**

Implementation of Mitigation Measures **AQ1** through **AQ14** would ensure that fugitive dust emissions would be reduced by approximately 61 percent. In addition to reducing regional emissions, these measures would ensure that fugitive dust from construction activities would not significantly impact motors and electrical equipment in close proximity to the construction zone. Mitigation Measures **AQ15** through **AQ23** would reduce regional construction emissions by at least five percent. Regional NO<sub>x</sub> emissions and localized PM<sub>2.5</sub> and PM<sub>10</sub> emissions would still exceed the SACQMD significance thresholds. Construction activity would result in a significant and unavoidable air quality impact.

### **Operational Air Quality.**

Not applicable.

## **3.13 BIOLOGICAL RESOURCES**

### **EXISTING SETTING**

Please refer to Section 2.3.1 Biological Resources for a detailed description of the environmental and regulatory setting.

### Tree Preservation

The City of San Gabriel's tree ordinance<sup>24</sup> was enacted in 1991 and is designed to protect and preserve trees in the single-family residential and commercial zones of the City. Under the City's tree ordinance no person may cut, trim, prune, transplant, destroy or remove more than 1/3 of the live foliage of any mature Class 1 tree located anywhere on private property or of "historical/landmark" significance without first obtaining a permit from the City.

Class 1 trees include any of the following:

- Alder (*Alnus*)
- Ash (*Fraxinus*)
- Beech (*Fagus*)
- Birch (*Betula*)
- Camphor (*Cinnamomum camphora*)
- Carrot wood (*Cupaniopsis anacardiopsis*)
- Cedars (*Cedrus atlantica*, and *deodora*)
- Chinese Flame tree (*koelreuteria bipinnata*)
- Coral tree (*Erythina*)
- Crape Myrtle (*lagerstroemia indica*)
- Fern Pine (*Podocarpus gracilor*)
- Fig Tree (*Fiscus rubiginosa*)
- Floss Silk Tree (*Chorisia*)
- Ginkgo (*Ginkgo biloba*)
- Jacaranda (*Jacaranda mimosifolia*)
- Liquidambar (*Liquidambar styraciflua*)
- Magnolia (*Magnolia grandiflora*)
- Oaks, all (*Quercus*)
- Olive (*Olea europea*)
- Pepper, "California" (*Schinus molle*)
- Pine (*Pinus canariensis*)
- Pine (*Pinus pinea*)
- Redwood (*sequoia giganteum*)
- Strawberry tree (*Arbutus unedo*)
- Sycamore (*Platanus racemosa*)
- Tulip tree (*Liriodendron tulipifera*)

### **CEQA SIGNIFICANCE CRITERIA**

The proposed project alternatives would have a significant impact on biological resource if the proposed project alternatives:

- 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;

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<sup>24</sup>Information found at <http://www.sangabrielcity.com/cityservices/communitydev/forest.pdf>.

- Substantially interfere 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;
- Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act through direct removal, filling, hydrological interruption, or other means; or
- Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance.

## **IMPACTS**

### **Wetlands**

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The project would not have a substantial adverse impact on federally protected wetlands because no part of the trench (such as walls or support structures) would be in areas defined as federally protected wetlands. In addition, neither the Alhambra nor Rubio washes are defined as federally protected wetlands. The project site and surrounding area do not contain wetlands or surface water bodies. Additionally, the Rubio Wash and Alhambra Wash are both concrete-lined flood control channels that do not support wetland habitats and are not considered wetlands by the USACOE or the CDFG. Compliance with existing regulations and the measures provided below would ensure impacts would not be adverse.

#### **Alternative 2 – No Build Alternative**

Under the No Build Alternative, no construction activities would occur. As a result, no impacts would occur on wetlands.

### **Wildlife Species and Habitat**

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The project site contains a railroad right-of-way that is currently in use and two concrete channels that do not include habitat for fish, thus, project construction and operation would not interfere substantially with the movement of any native resident or migratory fish. Also, construction would not interfere substantially with established native resident or migratory wildlife corridors or impede the use of native wildlife nurseries.

No sensitive habitats listed by CNDDB were identified within the project area. Although habitats within the project area are not considered sensitive, they may provide suitable nesting or foraging habitat for a variety of birds. Also, no wetlands or other waters of the U. S. were identified within the project area.

No special-status plant or wildlife species were determined to occur within the project area. Therefore, no impacts to special-status species are expected as the result of implementation of the proposed project.

The project area likely provides nesting habitat for nesting avian species whose nests and young are protected under the Migratory Bird Treaty Act (MBTA) and California Fish and Game Codes. Specifically, adult western scrub jays were observed feeding fledglings within the mixed ornamental-oak habitats adjacent to W. Main St., indicating that this habitat is used for nesting activity. Construction activities associated with the proposed project that result in ground disturbance and/or the removal of vegetation could have both direct and indirect impacts to these sensitive resources.

The breeding season for birds generally occurs from February 1 through August 31; implementation of construction activities associated with the project during this period could result in both direct and indirect impacts to nesting avian species. Direct project impacts would include the destruction of active nests, eggs, or young located within vegetation removed within the proposed project. Indirect impacts would include noise and disturbance associated with the construction activities that cause birds in adjacent habitats to abandon their nests. Any impacts (direct or indirect) that result in the abandonment or destruction of an active nest or the destruction of eggs or young of any protected avian species, including special-status species, would be considered potentially adverse.

Direct mortality of some wildlife species such as lizards, opossum and gophers may occur during project construction. However, these species are well adapted to human habitats and fairly common.

Construction dust, noise, vibration and increases human presence and construction equipment may result in indirect effects on wildlife in the project vicinity and may result in temporary avoidance of these areas by some birds and other wildlife species. However, wildlife species using the project vicinity are generally species well adapted to human disturbances. Thus, indirect impacts due to project construction on wildlife would not be considered adverse.

No habitat conservation plans or other similar plan exists for the project vicinity. Thus the project would not conflict with any provisions of an adopted Habitat Conservation Plan, National Community Conservation plan, or other approved local, regional or state habitat conservation plan.

#### **Alternative 2 – No Build Alternative**

No development would occur under this alternative. No impacts to wildlife species and habitat are anticipated.

#### **Tree Preservation**

##### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

Implementation of the proposed project would remove some landscape trees and non-native vegetation. However, most of the trees located on the project site generally consist of ornamental vegetation and are not protected by any tree preservation ordinance within the City of San Gabriel, Alhambra or Rosemead or the County of Los Angeles. Several individuals of coast live oak do occur on the project site, however; these trees occur within the UPRR ROW, and therefore are not subject to any state, county, or city ordinances or regulations. Oak trees that fall within the limits of the city of San Gabriel are preserved under the Tree Protection and Preservation Regulations; Multiple Family, Commercial and Industrial Zones ordinance and removal of such trees requires specific permitting. If any oak trees that do not occur within the UPRR ROW will be impacted or removed as a result of project construction, a certified arborist should be contracted to conduct a pre-construction survey and provide recommendations for mitigation ratios and permitting for species that need to be removed.

#### **Alternative 2 – No Build Alternative**

No development would occur under this alternative. No trees would be removed. Therefore, no impact is anticipated.

#### **MITIGATION MEASURES**

Because the proposed project does not include placement of wall structures or other components within areas that would be defined by the USACOE as wetlands or waters of the United States or defined by

CDFG as state streambeds, no direct project impacts on jurisdictional habitat are expected. However, to ensure indirect impacts would be avoided or minimized, the following mitigation measure shall be implemented.

- NC1** ACE shall comply with Section 402 of the Clean Water Act and National Pollutant Discharge Elimination System (NPDES) standards during and following construction to ensure that dirt, construction materials, pollutants, or other human associated materials are not discharged from the project area. A certification from the Regional Water Quality Control Board will be required prior to project construction.
- NC2** If new landscaping is provided as part of the project, planting of invasive species shall be avoided.
- NC3** Ground-disturbing and vegetation removal activities associated with construction of the project shall be performed outside of the breeding season for birds, or between September 1 and January 31. If these project activities cannot be implemented during this time period, ACE should retain a qualified biologist to perform preconstruction nest surveys to identify active nests within and adjacent to (up to 500 feet) the project area. If the preconstruction survey is conducted early in the nesting season (February 1–March 15) and nests are discovered, a qualified biologist may remove the nests only after it has been determined that the nest is not active (i.e., the nest does not contain eggs, nor is an adult actively brooding on the nest). Any active non-raptor nests identified within the project area or within 300 feet of the project area should be marked with a 300-foot buffer, and the buffer area would need to be avoided by construction activities until a qualified biologist determines that the chicks have fledged. Active raptor nests within the project area or within 500 feet of the project area should be marked with a 500-foot buffer and the buffer avoided until a qualified biologist determines that the chicks have fledged. If the 300-foot buffer for non-raptor nests or 500-foot buffer for raptor nests cannot be avoided during construction of the project, the ACE should retain a qualified biologist to monitor the nests on a daily basis during construction to ensure that the nests do not fail as the result of noise generated by the construction. The biological monitor shall be authorized to halt construction if the construction activities cause negative effects, such as the adults abandoning the nest or chicks falling from the nest.
- NC4** ACE shall comply with the provisions of the City of San Gabriel’s tree protection ordinance. If any trees protected by the ordinance are to be removed or damaged during construction, ACE shall consult with the City of San Gabriel prior to removal and obtain the necessary permits or approvals. If any native trees are removed, replacement trees shall be planted on-site or at an adjacent site. A certified arborist shall be contracted to conduct a pre-construction survey and provide recommendations for mitigation ratios and permitting for species that need to be removed.

## **LEVEL OF IMPACT AFTER MITIGATION**

### **Wetlands**

Implementation of Mitigation Measures **HW5** and **NC1**, which outlines a strategy for consultation with ACOE and the cities of San Gabriel and Alhambra, would ensure impacts remain less than significant.

### **Wildlife Species and Habitat**

With implementation of Mitigation Measures **NC2** and **NC3** described above, impacts to wildlife species and habitat would be less than significant.

## **Tree Preservation**

With implementation of Mitigation Measure NC4 described above, impacts would remain less than significant.

## **3.14 GROWTH-INDUCING IMPACTS**

Section 15126.2(d) of the CEQA Guidelines states that the assessment of growth-inducing impacts in the EIR must describe 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.”

### ***Regulatory Framework***

#### Federal

Guidance for the preparation of growth inducing impacts was obtained from both federal and State regulations. The regulations established by the Council on Environmental Quality (CEQ), regarding the implementation of the National Environmental Policy Act (NEPA), require the evaluation of all potential environmental consequences of all proposed federal activities and programs. This provision includes a requirement to examine the indirect consequences, or secondary impacts, which may occur in areas beyond the immediate influence of a proposed action and at some time in the future (40 Code Federal Regulation (CFR) 1508.8). Secondary impacts may include changes in land use, economic vitality, and population density. These are all elements of growth.

Federal Transit Administration (FTA) guidelines require Metropolitan Planning Organizations (MPOs) to create regional growth projections by assuming future year conditions. The Southern California Association of Governments (SCAG) states in the 2008 Regional Transportation Plan (RTP) Program Environmental Impact Report (PEIR) that lead agencies for individual projects may use the PEIR as the basis of their regional impacts analysis. The 2008 RTP examines current and future transportation plans, population and employment growth, and land use data for the SCAG region to develop projections through the year 2035. The 2008 RTP, adopted on May 8, 2008, updates the 2004 RTP, which contains projections through year 2030. Since the year for the analysis of this proposed project has been determined to be 2030, the 2004 RTP projections serve as the basis for this analysis of growth inducing impacts.

#### State

The California Environmental Quality Act (CEQA) also requires the analysis of a project’s potential to induce growth. CEQA guidelines, Section 15126.2(d), require that environmental documents “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.” Growth inducing impacts also include removing obstacles to growth and can include changes in the amount and distribution of growth.

### ***Environmental Impacts/Environmental Consequences***

Generally, growth-inducing projects are located in isolated, undeveloped, or underdeveloped areas, necessitating the extension of major infrastructure (e.g., sewer and water facilities, roadways, etc.) or are those that could encourage “premature” or unplanned growth (i.e., “leap-frog” development). Growth-inducing impacts would be considered significant if the proposed project has the potential to 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).

#### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The proposed project includes four grade separations that would be achieved through the construction of a trench. The existing UPRR would be depressed to run below grade through the City of San Gabriel. The project does not include the addition of any new housing and is an improvement to existing infrastructure. Therefore the proposed project would not remove any barrier to growth and would not induce growth either directly or indirectly. Therefore, the proposed project is not growth-inducing.

#### **Alternative 2 - No Build Alternative**

The No Build Alternative would include all existing highway and transit services and facilities, the committed highway and transit projects in Metro’s 2008 LRTP, and the committed highway and transit projects in SCAG’s 2008 RTP. A substantial permanent change to the physical environment of the study area would not occur under the No Build Alternative. The No Build Alternative would not have the potential to induce growth.

### **MITIGATION MEASURES**

No mitigation measures are required.

### **LEVEL OF IMPACT AFTER MITIGATION**

#### **Growth Inducing Impacts**

Not applicable.

### ***CEQA Determination***

According to CEQA, growth inducing impacts would be considered significant if the proposed project has the potential to 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). The proposed project is an improvement to existing infrastructure and does not include any extension of infrastructure or new housing. The proposed project would not induce growth. No direct or indirect growth-inducing impacts would occur.

#### **Impacts Remaining After Mitigation**

No significant impacts related to growth inducement are anticipated for the proposed project alternatives.

### 3.15 EFFECTS DETERMINED NOT TO BE SIGNIFICANT

Effects associated with habitat conservation plans are not considered significant since the project site is located in a fully urbanized area within the Cities of Alhambra and San Gabriel. No habitat conservation plans, Natural Community Conservation Plan, or other approved local, regional, or State habitat conservation plans are currently applicable to the project site. As such, Alternatives 1 and 2 would not conflict with any local, regional, or state habitat conservation plans.

Mineral Resources. The project site is not located on or near any known mineral resource that would be of value to the region and the residents of the state, nor would the project result in the loss of availability of a locally important mineral resource recovery plan, specific plan or other land use plan.

Agricultural Resources. The proposed project would not covert any Prime Farmland, Unique Farmland or Farmland of Statewide Importance pursuant to the California Resource Agency. The project site does not include any farmland, timberland or agricultural uses and therefore would not conflict with any agricultural zoning or result in the conversion of agricultural land to non-agricultural uses.

### 3.16 UNAVOIDABLE SIGNIFICANT ENVIRONMENTAL EFFECTS

The EIR for the project identified three significant unavoidable effects that could not be mitigated to a level of less than significant.

#### **Air Quality- Regional Construction Emissions (NO<sub>x</sub>)**

Significant impacts were identified related to regional construction activity. Daily estimated emissions associated with construction would exceed SCAQMD regional significance thresholds for NO<sub>x</sub>. Thus, significant impacts would occur with this pollutant.

#### **Mitigation Measures**

Implementation of Mitigation Measures **AQ1** through **AQ14** would ensure that fugitive dust emissions would be reduced by approximately 61 percent. In addition, to reducing regional emission, these measures would ensure that fugitive dust from construction activities would not significantly impact motors an electrical equipment in close proximity to the construction zone. Mitigation Measures **AQ15** through **AQ 23** would reduce regional construction emissions by at least five percent. Regional NO<sub>x</sub> emissions would still exceed the SCAQMD significance threshold.

#### **Air Quality - Localized Construction Emissions (PM<sub>2.5</sub>, PM<sub>10</sub>, NO<sub>x</sub>)**

Significant impacts were identified related to localized construction activity. Daily estimated emissions associated with construction would exceed SCAQMD localized threshold for NO<sub>x</sub> PM<sub>2.5</sub> and PM<sub>10</sub>. Thus, significant impacts would occur with these pollutants.

#### **Mitigation Measures**

Implementation of Mitigation Measures **AQ1** through **AQ14** would ensure that fugitive dust emissions would be reduced by approximately 61 percent. In addition, to reducing regional emission, these measures would ensure that fugitive dust from construction activities would not significantly impact motors an electrical equipment in close proximity to the construction zone. Mitigation Measures **AQ15**



through **AQ23** would reduce regional construction emissions by at least five percent. Localized PM<sub>2.5</sub> and PM<sub>10</sub> would still exceed the SCAQMD significance threshold.

**Noise – Haul Truck Noise**

Significant impacts were identified related to haul truck noise specifically along residential streets such as Main Street. Haul truck activity would intermittently increase ambient noise levels by approximately 7 dBA, which would be a noticeable change. There is not feasible mitigation to avoid occasional haul truck activity on these residential streets. As such, haul truck noise would result in an avoidable significant impact.

**Mitigation Measures**

No feasible mitigation measures exist to avoid occasional haul truck activity on residential streets.

## 4.0 COMMENTS & COORDINATION

Early and continuing coordination with the general public and appropriate public agencies is an essential part of the environmental process to help determine the scope of environmental documentation, the level of analysis, potential impacts and mitigation measures and related environmental requirements. Agency consultation and public participation for this proposed project have been accomplished through a variety of formal and informal methods, including: project development team meetings, interagency coordination meetings, (continue list as appropriate). This chapter summarizes the results of the efforts to fully identify, address and resolve project-related issues through early and continuing coordination.

### 4.1 SCOPING MEETING

The Alameda Corridor-East Construction Authority's San Gabriel Trench Public Scoping Meeting was held on Thursday, October 30, 2008 at the San Gabriel Mission Playhouse in the City of San Gabriel from 6:00 p.m. to 8:00 p.m. The purpose of the meeting was to gain input from the public into the scope and content of the environmental information to be evaluated in the Environmental Impact Report/Environmental Assessment (EIR/EA). The following is a summary of the event:

#### MEETING FLYER DISTRIBUTION

- Alhambra City Council & City Manager - 6
- San Gabriel City Council & City Manager - 6
- Rosemead City Council & City Manager - 6
- Federal, State & Local Elected Officials - 30
- Governmental Agencies - 13
- Regional and Local Agencies - 21
- Community Organizations - 10
- Other Interested Parties - 8
- Affected Properties - 7
- Previous outreach meeting attendees - 131
- Alhambra, San Gabriel and Rosemead Vicinity Property Owners Parcel Records - 5,778
- Notices hand delivered by Outreach Specialist on October 24, 2008 to property owners of Affected Properties not included in parcel data records or previous mailing list - 18
- Notices left at San Gabriel City Hall public counter on October 23, 2008 (100 in English, 100 in Spanish and 100 in Chinese) - 300

The total number of notices that were distributed is approximately 6,334.

Parcel records were downloaded for the area approximately 1,000 feet north and 1,000 feet south along the 2.1-mile extent of the trench. The distribution area is approximately the area bounded by Las Tunas Drive on the north, Vista Avenue and Almansor Street on the west, and Walnut Grove Avenue to the east.

Notices were mailed to the mailing address of the property owners. If the mailing address and property address were different, an invitation was sent to both the mailing address (property owner) and to the "Current Occupant" at the property address (tenant) in order to ensure both the property owner and tenant received proper notice of the public scoping meeting.

#### Public Notice in Local Newspapers

- Pasadena Star-News in English on October 17, 2008 – Circulation: 27,900
- Chinese Daily News (World Journal) in Chinese on October 22, 2008 – Circulation: 100,000

Thirty-two people attended the meeting, including residents, property owners, business owners, staff from the Cities of San Gabriel and Alhambra, and representatives from Caltrans, Union Pacific Railroad and the Gabrielino/Tongva San Gabriel Band of Mission Indians. Informational materials were available in English, Chinese and Spanish. Staff proficient in Chinese and Spanish languages were available to assist the attendees. Handouts were available for attendees to take, including the San Gabriel Trench Fact Sheet (English, Chinese, Spanish), ACE Project Fact Sheet (English, Chinese and Spanish), ACE Frequently Asked Questions, and ACE Project Area Map.

There were numerous comments from the distribution of notices and publication of notice in the local newspapers that were received at the scoping meeting, through email, standard mail, and by phone. Comments received raised issues that included, but were not limited to: traffic during construction; access to businesses; disruption of historical and cultural resources related to the San Gabriel Mission and Native American ancestry; noise and vibration impacts to nearby residents and businesses during construction; air quality construction analysis that includes localized construction and mobile source air toxics; the effects of the temporary track to nearby residents; financing information; the risk pedestrian safety; additional seismic risks; impacts to aesthetics, utilities, and recreational resources; and the structural design integrity.

## 4.2 COORDINATION WITH PUBLIC AGENCIES

The following public agencies were contacted and consulted during the preparation of this environmental document:

- Federal Railroad Administration
- Dept. of Parks & Recreation
- Office of Planning & Research, State Clearinghouse
- Department of Toxic Substance Control
- Planning & Environmental Section
- Cal-EPA Dept. of Toxic Substances Control
- California Public Utilities Commission
- Native American Heritage Commission
- California Transportation Commission
- Southern California Association of Governments
- San Gabriel Valley Council of Governments
- South Coast Air Quality Management District
- Los Angeles County Dept. of Public Works
- Regional Water Quality Control Board
- City of El Monte
- City of Alhambra

The following agencies/entities have participated in the planning process for the proposed project:

ACE Construction Authority

- ACE is the lead agency under CEQA and is responsible for building the proposed project.

Caltrans

- Caltrans provides design oversight and review and will be the lead for CEQA/NEPA process.
- Caltrans is also the responsible agency for NEPA as delegated by FHWA.

Cities/Counties – City of San Gabriel, Alhambra, Rosemead

- ACE will incorporate each cities design standards where appropriate.
- ACE has held meetings with the Cities of Alhambra and San Gabriel to review progress. Meetings are held on an ad hoc basis.

Los Angeles County Department Public Works

- Coordinate drainage Los Angeles County for Rubio Wash.

US Army Corps of Engineers

- Coordinate drainage for Alhambra Wash

Railroad Companies – UPRR/Amtrak/Metrolink

- Coordinate with UPRR and with Amtrak and Metrolink as appropriate.

Utilities

- ACE is coordinating with fiber companies regarding public utilities in the UPRR right-of-way.

ACE PDT (Project Development Team)

- ACE holds monthly meetings to review the progress on the trench project and discuss any issues and concerns. Team members include ACE, ACE consultants (design team, etc) representatives from the Cities of San Gabriel and Alhambra, County of Los Angeles Public Works, UPRR, utilities companies and others.

### **4.3 COMMENTS AND RESPONDING TO COMMENTS**

This section includes a summary of comments received on the NOP. Although a response to these comments is not required under CEQA or NEPA, a matrix was compiled to assist the reader in finding sections where a particular topic is addressed. The comments received on the NOP are included as an Appendix to this EIR/EA.

<b>TABLE 4-1: ATTENDEES SIGNED-IN</b>				
Nancy Arcuri (The Citizen's Voice) 1021 E. Mooney Drive Monterey Park, CA 91755 626-571-8553	Steve and Karen Cranston (Las Tunas Adobe) 315 Monson Lane San Gabriel, CA 91776 626-282-7100 scrn7@att.net kycranston@gmail.com	Doug Richter 620 Montecito Drive San Gabriel, CA 91776 626-570-8050	Robert & Margaret Dominguez 214 E. Main Street San Gabriel, CA 91776 626-285-5516	Lupe C. Valdez (Union Pacific Railroad) 13181 Crossroads Pkwy North, Suite 500 Industry, CA 91746 626-935-7617 lcvaldez@up.com
Aaron C. 951-735-3692	Ernest P. Salas (Gabrieleno Tongva) 514 E. Main Street San Gabriel, CA 91776 626-287-4014	Yolanda Rojas 329 E. Main Street San Gabriel, CA 91776 626-286-7058	Anthony Morales (Gabrieleno/Tongva San Gabriel Band of Mission Indians) 309 S. Walnut Grove Avenue San Gabriel, CA 91776 626-286-1758	Jenny Tse 715 E. Fairview Avenue, Apt. G San Gabriel, CA 91776 626-379-2170 626-309-1735
Mary Swanton (San Gabriel Nursery) 632 S. San Gabriel Blvd. San Gabriel, CA 91776 626-286-3782 sg-nursery@yahoo.com	Grace Song (City of San Gabriel) 425 S. Mission Drive San Gabriel, CA 91776 626-308-2806 x 4626 gsong@sgch.org	Argis Marcuska (City of San Gabriel) P.O. Box 130 San Gabriel, CA 91778 626-308-2806 x 4632 amarciuska@sgch.org	Leo Francone 701 S. Montecito Drive San Gabriel, CA 91776 626-731-8510	John Gee 602 El Monte Street San Gabriel, CA 91776 626-281-0250
Joey Kurose 240 San Marcos San Gabriel, CA 91778	Dennis Sam 722 Abbot Avenue San Gabriel, CA 91776 626-308-0618 dennis.t.sam@boeing.com	Brian Manor (Caltrans) 100 S. Main Street Los Angeles, CA 90012 213-897-0704 brian_manor@dot.ca.gov	Robert Liang 5308 N. Pongosa Ave. San Gabriel, CA 91776 626-286-5608	Mr. & Mrs. Andy Madrid 118 W. Mission Road San Gabriel, CA 91776
Chin Hua Tse 715 E. Angeleno Ave. San Gabriel, CA 91776 626-710-8997	Chu Mei Tse 715 E. Angeleno Ave. San Gabriel, CA 91776 626-710-8996	Leo Szeto 501 S. San Gabriel Blvd. San Gabriel, CA 91776 626-378-2418 leoszeto@pacbell.net	Juan R. Nunez 2702 Del Mar Avenue Rosemead, CA 91770 626-280-8043	Mike Martin (City of Alhambra) 111 S. First Street Alhambra, CA 91801 626-570-5041 mmartin@cityofalhambra.org
Terry & Ann Cedar 400 W. Mission Road San Gabriel, CA 91776 805-570-8048 tac1966@msn.com	Virginia Salas 514 E. Main Street San Gabriel, CA 91776 626-287-4014	Patricia G. Foltyn 1047 Abbot Avenue San Gabriel, CA 91776 626-524-0187 cedarbridge@yahoo.com		

<b>TABLE 4-2: COMMENTS RECEIVED</b>			
<b>Contact Information</b>	<b>Comment(S)/Issue(S)</b>	<b>ACE Response</b>	<b>Comment Type</b>
<b>Leland Smith</b> Property Owner Spanish Galleon 445 S. San Gabriel Blvd. San Gabriel, CA 91776 Cell: (626) 456-2490	Mr. Smith inquired whether Angeleno Ave. would be made a cul-de-sac as a result of San Gabriel Blvd. being raised. His business is located at the corner of San Gabriel Blvd. and Angeleno Ave.	Traffic impacts are discussed in Section 2.1.8.	Phone Call
<b>Hermann Kaleve</b> San Gabriel Resident 233 W. Mission Rd. San Gabriel, CA 91776 Phone: (626) 282-6670 hermkaleve@sbcglobal.net	Mr. Kaleve expressed his pleasure that the project would eliminate the noise, inconvenience and danger of the increasing train traffic. He stated that the train crossings are inconvenient and dangerous, and emergency service and fire trucks are held up from saving lives and property. He stated that the train noise is getting worse and more frequent.	Comment noted.	Email
<b>Alan Chen</b> San Gabriel Resident/ Property Owner Printex Technology 322 S. San Gabriel Blvd. San Gabriel, CA 91776 Phone: (626) 285-8335 Cell: (626) 675-8335 Alan@alabel.com	A resident of San Gabriel since 1973, Mr. Chen expressed support for starting work soon on the San Gabriel Trench Project. He stated that Ramona St., Del Mar Ave., San Gabriel Blvd., and Walnut Grove Ave. become jammed with cars like parking lots for extended periods of time when trains cross. He said he can live with the street closures on the four major streets running north to south.	Comment noted.	Email
<b>Gabriel Halimi</b> Property Owner Desco Tools Co. 418 S. Pine St. PO Box 267 San Gabriel, CA 91776 Phone: (323) 283-0504 ghalimi@descotools.com	Mr. Halimi is a property owner directly adjacent to the railroad tracks. He expressed concern regarding the impacts of construction on his property and its marketability. Mr. Halimi asked if there will be any changes to the zoning of the properties around the railroad. He also asked what will be done to minimize traffic disruptions, if the major streets will be closed one at a time, and how long San Gabriel Blvd. will be closed.	Land use and zoning implications are included in Section 2.1.1. Traffic impacts are discussed in Section 2.1.8, construction impacts are included in Section 2.4.3	Email
<b>Robert Liang</b> San Gabriel Resident 5308 N. Pongosa Ave. San Gabriel, CA 91776 Phone: (626) 286-5608	Mr. Liang asked if he could submit comments in Chinese. He asked at what point does the end of the trench become at-grade and is curious about how the Rubio Wash will be affected. Mr. Liang expressed support for the San Gabriel Trench project as well as concern because his house is currently located east of the Rubio Wash, about 40 feet north of the railroad tracks. The temporary shoofly track will be located closer to his house and he has concerns about safety, foundation stability due to vibration, and noise and air pollution issues. Mr. Liang asked that possible solutions to these issues be investigated in order to avoid impacts.	A discussion of the lowering of Rubio Wash is included in Section 2.2.1 Hydrology. A discussion of the impacts associated with Noise and Vibration is included in Section 2.2.5 and 2.4.2.	Phone Call Mail-Letter (Original in Chinese) Scoping Meeting/Public Comment Form (Original in Chinese)
<b>Diane Ng</b> San Gabriel Resident 1013 S. Gladys Ave. San Gabriel, CA 91776 Cell: (626) 379-5273	Mrs. Ng expressed concern about how the project will impact her place of employment (840 Commercial Ave. at the corner of San Gabriel Blvd. and Commercial Ave.) which is adjacent to the railroad tracks.	Land use and zoning implications are included in Section 2.1.1. Traffic impacts are discussed in Section 2.1.8.	Phone Call

<b>TABLE 4-2: COMMENTS RECEIVED</b>			
<b>Contact Information</b>	<b>Comment(S)/Issue(S)</b>	<b>ACE Response</b>	<b>Comment Type</b>
<b>Steve Smith, Ph.D.</b> Program Supervisor <b>South Coast Air Quality Management District</b> 21865 Copley Dr. Diamond Bar, CA 91765 Phone: (909) 396-2000	South Coast Air Quality Management District recommends the use of SCAQMD CEQA Act Air Quality Handbook when preparing the air quality analysis. They are requesting ACE to identify any potential adverse air quality impacts that could occur from all phases of the project. SCAQMD is also recommending a localized air quality analysis and mobile source health risk assessment.	Please see Section 2.2.4 Air Quality	Mail-Letter
<b>Gloria Duenas</b> Rosemead Resident 4553 Delta Ave. Rosemead, CA 91770	Ms. Duenas proposed to have the project move forward to improve traffic flow and so ambulances are not held up.	Comment noted.	Mail-Letter
<b>Steve &amp; Karen Cranston</b> San Gabriel Residents 315 Monson Lane San Gabriel, CA 91776 Mailing Address: 1613 Chelsea Road, #293 San Marino, CA 91108 Phone: (626) 282-7100 scan7@att.net kycranston@gmail.com	The Cranstons own and reside in a historic home, the Las Tunas Adobe., and expressed concern regarding structural impacts due to construction vibration. They asked how traffic congestion and track crossings will be handled during construction and suggested mitigating construction dust due to prevailing west to east wind patterns. They inquired about construction work hours and duration due to noise concerns and regarding use of Orange Street for construction traffic. Mr. and Mrs. Cranston expressed interest in locating a tunnel which, according to folklore, ran between the Mission and the Las Tunas Adobe. They suggested the complete list of points raised by the San Gabriel Historical Assn. from the meeting eight years ago be referenced.	Please see Section 2.2.4 Air Quality and Section 2.1.10 Cultural Resources for a discussion of noise and vibration and the Las Tunas Adobe, respectively. Additional information related to cultural and historical resources will be available as part of the Section 106 process.	Scoping Meeting/Public Comment Form
<b>Doug Richter</b> San Gabriel Resident 620 Montecito Drive San Gabriel, CA 91776 Phone: (626) 570-8050	Mr. Richter suggested that the intersection of Ramona and Main Street be re-signalized to let traffic turn left in and out of Main Street at Ramona without traffic stopping and blocking the intersection.	Traffic plans for the project are not finalized at this point, however, Section 2.1.8 includes an analysis of the proposed traffic plan.	Scoping Meeting/Public Comment Form
<b>Ernest P. Salas</b> Gabriellino Band of Mission Indians 514 E. Main Street San Gabriel, CA 91776 Phone: (626) 287-4014	Mr. Salas asked if there were plans to acquire and raze any of the homes on the south side of the track in the 500 block of E. Main St. between California St. and Lafayette St. He also asked for information on the cultural resources as he is a member of the Gabriellino Band of Mission Indians.	Please see Section 2.1.1 Land Use, for specific information on properties in the area. Information on cultural resources is included in Section 2.1.10.	Scoping Meeting/Public Comment Form
<b>Chu Mei Tse</b> San Gabriel Resident 715 E. Angeleno Ave. San Gabriel, CA 91776 Phone: (626) 710-8996	Ms. Tse suggested the project will result in environmental improvements and requested information regarding property acquisition.	Comment noted.	Scoping Meeting/Public Comment Form (Original in Chinese)
<b>Leo Szeto</b> San Gabriel Resident 501 S. San Gabriel Blvd., #201 San Gabriel, CA 91776 Phone: (626) 378-2418 leoszeto@pacbell.net	Mr. Szeto suggested that San Gabriel Blvd. bridge be built near conclusion of construction phase to minimize traffic impacts and permit San Gabriel Blvd. traffic to be diverted to adjacent north-south routes.	Comment noted. Traffic plans for the project are not finalized at this point; however, Section 2.1.8 includes an analysis of the proposed traffic plan.	Scoping Meeting/Public Comment Form

<b>TABLE 4-2: COMMENTS RECEIVED</b>			
<b>Contact Information</b>	<b>Comment(S)/Issue(S)</b>	<b>ACE Response</b>	<b>Comment Type</b>
<b>Anthony Morales</b> Gabrielino/Tongva San Gabriel Band of Mission Indians 309 S. Walnut Grove Ave. San Gabriel, CA 91776 Phone: (626) 286-1758	Mr. Morales, a Native American descendent, requested monitoring of archeological and Native American finds, noting that the San Gabriel Mission and a Native American village are in close proximity to the project. Mr. Morales said his tribe is concerned about uncovering artifacts and potential human remains.	Please see Section 2.1.10 Cultural Resources for mitigation measures related to archeological artifacts.	Scoping Meeting/Public Comment Form
<b>Jenny Tse</b> San Gabriel Resident 715 E. Fairview Ave., Apt. G San Gabriel, CA 91776 Phone: (626) 309-1735	Ms. Tse said she supports the project due to its environmental and traffic improvements and hopes the construction can be completed expeditiously. Ms. Tse inquired about property acquisition since her family lives close to the railroad.	See above.	Scoping Meeting/Public Comment Form (Original in Chinese)
<b>Terry and Ann Cedar</b> Property Owners 400 W. Mission Rd. San Gabriel, CA 91776 Mailing Address: PO Box 3798 Santa Barbara, CA 93130 Phone: (805) 570-8048 Tac1966@msn.com	Mr. and Mrs. Cedar, who own a townhome development near Mission Road, expressed support for the project due to the noise, safety, traffic congestion and pollution benefits. Once the project is built, train traffic can increase without negative impacts to the community.	Comment noted.	Scoping Meeting/Public Comment Form
<b>Juan R. Nunez</b> Rosemead Resident 2702 Del Mar Ave. Rosemead, CA 91770 Phone: (626) 280-8043	Mr. Nunez asked about the cost of the project and how it is financed. He also asked if there is any acquisition of property and if there are any spurs on the line.	Comment noted.	Scoping Meeting/Public Comment Form
<b>Carlos Huerta</b> San Gabriel Resident 815 King St. San Gabriel, CA 91776 chuerta@sbcglobal.net	Mr. Huerta asked if the EIR/EA is available for review, if there are illustrations or models of the grade separation project, and suggested extending the trench eastward through to Rosemead Blvd.	Comment noted.	Email
<b>Susan Chapman</b> Program Manager, <b>Metropolitan Transportation Authority</b> One Gateway Plaza, MS 99-23-2 Los Angeles, CA 90012 Phone: (213) 922-6908 chapmans@metro.net	Metropolitan Transportation Authority stated that a Traffic Impact Analysis is required which must include monitoring of impacted freeway on- or off-ramps and an analysis of the project impacts on current and future transit services.	Comment noted.	Mail-Letter
<b>Bernard J. Wolters</b> San Gabriel Resident 1001 Montecito Dr. San Gabriel, CA 91776	Mr. Wolters recommended extending a street in a bridge across the lowered railroad trench to provide congestion relief at Mission Rd. and Del Mar Ave.	Comment noted. The proposed project includes a trench and four grade separations in the City of San Gabriel Trench. Building an additional grade separation is outside the scope of the project.	Mail-Letter



<b>TABLE 4-2: COMMENTS RECEIVED</b>			
<b>Contact Information</b>	<b>Comment(S)/Issue(S)</b>	<b>ACE Response</b>	<b>Comment Type</b>
<p><b>Kevin Brogan, Esq.</b> Hill, Farrer &amp; Burrill LLP One California Plaza, 37<sup>th</sup> Floor 300 S. Grand Ave. Los Angeles, CA 90071 Phone: (213) 621-0815 kbrogan@hillfarrer.com Representing <b>San Gabriel Nursery &amp; Florist</b> 632 S. San Gabriel Blvd. San Gabriel, CA 91776</p>	<p>Expressed concern regarding business losses, loss of on-street delivery and customer parking on San Gabriel Boulevard due to construction of the project. Requested development of a mitigation plan regarding these issues as well as noise, dust and fumes and drainage and run-off if San Gabriel Blvd. is raised in elevation. Expressed concern regarding traffic hazards at intersection of El Monte St. and San Gabriel Blvd. with increased motorist speeds on San Gabriel once project is completed.</p>	<p>Comment noted. Please see responses above regarding traffic, noise, air quality and hydrology.</p>	<p>Mail/Fax/Email-Letter</p>
<p><b>James Flournoy</b> Rosemead Resident 8655 Landis View Lane Rosemead, CA 91770 Phone: (626) 288-1755 wyrmidrider@earthlink.net</p>	<p>Mr. Flournoy expressed concerns regarding project stability during seismic event, particularly of the retaining walls and bridges, and if water, storm water and wastewater mains fail and flood the trench. He suggested Walnut Grove Ave. for a grade separation accommodate through use of an inverted siphon for Rubio Wash.</p>	<p>Please see section 2.2.2 Geology. The proposed project includes a trench and four grade separations in the City of San Gabriel Trench, per the fact sheet. Building an additional grade separation is outside the scope of the project.</p>	<p>Email</p>
<p><b>Scott P. Harris</b> <b>California Department of Fish and Game</b> spharris@dfg.ca.gov</p>	<p>California Fish and Game requested attention be paid to drainage impacts of project.</p>	<p>Comments noted. Please see Section 2.2.1 Hydrology.</p>	<p>Email</p>
<p><b>Laurence S. Wiener, Esq.</b> Representing the <b>City of Alhambra</b> Richards, Watson &amp; Gershon 355 S. Grand Ave., 40<sup>th</sup> Floor Los Angeles, CA 90071 Phone: (213) 626-8484</p>	<p>The City of Alhambra is concerned about impacts during construction to air quality, noise, traffic, storm water/flooding, utilities, recreational resources, hazardous materials/upsets, pedestrian safety, San Pasqual Wash, and aesthetics. City suggests holding public outreach meeting(s) in the City of Alhambra to reach out to residents.</p>	<p>Please see responses to comments above regarding air quality, noise, traffic and hydrology.</p>	<p>Mail-Letter</p>
<p><b>Gary L. Riddle</b> Program Manager <b>Union Pacific Railroad</b> 1400 Douglas St., Stop 0910 Omaha, NE 68179 Phone: (402) 544-3005 glriddle@up.com</p>	<p>Union Pacific Railroad maintains construction of the project must not interfere with UP's train operations and expresses concerns regarding air quality impacts to locomotive control compartments operating in trench, impacts of the trench on drainage of surface water, public safety impacts of trench construction and operation and that the party responsible for maintenance of the trench identify long-term maintenance needs and funding sources. Union Pacific also offered comments regarding trench, bridge and grade separation structural and track and signal design and asserted that all federal and state construction-related permits must be secured by ACE.</p>	<p>Comment noted.</p>	<p>Email-Letter</p>
<p><b>Susan Parks</b> Superintendent <b>San Gabriel Unified School District</b> 408 Junipero Serra Dr. San Gabriel, CA 91776 Phone: (626) 451-5400</p>	<p>San Gabriel Unified School District requests crossing guards at all intersections, implementation of student safety awareness campaign, installation of safety walls along railroad right of way, sound mitigation for schools near project and for district headquarters, and attention to aesthetics and landscaping.</p>	<p>Comment noted. Please see sections 2.2.5 Noise and 2.1.9 Visual/Aesthetics.</p>	<p>Mail/Fax-Letter</p>

<b>TABLE 4-2: COMMENTS RECEIVED</b>			
<b>Contact Information</b>	<b>Comment(S)/Issue(S)</b>	<b>ACE Response</b>	<b>Comment Type</b>
<b>Garreth Damrath</b> Senior Environmental Planner <b>Caltrans</b> Division of Environmental Planning 100 S. Main St., MS-16A Los Angeles, CA 90012-3606 Phone: (213) 897-0704	Caltrans stated that the environmental document should include a Purpose and Need Statement, a Range of Alternatives an alternative which includes open space to improve the visual characteristic of the area and create an aesthetically pleasing railway corridor, such as a cap park.	Comments noted. Please see Chapter 1.0 Proposed Project for a discussion of purpose and need and alternatives.	Mail/Fax/Email-Letter

## 5.0 PERSONS & SOURCES CONSULTED

### 5.1 PERSONS AND SOURCES CONSULTED

City of San Gabriel  
San Gabriel City Hall  
425 S. Mission Drive  
San Gabriel, CA 91776  
Contact: Bruce Mattern, City Engineer

City of San Gabriel Fire Department  
1303 S. Del Mar Avenue  
San Gabriel, CA 91776  
Contact: Don Berry, Deputy Marshall

City of San Gabriel Police Department  
625 South Del Mar Avenue  
San Gabriel, CA 91776-0130  
Contact: David A. Lawton, Chief

City of Alhambra Utilities Department  
111 South First Street  
Alhambra, CA 91801  
Contact: Martin Ray, Deputy Director

Allied Waste Services  
14905 S San Pedro Street  
Gardena, CA 90247  
Contact: Susanne Passantino

Consolidated Disposal  
12949 Telegraph Rd.  
Santa Fe Springs, Ca, 90670  
Contact: Customer Service Representative

Los Angeles County Sanitation District  
P.O. Box 4998  
Whittier, CA 90607-4998  
Contact: Martha Tremblay, Engineer

### 5.2 SOURCES CONSULTED

Alameda Corridor-East Construction Authority, *Draft Relocation Impact Report for San Gabriel Trench Project City of San Gabriel*, August 2003, Revised December 2009.

ATS Consulting, *Construction Noise and Vibration Impact Assessment, San Gabriel Trench Grade Separation*, November 2007.

California Air Resources Board, *Ambient Air Quality Standards*, November 17, 2008.

California Department of Conservation, *Seismic Hazard Zones, El Monte Quadrangle* (1999), available at <http://www.conservation.ca.gov/cgs/shzp/Pages/Index.aspx>, accessed November 12, 2008.

California Geological Survey, *Alquist-Priolo Earthquake Fault Zones* (2007), available at [www.consrv.ca.gov/CGS/RGHM/AP/Pages/Index.aspx](http://www.consrv.ca.gov/CGS/RGHM/AP/Pages/Index.aspx), accessed November 12, 2008.

California Geological Survey, *Special Publication 42 Fault-Rupture Hazard Zones in California, Interim Revision*, August 2007.

California Integrated Waste Management, *Waste Stream Profile*, 2008.

California Department of Transportation, *Traffic Noise Analysis Protocol for New Highway Construction and Reconstruction Projects*, August 2006.

California Department of Transportation, *Transportation Project-Level Carbon Monoxide Protocol*, 1997.

City of Alhambra Department of Utilities, *2007 Consumer Confidence Report*, 2007.

City of Alhambra website, <http://www.cityofalhambra.org>, accessed November-December 2008.

City of Rosemead website, <http://www.cityofrosemead.org>, accessed December 2008.

City of San Gabriel, *Mission District Specific Plan*, 2004.

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City of San Gabriel Police Department website, [http://www.sgpd.org/html/crime\\_statistics.html](http://www.sgpd.org/html/crime_statistics.html), accessed November 24, 2008.

County of Los Angeles website, <http://portal.lacounty.gov/wps/portal/lac/home>, accessed November-December 2008.

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Donald Watson, Alan Plattus, and Robert Shibley, *Time-Saver Standards for Urban Design*, 2003.

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Federal Highway Administration website, <http://fhwa.dot.gov>, accessed February 1, 2008.

Federal Railway Administration, *High-Speed Ground Transportation Noise and Vibration Impact Assessment*, 2005.

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Group Delta, *Draft Geotechnical Report: Alameda Corridor - East*, September 1999.

Iteris, *Draft Traffic Study Report for Construction Conditions for the San Gabriel Trench Grade Separation Project*, 2008.

JMD, *San Gabriel Trench Transportation Management Plan*, August 2009.

MAA Engineering Consultants, *Phase I Environmental and Geotechnical Site Assessment*, May 1999.

Moffatt and Nichol, *Draft Preliminary Engineering Report (Advanced Engineering Concept Plan)*, September 3, 2008.

Moffatt and Nichol, *Right of Way and Easement Report*, February 2009.

Parsons Transportation Group, *Noise and Vibration Assessment, Alameda Corridor-East*, September 1999 (Revised March 2000).

Southern California Air Quality Management District, *Historical Data by Year*, available at <http://www.aqmd.gov/smog/historicaldata.htm>, accessed December 8, 2008.

Southern California Association of Governments, *Regional Transportation Plan*, 2008.

SWCA Environmental Consultants, *Extended Phase I and Phase II Cultural Studies*, September 2009.

SWCA Environmental Consultants, *Historical Property Survey Report for the San Gabriel Trench Grade Separation Project*, 2009

SWCA Environmental Consultants, *Paleontological Resources Assessment of the San Gabriel Trench Grade Separation Project*, September 2009.

United States Geological Survey, *About Liquefaction*, available at <http://geomaps.wr.usgs.gov/sfgeo/liquefaction/aboutliq.html>, accessed November 12, 2008.

United States Geological Survey, *Geology of the San Gabriel Mountains, Traverse Ranges Province*, available at [http://geomaps.wr.usgs.gov/socal/geology/transverse\\_ranges/san\\_gabriel\\_mtns/index.html](http://geomaps.wr.usgs.gov/socal/geology/transverse_ranges/san_gabriel_mtns/index.html), accessed November 12, 2008.

United States Geological Survey, *Landslides Hazards Program*, available at <http://landslides.usgs.gov/learning/ls101.php>, accessed on November 12, 2008.

## **OTHER REFERENCES**

City of Alhambra, *City of Alhambra General Plan*, 1987.

City of San Gabriel, *City of San Gabriel General Plan*, 2004.

Southern California Association of Governments, *Regional Comprehensive Plan*, 2008.

United States Census Bureau website, <http://factfinder.census.gov/home/saff/main.html>, access October-December 2008.

## **5.3 LEAD AGENCY**

Alameda Corridor - East Construction Authority  
4900 Rivergrade Road, Suite A120  
Irwindale, CA 91706  
Contact: Rick Richmond, Chief Executive Officer

## **5.4 PREPARERS OF THIS EIR/EA**

Terry A. Hayes Associates LLC  
8522 National Boulevard, Suite 102  
Culver City, CA 90232  
Terry A. Hayes, AICP, Principal  
Jessica Kirchner, AICP, Project Manager  
Sam Silverman, Senior Environmental Scientist  
Janet Fitzgerald, Senior Associate  
Jaime R. Guzman, Planner  
Michael Sullivan, Planner  
| Kristen Kam, Assistant Planner/Graphics  
Jeremy Stephens, Assistant Planner  
Michelle Flores, Administrative Assistant

## 6.0 COMMENTS AND RESPONSES

The Draft EIR/EA was available for a 45-day public review period between September 29, 2009 and November 14, 2009. During this period, 13 written comments on the Draft EIR/EA were received. In addition, a public hearing was held during the review period on October 28, 2009 at the San Gabriel Mission Playhouse in San Gabriel to receive public comments on the Draft EIR/EA. An additional 13 public comments pertaining to the proposed project and Draft EIR were received during the hearing. Finally three verbal comments were submitted via telephone.

This Final EIR provides responses to all written and public hearing comments received on the Draft EIR during the 45-day public review period and at the public hearing held on October 28, 2009.

Comments on the Draft EIR include issues raised by the public that warrant clarification or correction of certain statements in the Draft EIR/EA. Section 3.0 Corrections and Additions to the Draft EIR of this Final EIR provides any such corrections or clarifications as required by Section 15132 of the California Environmental Quality Act (CEQA) Guidelines. None of the corrections and additions constitutes significant new information or substantial project changes as defined by CEQA Guidelines Section 15088.5.

### 6.1 RESPONSE TO WRITTEN COMMENTS

Each comment letter has been assigned a number. The body of each comment letter has been separated into individual comments, which also have been numbered. This results in a tiered numbering system, whereby the first comment in Letter 1 is depicted as Comment 1-1, and so on. These numbered comments are included in their entirety, followed by the corresponding responses. Comments on the Draft EIR were received from the following:

#### DRAFT EIR WRITTEN COMMENTS FROM PUBLIC AGENCIES:

1. California Public Utilities Commission  
Jose Pereyra, Utilities Engineer  
320 West 4<sup>th</sup> Street, Suite 500  
Los Angeles, CA 90013  
November 20, 2009
2. California Transportation Commission  
Bimla Rhinehart, Executive Director  
1120 N Street, MS-52  
Sacramento, CA 94273  
November 9, 2009
3. Governor's Office of Planning and Research  
Scott Morgan, Acting Director  
1400 10<sup>th</sup> Street  
Sacramento, CA 95812-3044  
November 17, 2009
4. Metro  
Susan F. Chapman, Program Manager  
One Gateway Plaza MS 99-23-2  
Los Angeles, CA 90012-2952  
November 9, 2009

5. City of San Gabriel  
Carol D. Barrett, Planning Manager  
425 Mission Drive  
San Gabriel, CA 91778  
November 24, 2009
6. City of San Gabriel  
Algis J. Marcuska, Engineering Division  
425 Mission Drive  
San Gabriel, CA 91778  
November 13, 2009

**DRAFT EIR/EA WRITTEN COMMENTS FROM PRIVATE ENTITY:**

7. Union Pacific Railroad  
Gary Riddle, Engineering Department  
1400 Douglas Street  
Stop 0910  
Omaha, NE 68179  
November 12, 2009
8. All Aboard Mini-Storage  
Paul R. Driscoll  
990 Highland Drive, Suite 300  
Solana Beach, CA 92075  
November 2, 2009
9. All Aboard Mini-Storage  
Paul R. Driscoll  
990 Highland Drive, Suite 300  
Solana Beach, CA 92075  
October 28, 2009

**DRAFT EIR/EA WRITTEN COMMENTS FROM PUBLIC:**

10. Anthony Morales  
Tribal Chief/Chairman  
Gabrieleno/Tongva San Gabriel Band of Mission Indians  
No Address  
November 16, 2009
11. Ernie and Andrew Salas  
514 Main Street  
San Gabriel, CA 91176  
October 28, 2009
12. Andrew Salas  
Gabrieleno Band of Mission Indians  
P.O. Box 393  
Covina, CA 91723  
November 6, 2009



13. Robert Laing  
5308 Pondosa Avenue  
San Gabriel, CA 91776  
September 29, 2009
14. Leslie Levy  
737 S. Almansor Street  
Alhambra, CA 91801  
October 2, 2009
15. Marietta Guzzo  
5463 N. Delta Avenue  
San Gabriel, CA 91776  
October 2, 2009
16. Tom Sandoval  
No Address  
October 6, 2009
17. Jian Cheng  
No Address  
October 8, 2009
18. Trac Lam  
No Address  
November 5, 2009
19. Edward Dario  
321 W. Wedgewood Avenue  
San Gabriel, CA 91776  
October 28, 2009
20. Edward Dario  
No Address  
October 28, 2009
21. Robert Liang  
5308 Pondosa Avenue  
San Gabriel, CA 91776  
November 1, 2009
22. Robert Liang  
5308 N. Pondosa Avenue  
San Gabriel, CA 91776  
October 28, 2009
23. Gloria Duenas  
4553 Delta Avenue  
Rosemead, CA 91770  
October 28, 2009

24. Daniel Slama  
No Address  
October 28, 2009
25. Ernest P. Salas  
Gabrieleno Band of Mission Indians  
514 Main Street  
San Gabriel, CA  
October 28, 2009
26. Jason Huang  
337 Clary Avenue  
October 28, 2009
29. Jason Huang  
9633 Clancey Avenue  
Downey, CA 90240  
October 28, 2009
28. Robert Doninguez  
214 E. Main Street  
San Gabriel, CA 91776  
October 28, 2009
29. Ernest P. Salas  
514 E. Main Street  
San Gabriel, CA 91776  
October 28, 2009
30. Ernest Cummings  
233 W. Wedgewood Drive  
October 28, 2009

**COMMENTS RECEIVED AFTER THE CLOSE OF THE COMMENT PERIOD**

31. Los Angeles County Department of Public Works  
Gail Farber  
900 South Freemont Avenue  
Alhambra, CA 91803  
November 19, 2009
32. City of San Gabriel  
Carol D. Barrett, Planning Manager  
425 Mission Drive  
San Gabriel, CA 91778  
December 1, 2009
33. City of Alhambra  
Julio Fuentes, City Manager  
111 South First Street  
Alhambra, CA 91801  
December 31, 2009

Letter 1

STATE OF CALIFORNIA  
PUBLIC UTILITIES COMMISSION  
320 WEST 4TH STREET, SUITE 500  
LOS ANGELES, CA 90013  
(213) 576-7083

Arnold Schwarzenegger, Governor



November 20, 2009

Ricky Choi  
Community Relations Project Manager  
Alameda Corridor-East Construction Authority  
4900 Rivergrade Road, Suite A120  
Irwindale, CA 91706-1446

Re: Draft Environmental Impact Report for San Gabriel Trench Grade Separation Project

Dear Mr. Choi:

Thank you for providing us with a copy of your Draft Environmental Impact Report/Environmental Assessment (DEIR/EA) for the San Gabriel Trench Grade Separation Project. Although the California Public Utilities Commission (CPUC or Commission) has been interacting with the Alameda Corridor-East Construction Authority (ACE) regarding the project, the CPUC has not specifically provided written comments on this project prior to this date and we appreciate the opportunity to provide the following comments:

The project is subject to a number of rules and regulations involving the CPUC. These may include: Sections 1201 et al of State of California Public Utilities Code, which requires Commission authority to construct rail lines over existing streets. The design criteria of the proposed project must comply with CPUC General Orders (GOs), such as, GO 72-B rules governing the construction and maintenance of crossings at grade of railroads with public streets, roads and highways; GO 75-D regulations governing standards for warning devices for at-grade highway-rail crossings; and GO 26-D regulations governing clearances on railroads with reference to side and overhead structures, parallel tracks, crossings of public roads, highways and streets.

As part of its mission to reduce hazards associated with at-grade crossings, the Commission's policy is to reduce the number of new at-grade crossings on rail corridors. We support ACE's San Gabriel Trench Grade Separation Project as it proposes to grade-separate four existing at-grade highway-rail crossings on Union Pacific Railroad's (UPRR) tracks in City of San Gabriel.

Commission staff participated in two field diagnostic meetings with ACE, UPRR and City of San Gabriel. The staging of construction activities was discussed as well as the need for temporary at-grade crossings along a shoofly track during Trench construction at the four existing crossings.

The temporary crossings should be designed and constructed as discussed during the field diagnostic meetings with ACE personnel. The temporary crossings should employ the following major treatments as agreed during diagnostic meetings:

1. Railroad warning lights and crossing gates,
2. Pedestrian crossing gates, tactile strips, and channelization,
3. Interconnection with and preemption of traffic signals at adjacent roadway intersections,
4. Modification of existing traffic signals at adjacent roadway intersections,
5. Relocation/removal of crosswalks,

**LETTER 1**

November 20, 2009

Jose Pereyra  
California Public Utilities Commission  
320 West 4<sup>th</sup> Street, Suite 500  
Los Angeles, CA 90013

**Response 1-1**

The comment contains introductory information and includes a summary of rules and regulations that the project is subject to involving the CPUC.

ACE thanks the CPUC for their involvement in the project. ACE anticipates working closely with the CPUC during the development of the project to ensure compliance with CPUC General Orders (GOs), such as GO 72-B rules governing the construction and maintenance of crossings at grade of railroads with public streets, roads and highways; GO 75-D regulations governing standards for warning devices for at-grade highway-rail crossings; and GO 26-D regulations governing clearances on railroads with reference to side and overhead structures, parallel tracks, crossings of public roads, highways and streets.

**Response 1-2**

This comment includes a statement of support for the project and a summary of a field meeting between ACE, Union Pacific Railroad (UPRR), the City of San Gabriel and the CPUC. The commentor requests that the temporary crossings be designed and constructed as discussed during the field meeting. The commentor also includes a list of major treatments. This comment does not state a specific concern regarding the adequacy of the Draft EIR/EA, and no additional response to this comment is necessary. However, this comment is noted for the administrative record and will be forwarded to the decision-makers for review and consideration.

1-1

1-2

Ricky Choi  
Community Relations Project Manager  
November 20, 2009  
Page 2 of 2

In acquiring Commission approval for construction of the San Gabriel Trench and the necessary temporary at-grade crossings, ACE must file a formal application with the Commission in accordance with Rule 3.9 (Railroad Across Public Road) of the Commission's Rules of Practice and Procedure.

We understand that this is a highly complex and challenging project with funding, design and environmental approval for the greater Los Angeles area. It is imperative that the CPUC be involved with the details of this project from its inception in order to be informed and to be of greater assistance in the future.

The CPUC will need to provide applicable regulatory oversight for all phases of the project. This will require early consultation with not only ACE personnel, but also with contracted consultants in order to provide early consultation on all proposed design and engineering of the proposed project improvements on the corridor.

This will assist with the review of the environmental documents and final CEQA approval of the project by the CPUC, since we are a responsible agency under CEQA section 15381 with regard to this project and in complying with any and all General Order requirements as they apply to the San Gabriel Trench Grade Separation Project.

Thank you very much for the opportunity to review and comment on your DEIR/EA. Commission staff is available to meet with you and discuss our concerns.

We look forward to working with ACE on this project. Should you have any questions, please contact me at (213) 576 – 7083 or email at [jfp@cpuc.ca.gov](mailto:jfp@cpuc.ca.gov).

Sincerely,

/ S /

Jose Pereyra  
Utilities Engineer  
Rail Crossings Engineering Section  
Rail Transit and Crossings Branch  
Consumer Protection and Safety Division

### Response 1-3

This comment requests that ACE file a formal application with the CPUC in accordance with Rule 3.9 (Railroad Across Public Road) of the CPUC's Rules of Practice and Procedure. The comment also includes a statement affirming the CPUC's role as a Responsible Agency under CEQA.

This comment does not state a specific concern regarding the adequacy of the Draft EIR/EA, and no additional response to this comment is necessary. However, this comment is noted for the administrative record and will be forwarded to the decision-makers for review and consideration.

1-3

BOB ALVARADO, Chair  
JAMES EARP, Vice Chair  
DARIUS ASSEM  
JOHN CHALKER  
LUCETTA DUNN  
DARIO FROMMER  
JAMES C. GHELMETTI  
CARL GUARDINO  
PATRICK MASON  
JOSEPH TAVAGLIONE  
LARRY ZARIAN  
  
SENATOR ALAN LOWENTHAL, Ex Officio  
ASSEMBLYMAN MIKE ENG, Ex Officio  
  
BIMLA G. RHINEHART, Executive Director

**CALIFORNIA TRANSPORTATION COMMISSION**

1120 N STREET, MS-52  
P. O. BOX 942873  
SACRAMENTO, 94273-0001  
FAX (916) 653-2134  
(916) 654-4245  
<http://www.ctc.ca.gov>

Letter 2  
STATE OF CALIFORNIA



00557 12,190.04  
ARNOLD SCHWARZENEGGER  
GOVERNOR  
121 200.05  
RECEIVED  
NOV 20 2009  
BY:

November 9, 2009

Rick Richmond  
Chief Executive Officer  
Alameda Corridor-East Construction Authority  
4900 Rivergrade Road, Ste A120  
Irwindale, CA 91706

Re: Draft Environmental Impact Report – San Gabriel Valley Grade Separation Project

Dear Mr. Richmond,

The California Transportation Commission, as a Responsible Agency, received the Draft Environmental Impact Report (DEIR) for the San Gabriel Valley Grade Separation Project (project) in Los Angeles County.

The Commission has no comments regarding the environmental issues to be addressed in the DEIR. However, since this project is included in the Proposition 1B Trade Corridors Improvement Fund (TCIF) program of projects, upon finalization of the environmental process, in addition to providing the final environmental document, the Commission expects the Project Sponsor(s) to confirm in writing whether the scope of work of the project as identified through the environmental process is or is not consistent with the project programmed in the TCIF. In the event the project has been revised, the revised scope may require a request to the Commission for a program/project amendment.

In addition, if the revision to the project will result in an estimated cost above the current programmed amount, the Project Sponsor(s) is responsible for securing necessary supplemental funds and identifying the source(s) where supplemental funds will be obtained to ensure the project continues to be fully funded and that the project can be successfully implemented. If the Project Sponsor(s) recommends supplemental funding from sources that are within the purview of the Commission (Bond, STIP, TCRP, etc.), Commission approval for programming or allocation of these funds will be required. Conversely, if the Project Sponsor(s) will utilize local (or local-federal) funds, a local board action or resolution committing the supplemental funding levels must be provided to the Commission.

2-1

**LETTER 2**

November 9, 2009

California Transportation Commission  
Bimla Rhinehart, Executive Director  
1120 N Street, MS-52  
Sacramento, CA 94273

**Response 2-1**

The comment states the Commission has no comments regarding the environmental issues to be addressed in the DEIR. No additional response to this comment is necessary.

000557

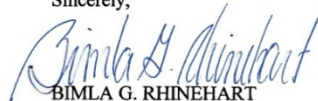
Mr. Rick Richmond  
November 9, 2009  
Page 2 of 3

Further, in programming the TCIF, the Commission established its intention to monitor the outcomes of the environmental process with regard to air quality impacts due to emissions from diesel or other particulates and related mitigation strategies. The Commission will only allocate TCIF to projects that can demonstrate compliance with the TCIF and with all applicable environmental requirements, including non-air quality impacts and including the implementation of appropriate mitigation measures. The Commission expects the Project Sponsor(s) to commit to the implementation of these mitigation measures as part of its submittal of the final environmental document for approval for future funding consideration and in its request for allocation of TCIF funding.

2-1  
(cont)

If you have any questions, please contact Susan Bransen at (916) 653-2082.

Sincerely,

  
BIMLA G. RHINEHART  
Executive Director

c: Jay Norvell, Chief, Caltrans Environmental Analysis



ARNOLD SCHWARZENEGGER  
GOVERNOR

November 17, 2009

Letter 3

STATE OF CALIFORNIA  
GOVERNOR'S OFFICE of PLANNING AND RESEARCH  
STATE CLEARINGHOUSE AND PLANNING UNIT



CYNTHIA BRYANT  
DIRECTOR

Regina Talamentez  
Alameda Corridor-East Construction Authority  
4900 Rivergrade Road, Suite A120  
Irwindale, CA 91706

Subject: San Gabriel Trench Grade Separation Project  
SCH#: 2008101073

Dear Regina Talamentez:

The State Clearinghouse submitted the above named Draft EIR to selected state agencies for review. The review period closed on November 12, 2009, and no state agencies submitted comments by that date. This letter acknowledges that you have complied with the State Clearinghouse review requirements for draft environmental documents, pursuant to the California Environmental Quality Act.

Please call the State Clearinghouse at (916) 445-0613 if you have any questions regarding the environmental review process. If you have a question about the above-named project, please refer to the ten-digit State Clearinghouse number when contacting this office.

Sincerely,

for: Scott Morgan  
Acting Director, State Clearinghouse

3-1

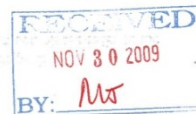
**LETTER 3**

November 17, 2008

Scott Morgan, Acting Director  
State of California Governor's Office of Planning and Research  
State Clearinghouse and Planning Unit  
1400 10<sup>th</sup> Street  
P.O. Box 3044  
Sacramento, CA 95812-3044

**Response 3-1**

The comment states that the State Clearinghouse received and distributed the Draft EIR to selected State agencies and that the proposed project has complied with State Clearinghouse requirements for review of draft environmental documents pursuant to CEQA. No State agencies submitted comments during the 45-day public review period. No additional response to this comment is necessary.



1400 10th Street P.O. Box 3044 Sacramento, California 95812-3044  
(916) 445-0613 FAX (916) 323-3018 www.opr.ca.gov

**Document Details Report  
State Clearinghouse Data Base**

**SCH#** 2008101073  
**Project Title** San Gabriel Trench Grade Separation Project  
**Lead Agency** Alameda Corridor-East Construction Authority

**Type** EIR Draft EIR  
**Description** The Alameda Corridor-East Construction Authority (ACE) proposes to eliminate 4 at-grade railroad crossings along the Union Pacific Railroad (UPRR) in the City of San Gabriel. These improved crossings would occur at Ramona Street, Mission Drive, Del Mar Avenue, and San Gabriel Boulevard. Currently the 2.2 mile stretch of railroad includes 4 at-grade crossings with no grade separations between the railroad and vehicles or pedestrians. The proposed project would lower the existing railroad from its current at-grade condition into a trench. Although the actual trench would be located within the City of San Gabriel, construction activities and some limited track work would take place in the Cities of Alhambra, Rosemead and the County of Los Angeles.

**Lead Agency Contact**

**Name** Regina Talamentez  
**Agency** Alameda Corridor-East Construction Authority  
**Phone** 626-962-9292 **Fax**  
**email**  
**Address** 4900 Rivergrade Road, Suite A120  
**City** Irwindale **State** CA **Zip** 91706

**Project Location**

**County** Los Angeles  
**City** San Gabriel  
**Region**  
**Lat / Long** 34° 05' 44" N / 110° 06' 32" W  
**Cross Streets** Ramona St, Mission Rd, Del Mar Ave, San Gabriel Blvd  
**Parcel No.** Several  
**Township** **Range** **Section** **Base**

**Proximity to:**

**Highways** I-10  
**Airports** None  
**Railways** UPRR  
**Waterways** Alhambra Wash and Rubio Wash  
**Schools** Several  
**Land Use** M-1, Light Manufacturing

**Project Issues** Air Quality; Archaeologic-Historic; Drainage/Absorption; Flood Plain/Flooding; Geologic/Seismic; Minerals; Noise; Population/Housing Balance; Recreation/Parks; Public Services; Schools/Universities; Sewer Capacity; Soil Erosion/Compaction/Grading; Solid Waste; Toxic/Hazardous; Traffic/Circulation; Water Quality; Water Supply; Wetland/Riparian; Growth Inducing; Landuse; Cumulative Effects; Aesthetic/Visual; Biological Resources; Forest Land/Fire Hazard

**Reviewing Agencies** Resources Agency; Department of Fish and Game, Region 5; Office of Historic Preservation; Department of Parks and Recreation; Department of Water Resources; California Highway Patrol; Caltrans, District 7; Regional Water Quality Control Board, Region 4; Native American Heritage Commission; Public Utilities Commission; State Lands Commission

**Date Received** 09/29/2009 **Start of Review** 09/29/2009 **End of Review** 11/12/2009

Note: Blanks in data fields result from insufficient information provided by lead agency.



Letter 4

Metropolitan Transportation Authority      One Gateway Plaza      213.922.2000 Tel  
Los Angeles, CA 90012-2952      metro.net



**Metro**

November 9, 2009

Ricky Choi  
Community Relations Project Manager  
Alameda Corridor-East Construction Authority  
4900 Rivergrade Road, Suite A120  
Irwindale, CA 91706-1446

Dear Mr. Choi:

Los Angeles County Metropolitan Transportation Authority (Metro) is in receipt of the Draft EIR for the San Gabriel Trench Grade Separation Project. This letter conveys recommendations concerning issues that are germane to Metro's statutory responsibilities in relation to the proposed project.

The following issues should be addressed for the Final EIR:

1. Several transit corridors with Metro bus service could be impacted by the project. Prior to construction, the Alameda Corridor-East Construction Authority should coordinate identified detours with the San Gabriel Valley Service Sector: Jack Gabig, General Manager, and Scott Page, Service Development Manager, can be reached at 626-454-2801 and 626-454-2820, respectively.
2. Metro Bus Operations Control Special Events Coordinator should be contacted at 213-922-4632 regarding construction activities that may impact Metro bus lines. Other Municipal Bus Service Operators may also be impacted and therefore should be included in construction outreach efforts.

Metro looks forward to reviewing the Final EIR. If you have any questions regarding this response, please call me at 213-922-6908 or by email at chapmans@metro.net. Please send the Final EIR to the following address:

Metropolitan Transportation Authority  
Metro CEQA Review Coordination  
One Gateway Plaza MS 99-23-2  
Los Angeles, CA 90012-2952  
Attn: Susan Chapman

Sincerely,

Susan F. Chapman  
Program Manager, Long Range Planning

cc: Jack Gabig  
Scott Page  
Pete Serdienis

NOV 12 2009  
*lm*

**LETTER 4**

November 9, 2009

Metro  
Susan F. Chapman, Program Manager  
One Gateway Plaza MS 99-23-2  
Los Angeles, CA 90012-2952

**Response 4-1**

This comment contains introductory information and a comment pertaining to transit service corridors with Metro bus service that have the potential to be impacted by the project. The comment includes contact information for Metro's San Gabriel Valley Service Sector Coordinator and a request that ACE contact the coordinator prior to project construction.

4-1

The Draft EIR/EA includes detailed information on transit service and proposed detour routes, including those with Metro bus service (Section 2.1-8 Traffic and Transportation, pp. 2-53 through 2-57). The analysis presented in this section indicates that although Metro Lines 176 and 487 would need to be rerouted during street closures, the maximum increase in walking distance would be approximately 1/2-mile. In addition, the Draft EIR/EA includes the following mitigation measure:

4-2

**TT1:** ACE shall develop a transit detour plan for Metro Lines 176 and 487 in close consultation with Metro to ensure minimal disruption to services. In particular, it is probable that students at San Gabriel High School and other schools in the area use these routes. Construction of the Ramona Street grade crossing shall occur during the summer months, when school is not in session.

ACE anticipates working closely with Metro to develop detour plans and will consult with Metro staff, as indicated in Metro's comment letter, prior to construction of the project.

**Response 4-2**

The comment includes contact information for Metro Bus Operations Control Special Events Coordinator and requests ACE contact Metro's coordinator prior to project construction.

See Response 4-1 above.



Letter 5



Development Services Department

November 24, 2009

Mr. Rick Choi  
Community Relations Project Manager  
ALAMEDA CORRIDOR - EAST (ACE) CONSTRUCTION AUTHORITY  
4900 Rivergrade Road, Ste. A120  
Irwindale, CA 91706

SUBJECT: San Gabriel Trench Grade Separation Project Draft Environmental Impact Report/Environmental Assessment Dated September, 2009

Dear Mr. Choi:

Thank you for the opportunity to review the Draft Environmental Impact Report/Environmental Assessment for the San Gabriel Trench Grade Separation Project. Included in this correspondence is a detailed list of all our comments on this document. These comments were previously transmitted under separate cover. We are sending them again, with this enhanced cover letter, to provide additional context for your consideration of our response.

5-1

When we reviewed the document, we noted that some items raised in correspondence to Rick Richmond in June, 2007 (copy attached) remain unaddressed including the following:

- It is our understanding that the California Mission Studies Association has asked to be notified of environmental documents, meeting notices, and other actions attendant to this project, especially with respect to the Chapman Mill. In reviewing the current document, we are unable to determine whether the ACE team has provided the documents as requested.
- The analysis refers to a vibration study performed by Harris, Miller and Hansen, Inc. in 2000. That document has not yet been made available to the City of San Gabriel for review.
- The document remains silent on the relationship of the mitigation monitoring plan proposed and the requirements of AB 3180 which already requires mitigation monitoring to protect cultural resources.

5-2

5-3

5-4

We have been encouraged by the quality of the material presented in briefings by your consultants are the issues of historic and cultural resources. However, our confidence is somewhat diminished by seeing that some of the issues brought to ACE's attention in our April, 2009 comments remain unaddressed. For example, the misnamed city streets and buildings remain uncorrected.

5-5

Several of the items transmitted to ACE on November 13, 2009 merit specifically calling them out.

Summary

P. S-20: At CT6, it indicates the P.M. peak hour delay would be 48.1 seconds, but does not indicate the LOS.

5-6

**Letter 5**

November 24, 2009

City of San Gabriel  
Carol D. Barrett, Planning Manager  
425 Mission Drive  
San Gabriel, CA 91778  
Carol Barrett

**Response 5-1**

This comment expresses an opinion about the proposed project, but does not state a specific concern regarding the adequacy of the Draft EIR/EA. No additional response to this comment is necessary; however this comment is noted for the administrative record and will be forwarded to the decision-makers for review and consideration.

**Response 5-2**

The comment states that the Draft EIR/EA does not clearly state whether the California Mission Association was notified regarding environmental documents, meetings and other actions. The Historic Resources Evaluation Report (HRER) includes a summary of contact with the California Mission Studies Association (CMSA). To summarize, the CMSA was contacted via email and telephone on January 13, 2009, January 30, 2009, and February 3, 2009 about the proposed project. Follow-up emails and voicemails were left notifying the CMSA of the project and requesting information or feedback as part of the local historic group consultation process. CMSA had not responded as of December 9, 2009. Project documents related to the San Gabriel Mission, such as the HRER will be forwarded to the CMSA once they are finalized pending Caltrans approval.

**Response 5-3**

The comment states that the analysis in the report refers to a vibration study performed by Harris, Miller and Hansen which has not been made available to the City of San Gabriel.

Mr. Rick Choi  
November 24, 2009  
Page 2 of 8

Section 2.1.1 – Land Use

P. 2-13: At Table 2.1-3, Policy 3.21, the reference should be to Section 2.1-10 Cultural Resources. The statement “The potential for encountering unrecorded cultural or archaeological resources is low” is incorrect. The potential is high. One has to question the thoroughness of the work and the reliability of the consultants when these sorts of errors are noted

Section 2.1.1 – Population, Housing and Employment Growth

P. 2-23: At 2<sup>nd</sup> paragraph, it states that “none of the housing that would be displaced is considered affordable housing”. What is the basis for this statement?

Section 2.1.8 – Traffic and Transportation

P. 2-47 and 2-48: Measures US 1-5 should be reviewed against the current proposal by which the County would be contracted by the City to perform certain maintenance responsibilities in the trench zone.

Section 2.1.10 – Cultural and Paleontological Resources

P. 2-82 through 2-84: The Alhambra Wash is described as a cultural landscape and noted in Fig. 11-2 of the general plan, and may have other protections under “Common Ground,” the regional watershed preservation plan of the San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy. The City has adopted this plan, and cross references it as a general plan policy applicable to the Cultural Resources Chapter (General Plan

Figure 11-2, Cultural Landscapes). The Mission Road corridor adjoining the Mission is also classified as a Cultural Landscape subject to protection (11-2). Again,

P. 2-90: In line with the comments above, these issues [related to Mitigation Measure CR3] should also be embodied in the Cultural Resources Mitigation and Treatment Program.

P. 2-90: These analyses [related to Mitigation Measure CR3] would also require reconsideration and amendment of the texts at 3-16 through 3-19 (Utilities) and 3-26 through 3-29 (Cultural Resources).

Section 2.2.2 – Geology and Soils

P. 2-103: Under Liquefaction, where is the designated liquefaction zone, located approximately 0.5 mile to the south and southeast of the project site?

P. 2-113: Under Emergency Responses/Evacuation Plan, first paragraph, what is the construction phasing schedule?

The Harris, Miller and Hansen study was prepared as part of the early program evaluate when details regarding the specifics of the project were not known. Since that time additional and more relevant analysis has been completed and as a result the analysis presented in the Draft EIR/EA is based on the most current information. The noise and vibration analysis presented on pages 2-155 through 2-174 of the Draft EIR/EA is based on the following studies: ATS Consulting, Construction Noise and Vibration Impact Assessment, 2007 and Parsons Engineering, Alameda Corridor East Noise and Vibration Impacts Assessment Report, 1999. Although the Harris, Miller and Hansen report is included in Section 5.2 Sources Consulted, it was not used in the preparation of the document.

The Harris, Miller and Hansen study was provided to the City of San Gabriel per this request. All of the background materials and studies used to prepare the document are a matter of the public record and are available for review at ACE’s offices located at:

4900 Rivergrade Road, Suite A120  
Irwindale, CA 91706.

Requests for copies of reports and studies used in preparation of the document should be sent to Ricky Choi, ACE Community Relations Manager.

**Response 5-4**

The comment states the document remains silent as to the relationship of the mitigation monitoring plan proposed and the requirements of AB3180 which already requires mitigation monitoring to protect cultural resources.

Section 21081.6 of the Public Resources Code, (AB 3180 (Cortese)) requires that the public agency shall adopt a reporting or monitoring program for the changes made to the project or conditions of project approval, adopted to mitigate or avoid significant effects on the environment. The reporting or monitoring program shall be designed to ensure compliance with mitigation measures during project implementation. The monitoring program must be adopted when a

5-6

public agency makes its findings under CEQA so that the program can be made a condition of project approval in order to mitigate significant effects on the environment.

Mr. Rick Choi  
November 24, 2009  
Page 3 of 8

P. 2-124: Sensitive receptors should include the convalescent nursing home called Vista Cove located at 909 W. Santa Anita Street, the San Gabriel Valley Medical Center located at 438 W. Las Tunas Drive, and the Vincent Lugo Park located at the corner of Wells and Ramona Street.

5-6

Of interest to the staff in San Gabriel is the role being played by the Preservation Engineer. We are unable to determine in reviewing the document what work he has accomplished. We would appreciate being provided the data which would allow us to read and understand his recommendations for the project and mitigation of issues of concern.

5-7

We look forward to continuing to work closely with the ACE Construction Authority to realize the successful implementation of this important project. If you have any questions, please feel free to contact me at (626) 308-2806 ext. 4624 or cbarrett@sgch.org.

DEVELOPMENT SERVICES DEPARTMENT



Carol D. Barrett, FAICP  
Planning Manager

Enclosure: Letter to Rick Richmond Dated June 12, 2007

Cc: Councilmember Dave Gutierrez  
Mary Camarrano, President, San Gabriel Historical Association  
Steven A. Preston, FAICP, Interim City Manager  
Bob Kress, City Attorney,  
Jennifer Davis, Interim Director of Development Services  
Mark Gallatin, City Planner  
Bruce Mattern, City Engineer  
Algis Marciuska, Senior Engineer

The Draft EIR/EA does not include an MMRP as the MMRP is required as a part of the Final EIR/EA. The MMRP included in this Final EIR/EA includes measures specific to compliance with Section 106 for cultural resources which is a federal requirement. These requirements are included in the MMRP and, therefore, enforceable under AB3180.

### Response 5-5

The comment expresses an opinion, but does not state a specific concern regarding the adequacy of the Draft EIR. No additional response to this comment is necessary; however, this comment is noted for the administrative record and will be forwarded to the decision-makers for review and consideration.

### Response 5-6

The comment summarizes the City's comments regarding the project. These comments are addressed individually below.

### Response 5-7

The comment expresses an opinion, but does not state a specific concern regarding the adequacy of the Draft EIR. No additional response to this comment is necessary; however, this comment is noted for the administrative record and will be forwarded to the decision-makers for review and consideration.

### Response 5-8

The comment includes three typographical errors to be corrected. The text on page S-4 now reads as follows:

Paragraph 2, 3<sup>rd</sup> sentence

These sensitive land uses include the San Gabriel Mission (north of the Ramona Street and Mission Drive Crossings), San Gabriel High School (located southwest of the Junipero Serra Drive and Ramona

Mr. Rick Choi  
November 24, 2009  
Page 4 of 8

**Alameda Corridor-East Project  
San Gabriel Trench Grade Separation Project  
Union Pacific Railroad in Los Angeles County  
Environmental Impact Report/Environmental Assessment**

Issue	Specific Comment	Page #
<b>Project Location</b>	<ul style="list-style-type: none"> <li>Clary Avenue is misidentified as Clary Drive.</li> <li>Mission Road does not provide direct access to I-10.</li> <li>Mission Road is misidentified as Mission Drive.</li> </ul>	S-4
<b>Table S-1</b>	<ul style="list-style-type: none"> <li>Under Displacement of Housing, it indicates the project would result in displacement of two residences and one business. Under Environmental Justice, it indicates the project would result in displacement of one business and three residences.</li> </ul>	S-12
	<ul style="list-style-type: none"> <li>At NC3, the bottom of the text is cut off.</li> </ul>	S-18
	<ul style="list-style-type: none"> <li>At CT6, it indicates the P.M. peak hour delay would be 48.1 seconds, but does not indicate the LOS.</li> </ul>	S-20
	<ul style="list-style-type: none"> <li>Under Transit Service, Metro Line 487 should be included.</li> </ul>	S-21
<b>Table S-2</b>	<ul style="list-style-type: none"> <li>At CR2, the bottom of the text is cut off.</li> </ul>	S-28
	<ul style="list-style-type: none"> <li>At AQ6, the bottom of the text is cut off.</li> </ul>	S-36
	<ul style="list-style-type: none"> <li>At CT3, the bottom of the text is cut off.</li> </ul>	S-38
<b>1.2 Purpose and Need/Project Objectives Introduction</b>	<ul style="list-style-type: none"> <li>Mission Road is misidentified as Mission Drive.</li> </ul>	1-1
<b>1.2 Purpose and Need/Project Objectives Existing Conditions</b>	<ul style="list-style-type: none"> <li>At last paragraph and at Table 1-1, Mission Road is misidentified as Mission Drive.</li> </ul>	1-4,5
<b>1.3 Project Location and Demographics Project Site</b>	<ul style="list-style-type: none"> <li>Mission Road does not provide direct access to I-10.</li> </ul>	1-6

Street intersection), Rancho Las Tunas Adobe (located approximately 470 feet southeast of the Mission Road and Junipero Serra Drive intersection), the Asian Youth Center (on the north side of Clary Drive Avenue) and the West San Gabriel Valley YMCA...

Paragraph 4, last sentence  
Mission Road provides direct access to 1-10 located to the south via an adjacent north/south street, such as Ramona Street or Del Mar Avenue.

Last Paragraph, 1<sup>st</sup> sentence  
Currently, Ramona Street, Mission Drive Road, Del Mar Avenue and San Gabriel Boulevard...

**Response 5-9**

The comment states the Draft EIR/EA includes conflicting statements regarding the number of homes and businesses that would be replaced. The proposed project would displace two residences and one business. An additional two residences and two businesses have ancillary structures, such as back porches that encroach into the right-of-way. These structures would be removed and are therefore considered as partial takes. The discussion and tables in the environmental justice and population, housing and employment sections have been updated accordingly.

**Response 5-10**

The comment refers to text that was omitted on page S-18 under Mitigation Measure NC3. The complete text of the mitigation measure is provided below.

**NC3:** Ground-disturbing and vegetation removal activities associated with construction of the project shall be performed outside of the breeding season for birds, or between September 1 and January 31. If these project activities cannot be implemented during this time period, the project applicant should retain a qualified biologist to perform preconstruction nest surveys to identify active nests within and adjacent to (up to 500 feet) the project area. If the preconstruction

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	<ul style="list-style-type: none"> <li>Mission Road is misidentified as Mission Drive.</li> </ul>	1-10	5-16
	•		
<b>1.4 Project Alternatives</b>	<ul style="list-style-type: none"> <li>Mission Road is misidentified as Mission Drive.</li> </ul>	1-15	5-17
	•		
<b>2.1.1 Land Use Regional Plans and Policies</b>	<ul style="list-style-type: none"> <li>At Table 2.1-3, Policy 3.21, the reference should be to Section 2.1-10 Cultural Resources. The statement "The potential for encountering unrecorded cultural or archaeological resources is low" is incorrect. The potential is high.</li> </ul>	2-13	5-18
	•		
<b>2.1.3 Population, Housing and Employment Growth Employment</b>	<ul style="list-style-type: none"> <li>Delete New Century Ford.</li> </ul>	2-21	5-19
	•		
<b>2.1.3 Population, Housing and Employment Growth Environmental Consequences - Population</b>	<ul style="list-style-type: none"> <li>At 2<sup>nd</sup> paragraph on p. 2-22, it states that all three residences are currently occupied, but Table 2.1-10 correctly shows the home at 325 E. Main St. as vacant.</li> <li>At 2<sup>nd</sup> paragraph on p. 2-22, it refers to a home at 205 E. Main St., but the home is not listed in Table 2.1-10.</li> <li>At 1<sup>st</sup> paragraph on p. 2-23, it states that the total number of residents potentially displaced by the project is two, while Table 2.1-10 says five.</li> </ul>	2-22, 23	5-20
	•		
<b>Environmental Consequences - Housing</b>	<ul style="list-style-type: none"> <li>At 2<sup>nd</sup> paragraph, it states that "none of the housing that would be displaced is considered affordable housing". What is the basis for this statement?</li> </ul>	2-23	5-21
	•		
<b>2.1.5 Community Cohesion Affected Environment</b>	<ul style="list-style-type: none"> <li>At 5th paragraph, change "San Gabriel Civic Auditorium" to "Mission Playhouse".</li> </ul>	2-32	5-22
	•		
	<ul style="list-style-type: none"> <li>At 1<sup>st</sup> paragraph, change the last sentence to read "This node consists of single-family residences with several multi-family apartment buildings along with one-story commercial uses".</li> </ul>	2-33	5-23
	•		
<b>Demographics</b>	<ul style="list-style-type: none"> <li>At 1<sup>st</sup> paragraph, delete the phrase "Similar to Los Angeles County and the City of San Gabriel". Change the last sentence to read "The Study Area consists of more renter-occupied housing units (57 percent) than owner-occupied housing units (40 percent), which is more similar to the City of Alhambra than the City of San Gabriel and the County of Los Angeles</li> </ul>	2-34	5-24

survey is conducted early in the nesting season (February 1–March 15) and nests are discovered, a qualified biologist may remove the nests only after it has been determined that the nest is not active (i.e., the nest does not contain eggs, nor is an adult actively brooding on the nest). Any active non-raptor nests identified within the project area or within 300 feet of the project area should be marked with a 300-foot buffer, and the buffer area would need to be avoided by construction activities until a qualified biologist determines that the chicks have fledged. Active raptor nests within the project area or within 500 feet of the project area should be marked with a 500-foot buffer and the buffer avoided until a qualified biologist determines that the chicks have fledged. If the 300-foot buffer for non-raptor nests or 500-foot buffer for raptor nests cannot be avoided during construction of the project, the project applicant should retain a qualified biologist to monitor the nests on a daily basis during construction to ensure that the nests do not fail as the result of noise generated by the construction. The biological monitor shall be authorized to halt construction if the construction activities cause negative effects, such as the adults abandoning the nest or chicks falling from the nest.

### Response 5-11

The comment refers to a text omission on page S-20. The text should read as follows: The PM peak hour delay would be 48.1 seconds and operate at LOS **D**. The text of the document has been revised accordingly.

### Response 5-12

The comment refers to a text omission on page S-21. The text should read as follows: Metro Lines **176 and 487** and Montebello Transit Line 20 would be re-routed to continue service during road closures. The text of the document has been revised accordingly.

### Response 5-13

The comment refers to text omissions on pages S-28, S-36 and S-38. Measure CR2 has been revised for the Final EIR/EA. The full text of the previous version of measure CR2 is provided below.

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	as a whole".	
	•	
<b>2.1.8</b>	• Measures US 1-5 should be reviewed against the current proposal by which the County would be contracted by the City to perform certain maintenance responsibilities in the trench zone.	2-47, 2-48
	•	
<b>2.1.9 Visual/Aesthetic Resources</b>	• Mission Road does not provide direct access to I-10.	2-66
	•	
<b>2.1.10 Cultural and Paleontological Resources</b>	• At 4th paragraph, "California Register" is repeated.	2-74
	•	
<b>Architectural History</b>	• The Alhambra Wash is described as a cultural landscape and noted in Fig. 11-2 of the general plan, and may have other protections under "Common Ground," the regional watershed preservation plan of the San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy. The City has adopted this plan, and cross references it as a general plan policy applicable to the Cultural Resources Chapter (General Plan Figure 11-2, Cultural Landscapes). The Mission Road corridor adjoining the Mission is also classified as a Cultural Landscape subject to protection (11-2).	2-82, 2-83, 2-84
	•	
	• In 3 <sup>rd</sup> paragraph, Monson Lane is misidentified as Monsoon Lane.	2-84
	•	
<b>Measure CR3</b>	• In line with the comments above, these issues should also be embodied in the Cultural Resources Mitigation and Treatment Program.	2-90
	• These analyses would also require reconsideration and amendment of the texts at 3-16 through 3-19 (Utilities) and 3-26 through 3-29 (Cultural Resources).	2-90
	•	
<b>2.2 Physical Environment</b>	• In Paragraph "Flooding and Inundation," Las Tunas Road should be Drive.	2-96
	•	
<b>2.2.1 Hydrology and Water Quality</b>	• Under Environmental Consequences, first paragraph, the third sentence needs to end with a period, between the words potential and Construction.	2-98
	•	
<b>2.2.2 Geology and Soils</b>	• Under Liquefaction, where is the designated liquefaction zone, located approximately 0.5 mile to the south and southeast of the	2-103

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**CR2:** As there is a potential for previously unrecorded subsurface historic properties within the direct APE, archaeological testing and evaluation will be required at the locations identified as having such potential prior to construction. These include the former location of the Southern Pacific Railroad San Gabriel Depot and two concrete culverts. If present, evaluation of these resources will determine their eligibility for listing on the California Register or the National Register. Testing and evaluation will be conducted in advance of construction to allow time for review and analysis. Given that a portion of the APE is an active rail line, there are constraints to testing within the railroad right-of-way prior to construction, including safety issues and the inability to test beneath the tracks and ballast, as well as active buried utility lines adjacent to the railroad tracks. In these instances, testing and evaluation shall take place during the construction process immediately following the removal of the rail line and utilities.

**AQ6:** Low-sulfur fuel shall be used in all construction equipment as provided in California Code of Regulations Title 17, Section 93114.

**CT3:** ACE shall coordinate with Metro regarding the re-routing of Line 487 during the Ramona Street closure and of Line 176 during the Mission Road closure. Metro shall approve the detour route, which may include elements or be the same detour route described in this document. Ensuring that the route maintains most of the service prior to construction would result in no adverse impacts.

### Response 5-14

The comment refers to a typographical error on page 1-1. The second sentence in the first paragraph under the heading Introduction now reads: These improved crossings would occur at Ramona Street, Mission Drive Road, Del Mar Avenue and San Gabriel Boulevard.



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	project site?	
	• Under Ground Shaking, Alternative 1, first sentence needs to end with a period, not a comma.	2-107
	• Under Emergency Response/Evacuation Plan, note address of the City's emergency operation center (EOC) located at 1303 S. Del Mar Avenue in the City's Fire Department.	2-111
	• Under Emergency Responses/Evacuation Plan, first paragraph, what is the construction phasing schedule?	2-113
<b>Sensitive Receptors</b>	• Sensitive receptors should include the convalescent nursing home called Vista Cove located at 909 W. Santa Anita Street, the San Gabriel Valley Medical Center located at 438 W. Las Tunas Drive, and the Vincent Lugo Park located at the corner of Wells and Ramona Street.	2-124
	• Add the Non-residential Sensitive Receptors to Figure 2.2-4: San Gabriel Valley Medical Center and Vincent Lugo Park.	2-125
	• Add the Non-residential Sensitive Receptors to Figure 2.2-6: San Gabriel Valley Medical Center and Vincent Lugo Park.	2-137
	• Add San Gabriel Valley Medical Center and Vincent Lugo Park to list.	2-138
<b>3.1.3 Population, Housing and Employment</b>	• Table 3-2 misidentifies Agostino Road as Augustino Road.	3-9
<b>3.3 Public Services Public Schools</b>	• Table 3-3 includes Mission Elementary School, which is a private, parochial school.	3-11
<b>3.3 Public Services Impacts- Fire Protection and Emergency Services</b>	• At 3 <sup>rd</sup> paragraph, change "assist local police emergency respondents" to "assist local fire emergency respondents" and change "increased police service facilities" to "increased fire service facilities".	3-12
<b>Impacts- Public Libraries</b>	• At 2 <sup>nd</sup> paragraph, change "Ramona Street" to "Del Mar Avenue".	3-14
<b>Mitigation Measure PS5</b>	• Change "these Fire Departments" to "these Police Departments".	3-15
<b>Mitigation Measure</b>	• Change "schedule during the summer" to	3-15

5-35  
5-36  
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**Response 5-15**

The comment refers to a typographical error in Table 1-1. The table now reads: Mission ~~Drive~~ **Road**.

**Response 5-16**

The comment refers to a factual error on page 1-6. The sentence now reads as follows: Mission Road provides ~~direct~~ access to 1-10 located to the south **via an adjacent north/south street such as Ramona Street or Del Mar Avenue**.

The comment also refers to a typographical error on page 1-10. The second paragraph, first sentence has been corrected to read as follows:

Currently, Ramona Street, Del Mar Avenue, Mission ~~Drive~~ **Road**, and San Gabriel Boulevard cross the UPRR tracks at grade...

**Response 5-17**

The comment refers to a typographical error on page 1-15. The fourth sentence in the third full paragraph now reads as follows: The crossings at Ramona Street, Mission ~~Drive~~ **Road**, Del Mar Avenue and San Gabriel Boulevard would remain at grade under the No-Build Alternative.

**Response 5-18**

The comment refers to a factual error on page 2-13. The third box on in the second row of the table should read as follows: The potential for encountering unrecorded cultural or archeological resources is ~~low~~ **high**.

**Response 5-19**

The comment states New Century Ford should be deleted from the list of employers in the City of San Gabriel. The text on page 2-21 was updated to reflect this comment.



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<b>PS8</b>	"scheduled during the summer".	
<b>Level of Impact After Mitigation - Police Protection</b>	<ul style="list-style-type: none"> <li>Change "fire emergency services" to "police emergency services".</li> </ul>	3-15
<b>3.11 Noise</b>	<ul style="list-style-type: none"> <li>How about adding noise barriers near the Vista Cove convalescent nursing home in Table 3-9?</li> </ul>	3-50
<b>3.13 Biological Resources</b>	<ul style="list-style-type: none"> <li>Under Mitigation Measures NC1, is it the City that shall comply or the applicant?</li> </ul>	3-69

5-45

5-46

5-47

### Response 5-20

The comment refers to discussion related to the displacement of residences associated with the proposed project. The following text changes were made to the Draft EIR/EA to clarify.

Second paragraph on p.2-22 should read as follows:

~~All~~ **Two** of the ~~three~~ residences are currently occupied.

However, the number of person in the second occupied single-family home at ~~205 E. Main Street~~ **405 S. Del Mar Avenue** was not ascertained during the field inspection.

Using this estimate, approximately three persons would occupy the house at ~~205 E. Main Street~~ **405 S. Del Mar Avenue**.

First paragraph on page 2-23 should read as follows:

In total the number of residents that the proposed project would potentially displace is ~~two~~ **four** (one at 313 E. Main Street and ~~one~~ **three** at 404 S. Del Mar Avenue).

### Response 5-21

The comment refers to the text on page 2-22 which indicates none of the housing that would be displaced is considered affordable housing. The commentor asks for clarification on affordable housing.

In this instance, the term "affordable" housing is intended to refer to housing that is either subsidized or under rent restriction. The text of the document has been updated to clarify this distinction.

### Response 5-22

The comment refers to a typographical error on page 2-32. The text has been updated to read as follows:

This corridor includes the historic landmark San Gabriel Mission, ~~San Gabriel Civic Auditorium~~, **Mission Playhouse**, the City Hall...



◆ City With A Mission ◆ Founded 1771 ◆  
Eleven A. Preston, Deputy City Manager ◆ 626-308-2810

June 12, 2007

Mr. Rick Richmond  
Chief Executive Officer  
Alameda Corridor East Construction Authority  
4900 Rivergrade Road, Suite A-120  
Irwindale, California 91706

**Subject: Review and Comments -- Initial Study/Environmental Assessment  
San Gabriel Trench Grade Separation Project**

Dear Mr. Richmond:

Thank you for sharing with us the draft environmental assessment and initial study for the proposed San Gabriel Trench Grade Separation Project.

You will recall that in our April 17 meeting, the City's personnel requested the opportunity to review the revised environmental assessment document to determine the extent to which the document had reflected issues raised in our initial review. Moreover, the adoption of both a new general plan and a Mission District Specific Plan, with specific references to the project, required that we be able to review the environmental document to confirm that the data is accurate.

The City of San Gabriel remains in full support of the trench project. The City's analysis of the environmental document intends to ensure that those adverse environmental impacts which may occur without proper consideration and mitigation are properly addressed prior to the construction stage.

With that preface, the City respectfully submits the following comments:

5-48

### Response 5-23

The comment requests additional text to be added on page 2-33. The text now reads as follows: This node consists of single-family residences with several multi-family apartment buildings- **along with one-story commercial uses.**

### Response 5-24

The comment suggests revisions to text on page 2.-34. The text is revised to read as follows: ~~Similar to Los Angeles County and the City of San Gabriel,~~ The Study Area consists of more renter-occupied housing units (57 percent) than owner-occupied housing units (40 percent), which is **more** similar to the City of Alhambra than the City of San Gabriel ~~as a whole and~~ or the County of Los Angeles **as a whole.**

### Response 5-25

ACE will work with the City to ensure maintenance responsibilities as they related to mitigation measures US1 through US5 would be included in formal agreement between the City, ACE and UPRR.

### Response 5-26

The comment refers to a factual error on page 2-66. The sentence now reads as follows: Mission Road provides ~~direct~~ access to Interstate 10 located to the south **via an adjacent north/south street such as Ramona Street or Del Mar Avenue.**

### Response 5-27

The comment refers to a typographical error. The text has been corrected to read as follows: "Historical resources" are described under the CEQA, and in California Public Resources Code (PRC) Section 5024.1 which established the ~~California Register~~ California Register.

General Comments

1. **Overall.** The draft narrative provides an effective explanation of the need for, and value of, the trench and grade separations. The City fully supports these ventures and sees the specific comments of this document as calling for technical refinements to the existing document, not a wholesale re-evaluation. These refinements reflect changes in applicable City laws and standards since the project was initiated; new information; and changes in environmental conditions.
2. **Mission and Chapman Mill Issues.** It is our understanding that the California Mission Studies Association has asked to be notified of environmental documents, meeting notices, and other actions attendant to this project, particularly with respect to the Chapman Mill. Can the ACE team verify that these documents have been provided as requested?
3. **Corrections Required – Mission.** The narrative makes serious mis-statements concerning the ability of the San Gabriel Mission Archangel and its outbuildings to survive vibration associated with both short-term construction impacts and extended increased use of the rail line.
  - a. For purposes of the environmental analysis, the discussion considers only the impact on the mission itself, but it does not include the ancillary contributing structures within mission grounds.
  - b. Repeated reports have documented the significant issues attached to the mission and its surrounding buildings, some of which show significant damage.
  - c. Within 150 feet of the trench zone in each direction remain two unreinforced adobe structures. The Adobe Rancho Las Tunas has been fully documented as being an unreinforced adobe structure and the San Gabriel Mission Museum (Priests House ca 1810) adjacent to the Mission Church has received some seismic retrofit.
  - d. The analysis refers to a vibration study performed by Harris, Miller and Hansen, Inc., but that document has not been made available to the City for this review.
  - e. The analysis presented appears to document only ambient noise and vibration conditions associated with ongoing operations of the rail line, but does not address whether there is the possibility of damage that may occur as the result of construction activities occurring during the trenching and/or construction of the line.
  - f. There is substantial historical evidence to show that contrary to the narrative, the San Gabriel Mission has not withstood seismic activity. In addition, the property continues to face serious long-term needs associated with deterioration of facilities such that it is attempting to remediate those issues. It would be irresponsible to mischaracterize the Mission as being fully able to withstand either seismic activity or vibration.

5-48  
(cont)

**Response 5-28**The comment states the Alhambra Wash is described as a cultural landscape and noted in Figure 11-2 of the City’s General Plan, and may have other protections under “Common Ground”, the regional watershed preservation plan of the San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy.

Alhambra Wash Channel was intensively surveyed and evaluated for historic significance in the project cultural resources technical report (Historical Resources Evaluation Report – supplied to the City of San Gabriel). In that evaluation, the channel is described as "built in 1937 by the U S Engineer Office (predecessor to Army Corps of Engineers)." The evaluation asserts: “The wash and culvert were part of a comprehensive region-wide drainage control program that was undertaken jointly by Los Angeles County Flood Control District and Army Corps of Engineers (Corps). The wash is 7.2 linear miles of rectangular, reinforced concrete channel, used to close gaps and extend the channel from Huntington Drive to Rio Hondo.” The significance statement states “The wash was improved in 1947 and 1953.”

However, the wash was found to have no significance under the criterion which would make it eligible for listing in the National or California registers nor is it a contributor to a larger National or California Register-eligible historic district.

Although a designation as “cultural landscapes” in the General Plan, and "Common Ground," in the adopted regional watershed preservation plan of the San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy do not equate to historic significance under CEQA. However, ACE recognizes the importance of the Wash to the City of San Gabriel. As such, the discussion in Section 3.0 of the document has been revised to reflect this local designation.

**Response 5-29**

The comment refers to a typographical error on page 2-84. Bullet number three was corrected to read as follows: Rancho Las Tunas Adobe, 315 Monsoen Lane, San Gabriel.

4. **Cultural Resources.** The broad outline of mitigation strategy provided is acceptable but lacking sufficient data to ensure that critical resources of concern to the City will be adequately protected. The City requests that its preservation consultants and archaeological consultant be included in the development of the proposed mitigation monitoring and treatment plan. As mitigation monitoring is already required under State law, it is unclear whether the ACE authority intends to develop a separate plan for construction management relative to affected cultural resources, or whether this is simply a reference to the AB 3180 mitigation monitoring program that is already a requirement of State law.

**Specific Comments**

Page	Para	Section	Comment
Cover			Please provide State Clearinghouse number to the City for reference in future correspondence.
8	2.4	<b>Alternatives Eliminated</b>	Spelling error in caption: "Furthur" should read, "Further."
15	3.4	<b>Wetlands</b>	<p>The San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy have been chartered by the State Legislature to address watershed issues within the San Gabriel river basin, including that area contained within the City of San Gabriel.</p> <p>The Watershed Conservation Authority is responsible for management of certain aspects of watershed in the region, but does not appear to have been consulted in the preparation of the document.</p> <p>The City has adopted the Conservancy's plan for the watershed area, Common Ground, as the basis for its own planning in and around storm and flood channels, and in programming future open space needs. Have the relevant watershed, storm drainage and flood control aspects of this environmental evaluation been shared with the Conservancy, and have they responded. This issue is noted because the Conservancy did not exist at the time that the ACE project was initially proposed, but today is a close partner with the City on those aspects of regional planning and infrastructure development that may affect the watershed system. There is no indication provided concerning whether the Conservancy was consulted for comment.</p>
16	3.5	<b>Air Quality</b>	<p><b>Construction Disturbance and Mitigation.</b></p> <ul style="list-style-type: none"> <li>We do not dispute the analysis with respect to long-term compliance but do not see an adequate discussion of short-term construction-related impacts. These impacts should be addressed, and appropriate mitigation measures instituted, to protect residents and residential uses immediately adjoining the construction zone during the construction period.</li> </ul>

**Response 5-30**

The comment refers to previous comments and states issues from previous comments should also be embodied in the Cultural Resources Mitigation and Treatment Plan. It is unclear from the comment which issues the commentor is referring to. However, it is assumed that the comment is referring to the City of San Gabriel's role in the development of the Cultural Resources Mitigation Monitoring and Treatment Plan (CRMMTP), similar to comments above regarding the City's role and maintenance responsibilities in comment 5-25. A draft Treatment Plan has been prepared per Caltrans guidelines, and was circulated to signatories and invited parties (including COSG) on December 10, 2009. The Treatment Plan and MOA will require substantial input from invited parties and will clearly state mitigation measures and responsible parties.

**Response 5-31**

5-48 (cont) The comment refers to mitigation measure CR3 and to the CEQA mitigation measures listed on pages 3-16 through 3-19 and 3-26 through 3-29. The text on pages 3-16 through 3-19 and 3-26 through 3-29 will be updated according to the changes above.

**Response 5-32**

The comment refers to a typographical error on page 2-96. The text was corrected to read as follows: In addition, Las Tunas ~~Road~~ Drive is a major east/west roadway with an existing major storm drain line along its entire length.

**Response 5-33**

The comment refers to a typographical error on page 2-98. The text was corrected and a period was inserted between the words potential and construction in the third sentence.

			4
2'	3.6.2	<b>Noise and Vibration</b>	<p>While the City does not object to the methodology, the analysis provides no specific explanation of how the data presented in the analysis should be interpreted with respect to several key facilities that meet the criteria for Categories 1 through 3, noise/vibration sensitive land uses. These include (* indicates structures with documented historic significance):</p> <ul style="list-style-type: none"> <li>▪ There is no discussion of fugitive dust control measures that will be employed. There should be such a discussion, focusing on sensitive uses such as schools and residences adjoining the grade separations and trench. At a minimum the document should specify that the construction will observe City of San Gabriel standards as specified by the City Engineer and the standards of the Southern California Air Quality Management District.</li> <li>▪ San Gabriel City Hall, 425 South Mission Drive*</li> <li>▪ Mission San Gabriel Archangel*</li> <li>▪ San Gabriel Mission Museum*</li> <li>▪ San Gabriel Unified School District Headquarters</li> <li>▪ San Gabriel Mission High School</li> <li>▪ San Gabriel Mission Elementary School</li> <li>▪ Asian Youth Center, 100 West Clary Avenue</li> <li>▪ La Casa de San Gabriel Community Center</li> <li>▪ San Gabriel Branch, Los Angeles County Public Library</li> <li>La Tuna Adobe*</li> <li>Lopes de Lowther Adobe*</li> </ul> <p>In the case of the Asian Youth Center, the building is located immediately adjoining the property line of the ACE construction. The other facilities on this list typically are located less than one block from the construction zone.</p> <p>The analysis does not appear to discuss the relatively higher short term impacts associated with construction. This impact should be discussed, documented and appropriate mitigation provided.</p>
32	3.6	<b>Vibration</b>	<p>The text reads: "Given that the San Gabriel Mission has the structural integrity to survive the seismic activity in Southern California, the increase in train vibration would be very unlikely to cause even minor cosmetic damage in the Mission buildings."</p> <p>This is an amazingly inaccurate statement, made even more so by the fact that this false statement was previously corrected in our review of the first round environmental document several years ago. See discussion above.</p>
32	3.7	<b>Waterways and Hydrology</b>	<p>It is not clear from reading the analysis in the draft environmental document how the Rubio Wash lowering may be implemented or what impacts may be associated with that change, which would affect both properties within the City of San Gabriel and in adjoining, unincorporated sections of Los Angeles County.</p> <p>Any changes in the profile of the Rubio Wash falling within the</p>

5-48  
(cont)

### Response 5-34

The comment asks where the designated liquefaction zone is located approximately 0.5 miles to the south and southeast of the project site. The designated liquefaction zone is located approximately one mile to the south of the project site, just south of Valley Boulevard. It extends from just east of San Gabriel Boulevard on the west to Walnut Grove Avenue on the east. The text of the document has been updated to reflect this comment.

### Response 5-35

The comment refers to a typographical error on page 2-107. The text was corrected and a period was placed at the end of the first sentence under the heading Ground Shaking.

### Response 5-36

The comment provides the address of the City's emergency operation center. No additional response to this comment is necessary; however this comment is noted for the administrative record and will be forwarded to the decision-makers for review and consideration.

### Response 5-37

The comment asks for the construction phasing schedule. The overall project schedule has been developed based on several constraints including the construction of the Ramona Street crossing during the summer months to accommodate the school schedule, opportunities for utility shut downs from April through October, and the phased schedule which does not allow for any two adjacent streets to be closed at the same time. An overview of the construction schedule is presented below:

- Begin Environmental Phase September 2008
- Preliminary Engineering Report Approval - June 2009
- Complete Environmental Approvals - April 2010
- Notice to Proceed – May 2011
- Shoofly and Alhambra Wash Construction - May 2011

5

34	3.8	Water Quality	<p>City limits of San Gabriel or connecting on either side of the should be designed to reflect the City's general plan standards, requiring that these watercourses be protected and enhanced; that sufficient space be left for utility vehicle access and trail linkages specified in the City's planning documents; and that changes are not made inconsistent with the watershed area plan adopted by the San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy.</p> <p>The analysis does not appear to address stormwater runoff associated with construction, which is subject to SJSMP requirements and the Los Angeles Region Stormwater Permit regulations. The environmental analysis should demonstrate that:</p> <ul style="list-style-type: none"> <li>▪ the project will comply with all applicable stormwater regulations;</li> <li>▪ appropriate best management practices shall be incorporated into project design and execution to prevent off-site flows;</li> <li>▪ stormwater retention shall occur onsite up to those limits prescribed by law and the regional stormwater permit;</li> <li>▪ a stormwater retention plan has been reviewed by the permitting agency, in consultation with the San Gabriel City Engineer.</li> </ul>
35	3.9	Historic and Cultural Resources	<p>Since the original work was completed on a draft environmental review several years ago, the City has adopted the Mission District Specific Plan, which identifies a historic district including parcels that we believe are incorrectly excluded from the study.</p> <p>The City contends that the zone for consideration extends a greater distance than that proposed in the subject environmental document, and should correctly include at least two other structures of substantial historic significance adjoining the study area. These are:</p> <ol style="list-style-type: none"> <li>1. The Ortega-Vigare Adobe at</li> <li>2. The Rancho Las Tunas Adobe</li> <li>3. The Hayes House</li> <li>4. Hayes House stone jail</li> </ol> <p>We generally concur with the proposed strategy for dealing with cultural resource issues but recommend that it include construction mitigation strategies for the Rancho Las Tunas and Vigare Adobes, the Mission Gardens and Vinyard for any mission structures, post-Mission period structures (1834-1913) or artifacts, and for paleontological, archaeological or Native American artifacts.</p>
38	3.10.1	Visual Resources	<p>The visual resource discussion treats the corridor in isolation, without respect to the fact that a small but significant portion of the corridor runs through a historic district, the City's civic center and a collection of some of the most historic public and private buildings in Southern California. A more conventional treatment consistent with CEQA standards evaluates the impact</p>

5-48  
(cont)

- Shift Rail to Shoofly – November 2011
- Construction of Mission Road Street Crossing – September 2011
- Construction of San Gabriel Boulevard Street Crossing – November 2011
- Construction of Ramona Street Crossing – June 2012
- Construction of Del Mar Avenue Street Crossing – April 2013
- Construction of UPRR rail in trench – October 2013
- Shoofly removal and Alhambra Wash construction – January 2014
- Project completion – May 2014

### Response 5-38

The comment refers to sensitive receptors discussed on page 2-124 of the draft document. The Vista Cove convalescent home and the San Gabriel Valley Medical Center was added to the list of sensitive receptors. They were also identified in the sensitive receptor figures and added to the analysis tables.

Vincent Lugo Park is located over 3,500 feet south of construction activity. Multiple blocks of residential land uses separate the Park from construction activity. Construction noise would be inaudible at Vincent Lugo Park based on the distance between the source and the receptor and the intervening buildings acting as noise barriers. In addition, no haul routes would be located near the Park. Construction vibration would not be perceptible at Vincent Lugo Park based on the distance between the source and the receptor.

### Response 5-39

The comment refers to a typographical error. The table on page 3-9 has been corrected and row three, column two now reads Agostino Road.



**Response 5-40**

The comment refers to a typographical error. San Gabriel Mission Elementary School was removed from Table 3-3.

**Response 5-41**

The comment refers to a typographical error on page 3-12. The text of the document has been corrected to read as follows: Nevertheless, an Emergency Response Plan would be necessary to assist local ~~police~~ fire emergency respondents in the event of emergencies within the trench. As such less-than-significant impacts associated with increased ~~police~~ fire facilities are anticipated.

of new construction upon visual resources that may be seen from the site. By that standard the analysis provides an incomplete assessment of visual resource impacts.

- The construction zone affects "portals" and "gateways" specified in the City's general plan, and for which specific recommendations for gateway treatments are provided. The City, in a separate document accompanying this review, will be making specific recommendations
- Because a significant part of the construction zone, running from an estimated 400 feet west of Ramona Street to approximately 400 feet east of Southbound Mission Drive, lies within the historic Mission District and is subject to both general plan and Mission District design standards, mitigation should include appropriate treatment of constructed improvements within that zone to (a) meet City design standards for improvements; (b) incorporate design enhancements appropriate to protect and enhance the context of the existing historic and cultural resources and landscape components.
- The term "standard railway lighting" provides the reader no indication what the size, scope, placement or lightfall of such lighting would be; or whether mitigation is needed to protect immediately adjoining residential neighborhoods or historic resources from an adverse impact. Please specify within a reasonable range what such lighting typically constitutes.

35 3.11 Land Use

The discussion of land use is insufficient.

- It does not document relevant issues identified in the general plan with respect to treatment of lands adjoining the Alameda Corridor East. The document provides a single line (presumably drawn from the Circulation Element) stating that the proposal fully complies with the general plan without referencing the correct and current general plan document by name, title, or publication date (either in the body or references); citing the specific source for its quote; or researching the relevant policies of the general plan dealing with the Alameda Corridor and the historic zones that it passes through.
- It does not address appropriate discussion of the Mission District Specific Plan, which establishes additional land use policies above and beyond the general plan addressing this issue.

These issues are more fully addressed in a memo from the Community Development Department, attached to this analysis.

40 3.12 Social and Economic

The study, based on 200 data, reports on several ethnic groups defined under Federal criteria as minorities, but does not address the 49% of San Gabriel's portion constituted of Asian and Pacific

5-48  
(cont)

### Response 5-42

The comment refers to a typographical error on page 3-14. The text of the document has been corrected to read as follows: As the rains would no longer need to sound their whistle when they approach the ~~Ramona Street~~ **Del Mar Avenue** intersection....

### Response 5-43

The comment refers to a typographical error on page 3-15. The text of the document has been corrected to read as follows: During construction of the proposed project, ACE shall remain in close contact with the ~~Police Fire~~ **Police** Departments and keep the apprised of work progress and any changes to the closure and detour plans and schedules.

### Response 5-44

The comment refers to a typographical error on page 3-15. The text of the document has been corrected to read as follows: Construction of the Ramona Street bridge shall be scheduled ~~d~~ during the summer period when San Gabriel High School is not in session.

### Response 5-45

The comment refers to a typographical error on page 3-15. The text of the document has been corrected to read as follows: Impacts are anticipated to be less-than-significant for ~~fire-emergency~~ **police protection** services after the implementation of Mitigation Measures **PS4** through **PS6**.

### Response 5-46

The comment asks about adding noise barriers near the Vista Cove convalescent nursing home in Table 3-9. Vista Cove was identified as a residential receptor adjacent to Winston Smoyer Community Garden. The analysis has been revised to specifically identify Vista Cove. The existing mitigation measures are sufficient to reduce noise impacts to a less-than-significant level. The text of the document has

44	Table 3-12.6		<p>Islander origin. It purports to comply with standards for evaluation of environmental justice involving communities of color.</p> <p>Table 3.12-6, "List of Displacement Properties," lists properties potentially subject to displacement. In its tally it lists for properties on "Cleary Avenue", which we presume to mean the 100 and 200 blocks of West Clary Avenue since there is no Cleary Avenue in the City. It lists a "business" at 100 W. Clary, references a relocation report, and determines that there would be no relocation impact. The relocation report was not provided for this review.</p> <p>The City's largest nonprofit social service location, the Asian Youth Center, is located at 100 W. Clary Avenue; it serves a large primary population of Asian and Pacific Islander youth and families, with a significant secondary population of Latino youth and families. There is no discussion in the narrative concerning this facility, since it is a critical resource providing social services, family counseling, recreation and education.</p>
3.14	50	Public Utilities	<p>After review with the City Engineer, the City wishes to have a clearer understanding of the strategy to lower the Rubio Wash, the extent to which this strategy has been reviewed with the Los Angeles County Department of Public Works (Flood Control District), and the impacts associated with a further lowering of the Channel by 16 feet.</p>
3.16	53-54	Construction Noise	<p>Noise impacts on specific noise-sensitive facilities, generally conforming to the list documented on page 4 of this letter, do not appear to have been addressed or mitigated in any meaningful manner. City facilities, the Mission Elementary and High Schools, the SGUSD headquarters, Smith Park, Plaza Park, and the Asian Youth Center will all experience significant noise impacts. As noted earlier in this analysis, the AYC, Plaza and Smith Park facilities directly adjoins the tracks, but no discussion is provided concerning impacts on its facilities or users.</p> <p>The mailing list for distribution of the environmental assessment document has several inaccuracies:</p> <ul style="list-style-type: none"> <li>▪ "Idelen Warrner, 502 W. Valley Blvd.", should read "Helen Warren, Realtor, 502 W. Valley Boulevard."</li> <li>▪ Under "Individuals and Firms," two entries refer to the "Gabrieleno/Tongva Tribal Council" and "Gabriolina/Tongva Tribe." The correct designation is "Gabrielino/Tongva Band of Mission Indians of San Gabriel"</li> </ul> <p>The distribution list should include the following organizations that are not shown on the list:</p> <p>City of San Gabriel Attention: Steven A. Preston, FAICP Deputy City Manager</p>

7

5-48  
(cont)

been corrected to read as follows:

The residential land uses along with, **Vista Cove convalescent nursing home**, Alhambra Municipal Golf Course and Winston Smoyer Community Garden are generally in the transition area where the tracks will go from at-grade to the trench. The trench would be approximately ten feet deep at the Alhambra Wash. The construction in this area would be less intensive than at areas where the trench will be the full depth. Although not shown in Table 3-11, sufficient noise control would be achievable with Control Measures **N2** through **N7**. Specifically, Control Measure **N7** is a performance standard that ensures a noise plan will be formulated prior to the initiation of construction that will ensure that sensitive receptors would not be exposed to noise levels that exceed the **levels specified In Table 3-10 standards**. Therefore, general construction noise would not result in a significant impact.

**Response 5-47**

The comment refers to a typographical error on page 3-69. The text of the document has been corrected to read as follows:

NC1: **ACE** ~~The City~~ shall comply with Section 401 of the Clean Water Act and National Pollutant Discharge Elimination System (NPDES)...

**Response 5-48**

The comment includes an attached letter directed to ACE dated June 12, 2007. This letter refers to a previous version of the document that was provided as a courtesy to the City as an Initial Study/Environmental Assessment (IS/EA). Since that time the impacts to associated with the project have been reevaluated and an expanded EIR/EA was prepared. No additional response to this comment is necessary; however this comment is noted for the administrative record and will be forwarded to the decision-makers for review and consideration.

425 South Mission Drive  
San Gabriel, CA 91776

San Gabriel and Lower Los Angeles Rivers and Mountains  
Conservancy  
900 South Fremont Ave.  
Annex Building, 2nd Floor  
P.O. Box 1460  
Alhambra, CA 91803

William L. Fairbanks, Ph.D., President  
California Mission Studies Association  
Post Office Box 3357  
Bakersfield, CA 93385

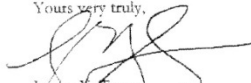
Asian Youth Center  
Attention: May L. To, Executive Director  
100 W. Clary Avenue  
San Gabriel, CA 91776

I will be leaving the City effective July, 2007. Until such time a Planning Division Manager is appointed, further contacts with respect to environmental documents should be mailed to:

Steven A. Preston, FAICP  
Deputy City Manager  
City of San Gabriel  
425 South Mission Drive  
San Gabriel, California 91776

Bruce D. Mattern, PE, TE  
City Engineer  
City of San Gabriel  
425 South Mission Drive  
San Gabriel, California 91776

Yours very truly,



Linda Y. Tong  
Planning Manager

RRLTR07A

5-48  
(cont)

Letter 6

Ricky Choi

**From:** Regina Talamantez [rtalamantez@theaceproject.org]  
**Sent:** Friday, November 13, 2009 4:58 PM  
**To:** 'Ricky Choi'  
**Cc:** 'Algis Marciuska'; 'Bruce Mattern'  
**Subject:** FW: ACE San Gabriel Trench Project COSG Comments on Draft EIR-EA  
**Attachments:** ACE EIR Comments Planning 11132009.pdf

Hi Ricky, We've responded to the EIR document, see attached for comments.

Best Regards!

Regina M. Talamantez, PE  
Senior Project Manager

ALAMEDA CORRIDOR - EAST (ACE) CONSTRUCTION AUTHORITY  
3983 Rivergrade Road, Ste. A120  
Fremont, CA 91706  
City: 502-9292 x118  
(408) 855-1807 cell  
[rtalamantez@theaceproject.org](mailto:rtalamantez@theaceproject.org)

**From:** Algis Marciuska [mailto:Amarciuska@SGCH.ORG]  
**Sent:** Friday, November 13, 2009 4:58 PM  
**To:** Regina Talamantez  
**Cc:** Bruce Mattern  
**Subject:** ACE San Gabriel Trench Project COSG Comments on Draft EIR-EA

Regina,

Attached are our comments on the EIR-EA. The picture of the Mission on the cover of the EIR-EA looks great. I would recommend that the picture on the cover showing the drainage ditch be changed. It is not even a picture of our project, and it is a very ugly view at that. Let's put pictures on the cover that we can be proud of.

Algis J. Marciuska, PE  
Engineering Division  
Community Development Department  
CITY OF SAN GABRIEL  
(626) 308-2806 Ext. 4632

4:

To ensure good service and personal attention, we kindly request that you schedule visits by appointment so that we can assure the appropriate staff member is available to serve you. Thanks for your cooperation.

Letter 6

November 13, 2009  
City of San Gabriel  
Algis Marciuska  
No Address

Response 6-1

This comment states that the picture on the cover of the EIR/EA should be changed. This comment expresses an opinion, but does not state a specific concern regarding the adequacy of the Draft EIR. No additional response is necessary. However, this comment is noted for the administrative record and will be forwarded to the decision-makers for review and consideration.

Response 6-2

This comment includes specific comments from the City of San Gabriel on the Draft EIR/EA that are the same as those included in comment letter 5 above. See Response to Comments 5-8 through 5-47 above.

6-1

**Alameda Corridor-East Project  
San Gabriel Trench Grade Separation Project  
Union Pacific Railroad in Los Angeles County  
Environmental Impact Report/Environmental Assessment**

Issue	Specific Comment	Page #
<b>Project Location</b>	<ul style="list-style-type: none"> <li>Clary Avenue is misidentified as Clary Drive.</li> <li>Mission Road does not provide direct access to I-10.</li> <li>Mission Road is misidentified as Mission Drive.</li> </ul>	S-4
<b>Table S-1</b>	<ul style="list-style-type: none"> <li>Under Displacement of Housing, it indicates the project would result in displacement of two residences and one business. Under Environmental Justice, it indicates the project would result in displacement of one business and three residences.</li> </ul>	S-12
	<ul style="list-style-type: none"> <li>At NC3, the bottom of the text is cut off.</li> </ul>	S-18
	<ul style="list-style-type: none"> <li>At CT6, it indicates the P.M. peak hour delay would be 48.1 seconds, but does not indicate the LOS.</li> </ul>	S-20
	<ul style="list-style-type: none"> <li>Under Transit Service, Metro Line 487 should be included.</li> </ul>	S-21
<b>Table S-2</b>	<ul style="list-style-type: none"> <li>At CR2, the bottom of the text is cut off.</li> </ul>	S-28
	<ul style="list-style-type: none"> <li>At AQ6, the bottom of the text is cut off.</li> </ul>	S-36
	<ul style="list-style-type: none"> <li>At CT3, the bottom of the text is cut off.</li> </ul>	S-38
<b>1.2 Purpose and Need/Project Objectives Introduction</b>	<ul style="list-style-type: none"> <li>Mission Road is misidentified as Mission Drive.</li> </ul>	1-1
<b>1.2 Purpose and Need/Project Objectives Existing Conditions</b>	<ul style="list-style-type: none"> <li>At last paragraph and at Table 1-1, Mission Road is misidentified as Mission Drive.</li> </ul>	1-4,5
<b>1.3 Project Location and Demographics Project Site</b>	<ul style="list-style-type: none"> <li>Mission Road does not provide direct access to I-10.</li> </ul>	1-6

	<ul style="list-style-type: none"> <li>Mission Road is misidentified as Mission Drive.</li> </ul>	1-10
<b>1.4 Project Alternatives</b>	<ul style="list-style-type: none"> <li>Mission Road is misidentified as Mission Drive.</li> </ul>	1-15
<b>2.1.1 Land Use Regional Plans and Policies</b>	<ul style="list-style-type: none"> <li>At Table 2.1-3, Policy 3.21, the reference should be to Section 2.1-10 Cultural Resources. The statement "The potential for encountering unrecorded cultural or archaeological resources is low" is incorrect. The potential is high.</li> </ul>	2-13
<b>2.1.3 Population, Housing and Employment Growth Employment</b>	<ul style="list-style-type: none"> <li>Delete New Century Ford.</li> </ul>	2-21
<b>2.1.3 Population, Housing and Employment Growth Environmental Consequences - Population</b>	<ul style="list-style-type: none"> <li>At 2<sup>nd</sup> paragraph on p. 2-22, it states that all three residences are currently occupied, but Table 2.1-10 correctly shows the home at 325 E. Main St. as vacant.</li> <li>At 2<sup>nd</sup> paragraph on p. 2-22, it refers to a home at 205 E. Main St., but the home is not listed in Table 2.1-10.</li> <li>At 1<sup>st</sup> paragraph on p. 2-23, it states that the total number of residents potentially displaced by the project is two, while Table 2.1-10 says five.</li> </ul>	2-22, 23
<b>Environmental Consequences - Housing</b>	<ul style="list-style-type: none"> <li>At 2<sup>nd</sup> paragraph, it states that "none of the housing that would be displaced is considered affordable housing". What is the basis for this statement?</li> </ul>	2-23
<b>2.1.5 Community Cohesion Affected Environment</b>	<ul style="list-style-type: none"> <li>At 5th paragraph, change "San Gabriel Civic Auditorium" to "Mission Playhouse".</li> </ul>	2-32
	<ul style="list-style-type: none"> <li>At 1<sup>st</sup> paragraph, change the last sentence to read "This node consists of single-family residences with several multi-family apartment buildings along with one-story commercial uses".</li> </ul>	2-33
<b>Demographics</b>	<ul style="list-style-type: none"> <li>At 1<sup>st</sup> paragraph, delete the phrase "Similar to Los Angeles County and the City of San Gabriel". Change the last sentence to read "The Study Area consists of more renter-occupied housing units (57 percent) than owner-occupied housing units (40 percent), which is more similar to the City of Alhambra than the City of San Gabriel and the County of Los Angeles as a whole".</li> </ul>	2-34
<b>2.1.8</b>	<ul style="list-style-type: none"> <li>Measures US 1-5 should be reviewed</li> </ul>	2-47,

	against the current proposal by which the County would be contracted by the City to perform certain maintenance responsibilities in the trench zone.	2-48
<b>2.1.9 Visual/Aesthetic Resources</b>	<ul style="list-style-type: none"> <li>Mission Road does not provide direct access to I-10.</li> </ul>	2-66
<b>2.1.10 Cultural and Paleontological Resources</b>	<ul style="list-style-type: none"> <li>At 4th paragraph, "California Register" is repeated.</li> </ul>	2-74
<b>Architectural History</b>	<ul style="list-style-type: none"> <li>The Alhambra Wash is described as a cultural landscape and noted in Fig. 11-2 of the general plan, and may have other protections under "Common Ground," the regional watershed preservation plan of the San Gabriel and Lower Los Angeles Rivers and Mountains Conservancy. The City has adopted this plan, and cross references it as a general plan policy applicable to the Cultural Resources Chapter (General Plan Figure 11-2, Cultural Landscapes). The Mission Road corridor adjoining the Mission is also classified as a Cultural Landscape subject to protection (11-2).</li> </ul>	2-82, 2-83, 2-84
	<ul style="list-style-type: none"> <li>In 3<sup>rd</sup> paragraph, Monsoon Lane is misidentified as Monsoon Lane.</li> </ul>	2-84
<b>Measure CR3</b>	<ul style="list-style-type: none"> <li>In line with the comments above, these issues should also be embodied in the Cultural Resources Mitigation and Treatment Program.</li> <li>These analyses would also require reconsideration and amendment of the texts at 3-16 through 3-19 (Utilities) and 3-26 through 3-29 (Cultural Resources).</li> </ul>	2-90
<b>2.2 Physical Environment</b>	<ul style="list-style-type: none"> <li>In Paragraph "Flooding and Inundation," Las Tunas Road should be Drive.</li> </ul>	2-96
<b>2.2.1 Hydrology and Water Quality</b>	<ul style="list-style-type: none"> <li>Under Environmental Consequences, first paragraph, the third sentence needs to end with a period, between the words potential and Construction.</li> </ul>	2-98
<b>2.2.2 Geology and Soils</b>	<ul style="list-style-type: none"> <li>Under Liquefaction, where is the designated liquefaction zone, located approximately 0.5 mile to the south and southeast of the project site?</li> </ul>	2-103
	<ul style="list-style-type: none"> <li>Under Ground Shaking, Alternative 1, first sentence needs to end with a period, not a comma.</li> </ul>	2-107

	<ul style="list-style-type: none"> <li>Under Emergency Response/Evacuation Plan, note address of the City's emergency operation center (EOC) located at 1303 S. Del Mar Avenue in the City's Fire Department.</li> </ul>	2-111
	<ul style="list-style-type: none"> <li>Under Emergency Responses/Evacuation Plan, first paragraph, what is the construction phasing schedule?</li> </ul>	2-113
<b>Sensitive Receptors</b>	<ul style="list-style-type: none"> <li>Sensitive receptors should include the convalescent nursing home called Vista Cove located at 909 W. Santa Anita Street, the San Gabriel Valley Medical Center located at 438 W. Las Tunas Drive, and the Vincent Lugo Park located at the corner of Wells and Ramona Street.</li> </ul>	2-124
	<ul style="list-style-type: none"> <li>Add the Non-residential Sensitive Receptors to Figure 2.2-4: San Gabriel Valley Medical Center and Vincent Lugo Park.</li> </ul>	2-125
	<ul style="list-style-type: none"> <li>Add the Non-residential Sensitive Receptors to Figure 2.2-6: San Gabriel Valley Medical Center and Vincent Lugo Park.</li> </ul>	2-137
	<ul style="list-style-type: none"> <li>Add San Gabriel Valley Medical Center and Vincent Lugo Park to list.</li> </ul>	2-138
<b>3.1.3 Population, Housing and Employment</b>	<ul style="list-style-type: none"> <li>Table 3-2 misidentifies Agostino Road as Augustino Road.</li> </ul>	3-9
<b>3.3 Public Services Public Schools</b>	<ul style="list-style-type: none"> <li>Table 3-3 includes Mission Elementary School, which is a private, parochial school.</li> </ul>	3-11
<b>3.3 Public Services Impacts- Fire Protection and Emergency Services</b>	<ul style="list-style-type: none"> <li>At 3<sup>rd</sup> paragraph, change "assist local police emergency respondents" to "assist local fire emergency respondents" and change "increased police service facilities" to "increased fire service facilities".</li> </ul>	3-12
<b>Impacts- Public Libraries</b>	<ul style="list-style-type: none"> <li>At 2<sup>nd</sup> paragraph, change "Ramona Street" to "Del Mar Avenue".</li> </ul>	3-14
<b>Mitigation Measure PS5</b>	<ul style="list-style-type: none"> <li>Change "these Fire Departments" to "these Police Departments".</li> </ul>	3-15
<b>Mitigation Measure PS8</b>	<ul style="list-style-type: none"> <li>Change "schedule during the summer" to "scheduled during the summer".</li> </ul>	3-15
<b>Level of Impact After Mitigation - Police Protection</b>	<ul style="list-style-type: none"> <li>Change "fire emergency services" to "police emergency services".</li> </ul>	3-15
<b>3.11 Noise</b>	<ul style="list-style-type: none"> <li>How about adding noise barriers near the</li> </ul>	3-50

	Vista Cove convalescent nursing home in Table 3-9?	
<b>3.13 Biological Resources</b>	<ul style="list-style-type: none"><li>• Under Mitigation Measures NC1, is it the City that shall comply or the applicant?</li></ul>	3-69



Letter 7

D.A. (David) Connell  
Vice President - Engineering  
ph. (402) 544-3237

W.E. (Bill) VanTrump  
Sr. AVP Engineering - Signal/Comm./TCO  
ph. (402) 544-4147



Mark Wheeland  
AVP Engineering - Track Programs  
ph. (402) 544-6153

J.J. (John) Hovanec  
AVP Engineering Design/Construction  
ph. (402) 544-2289

T.A. (Todd) Wimmer  
AVP Engineering Structures/Maintenance  
ph. (402) 544-3101

November 12, 2009

Ricky Choi  
Community Relations Project Manager  
Alameda Corridor – East Construction Authority  
4900 Rivergrade Road, Suite A120  
Irwindale, CA 91706-1446

NOV 16 2009  
*[Handwritten signature]*

Re: Draft EIR/EA Comments for San Gabriel Trench Project

Dear Mr. Choi:

I write in response to the Notice of Completion/Availability for Public Review: Draft Environmental Impact Report/Environmental Assessment for the above-referenced project.

Union Pacific wishes to emphasize that this remains a proposed project that requires the railroad's consent because it would be built on Union Pacific's property and affect its operations. Union Pacific has been working in good faith with Alameda Corridor – East Construction Authority ("ACE") to develop the plans and other conditions necessary for the project to be acceptable to the company. Union Pacific views the environmental review process as an element of these continuing discussions. For these reasons, the comments provided in this correspondence do not reflect the railroad's approval of any part of the content of the Draft EIR or permission for ACE or any other party to proceed with the project. Instead, these comments are meant to provide further guidance regarding the requirements that must be met before Union Pacific will approve the project and execute the required Construction & Maintenance Agreement.

Union Pacific provided scoping comments by letter dated November 13, 2008. Although a copy of the letter is attached to the Draft EIR, the railroad notes that the Draft EIR does not address all of the scoping comments. Those comments and additional ones are set forth below.

1 - Union Pacific Railroad is the owner and operator of the Alhambra Subdivision on which the project will be constructed. Pursuant to federal law, Union Pacific Railroad is obligated to provide common carrier freight service on this line until

Letter 7

November 12, 2009

Union Pacific Railroad  
Gary Riddle, Engineering Department  
1400 Douglas Street  
Stop 0910  
Omaha, NE 68179

Response 7-1

This comment includes introductory information which relates to UPRR's role as it relates to the proposed project. This comment does not state a specific concern regarding the adequacy of the Draft EIR/EA. No additional response to this comment is necessary; however, this comment is noted for the administrative record and will be forwarded to the decision-makers for review and consideration.

Response 7-2

This comment states that not all of UPRR's comments provided during the scoping period were addressed in the Draft EIR/EA. The comment also states UPRR's obligations under federal law and states the EIR/EA must consider how the trench may impact UPRR's carrier obligations.

Scoping comments under CEQA are intended to provide an overall framework for the analysis presented in the Draft EIR/EA. Comments are not required to be formally addressed in the draft documents, rather the intent of the comments is to provide the preparers of the document with an understanding of concerns related to the environmental issues potentially associated with the proposed project. In many cases, although the comment is not specifically spelled out in a certain place in the document, the issue of concern is folded into one of the many topic areas addressed in the document. Further, as described in the UPRR's letter, UPRR works closely with ACE providing input on plans and other aspects of the project. Many of UPRR's scoping comments that do not relate to the environmental issues associated with the project are addressed through ACE's cooperative process and are therefore

relieved of that obligation by the Surface Transportation Board. The EIR/EA must consider how the trench project may impact such common carrier obligation and how significant impacts thereto may be mitigated.

7-2  
(cont)

2 - The EIR/EA must consider how the project will be constructed without blocking, stopping or otherwise interfering with Union Pacific's train operations or with the safe maintenance and repair of our trackage.

7-3

3 - The EIR/EA must consider how the project will be safely constructed by the project contractors without interference with Union Pacific train operations. All federal and state safety regulations must be considered.

7-4

4 - The EIR/EA must consider how the impact of construction and operation of the trench will affect air quality, specifically the air quality in railroad locomotive control compartments while operating through the trench. All adverse impacts must be fully mitigated as part of the project.

7-5

5 - The EIR/EA must consider how the trench will impact drainage of surface and ground water in the project area, and all significant impacts must be fully mitigated as part of the project.

7-6

6 - The EIR/EA must consider the impact of construction and operation of the trench on public safety, and all significant impacts must be fully mitigated as part of the project.

7-7

7 - EIR/EA will require acknowledgement of the responsible party to maintain the trench at the end of the project. The responsible party must identify the needs and long term funding sources to maintain the facility.

7-8

8 - EIR/EA must take into account the following UPRR Engineering Design Standards.

- Track and signal design comments.
  - Project shall be designed for a 100 year duration life expectancy.
- Trench Design Comments
  - UPRR will require acknowledgement of the maximum surcharge that can be accommodated at the top and adjacent trench walls.
  - UPRR will require acknowledgement of the shoofly stability during construction of the adjacent trench walls.
  - UPRR will require acknowledgement that drilled shaft construction will include temporary or permanent casings to ensure active railroad tracks are not affected by the drilling operation.

7-9

being addressed through the plans and specifications development process subject to UPRR approval and through the Construction and Maintenance Agreement necessary for construction of the project.

The proposed project includes a shoofly, or temporary track, to maintain operations at all times along the railroad. The shoofly and its associated impacts are described and evaluated throughout the EIR/EA. Further, the purpose of the EIR is to evaluate the potential impacts of the proposed project which consists of four individual grade crossings. The purposes of CEQA are: 1) Inform the public and decision-maker of the potential significant environmental effects of proposed activities. 2) Identify ways environmental damage can be avoided or significantly reduced. 3) Prevent significant avoidable damage to the environment by requiring changes to a project through the use of alternatives or mitigation measures when the governmental agency finds the changes to be feasible 4) Disclose to the public the reasons why the governmental agency approved a project in the manner the agency chose if significant effect are involved (CEQA Guidelines Section 15002). It is unclear from the comment how UPRR's carrier obligations relate to the environmental effects of the proposed project. Therefore, a discussion of UPRR's carrier obligations was not included in this environmental document.

### Response 7-3

The comment relates to construction of the project without blocking, stopping or otherwise interfering with UPRR operations. As discussed in the EIR/EA, the proposed project will include a safety plan which will be coordinated by ACE with the UPRR. Refer to Sections 3.3 Public Services and 3.10 Hazards and Hazardous Materials for a discussion of potential safety impacts. These sections outline the various safety procedures that will be developed prior to construction of the trench. In addition, best engineering practices are being used to ensure the safety of the trench. As described in Response 7-2 above, UPRR concerns that do not relate to environmental issues associated with the proposed project are being addressed through the plans and specifications development process subject to UPRR approval and through the Construction and Maintenance Agreement necessary for construction of the project.

Comments concerning the Draft EIR/EA.

- S.4 Alternatives Considered But Eliminated From Further Discussion.
  - Deck Parks - UPRR fully supports the elimination of this alternative.
- Section 2.2 Physical Environment
  - Alhambra Wash and Rubio Wash are marked on the USGS maps as intermittent waterways. Both washes discharge to the Rio Hondo River and then ultimately connect to the LA River and may be jurisdictional under the tributary rule. Report notes several CWA regulations such as: 401, 402, and 404 - need jurisdictional determination of washes and permitting processes outlining permits to be obtained where applicable.
  - The construction project is located in the San Gabriel and Rio Hondo Watersheds where Special Conditions are applicable for the construction project since we are working in washes and redesigning storm water flows.
  - Relocating Rubio Wash drop structure, along with adding flows to the Alhambra wash may involve a CDFG Streambed alteration plan. In addition to possibly triggering a Federal nexus. UPRR will require acknowledgement of the drainage pattern through the trench and the flows being directed to each wash.
  - Flooding and Inundation - UPRR will require acknowledgement of the 100-year floodplain not present in the Project area.
  - Asbestos inspection/surveys must be performed before demolition or renovation of any existing structures on UPRR Right-of-Way.
  - Demolition notifications of all structure must be submitted to the local jurisdiction within the prescribed timeframe prior to demolition.
- Section 2.2.2 Geology And Soils
  - Seismicity - UPRR will require acknowledgements of the seismic stability of the structure as defined by the Uniform Building Code applicable to the City of San Gabriel and City of Alhambra Municipal Codes.
- Section 2.2.3 Hazardous Waste/Materials
  - Project site is included on the National Priorities List (NPL) known Superfund list. UPRR will require acknowledgement of the mitigation plan should this known plume be encounter within the project limits.
  - Representative sampling of all wood waste (ties, poles, timbers, etc) for California Hazardous Waste must be conducted prior to disposal of wood waste.
- Section 2.2.4 Air Quality. See Statement No.4.
- Section 2.2.5 Noise. UPRR will require acknowledgement of the impacts to railroad employees and the mitigation of those impacts.
- Section 2.4 Construction Impacts
  - Measures To Minimize Harm
    - CAQ14 - 10-08-09 Omaha meeting UPRR stated all construction traffic should be diverted away from the at-grade crossings.
- Section 3.0 California Environmental Quality (CEQA) Evaluation.
  - Section 3.3 - Fire Protection and Emergency Services - UPRR will be a partner and signatory to the procedures.

**Response 7-4**

See Response 7-3 above.

**Response 7-5**

The comment indicates that a discussion of air quality within the trench should be included in the EIR/EA. The EIR includes a discussion of air quality within the trench and states "Regarding trains, Alternative 1 would not increase the frequency of train travel or change vehicle speeds on the railway. Train TAC emissions would be identical to existing conditions. Train TAC emissions would disperse into the atmosphere and would not accumulate within the trench. Train conductors would not be exposed to reentrained or increased TAC emissions." Refer to Section 3.12 Air Quality.

Expanding on the discussion, the 23.5-foot trench depth would not create significant downwash effects or limit the dispersion of pollutants into the atmosphere such that diesel particulate matter concentrations would substantially increase within railroad locomotive control compartments. In addition, any increased exposure would be short-term since the trench would only extend for 1.4 miles.

**Response 7-6**

The comment states the drainage impacts should be addressed and mitigated. The EIR/EA includes a discussion of drainage impacts. Refer to Section 3.4 Utilities and Service Systems on page 3.31. In addition, the project includes several mitigation measures designed to reduce the potential for flooding within the trench including development of a SWPPP and construction of a graded swale. Refer to measures HW1 through HW5.

**Response 7-7**

The comment states the EIR/EA should consider public safety impacts. See Response 7-3 above.

These comments are based on Union Pacific's knowledge of the proposed project today. Union Pacific reserves its rights to provide further comments as the proposal develops and additional information becomes available.

7-24

Sincerely,



Gary Riddle

Cc: John Hovanec – MS 0910  
Dave Orrell – MS 0910  
Patrick Halsted – MS 0910  
Stephen Grosse-Rhode – MS 0910  
Freddy Cheung – Colton, CA  
Dan Miller – Colton, CA  
Tom Williams – Colton, CA  
Jerry Wilmoth – Roseville, CA  
David Pickett – Roseville, CA

### Response 7-8

The comment states the EIR/EA will require acknowledgement of the responsible party to maintain the trench at the end of the project. The comment does not relate to the adequacy of the Draft EIR/EA. The construction and maintenance agreement between ACE, UPRR and the City will address trench maintenance.

### Response 7-9

The comment includes UPRR Engineering Design Standards. The comment does not relate to the adequacy of the Draft EIR/EA. No additional response to this comment is necessary; however, this comment is noted for the administrative record and will be forwarded to the decision-makers for review and consideration.

### Response 7-10

The comment expresses support for the elimination of “deck park” alternative from consideration. No response to this comment is necessary.

### Response 7-11

The comment states a jurisdictional determination and outlining of permits that should be obtained where applicable. ACE is working with the LACDWP and the USACE to ensure all requirements related to construction in the washes are met. ACE, UPRR and other interested parties will be entering into a series of agreements, commonly referred to as a MOU. The MOU process will provide the opportunity for UPRR to specify information and processes related to notification and mitigation. The Draft EIR/EA includes standard mitigation measures related to water quality and stormwater management. The project will comply with existing requirement regarding water discharge as applicable.

**Response 7-12**

The comment states special conditions are applicable for project construction within the washes. ACE is working with the LACDWP and the USACE to ensure all requirements related to construction in the washes are met.

**Response 7-13**

The comment states a streambed alteration plan may be necessary for the construction associated with Rubio Wash and states UPRR will require acknowledgement of the drainage pattern through the trench and the flows being directed to each wash. ACE is working with the CDFG, LACDWP and the USACE to ensure all requirements related to construction in the washes are met including a streambed alteration plan. Mitigation measure HW5 includes acquisition of a Section 1601 Streambed Alteration Agreement if necessary.

**Response 7-14**

The comment states that the UPRR will require acknowledgement of the 100-year flood-plan. As stated in Section 2.2.1 of the EIR/EA the proposed project is not located within a 100-year flood plan. In addition, measures HW2 through HW5 are included to minimize hydrology impacts in general as well as potential flooding impacts.

**Response 7-15**

The comment states asbestos inspection surveys must be performed before demolition of any structures on UPRR right-of-way. The project area does not contain any structures that would typically contain asbestos materials or lead-based paint. However, as detailed in mitigation measure HH5, as part of the proposed project, the following plans would be prepared and implemented prior to project construction: health and safety plan, waste management plan, sampling and analysis plan, a plan for possible hazardous materials or emergencies during construction, and a work plan or the radiation of any hazardous wastes encounter. ACE will continue to work closely with UPRR in the development of these plans.

**Response 7-16**

The comment states that demolition notifications of all structure(s) must be submitted to the local jurisdiction within the prescribed timeframe prior to construction. See Response 7-15 above.

**Response 7-17**

The comment states UPRR will require acknowledgment of the seismic stability of the structure as defined by the Uniform Building Code. ACE, UPRR and other interested parties will be entering into a series of agreements, commonly referred to as a MOU. The MOU process will provide the opportunity for UPRR to specify information and processes related to notification and mitigation. The comment does not relate to the adequacy of the Draft EIR/EA. No additional response to this comment is necessary; however, this comment is noted for the administrative record and will be forwarded to the decision-makers for review and consideration.

**Response 7-18**

The comment states UPRR will require acknowledgment of any known plume to be encountered within the project limits. The EIR/EA includes a full discussion of hazardous materials and the process for abatement in the event hazardous materials are encountered.

**Response 7-19**

The comment states that representative sampling of wood waste must be conducted prior to disposal of wood waste. Please see Response 7-15 and mitigation measure HH5 for a complete list of the hazardous materials plans that will be prepared prior to project construction.

**Response 7-20**

The comment refers to comment 7-5. See Response 7-5 above.

**Response 7-21**

The comment states UPRR will require acknowledgment of noise impacts to railroad employees. Noise impacts to railroad employees have not been identified in the environmental documentation. Engineers may be exposed to increased noise levels due to the reflection of noise off trench walls. This noise level increase will be offset by reduction in noise exposure as a result of eliminating the sounding train warning signals. Warning signals often emit noise levels greater than 100 dBA and can be a substantial health hazard. It is not anticipated that railroad employees will be exposed to higher noise levels than under existing conditions.

**Response 7-22**

The comment refers to mitigation measure CAQ14 which states “Construction traffic shall be routed and scheduled to reduce congestion and related air quality impacts caused by idling vehicles along local roads during peak travel times” The commenter states that construction traffic should be diverted away from the at-grade crossings. The commenter is referred to Figures 2.4-1 through 2.4-6 which show the detour routes planned for the proposed project. As demonstrated in these figures, construction traffic is generally routed away from the project area rather than across the project area. Further, mitigation measures CT1, CT4, CT5 and CT7 provide that detour plans be finalized prior to project construction through a collaborate and inclusive development process.

**Response 7-23**

The comment refers to the Fire Protection and Emergency Procedures section and states the UPRR will be a partner and signatory to procedures. ACE, UPRR and other interested parties will be entering into a series of agreements, commonly referred to as a MOU. The MOU process will provide the opportunity for UPRR to specify information and processes related to notification and mitigation. The comment does not relate to the adequacy of the Draft EIR/EA. No additional response to this comment is necessary; however, this comment is noted for the administrative record and will be forwarded to the decision-makers for review and consideration.

**Response 7-24**

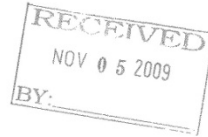
This comment includes closing remarks and states UPRR reserves the right to provide additional comments. The comment does not relate to the adequacy of the Draft EIR/EA. No additional response to this comment is necessary; however, this comment is noted for the administrative record and will be forwarded to the decision-makers for review and consideration.

Letter 8



November 2, 2009

Ricky Choi  
Community Relations Project Manager  
Alameda Corridor-East Construction Authority  
4900 Rivergrade Road, Suite A120  
Irwindale, CA 91706-1446  
Phone: 626-962-9292 x 154



Re: Comment on DEIR for ACE on the San Gabriel Trench Grade Separation Project  
from All Aboard Mini Storage

Dear Ricky:

The Draft Environmental Impact Report (DEIR) completed by the Alameda Corridor East Construction Authority (ACE) for the San Gabriel Trench Grade Separation Project inaccurately identifies our business, All Aboard Mini Storage, and provides very few details regarding the difficulty or impact of relocating our self storage facility. Specifically, the EIR contains errors regarding the facts about All Aboard, and fails to discuss how the community relies on and utilizes our services at this location, the difficulty in relocating our self storage customers, or the difficulty in getting a new location for our business. Most importantly, the report fails to discuss the length of time necessary to relocate our business, which can be anywhere from 24 to 36 months. Overall, the report does not fully address the impact on the community of losing self storage at this location.

8-1

The Draft Relocation Impact Report (DRIR) refers to a "Self Storage Corporation" that has 75 units. Neither of these references accurately describes All Aboard Mini Storage in San Gabriel. All Aboard Mini Storage has no affiliation with a "Self Storage Corporation", and All Aboard has 379 storage units. The DRIR states that personal on-site interviews were completed, however, no one interviewed an All Aboard employee who would understand the impact of relocating the business. All Aboard's on-site employees are trained to take care of our customers' needs, sell self storage units, and maintain the property, not understand the impact of moving the business. The DRIR states that businesses were contacted and encouraged to respond to the report, however, no one ever contacted All Aboard's corporate office and encouraged All Aboard to respond to the report.

8-2

The DRIR fails to address that fact that All Aboard Mini Storage provides an important service to the local community that would no longer be available to San Gabriel residents and businesses if we are relocated. All Aboard Self Storage has been operating in San Gabriel since 1991. We have an established business with 379 spaces and over 300 customers. We serve the local

1

990 Highland Drive, Suite 300 • Solana Beach, CA • 92075

Letter 8

November 2, 2009

All Aboard Mini Storage  
990 Highland Drive, Suite 300  
Solana Beach, CA 92075

Response 8-1

This comment contains introductory information and states that the Draft EIR/EA does not provide sufficient detail regarding the relocation of the mini-storage. The comment also states the correct number of storage units at the site is 379. The Draft EIR/EA includes a discussion of population, employment and housing impacts at both the local and regional level (see Draft EIR/EA pages 2-20 through 2-25) and includes a discussion of All Aboard Mini Storage. The text of the Draft EIR/EA on page 2-24 is updated to reflect this comment.

Response 8-2

The comment refers to details contained in the Draft Relocation Impact Report prepared by ACE and referenced in the Draft EIR/EA. The commentor states that no one at All Aboard Mini Storage was contacted to participate or respond to the report. The commentor also states that the Relocation Report fails to discuss the importance of the storage facility to the community or the difficulty of relocating the facility. ACE recognizes the importance of All Aboard Mini Storage and the services it provides to the community. However the Draft EIR/EA includes a discussion of population, employment and housing impacts at both the local and regional level (see Draft EIR/EA pages 2-20 through 2-25) and includes a discussion of All Aboard Mini Storage.

**Response 8-3**

community. Our customers live and work in San Gabriel. Self storage customers want a facility that is close to either their work or their home because they want easy access to their goods. They visit their units on a regular basis to either store more things or get something they need. Our location is critical to the service we provide the community. Most of our customers live within a few miles of our facility. At our San Gabriel property almost 50% of our customers have become customers because they found us by just driving by our facility. A significant percentage of our customers, 28%, are repeat customers. People in the community depend upon our storage services again and again. The fact that 28% of our customers are repeat customers reinforces the assertion that our location is critical to businesses and residents in San Gabriel. Besides our location, residents of San Gabriel use All Aboard repeatedly because our unique single story property configuration allows us to provide easily accessible, convenient, clean, and safe self storage to the local community. With our single story self storage buildings, there are no long hallways to walk down, no stairs to climb, or elevators to negotiate. Customers simply drive up to their space and unload or pick up their goods. Our ability to provide convenient self storage to San Gabriel would be negatively impacted by relocation. If All Aboard were to move out of this area, the community would lose a service that they have depended on for almost 20 years.

The relocation report also fails to discuss the difficulty in relocating our customers to a new facility. We are not a retail business that simply needs to move inventory from one building to another. We have customers who live or work close by our facility who depend on the close proximity of our facility to their home or business. Relocating our business to another location may prevent our customers from being able to continue to use self storage. Customers will need time and money to relocate to our new facility.

The DRIR does not address the issues involved in finding a replacement property for All Aboard. A critical issue not discussed in the report is the time necessary to relocate. The time required to find a new location, get the necessary government approvals, obtain financing, build a new facility and finally relocate our customers to the new facility is anywhere from 24 to 36 months. The items that ultimately determine the length of this time period are not controlled by All Aboard. We do not control when properties become available for purchase. We do not control the time it takes the local government to issue all the necessary permits and zoning adjustments. We do not control the availability of contractors to build a new facility or the availability of financing to pay for the construction. All of these factors that determine the length of time it will take to relocate are outside of our control. In addition to the timing of the relocation, the new location itself is critical for a self storage business because of the permits required, the size and shape of the parcel required, and, as mentioned earlier in this letter, the proximity to the customers it serves. San Gabriel, similar to all other cities in which All Aboard operates, has specific zoning laws that only allow self storage facilities to be built in specific zones. The relocation report does not discuss zoning at all. It simply states that there are "a wide range of

The comment states the Draft EIR fails to discuss the impact of losing All Aboard Mini Storage on the local community. ACE recognizes the importance of All Aboard Mini Storage and the services it provides to the community. However the Draft EIR/EA includes a discussion of population, employment and housing impacts at both the local and regional level (see Draft EIR/EA pages 2-20 through 2-25) and includes a discussion of All Aboard Mini Storage. The text of the document has been updated to reflect this information provided by the commentor. In addition, the project will comply with the Uniform Relocation Assistance and Real Property Acquisition Policies of 1970, as described in Mitigation Measure **PHE1**. The purpose of the Uniform Relocation Assistance and Real Property Acquisitions Policies is to ensure the fair, uniform and equitable treatment of persons and businesses displaced from the dwellings regardless of race, ethnicity, income or age. Moving expenses will be reimbursed for actual and related costs incurred in moving. In cases where relocation will be necessary for right-of-way acquisition, a decision on relocation will be reviewed with each residence or business owner to ensure that they are aware of all the opportunities. Suitable facilities for relocation existing in the general area will be sought. As discussed in the Draft EIR/EA a Relocation Assistance Program will be developed for displaced residents and businesses.

8-2  
(cont.)



commercial leasing and sales opportunities” in the Alhambra, Irwindale, Baldwin Park, and Monrovia” areas. The report says nothing about the zoning of the available parcels in these areas, nothing about whether the available locations are appropriate for self storage, and nothing about whether the configuration of the available parcels would allow self storage. All Aboard depends on acquiring long narrow parcels to build our facilities in order to build single story storage buildings that provide convenient, safe, and easy to access storage units for customers. In San Gabriel, we are located in a unique parcel along the railroad tracks that is ideal for our single story self storage facilities. Smaller parcels would not allow us to provide the single story facility to consumers. The single story configuration makes storing goods significantly more convenient because customers simply drive up to their space and unload their goods. Additionally, the available parcels referred to in the report as potential relocation areas may be in communities that already have a sufficient number of self storage units to satisfy the local demand. Therefore, the community would not benefit from the relocation of the storage facility. The report infers that there are not any opportunities to relocate to another property in San Gabriel.

8-2  
(cont.)

Finally, the DEIR fails to discuss the impact of losing All Aboard Mini Storage on the local community. All Aboard provides an important service to San Gabriel. Safe, convenient, easily accessible self storage allows residents within the community to get more efficient use of their home or apartment. Our self storage facility also helps keep backyards open with space for kids to play. Customers store their holiday items, extra furniture, books and files, and they have access to these items 7 days a week. Local businesses also benefit by storing inventory, files, and tools at our facility. Thus, unless there is a site to which All Aboard can relocate in or near San Gabriel, the relocation will move All Aboard far from its customer base, causing longer travel time or require our customers to lose space in their homes. Without the ability to relocate in the immediate area, the community will lose a valuable service to which it has depended upon for the past 20 years.

8-3

Sincerely,



Paul R. Driscoll  
San Gabriel Hyrail LLC  
Phone: 858-259-9000 x123

Letter 9



**ALAMEDA CORRIDOR-EAST CONSTRUCTION AUTHORITY**  
4900 Rivergrade Road, Suite A120, Irwindale, CA 91706 • Tel: (800) ACE-1426 • Fax: (626) 472-0094 •  
www.theaceproject.org

**San Gabriel Trench Project - Public Meeting Comment Form**

Contact Information / Información de Contacto / 聯絡詳情	
Name: <u>All Aboard Mini Storage</u> Nombre / 姓名: <u>Paul Driscoll</u>	Phone: _____ Teléfono / 電話: _____
Address: _____ Dirección: _____ 地址: _____	E-mail: _____ Correo electrónico / 電郵網址: _____
<p><b>Public Comment / Comentarios / 意見欄</b> (Attach additional pages if necessary)</p> <p style="font-size: 1.2em; font-family: cursive;">Size of Storage facility is mistaken. I have <del>379</del> 379 storage units - report says 70</p>	
<p><b>Submittal</b></p> <p>Submitted by/Sometido por/姓名: _____</p> <p>Signature/Firma/簽名: _____</p> <p>Date/Fecha/日期: _____</p>	

**Letter 9**

October 28, 2009

All Aboard Mini Storage  
Paul Driscoll  
No address

**Response 9-1**

This comment states the size of the storage facility is 379 units. See Response to Comment 8-1 above.

Please submit this form to an ACE Project Team Member, or mail to: Community Relations Project Manager, ACE Construction Authority, 4900 Rivergrade Road, Suite A120, Irwindale, CA 91706, or fax: to (626) 472-0094. The deadline for comments is November 14, 2009.

Letter 10

Ricky Choi

**From:** chiefrbwife@aol.com  
**Sent:** Monday, November 16, 2009 12:17 PM  
**To:** rchoi@theaceproject.org  
**Subject:** San Gabriel Trench Grade Separation Project

Meyiha (Greetings) Mr. Choi,

On behalf of the Gabrieleno/Tongva San Gabriel Band of Mission Indians governing officials, these comments are to respond formally for the San Gabriel Trench Grade Separation Project Draft EIR/EA under Section 106 criteria, government to government consultation.

I would like to commend SWCA for their outstanding professional expertise work performed during the field Research and all Scientific Testing Phase Studies.

Our tribal concerns are the impact to cultural and archaeological related resource items that may be compromised or removed indefinitely by the undertaking of this project. Like SWCA, our goal achievements are to protect cultural resources and to retrieve as much educational data from these discovered items through Special Scientific Studies like direct dating, sourcing materials, and site comparisons, etc. The cultural and archaeological related resource items already identified may produce significant historical data for academic, scientific and cultural institutions throughout our Nation. The data may also produce new research questions related to our cultural life ways, populations, travel movements, and engineering during this time period of historical contact with the first European settlers.

Our tribal officials concur with SWCA's recommendations for Alternative 1 with specific mitigation measures to address all cultural and archaeological related resource items, sediments and resources that are eligible for the National and State Registers. Also because the uncertainty locations of informal cemeteries, and cultural resources not identified during SWCA's surface survey, we formally recommend as a mitigation measure that all project earth excavations including utilities relocation mandate monitoring by our appointed tribal and archaeological monitors throughout the project limits, including outside designated Areas of Potential Effects. This Tribal Council will continue to provide the most educated and qualified Native American monitors under the direction of our tribal officials to oversee the production of the San Gabriel Trench Grade Separation Project.

We also look forward to continue ongoing government to government consultation with all the Project Agencies involved.

**"Wa"at Guata Ta"yi Honuka"  
"In memory of my ancestors"**

Respectfully,  
Anthony Morales, Tribal Chief/Chairman  
Gabrieleno/Tongva San Gabriel Band of Mission Indians

Letter 10

November 16, 2009

Anthony Morales  
No Address

Response 10-1

This comment expresses an opinion supportive of Alternative 1. No additional response to this comment is necessary; however, this comment is noted for the administrative record and will be forwarded to the decision-makers for review and consideration

10-1

Letter 11



**ALAMEDA CORRIDOR-EAST CONSTRUCTION AUTHORITY**  
4900 Rivergrade Road, Suite A120, Irwindale, CA 91706 • Tel: (800) ACE-1426 • Fax: (626) 472-0094 •  
www.theaceproject.org

**San Gabriel Trench Project - Public Meeting Comment Form**

**Contact Information / Información de Contacto / 聯絡詳情**

Name: Ernie Salas / Andrew Salas Phone: 626-287-4014  
Nombre / 姓名: \_\_\_\_\_ Teléfono / 電話: 626-926-4131  
Address: 514 Main Street E-mail: gabriel@indianaculture.com  
Dirección: San Gabriel, Ca 91176 Coreo electrónico / 電郵網址: \_\_\_\_\_  
地址: \_\_\_\_\_

**Public Comment / Comentarios / 意見欄 (Attach additional pages if necessary)**

Felicia Sheerman, Andrew Salas - w/ Gabrielino Band of Mission Indians  
concerned about access to archaeological finds. How will they get access to reports? Want to be involved in the project.  
Would like information from the project spread around to the other tribal groups other than A. moralis.  
"Not a Native American problem, a civil rights issue."  
"will take more aggressive action". Just want us to know

**Submittal**

Submitted by/Sometido por/姓名: \_\_\_\_\_  
Signature/Firma/簽名: \_\_\_\_\_  
Date/Fecha/日期: \_\_\_\_\_

**Letter 11**

October 28, 2009

Ernie Salas  
514 Main Street  
San Gabriel, CA 91176

**Response 11-1**

The commentors state that they are concerned about access to archeological finds and associated reports. The commentors also express an opinion regarding the manner in which information is distributed.

Archeological reports prepared as a part of the proposed project are available to the public and may be obtained at any time through ACE's community relations manager, Ricky Choi. Mr. Choi can be contacted via telephone at (800) ACE-1426 or via email at [rchoi@theaceproject.org](mailto:rchoi@theaceproject.org). If requested, ACE could provide reports on the status of monitoring that includes information regarding any finds related to Native American history. These reports could be provided to Mr. Salas at any intervals that Mr. Salas requests. ACE encourages Mr. Salas to continue working with ACE on developing a procedure for information distribution that all parties find acceptable.

Due to the involvement of federal funding for the project, the California Department of Transportation (Caltrans) has assumed the Federal Highway Administration's (FHWA) responsibility for environmental review, consultation and any other action in accordance with applicable federal laws for this project. As part of this role, Caltrans is responsible for the designation of the Native American monitors at the site and consultation with Native American groups.

Please submit this form to an ACE Project Team Member, or mail to: Community Relations Project Manager, ACE Construction Authority, 4900 Rivergrade Road, Suite A120, Irwindale, CA 91706, or fax: to (626) 472-0094. The deadline for comments is November 14, 2009.

10/13/2009 16:35 FAX 916 657 5390

NABC

001/001

**Native American Contact**  
Los Angeles County  
October 13, 2009

Charles Cooke  
32835 Santiago Road  
Acton, CA 93510  
  
(661) 733-1812 - cell  
suscol@intox.net

Chumash  
Fernandeno  
Tataviam  
Kitanemuk

Patrick Tumamait  
992 El Camino Corto  
Ojai, CA 93023  
  
(805) 640-0481  
(805) 216-1253 Cell

Chumash

Beverly Salazar Folkes  
1931 Shadybrook Drive  
Thousand Oaks, CA 91362  
  
805 492-7255  
(805) 558-1154 - cell  
folkes9@msn.com

Chumash  
Tataviam  
Fernandeno

San Luis Obispo County Chumash Council  
Chief Mark Staven Vigil  
1030 Ritchie Road  
Grover Beach, CA 93433  
  
cheifmvgil@fix.net  
(805) 481-2481  
(805) 474-4729 - Fax

Chumash

San Manuel Band of Mission Indians  
James Ramos, Chairperson  
26569 Community Center Drive  
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(909) 864-8933  
(909) 864-3724 - FAX  
(909) 864-3370 Fax

Serrano

LA City/County Native American Indian Comm  
Ron Andrade, Director  
3175 West 6th Street, Rm. 403  
Los Angeles, CA 90020  
  
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(213) 386-3895 FAX

Fernandeno Tataviam Band of Mission Indians  
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Fernandeno  
Tataviam

Owl Clan  
Qun-tan Shup  
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Chumash

Julie Lynn Tumamait  
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Chumash

Gabrieleno Band of Mission Indians  
Andy Salas (Chairperson)  
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GabrielenoIndians@yahoo.com

Gabrieleno

This list is current only as of the date of this document.

Distribution of this list does not relieve any person of statutory responsibility as defined in Section 7056.5 of the Health and Safety Code, Section 5097.94 of the Public Resources Code and Section 5097.98 of the Public Resources Code, and Federal NEPA (42 USC 4321-4335), NEPA Sections 106, 4(f) (16 USC 470(f)) and NAGPRA (25 USC 3001-3013)

This list is only applicable for contacting local Native Americans with regard to cultural resources for the proposed

Letter 12

Ricky Choi

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**From:** Gabrieleno Band of Mission Indians [gabrielenoindians@yahoo.com]  
**Sent:** Friday, November 06, 2009 11:01 AM  
**To:** rchoi@theaceproject.org  
**Cc:** Regina Talamantez; ds\_nahc@pacbell.net  
**Subject:** Fw: Notice of Completion Draft EIR - San Gabriel Trench Grade Separation Project  
**Attachments:** ACE Corridor Draft EIR Comments.doc

-- Forwarded Message ----

From: Gabrieleno Band of Mission Indians <gabrielenoindians@yahoo.com>  
To: rchoi@theaceproject.org  
Cc: Regina Talamantez <rtalamantez@theaceproject.org>; ds\_nahc@pacbell.net  
Sent: Fri, November 6, 2009 10:59:56 AM  
Subject: Notice of Completion Draft EIR - San Gabriel Trench Grade Separation Project

Please see attached letter.

Sincerely,  
Andrew Salas  
Chairman

**Letter 12**

November 6, 2009

Andrew Salas/Gabrieleno Band of Mission Indians  
P.O. Box 393 Covina, CA 91723

**Response 12-1**

This comment contains introductory information and relates a short history of the Gabrieleno villages that surrounded the San Gabriel Mission. The comment states that the City of San Gabriel, ACE and others have not considered other tribes in the area for Native American monitoring.

As stated above in Response 11-2, Caltrans, acting on behalf of FHWA is responsible for consultation with Native American tribes and designates the Native American monitors for project such as the San Gabriel Trench.

**Response 12-2**

The comment includes historical information on the area around the San Gabriel Mission and requests a descendant from the Gabrieleno tribe be onsite to conduct monitoring and represent the tribe. See Response 12-1 above.

Letter 12

Letter 12

**GABRIELEÑO BAND OF MISSION INDIANS**  
**A HISTORIC & PREHISTORIC TONGVA INDIAN TRIBE**  
**NATIVES OF CALIFORNIA FOR OVER 6,000 YEARS**

November 6, 2009

Ricky Choi, Community Relations Project Manager  
Alameda Corridor-East Construction Authority  
4900 Rivergrade Road, Suite A120  
Irwindale, Ca 91706-1446  
Tel: (626) 962-9292 ext. 154  
Fax: (626) 472-0094

Re: San Gabriel Trench Grade Separation Project  
Draft Environmental Impact Report

Dear Mr. Choi;

This letter is in response to the Notice of Completion of the Draft Environmental Impact Report on the above referenced project. This letter shall also serve the purpose of providing educational and informative information to ACE, the City of San Gabriel and other entities serving this project. Even though you are already aware, we feel its important to point out that there were several Gabrieleño villages that surrounded the San Gabriel Mission i.e. Japchivit & Sibapit (Siba) and throughout the Los Angeles Basin. It was customary to have a leader for each individual village. The leaders were known as capitans and today their known as our elders. There has never been a chief who represents the Gabrieleño people as a whole. If there was a chief he/she represented their village only. We feel it's important to educate our communities that when a particular project is occurring near our historic village sites; it's insensitive for the City of San Gabriel, ACE and others not to consider other known tribes in the area for NA monitoring. Please don't assume that communication occurs between tribes, we're requesting city officials to take on a more pro-active approach. Rather than use NA monitors from one known tribe in the area, we suggest using NA monitors from our tribe too from the same area. Our tribe represents the majority of the elders and our members are a variety not just from one family. Those elders now have a difficult time continuing with their community involvement and they rely strictly on information provided by our council and other tribes. Our elders have become outraged by the ongoing disrespect, when other monitors and leaders don't share the information about important archaeology findings, reburials and repatriations on *any* projects.

12-1

To avoid this problem on this particular project, they deliberately became involved and attended pre-construction meetings, safety meetings and attended public meetings with the City of San Gabriel. This was due to the fact that the proposed project runs directly through the traditional tribal territory of the Gabrieleño Band of Mission Indians and they want the responsibility to

12-2

Gabrielenoindians@yahoo.com P.O. Box 393 Covina, Ca 91723 (323) 335-8798

assist with and oversee that the identification, protection and proper disposition of our cultural resources are properly handled.

This area is highly sensitive and we have members who are direct descendants from several villages surrounding the Mission. We're hereby requesting our own direct descendant, elder and NA Monitor, Robert Dominguez to be onsite to represent our village/tribe during any excavation or ground disturbances. We're upholding a strong position that we're entitled to oversee this project. Since there are definitely two well-known Gabrieleño tribes with descendants and members who still reside in San Gabriel we find it only appropriate to use NA monitors from both tribes.

In addition, our elders feel that their civil rights are being violated when several requests for involvement are ignored or favoritism is involved with other individuals.

We/I appreciate your understanding in regards to this matter, I can be reached at 626-926-4131 should you have any questions or comments; please do not hesitate in contacting our office.

We/I look forward to continued involvement working with ACE to assist with preserving our cultural resources.

Sincerely,

Andrew Salas  
Chairman

Cc: Dave Singleton, NAHC  
City of San Gabriel, Planning/Building Dept.  
Gary Iverson, Caltrans District 7  
Regina Talamantez, ACE

12-2  
(cont)

Gabrielenoindians@yahoo.com P.O. Box 393 Covina, Ca 91723 (323) 335-8798

Letter 13

**SAN GABRIEL TRENCH PROJECT - PUBLIC COMMENT PHONE CALLS**

DATE	NAME & CONTACT INFO	COMMENT(S)/ISSUE(S)
9/29/09	Robert Liang 5308 N. Pongosa Ave. San Gabriel, CA 91776 (626) 286-5608	Robert Liang called to express his concerns regarding the temporary shoofly track that will be provided on the north side of the trench during construction. He said that if the temporary track will be just 10 feet from his master bedroom. Robert is concerned about the noise, dust and vibration during construction.

13-1

**Letter 13**

September 29, 2009

Robert Liang  
5308 N. Pongosa Ave.  
San Gabriel, CA 91776

**Response 13-1**

The commenter expressed concerns regarding the shoofly track that would be located on the north side of the track during construction. The commenter was concerned about noise, dust and vibration at his home during construction.

The Draft EIR/EA includes several mitigation measures to ensure noise levels do not exceed acceptable thresholds of 80dBA, including development of a noise plan and the following measure:

**CN7:** The construction contractor shall submit a noise plan detailing how the construction will be performed in a manner that will not exceed the limits specified in Table 2.4-16. The plan shall be prepared by a qualified acoustical engineer and should be approved by the resident engineer before construction is initiated. The noise control plan shall include an inventory of equipment, the estimated noise level at 50 feet for each major piece of equipment, calculations of the noise levels at sensitive receptors, and, noise reduction measures for any locations where the predicted noise levels exceed the limits specified in Table 2.4-16.

The Draft EIR/EA also includes a discussion of potential vibration impacts associated with operation of the shoofly track. As stated on page 2-168 of the document, the peak particle velocity (PPV) vibration value is typically used to assess the potential for building damage. The impact thresholds are 0.5 inches per second for normal buildings and 0.12 inches per second for fragile historic buildings. As shown in Table 2.4-14, the building damage threshold would not be exceeded at any of the sensitive receptors.



The root mean square (RMS) vibration value is typically used to assess the potential for annoyance from vibration to sensitive receptors. Table 2.4-14 lists the predicted RMS vibration from trains operating on the shoofly track. None of the predicted RMS values for locomotives and railcars passing by the sensitive receptors exceeded their respective thresholds.

The Draft EIR/EA includes 23 mitigation measures aimed at reducing air quality impacts resulting from construction activities. Several measures are specifically included to reduce dust, the full list of measures can be found on pages 2-154 through 2-155. Examples include:

- CAQ2:** Water or dust palliative shall be applied to the site and equipment as frequently as necessary to control fugitive dust emissions
- CAQ3:** Soil binder shall be spread on any unpaved road used for construction purposes, and all construction parking areas.
- CAQ4:** Trucks shall be washed off as they leave the right of way as necessary to control fugitive dust emissions
- CAQ7:** A dust control plan shall be developed documenting sprinkling, temporary paving, speed limits, and expedited revegetation of disturbed slopes as needed to minimize construction impact to existing communities.

Letter 14

**SAN GABRIEL TRENCH PROJECT - PUBLIC COMMENT PHONE CALLS**

DATE	NAME & CONTACT INFO	COMMENT(S)/ISSUE(S)
10/2/09	Leslie Levy 737 S. Almansor St. Alhambra, CA 91801 (626) 282-4227	Leslie Levy called to express hope that during the process, something can be done about public mass transit, especially from Alhambra to Rosemead, and specifically to consider mass transit as a possibility during construction. Also, Leslie suggested something similar to the Golden Line be implemented which can be a great alternative from Downtown Los Angeles to San Bernardino.

**Letter 14**

October 2, 2009

Leslie Levy  
Phone Call

**Response 14-1**

This comment expresses, but does not state a specific concern regarding the adequacy of the Draft EIR/EA. No additional response to this comment is necessary; however, this comment is noted for the administrative record and will be forwarded to the decision-makers for review and consideration.

14-1

Letter 15

**SAN GABRIEL TRENCH PROJECT - PUBLIC COMMENT PHONE CALLS**

DATE	NAME & CONTACT INFO	COMMENT(S)/ISSUE(S)
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**Letter 15**

October 2, 2009

Marietta Guzzo  
 No Address

**Response 15-1**

This comment expresses an opinion, but does not state a specific concern regarding the adequacy of the Draft EIR/EA. No additional response to this comment is necessary; however, this comment is noted for the administrative record and will be forwarded to the decision-makers for review and consideration.

10/2/09	Marietta Guzzo 5463 N. Delta Ave. San Gabriel, CA 91776 (323) 899-7804	Marietta called to express her concerns regarding horns blaring at night from the trains and inquired as to who she can contact with regard to possibly having a wall put up to mitigate the noise and safety impacts. She also expressed concern regarding the railroad tracks being adjacent to Roosevelt Elementary School located at 401 S. Walnut Grove Avenue in San Gabriel, and a local park. In addition, Marietta suggested having the trench continue past Walnut Grove Avenue.
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15-1

Letter 16

Ricky Choi

**From:** Sandoval, Tom [Tom.Sandoval@westin.com]  
**Sent:** Tuesday, October 06, 2009 3:48 PM  
**To:** rchoi@theaceproject.org  
**Subject:** A.C.E. project

Good afternoon Mr Choi. I'm E-mailing you on behalf of my mom who lives at 327 E. Main st in San Gabriel. Between Del Mar and San Gabriel blvd. Our question is, the elimination of the four grades. Will this be at the intersection them self's or will the entire tracks be lowerd like they are in Alhambra. In short will we have to relocate? Regards. Tom Sandoval.

16-1

to: rchoi@theaceproject.org

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Letter 16

October 6, 2009

Tom Sandoval  
No address

Response 16-1

This comment asks for clarification on the project and asks if the residence at 327 E. Main Street will be required to relocate.

The proposed project includes the lowering of the existing UPRR track below four intersections, Ramona Street, Mission Road, Del Mar Avenue and San Gabriel Boulevard. Bridge structures would be constructed at each intersection to allow the continuation of traffic over the lowered railroad. This would be similar to the configuration of the tracks in the City of Alhambra. The project does not require the relocation of the residence at 327 E. Main Street. However, a portion of this parcel is determined to illegally encroach into the UPRR right of way. As part of the project, the illegal encroachment will be required to be removed. In the event that relocation is required the project will comply with the Uniform Relocation Assistance and Real Property Acquisition Policies of 1970, as described in Mitigation Measure **PHE1**. The purpose of the Uniform Relocation Assistance and Real Property Acquisitions Policies is to ensure the fair, uniform and equitable treatment of persons and businesses displaced from the dwellings regardless of race, ethnicity, income or age. Moving expenses will be reimbursed for actual and related costs incurred in moving. In cases where relocation will be necessary for right-of-way acquisition, a decision on relocation will be reviewed with each residence or business owner to ensure that they are aware of all the opportunities. Suitable facilities for relocation existing in the general area will be sought. As discussed in the Draft EIR/EA a Relocation Assistance Program will be developed for displaced residents and businesses.

Hello Mr. Ricky Choi,

I am very pleased to receive the notice from your agency. My home is only a few feet away from the track. Every night while the trains drive by, I wish someone would build an underground track. I believe the re-construction will benefit the neighbors in three ways:

1. Eliminate the inconvenience the train brings
2. Improve the traffic
3. There are many natural resources near Mission. After the train is underground, the elimination of the noise will eliminate the barrier in local economy.

I hope you can start construction as early as possible! Thank you.

Resident, City of San Gabriel

Jian Cheng  
10/8/2009

17-1

## Letter 17

October 19, 2009

Jian Cheng  
No Address

## Response 17-1

This comment expresses an opinion supportive of the project. No additional response to this comment is necessary; however, this comment is noted for the administrative record and will be forwarded to the decision-makers for review and consideration.

## Letter 17

**Ricky Choi**

From: jian cheng [jiantiger2001@yahoo.com.cn]  
Sent: Monday, October 19, 2009 9:18 PM  
To: rchoi@theaceproject.org  
Subject: 回复

蔡英杰先生:你好!

收到贵局公听通知书后十分欣慰!我家距火车道近在咫尺,每晚火车吼叫呼啸而过之时,就是我

故说埋路轨于地下之改建工程利民,利市,利国.原因有三:

- 一 根绝火车扰民之患
- 二 畅通要道交通,
- 三 MISSION 之地域具丰富旅游资源,使火车隐声隐身,消除了开发此地域经济之阻碍,建议唯有一个,尽快开工,切忌好事多磨.

万谢!

圣盖博居民 成建  
2009年10月8日

Letter 18

Ricky Choi

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**From:** Trac [tmlam@uci.edu]  
**Sent:** Thursday, November 05, 2009 8:12 PM  
**To:** rchoi@theaceproject.org  
**Subject:** The ACE Project

Hello Mr. Ricky Choi,

I am writing on behalf of my father, San Phi Lam who resides in 5305 N. Delta St. in the City of San Gabriel Valley. I have checked the status of the ACE Project near Walnut Grove Ave and noticed that the project is completed.

The ACE project which runs through Walnut Grove in the city of Rosemead and San Gabriel is currently complete. Are there any other future development?

The concerns are as follow:

- Any future development of the railroad area within this region
- Methods to reduce noise reduction as a result of on-going construction
- Method to control dust and pollution triggered by future development near residential areas.

Thank you for your time in addressing these concerns.

-Trac Lam

Resident of San Gabriel Valley  
Email: [tmlam@uci.edu](mailto:tmlam@uci.edu)

**Letter 18**

November 5, 2009

Trac Lam  
No Address

**Response 18-1**

This comment requests information related to future developments near Walnut Grove Avenue and also states concerns regarding noise and air quality impacts.

The proposed project includes the grade separation of four intersections (see Response 16-1 above). Minor street modification are also proposed at Walnut Grove Avenue; however the train will continue in its current configuration at this intersection and will not be lowered as part of the project.

The project includes numerous mitigation measures to control dust and reduce potential noise impact related to construction. See Response 13-1 above for additional information on noise and air quality mitigation measures.

18-1

Letter 19



**San Gabriel Trench Project - Public Meeting Comment Form**

Contact Information / Información de Contacto / 聯絡詳情	
Name: <u>EDWARD DARIO</u> Nombre / 姓名	Phone: <u>(626) 286-3735</u> Teléfono / 電話
Address: <u>221 W. WEDGEWOOD AVE</u> Dirección <u>SAN GABRIEL CA 91776</u> 地址	E-mail: <u>EJDARIO@YAHOO.COM</u> Correo electrónico / 電郵網址
Public Comment / Comentarios / 意見欄 (Attach additional pages if necessary)	
<p>AS A 31 YEAR RESIDENT OF SANGABRIEL, I FULLY SUPPORT THIS PROJECT.</p> <p>I BELIEVE IT WILL IMPROVE PUBLIC/TRAFFIC SAFETY, IMPROVE TRAFFIC FLOW AND REDUCE NOISE AT PREVIOUS TRAFFIC/RAIL CROSSINGS CAUSED BY TRAINS MOVING ALONG THE CURRENT RAIL LINE.</p> <p style="text-align: right;"><i>Edward Dario</i></p>	
Submittal	
Submitted by/Sometido por/姓名: <u>EDWARD DARIO</u>	
Signature/Firma/簽名: <i>Edward Dario</i>	
Date/Fecha/日期: <u>10/28/09</u>	

**Letter 19**

October 28, 2009

Edward Dario  
221 W. Wedgewood Ave  
San Gabriel, CA 91776

**Response 19-1**

This comment expresses an opinion supportive of the project. No additional response to this comment is necessary; however, this comment is noted for the administrative record and will be forwarded to the decision-makers for review and consideration.

Please submit this form to an ACE Project Team Member, or mail to: Community Relations Project Manager, ACE Construction Authority, 4900 Rivergrade Road, Suite A120, Irwindale, CA 91706, or fax: to (626) 472-0094. The deadline for comments is November 14, 2009.

Letter 20



San Gabriel Trench Project - Public Meeting Comment Form

Contact Information / Información de Contacto / 聯絡詳情	
Name: <u>Ed Dario</u>	Phone: _____
Nombre / 姓名	Teléfono / 電話
Address: _____	E-mail: _____
Dirección	Correo electrónico / 電郵網址
地址	
Public Comment / Comentarios / 意見欄 (Attach additional pages if necessary)	
<p>① Resident between Del Mar and Junipero Blvd. Also tenant (customer) of All aboard storage. Rent \$150/mo for 10'x10' space.</p> <p>② Corporate office, in Solara Blvd Alhambra location. ≈ 600+ UNITS occupancy in high 90%.</p> <p><u>Paul Dario</u> one of the owners of public storage ≈ 370 UNITS IN STORAGE.</p>	
Submittal	
Submitted by/Sometido por/姓名: <u>MARK MENDOZA</u>	
Signature/Firma/簽名: _____	
Date/Fecha/日期: _____	

Letter 20

October 28, 2009

Ed Dario  
No Address

Response 20-1

This comment includes specifications related to All Aboard Mini Storage, but does not state a specific concern regarding the adequacy of the Draft EIR. No additional response to this comment is necessary; however, this comment is noted for the administrative record and will be forwarded to the decision-makers for review and consideration.

Please submit this form to an ACE Project Team Member, or mail to: Community Relations Project Manager, ACE Construction Authority, 4900 Rivergrade Road, Suite A120, Irwindale, CA 91706, or fax: to (626) 472-0094. The deadline for comments is November 14, 2009.



Letter 21

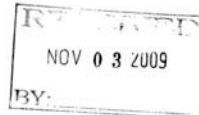
November 1, 2009

Robert Liang  
5308 N. PONDOSA AVE  
San Gabriel, CA 91776

TO: RICKY CHOI  
ALAMEDA CORRIDOR - EAST CONSTRUCTION AUTHORITY  
4900 RIVERGRADE ROAD, SUITE A120  
IRWINDALE, CA 91706-1446

11-1-09

FROM: ROBERT LIANG  
5308 N. PONDOSA AVE  
SAN GABRIEL, CA 91776



尊敬的蔡英傑先生:

在十月廿八日晚會議上,很高興得知有閩聖蓋博鐵路興建工程的新訊息。

我們曾到目前鐵路地段量度,若然臨時鐵路向北移動25',那麼臨時鐵路離我們的睡房外牆僅只有大概25'左右。可以想像當火車通過時,噪音和震動是相當嚴重的。施工過程中將會破壞空氣的清新,灰塵會掛滿後園的樹木和房子的四周,甚至可能出現不能打開窗戶的現象。

可喜的是在晚會上,工程部的負責人講述了不少對應措施,他闡明: 1) 將會在開工之前將我們的房子拍照評估作為房子的現存資料,去對照,萬一將來房子發生破壞而發生變化并予以修復。

2) 在開工之前,會在我房子與鐵路之間,挖一溝,在溝內放置一些防震傳動的物質,以減少震動對房子的影響。

3) 在開工之前,將會在我房子前放置屏帳作為隔離塵土的污染。

4) 在開工之前,會對我房子周圍所有的窗戶多加一層玻璃以防止噪音的污染。

對貴工程部以上的措施,我們十分贊賞,懇請能備案作為對應措施。

See translated comment below.

存档,同時能以文件照會我們。

我們還懇切希望,在臨時鐵路運作的過程中,在WALNUT GROVE AVE 與橋之間的路段,火車的時速減至15 MPH,將會大大幫助減少顛動對民宅的影響。我們期望對於將來發生的未能預見的個別情況能及時協商並採取適當的處理辦法。

謝謝!請隨時與我們聯繫。

*Robert Liang*

Letter 21

Ricky Choi  
Alameda Corridor-East Construction Authority  
4900 Rivergrade Road, Suite A120  
Irwindale, CA 91706-1446

Dear Mr. Ricky Choi,

I'm very glad to learn more information about the San Gabriel Trench project at the public meeting on October 28.

We have measured the distance from the current railroad to our home; and if the temporary tracks moves 25 feet northward, then it will only be 25 feet away from our bedroom wall. One can imagine the impacts of noise and vibration caused by the train traffic will be a great concern for us. During construction, there will be dust and dirt all over the backyard and the building; we might not even be able to open the window.

I was also glad to hear from the supervisor from the engineering department about some of the things they will do. He states,

1. Before construction, the team will evaluate and take pictures of our house to keep them in file. The team will repair accordingly if there is any damage to the property during construction.
2. Before construction, the team will dig a small trench to place some materials to help absorbing vibration and decrease the impacts to our house.
3. Before construction, the team will place a protective screen to shield the dust and dirt caused by the construction.
4. Before construction, the team will add another layer of glass to all my windows to prevent noise pollution.

We are very pleased to learn about these measures, and we hope that you can respond to this letter and give us a written confirmation that the team will assist in the above matters once the construction takes place.

We also suggest that the agency can regulate the trains to go at 15mph while using the temporary tracks; it will greatly decrease the vibration. We hope that we can communicate and discuss together for future planning, problems and related situations.

Thank you. Please feel free to contact us.

Robert Liang  
5308 N. Pondosa Ave.  
San Gabriel, CA 91776

**Response 21-1**

The comment states concerns related to the location of the shoofly track during construction of the trench. The comment states a concern about construction dust and debris as well as noise and vibration. The comment is a restatement of concerns expressed in Mr. Liang's letter 13 above. See response 13-1 above.

**Response 21-2**

The comment states four items stated by the project engineer that will be conducted prior to construction. The Draft EIR/EA includes numerous mitigation measures to reduce construction related air quality and noise impacts (see Response 13-1 above). Beyond the measures included in the Draft EIR/EA, which include sound walls at several locations, ACE will conduct a pre-condition survey in accordance with the comment.

**Response 21-3**

The comment states that while using the temporary track, trains should not exceed speeds of 15 miles per hour. The railroad tracks are owned and operated by UPRR; ACE does not have the authority to regulate speed of trains on the tracks during construction or operation of the proposed project.

21-1

21-2

21-3

Letter 22



San Gabriel Trench Project - Public Meeting Comment Form

Contact Information / Información de Contacto / 聯絡詳情	
Name: <u>Robert Liang</u> Nombre / 姓名	Phone: _____ Teléfono / 電話
Address: <u>5308 N. Pondosa Ave.</u> Dirección <u>San Gabriel, CA 91776</u> 地址	E-mail: _____ Correo electrónico / 電郵網址
Public Comment / Comentarios / 意見欄 (Attach additional pages if necessary)	
<p>Master bedroom is currently 60 ft from right-of-way. Temporary shoofly will move track north by 25 feet, distance to master bedroom will be 25 feet. concerned about dust, vibration and noise. would like to know what ACE can do to mitigate his concerns. (Sound blanket) would be supportive of pre-construction video of property prior to construction work.</p>	
Submittal	
Submitted by/Sometido por/姓名: _____	
Signature/Firma/簽名: _____	
Date/Fecha/日期: _____	

Letter 22

October 28, 2009

Robert Liang  
5308 N. Pondosa Ave  
San Gabriel, CA 91776

Response 22-1

This comment states concerns related to the shoofly track and the proximity to the commentor's home. Similar to comment 21, the commentor expresses concerns about dust, vibration and noise. See Response 21-1 and 13-1.

22-1

Please submit this form to an ACE Project Team Member, or mail to: Community Relations Project Manager, ACE Construction Authority, 4900 Rivergrade Road, Suite A120, Irwindale, CA 91706, or fax: to (626) 472-0094. The deadline for comments is November 14, 2009.

Letter 23

	<p><b>ALAMEDA CORRIDOR-EAST CONSTRUCTION AUTHORITY</b> 4900 Rivergrade Road, Suite A120, Irwindale, CA 91706 • Tel: (800) ACE-1426 • Fax: (626) 472-0094 • www.theaceproject.org</p>
---	--

**San Gabriel Trench Project - Public Meeting Comment Form**

<b>Contact Information / Información de Contacto / 聯絡詳情</b>	
Name: <u>Gloria Duenas</u> Nombre / 姓名	Phone: <u>626 2898994</u> Teléfono / 電話
Address: <u>4553 Delta Ave</u> Dirección <u>Rosemead</u> <u>91770</u> 地址	E-mail: _____ Correo electrónico / 電郵網址
<b>Public Comment / Comentarios / 意見欄 (Attach additional pages if necessary)</b>	
<p>Sounds great! Truly needed. I have been here 32 years and fought alot of traffic.</p>	
23-1	
<b>Submittal</b>	
Submitted by/Sometido por/姓名: _____	
Signature/Firma/簽名: <u>Gloria Duenas</u>	
Date/Fecha/日期: <u>10/28/09</u>	

**Letter 23**

October 28, 2009

Gloria Duenas  
4553 Delta Ave  
Rosemead, CA 91770

**Response 23-1**

This comment expresses an opinion supportive of the project. No additional response to this comment is necessary; however, this comment is noted for the administrative record and will be forwarded to the decision-makers for review and consideration.

Please submit this form to an ACE Project Team Member, or mail to: Community Relations Project Manager, ACE Construction Authority, 4900 Rivergrade Road, Suite A120, Irwindale, CA 91706, or fax: to (626) 472-0094. The deadline for comments is November 14, 2009.

Letter 24



**San Gabriel Trench Project - Public Meeting Comment Form**

Contact Information / Información de Contacto / 聯絡詳情	
Name: <u>Daniel Slama</u> Nombre / 姓名	Phone: <u>714 883 3383</u> Teléfono / 電話
Address: _____ Dirección _____ 地址 _____	E-mail: <u>DSLAMA@QUABOARD.NET</u> Correo electrónico / 電郵網址
Public Comment / Comentarios / 意見欄 (Attach additional pages if necessary)	
<u>requesting Environmental Mitigation Measures / Findings</u> 24-1	
Submittal	
Submitted by/Sometido por/姓名: _____	
Signature/Firma/簽名: _____	
Date/Fecha/日期: _____	

**Letter 24**

October 28, 2009

Daniel Slama  
No address

**Response 24-1**

This comment requests environmental mitigation measures associated with the project. The Draft EIR/EA includes numerous mitigation measures both throughout the document and compiled in the summary. The Draft EIR/EA was made available both online and at local repositories for a period of 45 days in compliance with the requirements of CEQA. In addition, a copy of the summary table was sent to the email address included in the comment letter.

Please submit this form to an ACE Project Team Member, or mail to: Community Relations Project Manager, ACE Construction Authority, 4900 Rivergrade Road, Suite A120, Irwindale, CA 91706, or fax: to (626) 472-0094. The deadline for comments is November 14, 2009.

Letter 25



San Gabriel Trench Project - Public Meeting Comment Form

<b>Contact Information / Información de Contacto / 聯絡詳情</b>	
Name: <u>GABRIELEÑO BAND OF MISSION INDIANS</u> Nombre / 姓名	Phone: _____
Address: <u>514 MAIN STREET</u> Dirección	Teléfono / 電話: _____ E-mail: _____
Address: _____ Dirección	Coreo electrónico / 電郵網址
<b>Public Comment / Comentarios / 意見欄</b> (Attach additional pages if necessary)	
<p>Property owner on main street, road not high wall. Likes to look at mountains. <span style="float: right;">25-1</span></p> <p>→ Keith and Regim addressed this. Bluff wall during const. (potentially). Permanent condition only 6' high chain link. <span style="float: right;">25-2</span></p>	
<b>Submittal</b> <u>MONICA MENDOZA</u>	
Submitted by/Sometido por/姓名: _____	
Signature/Firma/簽名: _____	
Date/Fecha/日期: _____	

Letter 25

October 28, 2009

Ernest P. Salas  
514 Main Street  
San Gabriel, CA

Response 25-1

The comment states the property owner does not want the walls of the trench to obstruct views of the mountains. The Draft EIR/EA addressed this concern; page 2-70 includes a discussion of views and vistas and concludes the new structures that would be constructed would not be of sufficient height to block existing views of the San Gabriel Mountains. Alternative 1 would include an approximately two-foot tall concrete barrier and six foot tall fence located at grade on both sides of the proposed trench. These new elements would not be tall enough to block views of the San Gabriel Mountains.

Response 25-2

The intent of the comment is unclear but is assumed to be related to the height of the trench walls. See Response 25-1 above.

Please submit this form to an ACE Project Team Member, or mail to: Community Relations Project Manager, ACE Construction Authority, 4900 Rivergrade Road, Suite A120, Irwindale, CA 91706, or fax: to (626) 472-0094. The deadline for comments is November 14, 2009.

Letter 26



**San Gabriel Trench Project - Public Meeting Comment Form**

Contact Information / Información de Contacto / 聯絡詳情	
Name: <u>Jason Huang</u> Nombre / 姓名	Phone: <u>562-879-8827</u> Teléfono / 電話
Address: <u>9633 Clancy Ave, Downey, CA 90240</u> Dirección 地址	E-mail: <u>jhuang723@yahoo.com</u> Correo electrónico / 電郵網址
Public Comment / Comentarios / 意見欄 (Attach additional pages if necessary)	
<p>Concerned re: Construction Notice for work affecting Apt Bldg (6 units) at: 337 Clary Ave, SG, CA 91776. — Please notify him through off site Prop Mgr. — Investors Realty Kim Wang (714) 821-8992</p>	
Submittal	
Submitted by/Sometido por/姓名: <u>[Signature]</u>	
Signature/Firma/簽名: _____	
Date/Fecha/日期: <u>10/28/09</u>	

**Letter 26**

October 28, 2009

Jason Huang  
337 Clary Ave

**Response 26-1**

The comment states a concern related to construction noticing for at the property at 337 Clary Avenue. The comment also includes a request to be notified through off-site managers of the property. ACE will notify Mr. Huang of construction activity.

26-1

Please submit this form to an ACE Project Team Member, or mail to: Community Relations Project Manager, ACE Construction Authority, 4900 Rivergrade Road, Suite A120, Irwindale, CA 91706, or fax: to (626) 472-0094. The deadline for comments is November 14, 2009.



Letter 27



San Gabriel Trench Project - Public Meeting Comment Form

Contact Information / Información de Contacto / 聯絡詳情	
Name: <u>JASON HUANG</u> Nombre / 姓名	Phone: _____ Teléfono / 電話
Address: <u>337 CLARY AVENUE</u> Dirección	E-mail: <u>jhuang723@yahoo.com</u> Correo electrónico / 電郵網址
Address: _____ 地址	
Public Comment / Comentarios / 意見欄 (Attach additional pages if necessary)	
<p>① WHAT KIND OF NOISE WILL MY TENANTS EXPERIENCE DURING CONSTRUCTION? <span style="float: right;">27-1</span></p> <p>② CONCERN W/ ADDITIONAL TRAFFIC AND WILL HE HAVE A POINT OF CONTACT? <span style="float: right;">27-2</span></p>	
Submittal	
Submitted by/Sometido por/姓名: _____	
Signature/Firma/簽名: _____	
Date/Fecha/日期: _____	

Please submit this form to an ACE Project Team Member, or mail to: Community Relations Project Manager, ACE Construction Authority, 4900 Rivergrade Road, Suite A120, Irwindale, CA 91706, or fax: to (626) 472-0094. The deadline for comments is November 14, 2009.

Letter 27

October 28, 2009

Jason Huang  
337 Clary Avenue

Response 27-1

The comment states a concern regarding noise levels during construction at 337 Clary Avenue.

The Draft EIR/EA includes noise measurement for Smith Park which is located near the residences at 337 Clary Avenue and would be expected to experience comparable noise levels. The analysis included in the Draft EIR/EA indicated there would not be an impact at this site. In addition, the Draft EIR/EA includes several measures to ensure noise levels do not exceed acceptable thresholds of 80 dBA, including the development of a noise plan and the following measure:

**CN7:** The construction contractor shall submit a noise plan detailing how the construction will be performed in a manner that will not exceed the limits specified in Table 2.4-16. The plan shall be prepared by a qualified acoustical engineer and should be approved by the resident engineer before construction is initiated. The noise control plan shall include an inventory of the equipment, the estimated noise level at 50 feet for each major piece of equipment, calculations of the noise levels at sensitive receptors and noise reduction measures for any locations where the predicted noise levels exceed the limits specified in Table 2.4 of the Draft EIR/EA.

Response 27-2

The comment states a concern with additional traffic, but does not state a specific concern regarding the Draft EIR/EA. The comment includes a request for a point of contact. The public outreach coordinator for ACE can be reached at (800) ACE-1426.

Letter 28

	<b>ALAMEDA CORRIDOR-EAST CONSTRUCTION AUTHORITY</b> 4900 Rivergrade Road, Suite A120, Irwindale, CA 91706 • Tel: (800) ACE-1426 • Fax: (626) 472-0094 • www.theaceproject.org
---	---

**San Gabriel Trench Project - Public Meeting Comment Form**

<b>Contact Information / Información de Contacto / 聯絡詳情</b>	
Name: <u>Robert Dominguez</u> Nombre / 姓名	Phone: <u>626-285-5516</u> Teléfono / 電話
Address: <u>214 E. Main St.</u> Dirección <u>SG, CA 91776</u> 地址	E-mail: _____ Correo electrónico / 電郵網址
<u>(3 properties) / 206 &amp; 208 Main St.</u>	
<b>Public Comment / Comentarios / 意見欄</b> (Attach additional pages if necessary)	
<p><u>What wanted to know if hauling operations/ truck traffic will impact Main St. during construction.</u></p>	
28-1	
<b>Submittal</b>	
Submitted by/Sometido por/姓名: _____	
Signature/Firma/簽名: <u>[Signature]</u>	
Date/Fecha/日期: <u>10/28/09</u>	

Please submit this form to an ACE Project Team Member, or mail to: Community Relations Project Manager, ACE Construction Authority, 4900 Rivergrade Road, Suite A120, Irwindale, CA 91706, or fax: to (626) 472-0094. The deadline for comments is November 14, 2009.

**Letter 28**

October 28, 2009

Robert Dominguez  
214 E. Main Street  
San Gabriel, CA 91776

**Response 28-1**

The comment asks if hauling operations or truck traffic will impact Main Street during construction. The Draft EIR/EA determined noise impacts related to hauling trucks would be a significant and unavoidable impact. No feasible mitigation measures exist. See Draft EIR/EA Section 2.4 Construction Impacts page 2-17. The following discussion is included, "A portion of the haul truck route would travel along residential streets such as Main Street. Haul truck activity would intermittently increase ambient noise levels by approximately 7 dBA. There is not feasible mitigation to avoid occasional haul truck activity on residential streets. As such, haul truck noise would result in an unavoidable short-term adverse impact. "

ACE is required to obtain approval from the City of San Gabriel for final haul routing and traffic management plans. Noise impacts on residential streets and other sensitive receptors is an important consideration in the designation of haul routes. The construction contractor will be required to comply with final haul route restrictions incorporated in the final construction documents.

Letter 29



**San Gabriel Trench Project - Public Meeting Comment Form**

<b>Contact Information / Información de Contacto / 聯絡詳情</b>	
Name: <u>Ernest P. Salas</u> Nombre / 姓名	Phone: <u>626-287-4014</u> Teléfono / 電話
Address: <u>514 E. Main St.</u> Dirección <u>SG, CA 91776</u> 地址	E-mail: _____ Correo electrónico / 電郵網址
<b>Public Comment / Comentarios / 意見欄 (Attach additional pages if necessary)</b>	
<p>Concerned regarding block wall height along the back side of property. He likes to see the mountains, prefers wall not to be above 8ft in height.</p>	
<b>Submittal</b>	
Submitted by/Sometido por/姓名: <u>[Signature]</u>	
Signature/Firma/簽名: _____	
Date/Fecha/日期: <u>10/28/09</u>	

**Letter 29**

October 28, 2009

Ernest P. Salas  
514 E. Main Street  
San Gabriel, CA 91776

**Response 29-1**

The comment states a concern regarding the trench walls blocking views of the San Gabriel Mountains. See Response 25-1 above.

Please submit this form to an ACE Project Team Member, or mail to: Community Relations Project Manager, ACE Construction Authority, 4900 Rivergrade Road, Suite A120, Irwindale, CA 91706, or fax: to (626) 472-0094. The deadline for comments is November 14, 2009.

Letter 30



San Gabriel Trench Project - Public Meeting Comment Form

Contact Information / Información de Contacto / 聯絡詳情	
Name: <u>ERNEST CUMMINGS</u> Nombre / 姓名	Phone: <u>(626) 287 2103</u> Teléfono / 電話
Address: <u>233 W. WEDGEWOOD DR</u> Dirección	E-mail: _____ Correo electrónico / 電郵網址
Public Comment / Comentarios / 意見欄 (Attach additional pages if necessary)	
<p>① CONCERN w/ LEFT TURNS BY VEHICULAR TRAFFIC AT BROADWAY &amp; MISSION RD.</p> <p>② CONCERN w/ SHORT DISTANCE BETWEEN GRAND &amp; MISSION (ALONG S. GABRIEL)</p>	
Submittal	
Submitted by/Sometido por/姓名: _____	
Signature/Firma/簽名: _____	
Date/Fecha/日期: _____	

Please submit this form to an ACE Project Team Member, or mail to: Community Relations Project Manager, ACE Construction Authority, 4900 Rivergrade Road, Suite A120, Irwindale, CA 91706, or fax: to (626) 472-0094. The deadline for comments is November 14, 2009.

Letter 30

October 28, 2009

Ernest Cummings  
233 W. Wedgewood Drive

Response 30-1

The comment states a concern regarding left turns at Broadway and Mission Road. Tables 2.4-18 through 2.4-21 of the Draft EIR/EA indicate the level of service (LOS) at Broadway and Mission Drive would not be adversely impacted during the closure of any of the project intersections and would continue to operate at LOS A (free-flow conditions).

Response 30-2

The comment states a concern regarding the short distance between Grand Avenue and Mission Road along San Gabriel Boulevard. The intent of the comment is unclear and does not state a specific concern regarding the adequacy of the environmental document. No further response is necessary; however the comment will be forwarded to the decision-maker for consideration.



GAIL FARBER, Director

Letter 31  
**COUNTY OF LOS ANGELES**

**DEPARTMENT OF PUBLIC WORKS**

"To Enrich Lives Through Effective and Caring Service"

900 SOUTH FREMONT AVENUE  
ALHAMBRA, CALIFORNIA 91803-1331  
Telephone: (626) 458-5100  
http://dpw.lacounty.gov

ADDRESS ALL CORRESPONDENCE TO:  
P.O. BOX 1460  
ALHAMBRA, CALIFORNIA 91802-1460

IN REPLY PLEASE  
REFER TO FILE: LD-1

November 19, 2009

Mr. Ricky Choi  
Community Relations Project Manager  
Alameda Corridor-East Construction Authority  
4900 Rivergrade Road, Suite A120  
Los Angeles, CA 90012

Dear Mr. Choi:

**DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR)/  
ENVIRONMENTAL ASSESSMENT (EA)  
SAN GABRIEL TRENCH GRADE SEPERATION**

Thank you for the opportunity to review the DEIR/EA for the San Gabriel Trench Grade Separation project. The Alameda Corridor-East Construction Authority proposes to eliminate four at-grade railroad crossings along the Union Pacific Railroad in the City of San Gabriel at Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard.

The following comments are for your consideration and relate to the environmental document only:

Hazards-Flood/Water Quality

1. The project DEIR should address the impact of discharges from the project into the Los Angeles County Flood Control District's (LACFCD) system including any increase in the volume discharged and the introduction of additional pollutants with the project discharges. The project DEIR should explain how the project will ensure that discharges from the project site will meet all applicable receiving water body, water quality standards.
2. The project DEIR should also detail any impacts that the project development would have on LACFCD properties including any proposed easements or connections to the system.

31-1

31-2

**Letter 31**

November 19, 2009

Gail Farber, Director of Public Works  
County of Los Angeles Department of Public Works  
900 South Fremont Avenue  
Alhambra, CA 91803

**Response 31-1**

The comment includes introductory remarks and states the Draft EIR/EA should address the impact of discharges into the Los Angeles County Flood Control District's system including any increase in volume discharged and the introduction of additional pollutants with project discharges. The comment also states the Draft EIR/EA should explain how the project site will meet all receiving water body standards.

The proposed project will include construction activities such as grading and clearing of vegetation that would lead to exposed soils susceptible to stormwater runoff. This is discussed in the Draft EIR/EA on pages 2-98 through 2-99. The Draft EIR/EA also states that outside of construction activities, the proposed project would not entail any activity or process that would degrade water quality and would not increase vehicle traffic which could result in an increase in nonpoint source pollutants. In addition, although the proposed project includes modifications to two washes that discharge into the Los Angeles County Flood System. The modifications of these washes would ensure that existing capacity and flows are maintained. Lastly, the proposed project includes Mitigation Measures **HW2** through **HW5**, which include consultation with the LACDPW, Los Angeles County Flood Control District and the Regional Water Quality Control Board to ensure all receiving water body standards are met.

Mr. Ricky Choi  
November 19, 2009  
Page 2

3. Page 2-48, Measures to Minimize Harm, US4—Further discussion should be provided regarding the proposed graded swale or earthen ditch to clarify how the measure will achieve the stated benefit.

31-3

4. Page 2-95, third paragraph—The DEIR incorrectly states "The project is located within the San Gabriel River Watershed." The project is located in the Rio Hondo and Los Angeles River Watersheds.

31-4

If you have any questions, please contact Ms. Lindsay Sagorski at (626) 458-4341 or by e-mail at [lsagorski@dpw.lacounty.gov](mailto:lsagorski@dpw.lacounty.gov).

If you have any other questions or require additional information, please contact Mr. Toan Duong at (626) 458-4921 or by e-mail at [tduong@dpw.lacounty.gov](mailto:tduong@dpw.lacounty.gov).

Very truly yours,

GAIL FARBER  
Director of Public Works



DENNIS HUNTER, PLS PE  
Assistant Deputy Director  
Land Development Division

JY:ca

P:\ldpub\ICEQA\CDMSAN GABRIEL TRENCH GRADE SEPERATION PROJECT\_DEIR-EA.doc

### Response 31-2

The comment states the Draft EIR/EA should also detail any impacts that the project development would have on LACFCD properties. See Response 31-1 above.

### Response 31-3

The comment refers to mitigation measure US4 and states further discussion should be provided regarding the proposed graded swale or earthen ditch.

US4 states: ACE shall install a graded swale or earthen ditch between the UPRR northern right of way and south side of Mission Road between the Alhambra Wash and Ramona Street to ensure that 100-year storm event does not impact the proposed project or Mission Road.

Although the proposed project includes several elements to reduce stormwater and drainage impacts, such as development of a Stormwater Pollution Prevention Plan (SWPPP), and construction of a new storm drain trunk line from Junipero Sera Drive to Rubio Wash, additional design elements will be required to ensure flooding does not occur within the trench structure itself. The purpose of the graded swale is to further reduce potential impacts by conveying stormwater at a slower, controlled rate while removing pollutants and allowing stormwater infiltration. This concept was developed in coordination with ACE and representatives of the LACDPW. Although detailed plans for the swale or ditch have not yet been developed, these plans will be developed during the design phase and submitted to LACDPW for review and refinement.

### Response 31-4

The comment refers to a factual error on page 2-95. The statement has been corrected and now reads as follows: The project is located in the ~~San Gabriel River Watershed~~ **Rio Hondo and Los Angeles River Watersheds.**"



Letter 32

Community Development Department

December 1, 2009

Mr. Rick Choi  
Community Relations Project Manager  
ALAMEDA CORRIDOR - EAST (ACE) CONSTRUCTION AUTHORITY  
4900 Rivergrade Road, Ste. A120  
Irwindale, CA 91706

SUBJECT: San Gabriel Trench Grade Separation Project Draft Environmental Impact Report/Environmental Assessment Dated September, 2009 – Part 2.

Dear Mr. Choi:

Thank you for the opportunity to review the Draft Environmental Impact Report/Environmental Assessment for the San Gabriel Trench Grade Separation Project. The comments in this letter reflect our interest in making explicit some of the understandings that have developed informally as part of the partnership in working with ACE and addressing environmental issues that arise out of the proposed mitigation measures.

Memorandum of Understanding between ACE and the City of San Gabriel (Mitigation A1)

The Summary Table of Impacts and Mitigations (p.S-14) refers to a Memorandum of Understanding related to protecting the visual character of the Mission District as set forth in the City's General Plan and Mission District Specific Plan. We have not yet seen a draft of the Memorandum of Understanding although work is proceeding on a specific design for the betterments proposed for the Mission District.

When the Memorandum is prepared, we believe that the document should include the goals and objectives which I believe we have previously identified to include:

Goals	Objectives	Performance Criteria
Project elements meet environmental design objectives	Corridors: progression	A defined scheme for vehicle and pedestrian progression through the most critical zone, with clear points of interconnection and crossings.  External edges less developed, central portion most developed
	Portals and gateways	Clear sense of District boundary and arrival; monumentation or design elements at portals announce arrival.  Designed to accommodate placement of way finding units under development by City

Letter 32

December 1, 2009

Carol Barrett  
City of San Gabriel

Response 32-1

The comment refers to a Memorandum of Understanding (MOU) that will be developed between the City of San Gabriel and ACE and includes goals and polices from the General Plan that the City would like to see included in the MOU. The MOU that is referred to in mitigation measure A1 specifically relates to the Mission District Landscape Concept which is currently being developed by ACE, UPRR and the City of San Gabriel. ACE and the City of San Gabriel are working on concepts for the betterment plan for the mission district that will meet the safety specifications required by the UPRR. However, it is important to note that the process is iterative and ongoing; therefore the City is encouraged to submit goals, policies and concepts to ACE at any time.

Response 32-2

The comment refers to the Memorandum of Agreement (MOA) for the San Gabriel Mission Site. The commentor states a concern regarding the City's overall role in the process.

The MOA that is being developed is required as part of the Section 106 process which provides protection for historic resources such as the San Gabriel Mission site. A draft MOA has been prepared and was circulated to signatories and invited parties (including the City of San Gabriel) on December 10, 2009. Several workshops are also planned between ACE and the signatories and invited parties to discuss the content of the MOA.

32-1

Mr. Rick Choi  
 December 1, 2009  
 Page 2 of 4

Goals	Objectives	Performance Criteria
Design solutions that properly protect the context and character of historic resources	Preservation of affected resources  Climate-appropriate Historically correct for local area and local history  Naturalized appearance, not requiring "sculpting"  Minimize access to attractive nuisances  Do not dominate the landscape; should provide setting and background for historic resources, not overwhelm them.  Layered landscape design with elements at different heights to minimize impact of new improvements.  Minimize unnecessary concrete	Protection and display of Chapman Mill and other artifacts through sequential displays or interpretive features  Drought tolerant native plants, low water use, palette reflecting historical materials in district.  Decorative sculptural fencing within most critical zones  Sculptural treatment of sidewalks exposed to streets or visible from public realm  History and importance of rail and streetcar lines to the Mission District themselves clearly expressed through design and interpretation.  Accent lighting as needed
Design solutions that are "authentic" in the context of a built out and historic community.	Reasonable attempt to design features to reflect history without attempting to mimic it. (Secretary of Interior Standards)  Don't falsify materials with paste-on solutions  Proper reflection of utility.	Betterment treatment of standard elements
Design improvements that comply with the City's plans	Streetscape components, lighting, street furniture and other improvements to follow Mission District Streetscape Plan and Mission District Specific Plan standards  Clear definition of gateways and portals	Ornamental Lighting  Trash receptacles  Benches  Tree grates  Trees to street tree master plan or MDSP  Color, treatment and paving to follow existing streetscape plan

32-1  
 (cont)

**Response 32-3**

The comment refers to the Cultural Resources Mitigation Monitoring and Treatment Plan and includes a list of concerns in bullet point format. The Cultural Resources Mitigation Monitoring and Treatment Plan is being developed with the MOA. ACE has engaged the City in the process and encourages the City to review the MOA and Treatment Plan to make sure the City's concerns, as provided in the comment letter are fully met.



Mr. Rick Choi  
December 1, 2009  
Page 3 of 4

Goals	Objectives	Performance Criteria
Design solutions that are safe and effective	Landscape and design choices that create disincentives to vandalism  Crime prevention through environmental design	Cactus and other plants near external walls  Vines covering surfaces  Sculptural wall finishes  Added "keep clear" zones
Expand pedestrian connectivity	Space for bike lanes and trails  Clearly defined and expressed pedestrian paths with proper connections throughout affected zone	Use of excess ROW for bike and pedestrian path reservation  Widened bridge deck to establish arrival in district and provide greater pedestrian amenity

We believe it is important to restate these goals and objectives because the EIR relies upon the notion of the Memorandum of Understanding to address impacts on the visual character as well as views and vistas. A Memorandum of Understanding provides a framework for shared decision-making. We look forward to reviewing a Draft of the memorandum at your earliest convenience.

Memorandum of Agreement for the San Gabriel Mission Site (Mitigation CR-1)

It is not clear whether the City will have an opportunity to review this document in draft form. The mitigation notes that the agreement will include a detailed research design, research evaluation and procedures, and detailed recovery, analyses and dissemination plans. Successful implementation of CR-1 is critical to the determination that the project can proceed even in the face of possible loss of historic resources as noted in the EIR document itself (material within the railroad R-O-W, for example). What is the status of this Memorandum of Agreement? Will the City of San Gabriel have an opportunity to review and comment on the Memorandum? What about other keenly interested parties such as the San Gabriel Historical Association?

Cultural Resources Mitigation Monitoring and Treatment Plan (Mitigation CR-3)

It is not clear whether the City will have an opportunity to review this document in draft form. Reference is made to approval by reviewing agencies and we would hope to be included in this process. The mitigation notes that the plan will provide a strategy to prevent the loss of any previously undocumented cultural resources discovered during the construction process. What is the status of this Treatment Plan? Will the City of San Gabriel have an opportunity to review and comment on the Memorandum? What about other keenly interested parties such as the San Gabriel Historical Association?

Because we have not yet seen drafts of either of the documents, we may find that all of the following issues of concern have been addressed. We look forward to seeing how the Agreement or the Treatment Plan follow-through on matters that were raised when ACE conducted its very helpful briefing for City staff following the consultant's completion of their excavation work along the R-O-W.

Mr. Rick Choi  
December 1, 2009  
Page 4 of 4

- Preservation of those artifacts not sent to UCLA for use by SGHA Museum, Mission Museum, Ramona Museum, or the City of San Gabriel.
- How the City can work with the Railroad on the Railroad's desire to secure and preserve artifacts related to the Railroad's history? What about the role of the above-named parties in preservation of artifacts not requested by the Railroad?
- Establishing a role, as much as possible, for the San Gabriel Historical Association.
- Understanding opportunities to secure structural artifacts like Chapman Mill in the Mission District with appropriate historic context/setting and interpretive exhibits.
- Protection of archaeological and paleontological remains to prevent poaching.
- Ensuring that copies of all documents and records are provided to appropriate parties including the City of San Gabriel, the San Gabriel Historical Association, etc.

We look forward to working to continue to build our partnership. We recognize, with you, that a more detailed review of the actual implementation mechanisms for the proposed mitigation strategies is important both for the protection of critical resources like the Mission District, adobes, cultural landscapes and scattered artifacts and for the opportunity it provides for community education. There may, in all of this, be an opportunity for recognition and media attention affirming the quality of the research, analysis, and preservation. As partners, we believe we can be helpful in securing that recognition.

COMMUNITY DEVELOPMENT DEPARTMENT

Carol D. Barrett, FAICP  
Planning Manager

- Cc: Councilmember Dave Gutierrez  
Mary Camarrano, President, San Gabriel Historical Association  
Steven A. Preston, FAICP, Interim City Manager  
Bob Kress, City Attorney  
Jennifer Davis, Interim Director of Development Services  
Mark Gallatin, City Planner  
Bruce Mattern, City Engineer  
Algis Marciuska, Senior Engineer

32-1  
(cont)

32-2

32-3

32-3  
(cont)

l:\community development\planning\planning division\ACE\ACE EIR Comments Cover Letter 12-1-09

Letter 33

Page 1 of 5

**MITIGATION AGREEMENT**

**I. PARTIES**

The parties to this agreement (the "Agreement") are Alameda Corridor-East Construction Authority ("ACE"), an Authority created by the San Gabriel Valley Council of Governments, and the City of Alhambra (the "City"), a municipal corporation, collectively referred to as the "Parties."

**II. RECITALS**

**A.** ACE proposes to eliminate four at-grade railroad crossings along the Union Pacific Railroad as it runs through the City of San Gabriel (Ramona Street, Del Mar Avenue, Mission Drive, and San Gabriel Boulevard) (the "Project"). The westernmost portion of the Project is located within the City of Alhambra.

**B.** In connection with this Project, ACE prepared a Draft Environmental Impact Report/Environmental Assessment ("EIR/EA"), designated as State Clearinghouse Number 2008101073, which has been circulated for public review and comment.

**C.** Based on its review of the EIR/EA, the City is concerned about potential adverse impacts to City property and utilities, as well as impacts to traffic and circulation patterns in the City, caused by the Project.

**D.** The City desires to achieve certainty that the Project will not create adverse impacts to City property and residents as discussed above. ACE desires to achieve a commitment from the City that it will not oppose the Project.

**III. AGREEMENT**

In consideration of the mutual promises and agreements contained herein, the Parties agree as follows:

1. **Construction Traffic:** ACE agrees that its construction contractors will be contractually required to use designated haul routes that avoid the use of City of Alhambra streets to access the Project site except for Mission Road, east of Hidalgo Avenue. ACE further agrees to take reasonable steps to enforce this contractual requirement. ACE further agrees that the haul routes relating to that portion of the Project occurring at Ramona Street, and westerly of Ramona Street, shall be as shown on Figures 2.4-8 and 2.4-10 in the EIR/EA. ACE further agrees that the delineated detour routes relating to that portion of the Project occurring at Ramona Street, and westerly of Ramona Street, shall be as shown on Figure 2.4-1 in the EIR/EA.

2. **Construction Staging:** ACE agrees that no construction staging related to the Project shall occur in the City of Alhambra except for the potential designated area on or adjacent to the San Gabriel High School property and east of the San Gabriel Wash. Construction staging shall occur as depicted in Figures 2.4-6 through 2.4-12 in the EIR/EA, or

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Letter 33

December 31, 2009

Julia Fuentes  
City Manager  
City of Alhambra

Response 33-1

The comment states that the City has two formal comments on the Draft EIR/EA. The City requests the language for Mitigation Measure US2 is revised to reflect the comment that Alhambra's water mains and lines and sewer/brine mains and lines will not be relocated as part of the project. The text of the document was updated to reflect this comment.

Response 33-2

The comment states that the discussion on page 2-44 should be updated to reflect that the City of Alhambra's water mains and lines and sewer/brine mains and lines will not be relocated as part of the project. The text of the document was updated to reflect this comment.

elsewhere outside of the boundaries of the City.

3. Water Mains/Lines: ACE agrees that, in connection with the Project, it will not relocate any City-owned water mains or lines or sewer/brine mains or lines, including without limitation any mains or lines that serve the City's water treatment plant. If any undocumented water mains or lines or sewer mains or lines are discovered, the City and ACE shall work together to address the need for relocation. This restriction does not apply to any landscaping irrigation lines located on the Union Pacific right-of-way, provided that before impacting any undocumented irrigation line that serves the golf course, the parties work together and reasonably agree on a relocation plan that avoids any adverse impact to the golf course or the performance of the golf course irrigation system..

4. Maintenance of Property Free of Graffiti: ACE agrees to maintain the railroad right-of-way under its control during construction free of graffiti at all times during construction. If the City notifies ACE of the presence of graffiti on property under the control of ACE during construction ACE shall remove the graffiti within three (3) business days.

5. No Pile Driving West of Ramona Street: ACE agrees not to use any pile driving method of construction westerly of Ramona Street.

6. Avoidance of Fugitive Dust and Dirt: ACE agrees to comply with South Coast Air Quality Management District Rule 403 regarding controlling fugitive dust emissions. ACE further agrees that it shall use its best efforts to keep that part of Mission Road within the City of Alhambra free of dirt during construction, including regular sweeping of the Road and any other appropriate measures.

7. Construction Hours: ACE agrees that all construction work occurring within the City of Alhambra shall conform to the City's construction hours: 7:00 a.m. through 8:00 p.m. Monday through Saturday, with no work on Sundays or Federal holidays.

8. Comment Letter: The City agrees that it will not submit a comment letter on the EIR/EA or otherwise oppose the Project as proposed in the EIR/EA, with the exception of the following comment which clarifies and reconciles language in the EIR/EA with the terms of this Agreement:

"Mitigation Measure US2 should be revised to explicitly state that water mains and lines and sewer/brine mains and lines [other than landscaping irrigation lines that do not serve the adjacent golf course] owned by the City of Alhambra which cross the railroad right of way will not be relocated or rerouted in connection with the project. This Mitigation Measure should remove reference to maintaining the water lines in place only 'if relocation is infeasible.'

33-1

"In addition, the discussion of 'Alternative 1 – Proposed Project' on page 2-44 should be revised to state explicitly that water mains and lines and sewer/brine mains and lines owned by the City of Alhambra which cross the railroad right of way will not be relocated or rerouted in connection with the project, and to delete the discussion of rerouting water lines and the resultant disruption in service."

33-2

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The City reserves the right to comment on or to oppose the Project should ACE revise the Project to deviate substantially from the project description set forth in the EIR/EA.

9. Cooperation: Consistent with this Agreement, the City of Alhambra shall reasonably cooperate with ACE and its construction contractors and issue any necessary permits for temporary lane restrictions and traffic control measures necessary for the safe access to the construction site approximately across from Granada. City shall make best efforts to review and approve traffic handling plans and traffic control submittals within 30 days of receipt from ACE.

10. Entire Agreement: This Agreement contains the sole and the entire agreement and understanding of the Parties with respect to the entire subject matter hereof, and any and all prior discussions, negotiations, commitments, or understandings related thereto, if any, are merged into this Agreement. No representations, oral or otherwise, express or implied, other than those contained herein, have been made by any party. No other agreements not specifically referred to herein, have been made by any party. No other agreement not specifically referred to herein, oral or otherwise, shall be deemed to exist or to bind the Parties.

11. Waiver: No provision of this Agreement may be waived unless in writing signed by all Parties. Waiver of any one provision shall not be deemed to be a waiver of any other provision.

12. California Law: All questions concerning the validity, interpretation, or performance of any of its terms or provisions, or any rights or obligations of the Parties hereto shall be governed by and resolved in accordance with the laws of the State of California.

13. Advice of Counsel: In consideration of these mutually dependent promises and representations, the Parties agree that this Agreement has been negotiated at arms' length between persons knowledgeable in the matters dealt with herein. In addition, each party has had the opportunity to seek the advice of experienced and knowledgeable legal counsel. Accordingly, any rule of law, including, but not limited to, Section 1654 of the Civil Code of California, or any other statutes, legal decisions, or common law principles of similar effect, that would require interpretation of any ambiguities in this Agreement against the party that has drafted it are of no application and are hereby expressly waived.

14. Specific Performance: ACE hereby acknowledges and agrees that in the event ACE breaches the terms of this Agreement, including but not limited to ACE's obligations related to avoiding or mitigating the impacts of the Project, the City will suffer irreparable injury, such that no remedy of law will afford it adequate compensation for such injury. Accordingly, the ACE hereby agrees that, in addition to any remedy at law or equity as to which the City may be entitled, the City shall be entitled to specific performance of ACE's obligations under this Agreement, as well as such further injunctive relief as may be granted by a court of competent jurisdiction.

15. Defense and Indemnification of the City: ACE agrees that it shall indemnify, defend, protect, and hold harmless the City, and its officers, agents, City Council members, and employees, from and against any and all claims, losses, proceedings, damages, causes of action,

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liability, costs and expenses (including, without limitation, attorneys fees), arising from or in connection with, any ACE obligation or responsibility under this Agreement. The City reserves the right, in cases subject to this defense obligation, to approve the attorney selected to defend the City.

16. **Insurance:** ACE agrees that ACE, or ACE in combination with each contractor performing work in the City of Alhambra, shall at all times during which Project work is performed in the City of Alhambra, maintain and keep in full force and effect, a policy or policies of Comprehensive General Liability Insurance, with (alone or in combination) minimum limits of at least ten million dollars for each occurrence, combined single limit, against any personal injury, death, loss or damage resulting from wrongful or negligent acts in connection with the Project. Excess/umbrella liability policies may be used in combination with the Comprehensive General Liability Insurance policies to satisfy the required minimum coverage. Each insurance policy required by this paragraph 16 shall contain an endorsement specifically naming the City of Alhambra, its City Council, each member of the City Council, and its officers, employees and agents as additional insureds and ACE shall provide a copy of each such endorsement to the City of Alhambra.

17. **Notices:** Any notices or other correspondence between the Parties shall be sent to the following unless either Party gives the other notice of a change of address:

To ACE:

Rick Richmond, CEO  
Alameda Corridor-East Construction Authority  
4900 Rivergrade Road, Suite A120  
Irwindale, CA 91706  
Telephone: (626) 962-9292

With a copy to:

Ricky Choi, Community Relations Project Manager  
Alameda Corridor-East Construction Authority  
4900 Rivergrade Road, Suite A120  
Irwindale, CA 91706  
Telephone: (626) 962-9292

To City:

Julio Fuentes, City Manager  
City of Alhambra  
111 South First Street  
Alhambra, CA 91801  
Telephone: (626) 570-5010

With a copy to:

Laurence S. Wiener  
Richards, Watson & Gershon  
355 S. Grand Avenue, 40<sup>th</sup> Floor  
Los Angeles, CA 90071

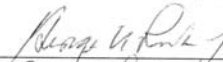
18. **Effectiveness of Agreement:** This Agreement shall be effective upon the execution of this Agreement by all Parties.

19. **Authority to Execute:** The person executing this Agreement on behalf of each Party represents and warrants that: (a) each is authorized by his or her respective entity to execute this Agreement; and (b) each is acting within the scope of his or her authority as officers or duly authorized representatives of his or her respective entity. These representations and warranties are in addition to, and not in derogation of, all representations and warranties implied by law.

20. **Amendments:** All amendments and supplements to this Agreement must be in writing and executed by each Party to this action and by his, her, or its attorney of record. However, such execution may be in counterparts and, when so executed, shall be deemed to constitute one document.

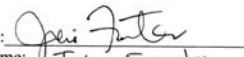
Dated: December 22, 2009

ALAMEDA CORRIDOR-EAST  
CONSTRUCTION AUTHORITY

By:   
Name: George W. Richmond  
Title: Chief Executive Officer

Dated: December 31, 2009

CITY OF ALHAMBRA

By:   
Name: Julio Fuentes  
Title: City Manager

**7.0 MITIGATION MONITORING AND REPORTING PROGRAM**

**TABLE 7-1: MITIGATION MONITORING AND REPORTING PROGRAM**

Impact	Mitigation Measure	Responsible Agency	Enforcing Agency	Timing
<p>The project would result in the displacement of two residencies and one business</p>	<p><b>PHE1:</b> The Alameda Corridor-East Construction Authority (ACE) shall comply with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, in the relocation of the displaced residents and businesses. A Relocation Assistance Program will be developed for the displaced residents and businesses. The Relocation Assistance Program shall set forth procedures for the fair, uniform, and equitable treatment of persons and businesses displaced from their dwellings regardless of race, ethnicity, income, or age. Moving expenses will be reimbursed for actual and related costs incurred in moving. In cases where relocation will be necessary for right-of-way acquisition, a decision on relocation will be reviewed with each residence or business owner to ensure that they are aware of all of the opportunities. Suitable facilities for relocation existing in the general area will be sought. The following outlines the relocation process for business relocations:</p> <ul style="list-style-type: none"> <li>• Take surveys to determine needs in a replacement site;</li> <li>• Prepare and send general information notices;</li> <li>• Search market for available sites;</li> <li>• Prepare and send Letter of Eligibility advising displacee of relocation assistance;</li> <li>• Take inventory of properties for moving estimates;</li> <li>• Obtain moving bids, if displacee chooses a commercial move;</li> <li>• Prepare claim forms for displacee's signature;</li> <li>• Have claim forms signed by displacee;</li> <li>• Send a 90-day Notice To Vacate, if applicable;</li> <li>• Prepare and route a check request for moving expenses; and</li> <li>• Arrange for the property to be secured until demolition (fencing, boarding up).</li> </ul>	<p>ACE</p>	<p>ACE</p>	<p>Pre-Construction</p>
	<p><b>PHE2:</b> The removal and replacement of private property for the purposes of permanent or temporary construction easements shall be replaced with "in-kind" facilities, as negotiated with the property owners.</p>	<p>ACE</p>	<p>ACE</p>	<p>Pre-Construction</p>
<p>The project could result in a need for additional fire/emergency personnel during the construction phase. These personnel could be provided by nearby cities without negatively affecting response times.</p>	<p><b>PS1:</b> ACE shall submit for review the construction plans to the San Gabriel Fire Department (SGFD), the Alhambra Fire Department (AFD), and the Los Angeles County Fire Department (LACoFD).</p>	<p>ACE</p>	<p>SGFD, AFD, and LACoFD</p>	<p>Pre-Construction</p>
	<p><b>PS2:</b> ACE shall submit for review the detour plans (including plans for pedestrians and bicycles) and sequence of street closures to the San Gabriel Fire Department, the Alhambra Fire Department, and the Los Angeles County Fire Department. During construction of the proposed project, ACE shall remain in close contact with these Fire Departments and keep them apprised of work progress and any changes to the closure and detour plans and schedules</p>	<p>ACE</p>	<p>SGFD, AFD, and LACoFD</p>	<p>Pre-Construction</p>
	<p><b>PS3:</b> ACE shall create an Emergency Response Plan for the proposed project. ACE shall submit the Emergency Response Plan for review and approval to the San Gabriel Fire Department, the Alhambra Fire Department, and the Los Angeles County Fire Department.</p>	<p>ACE</p>	<p>SGFD, AFD, and LACoFD</p>	<p>Pre-Construction</p>

<b>TABLE 7-1: MITIGATION MONITORING AND REPORTING PROGRAM</b>				
<b>Impact</b>	<b>Mitigation Measure</b>	<b>Responsible Agency</b>	<b>Enforcing Agency</b>	<b>Timing</b>
Construction of the trench could result in a delay in response times due to street closures.	<b>PS4:</b> ACE shall consult with the San Gabriel Police Department (SGPD), the Alhambra Police Department (APD), and the Los Angeles County Sheriff's Department regarding safety elements that can be implemented in the design of the proposed project.	ACE	SGPD, APD, Los Angeles County Sheriff's Department	Pre-Construction
	<b>PS5:</b> ACE shall submit for review the detour plans (including plans for pedestrians and bicycles) and sequence of street closures to the San Gabriel Police Department, the Alhambra Police Department, and the Los Angeles County Sheriff's Department. During construction of the proposed project, ACE shall remain in close contact with these Departments and keep them apprised of work progress and any changes to the closure and detour plans and schedules.	ACE	SGPD, APD, Los Angeles County Sheriff's Department	Pre-Construction
	<b>PS6:</b> ACE shall create an Emergency Response Plan for the proposed project. ACE shall submit the Emergency Response Plan for review and approval to the San Gabriel Police Department, the Alhambra Police Department, and the Los Angeles County Sheriff's Department.	ACE	SGPD, APD, Los Angeles County Sheriff's Department	Pre-Construction
Construction of the trench could result in temporary restricted access to schools and school walking and bus routes	<b>PS7:</b> ACE shall submit the street closure schedule and detour plan to San Gabriel High School and San Gabriel Elementary School, as well as the Alhambra Unified School District (AUSD) and the San Gabriel Unified School District (SGUSD).	ACE	AUSD and SGUSD	Pre-Construction
	<b>PS8:</b> Construction of the Ramona Street bridge shall be scheduled during the summer period when San Gabriel High School is not in session. If construction cannot be completed during this time period, the Applicant shall consult with San Gabriel High School administration regarding alternate pedestrian, vehicle, and school bus routes to school. Pedestrians, vehicles, and school buses shall be directed to use alternate routes during construction through clear, well-posted signage. The signage shall be posted prior to detour implementation. Additionally, San Gabriel High School students shall be educated and informed of the alternate routes prior to implementation of the detour routes.	ACE	AUSD	Pre-Construction
Construction of the trench could result in temporary restricted access to public libraries	<b>PS9:</b> ACE shall submit the street closure schedule and detour plan to San Gabriel Public Library.	ACE	County of Los Angeles Public Library	Pre-Construction
	<b>PS10:</b> ACE shall consult with the San Gabriel Public Library administration regarding alternate pedestrian and vehicle access routes. Pedestrians and vehicles shall be directed to use alternate routes during construction through clear, well-posted signage. The signage shall be posted prior to detour implementation. Additionally, detour information shall be made available to the public via all available media, including, but not limited to printed notices, the Internet, and local television and radio.	ACE	County of Los Angeles Public Library	Pre-Construction
Construction of the trench could result in temporary restricted access to parks and recreation areas	<b>RE1:</b> ACE shall submit the street closure schedule and detour plan to the Departments of Parks and Recreation of the Cities of San Gabriel, Alhambra, and Rosemead and the County of Los Angeles.	ACE	San Gabriel, Alhambra, Rosemead, Los Angeles County Departments of	Pre-Construction
	<b>RE2:</b> ACE shall consult with the City of San Gabriel Department of Parks and Recreation administration and the City of Alhambra regarding alternate pedestrian and vehicle access routes during construction. Pedestrians and vehicles shall be directed to use alternate routes during construction through clear, well-posted signage. The signage shall be posted prior to detour implementation. Additionally, detour information shall be made available to the public via all available media, including, but not limited to printed notices, the Internet, and local television and radio	ACE	San Gabriel, Alhambra, Rosemead, Los Angeles County Departments of Parks & Recreation	Pre-Construction

<b>TABLE 7-1: MITIGATION MONITORING AND REPORTING PROGRAM</b>				
<b>Impact</b>	<b>Mitigation Measure</b>	<b>Responsible Agency</b>	<b>Enforcing Agency</b>	<b>Timing</b>
Construction of the project could disrupt existing sewage and wastewater conveyance systems	<b>US1:</b> ACE shall work with affected utility companies to make use of available right-of-way as necessary. Relocation of utilities shall be scheduled to either precede construction or occur simultaneously. Customers shall be notified in advance of any disruptions to service.	ACE	City of San Gabriel Public Works Division and City of Alhambra Utilities Department	Pre-Construction
	<b>US2:</b> Prior to project grading, in the event that City of Alhambra water lines to the Water Treatment Plant cross the UPRR tracks, ACE shall coordinate with the City of Alhambra to protect in place water mains and lines and sewer/brine lines owned by the City of Alhambra per the December 2009 Mitigation Agreement between the City of Alhambra and ACE .	ACE	City of Alhambra Utilities Department	Pre-Construction
	<b>US3:</b> ACE shall install a sewer siphon system at Ramona Street, Del Mar Avenue and San Gabriel Boulevard in order to connect the existing sewer lines on the northern side of the UPRR tracks with the southern side. ACE shall coordinate with the City of San Gabriel, as well as the Los Angeles County Sanitation Districts the exact location of these systems. ACE shall work closely with these agencies to ensure that efficient sewer capacity is achieved.	ACE	City of San Gabriel Public Works Division and Los Angeles County Sanitation Districts	Pre-Construction and Construction
A new storm drain line would need to be constructed to replace existing storm drains that run under the UPRR.	<b>US4:</b> ACE shall install a graded swale or earthen ditch between the UPRR northern right of way and south side of Mission Road between the Alhambra Wash and Ramona Street to ensure that a 100-year storm event does not impact the proposed project or Mission Road.	ACE and General Contractor	City of San Gabriel Public Works Division and City of Alhambra Utilities Department	Pre-Construction and Construction
	<b>US5:</b> ACE shall construct a new storm drain trunk line that will commence near Junipero Serra Drive and traverse easterly to Rubio Wash along Clary Avenue, Agostino Road and Commercial Ave. Portions of the proposed storm drain, particularly in the area of Clary Street to Agostino Road, will have depths ranging from 15 feet to 20 feet and new storm drains and inlet structures located near the north UPRR right of way will have reverse gradients in order to connect into the proposed trunk line.	ACE	City of San Gabriel Public Works Division and Los Angeles County Department of Public Works	Pre-Construction
The project would conflict with adopted policies, plans, or programs supporting alternative transportation	<b>TT1:</b> ACE shall develop a transit detour plan for Metro Lines 176 and 487 in close consultation with Metro to ensure minimal disruption to services. In particular, it is probable that students at San Gabriel High School and other schools in the area use these routes. Construction of at least one of these streets should be scheduled for the summer period, when school is not in session.	ACE	Metro, AUSD, City of San Gabriel	Pre-Construction
	<b>TT2:</b> ACE shall develop either a transit detour plan or a reduced frequency plan for Montebello Line 20 in close consultation with the City of Montebello to ensure minimal disruption to services.	ACE	City of Montebello	Pre-Construction
The project would modify the visual character of the site and its surroundings	<b>A1:</b> ACE shall coordinate with Cities of San Gabriel and Alhambra to ensure that landscaping and any other visual elements installed with the proposed project are consistent with the existing built environment and the City of San Gabriel Mission District Specific Plan. Design elements related to the City of San Gabriel shall be included in the Memorandum of Understanding (MOU) between the City of San Gabriel and ACE. Design elements related to the City of Alhambra will be subject to the review and approval of the City.	ACE	City of San Gabriel	Pre-Construction
	<b>A2:</b> The lighting on the Ramona Street and Mission Road overhead structures shall incorporate design elements as specified in the Mission District Specific Plan.	ACE	City of San Gabriel	Pre-Construction

TABLE 7-1: MITIGATION MONITORING AND REPORTING PROGRAM				
Impact	Mitigation Measure	Responsible Agency	Enforcing Agency	Timing
The project would create a new source of lighting at the site	Refer to Mitigation Measure A2	ACE	City of San Gabriel	Pre-Construction
The loss or displacement of San Gabriel Mission Site (CA-LAN-184H) and other undiscovered buried resources would result in an adverse impact.	<p><b>CR1:</b> A Treatment Plan has been developed to address four archaeological resources: San Gabriel Mission archaeological site (CA-LAN-184H), former location of the SPRR San Gabriel Depot, and two historic culverts. The project's archaeological resources fall into two broad thematic categories: California mission archaeology and railroad archaeology. A Data Recovery Plan (Phase III) is proposed as part of the treatment of these resources. The San Gabriel Mission archaeological site (CA-LAN-184H) contains data that can be used to answer research questions regarding site function and chronology; Native American health, status, and ethnicity; and Mission period architecture and engineering practices. The three potential archaeological resources, if present, may contain data pertinent to research questions regarding site formation processes, chronology, function, and affiliation. Proposed data recovery methods include manual excavation, mechanical excavation, remote sensing, archaeological monitoring, archival research, and the physical relocation of Chapman's Mill and Millrace, as well as numerous specialized laboratory analyses.</p> <p>Large, diagnostic, or otherwise interesting artifacts will be mapped in situ. Most artifacts and all ecofacts from will be counted and described, placed into zip-top plastic bags labeled with the provenience information, date, excavators, and other pertinent information, and submitted to the archaeological laboratory for cleaning, analysis, and curation preparation. Because bulky building materials such as bricks (ladrillos), tiles (tejas), rocks, and cement are ubiquitous at CA-LAN-184H, these non-diagnostic artifacts will be volumetrically quantified using a graduated bucket and stockpiled separately on site during the excavation. The Union Pacific Railroad Museum, San Gabriel Mission Arcángel Musuem, San Gabriel Historical Association, and or the Ramona Museum will be allowed to select a representative sample of the materials for public education purposes. The Union Pacific Railroad Museum has first right of refusal. If none of the museums express an interest in curating the materials, they may be distributed to local schools as comparative material to be used as a learning aid for the California Fourth Grade Mission Project studies module or similar purposes. Because there is a potentially large amount of building materials present, SWCA recommends that each organization consider the quantity of materials (e.g. number of buckets, boxes, etc.) that they would like to receive prior to the start of excavation to assist the archaeologists in ensuring that these building materials are properly stockpiled. Because of their limited data potential and the expense of long-term curation,</p> <p>Archaeological monitoring will be employed for all areas containing buried cultural material as identified by the XPI and Phase II investigations. Archaeological monitoring shall be restricted to sensitive areas, specifically, the upper 10 feet of the broader Mission San Gabriel archaeological site and in the immediate vicinity of the SPRR San Gabriel Depot and two historic culvert locations. The treatment plan also includes public outreach and Native American coordination, and curation plans, along with a description of the study's anticipated personnel, scope, and schedule. The treatment plan shall also include an acknowledgment that the proposed mitigation measures and any unanticipated discoveries, including human remains will avoid interfering with UPRR railroad operations. The UPRR has also expressed an interest in observing archaeological excavations. Prior to the start of field work, the UPRR will be notified of the anticipated field schedule to allow railroad personnel to observe the excavations.</p>	ACE	California Department of Transportation (Caltrans) District 7 (Acting for the State Historical Preservation Office, or SHPO) and UPRR	Pre-Construction



<b>TABLE 7-1: MITIGATION MONITORING AND REPORTING PROGRAM</b>				
<b>Impact</b>	<b>Mitigation Measure</b>	<b>Responsible Agency</b>	<b>Enforcing Agency</b>	<b>Timing</b>
The loss or displacement of San Gabriel Mission Site (CA-LAN-184H) and other undiscovered buried resources would result in an adverse impact. (con't)	<b>CR2:</b> Prior to and for the duration of ground disturbance, ACE shall provide cultural resources training to key personnel or supervisors (including but not limited to engineers, inspectors, contractor representatives, laborers, operators, foremen, and utility workers) prior to the start of any excavations. The training shall be prepared by an archaeologist and or architectural historian who meet the Secretary of the Interior's Professional Qualifications Standards, it may be conducted by any member of the cultural resources team or the Resident Engineer, and may be presented in the form of a video. The training may be discontinued when ground disturbance, including landscaping, is completed. The training may be discontinued when ground disturbance, including landscaping, is completed. The training shall describe appropriate measures for treatment and protection in compliance with the Secretary of the Interior's Standards for the Treatment of Historic Properties. It shall include a discussion of applicable laws and penalties under the law, samples or visual representations of artifacts that might be found in the project vicinity. The training will outline the steps that must be taken in the event that cultural resources are encountered during project construction, including the authority of archaeological monitors to halt construction in the area of a discovery to an extent sufficient to ensure that the resource is protected from further impacts.	ACE and General Contractor	Caltrans District 7 (Acting for SHPO)	Pre-Construction
	<b>CR3:</b> The Native American monitoring services of a preapproved Native American Monitor of the Gabrieleno/Tongva Tribal Council of San Gabriel, selected by Caltrans and the City of San Gabriel will be retained for the Data Recovery (Phase III) program. The Native American Monitor(s) will ensure that Native American cultural resources will be treated appropriately and will draw from their extensive knowledge of the ethnographic and historic occupation and development of the San Gabriel Mission and the City of San Gabriel. Native American monitoring will occur along the full horizontal extent of the 2.2-mile long direct APE between Post Miles 489.4 to 491.6 to a moderate depth (0-10 feet). The purpose of this monitoring will be to identify unmarked human remains out side of archaeological sites, if any are present. If sensitive Native American cultural materials are identified during the Data Recovery (Phase III) program, archaeologists will coordinate with Native Americans to ensure proper treatment and disposition of the materials	ACE	Caltrans District 7 (Acting for SHPO)/ Native American Agencies	Pre-Construction and Construction
	<b>CR4:</b> If human remains are unearthed during construction, State Health and Safety Code Section 7050.5 requires that no further disturbance shall occur until the County Coroner has made the necessary findings as to origin and disposition pursuant to Public Resources Code Section 5097.98. If the human remains are determined to be prehistoric, the Coroner will notify the Native American Heritage Commission (NAHC), which will determine and notify a Most Likely Descendant (MLD). Caltrans District 7 Environmental Planning Branch shall be notified immediately. A detailed plan for the discovery of human remains is outlined in the Treatment Plan. The plan shall include provisions for preferred removal technique, storage and re-interment to the extent feasible. The plan shall also include an acknowledgment that the plan shall accommodate ongoing rail operations and minimize any potential interference to rail service.	ACE and General Contractor	Caltrans District 7 (Acting for SHPO)/ Native American Agencies	Pre-Construction and Construction

TABLE 7-1: MITIGATION MONITORING AND REPORTING PROGRAM				
Impact	Mitigation Measure	Responsible Agency	Enforcing Agency	Timing
The loss or displacement of San Gabriel Mission Site (CA-LAN-184H) and other undiscovered buried resources would result in an adverse impact. (con't)	<p><b>CR5:</b> Following the documentation of Chapman's Mill and Millrace, the most intact portion(s) of the feature will be physically relocated to one or more locations for the purpose of public display and interpretation. The relocation of this heavy and unreinforced masonry feature will be logistically challenging. Relocation and rehabilitation of Chapman's Millrace shall be undertaken in consultation with the qualified structural engineer, in collaboration with a qualified archaeologist, historic architect, or architectural historian (hereinafter qualified consultant team). A Relocation Feasibility Study of the Millrace resource shall be prepared by the qualified consultant team as a baseline, with the intention of determining a specific relocation methodology, identifying receiver sites, and analyzing other factors relevant to the mill and millrace relocation.</p> <p>If feasible, the features will be housed in a secure and environmentally stable temporary storage facility until their display locations are identified and available. The details of the relocation process, including the destination(s) of the relocated features, will be finalized prior to excavation of the trench. The resulting relocation of Chapman's Mill and Millrace shall be within the existing UPRR right-of-way or in another location between Ramona Street and Mission Road/Junipero Serra that is acceptable to both ACE and the City of San Gabriel. The mill and millrace relocation shall be oriented in the same compass orientation as it is currently. Potential destinations for mill/millrace segments include open space within the project APE, on property owned by the City of San Gabriel (City Hall), or at the Mission San Gabriel Arcángel. If those locations are not feasible due to space constraints, the Millrace shall be relocated to an appropriate substitute receiver site, such as property owned by the Old Mill Foundation (El Molino Viejo), identified prior to construction. Conditions of the sale or transfer of title (e.g., protective covenants, stipulations for the moving process, recordation prior to the move, standards for documentation of the property, re-evaluation of the property in its new location) shall be subject to review and approval by SHPO.</p> <p>To mitigate effects or impacts to Chapman's Mill and Millrace prior to relocation, the feature will be documented and recorded to Historic American Engineering Record (HAER) standards prior to any construction activities that will directly impact this resource. Recordation of the adversely affected archeological resource is recommended to ensure a permanent record of the feature's appearance and context in its original (donor) site. The resulting HAER documentation will be offered to the Library of Congress, with copies provided to the City of San Gabriel, the San Gabriel Library, and the San Gabriel Historical Association. The HAER report will include a narrative history and context statement for the Millrace.</p>	ACE and General Contractor	California Department of Transportation (Caltrans) District 7 (Acting for SHPO), UPRR, City of San Gabriel	Pre-Construction and Construction
	<p><b>CR6:</b> The public outreach plan referenced in the Treatment Plan will include disseminating the results of the archaeological data recovery program to professionals and to the public in the form of a technical report for professionals and a modified version of this report for the public. The professional report will be submitted to the South Central Coastal Information Center (SCCIC) at California State University, Fullerton. SWCA will also submit an article using a portion of the data to an archaeological publication and give presentations at the Society for California Archaeology Annual Meeting. The public report will be made available to the City of San Gabriel, San Gabriel Historical Association, Union Pacific Railroad Museum, San Gabriel Arcángel Mission Museum, San Gabriel Historical Association Museum, Ramona Museum, San Gabriel Library, City of Alhambra Public Library, County of Los Angeles Public Library, Rosemead Branch, City of San Marino Public Library, and the City of Pasadena Public Library. In addition, a public display focusing on Chapman's Mill and Millrace will be created to accompany the millrace in its permanent display location.</p> <p>In regards to the San Gabriel Arcángel and other eligible buildings, interpretive displays of photographs and drawings produced during the course of built environment studies shall be produced for public exhibition, museum exhibits, or historic image reproduction as part of project public outreach efforts. An appropriate number of interpretive signs or other media (e.g. permanent pole signs, monument signs, or decorative tiles), subject to review and approval by City of San Gabriel, shall be erected in or immediately adjacent to the project area to commemorate and describe the history of historic districts and separate historic properties in the project APE. Details of an acceptable standard height will be negotiated with the City. These measures will mitigate effects/impacts on historic properties, setting, and changes in views from properties in the project area.</p>	ACE	California Department of Transportation (Caltrans) District 7 (Acting for the State Historical Preservation Office, or SHPO) and the City of San Gabriel	Pre-Construction and Construction

TABLE 7-1: MITIGATION MONITORING AND REPORTING PROGRAM				
Impact	Mitigation Measure	Responsible Agency	Enforcing Agency	Timing
	Mitigation Measures <b>CR2</b> and <b>CR6</b>	See Above	See Above	See Above
There is potential for impacts resulting from construction noise and vibration at the historic structures located closest to the proposed project.	<p><b>CR7:</b> Reports documenting the condition of all historic properties that are expected to be affected by vibration and thus have the potential for damage or differential settlement as a result of the proposed project shall be undertaken prior to the commencement of any construction or demolition activities associated with the proposed project. Those specified properties are: Mission San Gabriel Arcángel, San Gabriel City Hall, Arcade Shops, 403-407 South Mission Drive Building, Raya Building, San Gabriel Mission Museum, Old Kitchen in the San Gabriel Campo Santo and Work Area, La Casa Vieja De Lopez Adobe, Ortega-Vigare Adobe, and Rancho Las Tunas Adobe. Pre-Construction surveys will be conducted subject to approval of the property owners.</p> <p>Pre-Construction Surveys shall be prepared by a qualified structural engineer with more than five years' experience in successful investment tax credit projects (including seismic retrofit, hereinafter "qualified structural engineer"), subject to approval and collaboration by an architect or architectural historian qualified under the Secretary of the Interior's Professional Qualifications Standards in Architecture, Architectural History or History (hereinafter "qualified architectural historian"), and the City of San Gabriel. The Pre-Construction survey prepared for each property is required in order to establish a baseline, and shall contain written descriptions of each property's existing condition, along with photographs and measured drawings, sketches, or CAD drawings of all cracks, walls with particular attention paid to cracks, bulges and planes in and out of plumb, floors in and out of level, openings and roof planes, as needed. The types of drawings deemed appropriate shall be at the discretion of the qualified structural engineer, with consultation by the project qualified architectural historian and the City of San Gabriel. The resulting Pre-Construction surveys shall be made available to property owners and stewards, on request, and shall be retained on file for a minimum of 15 years after project completion at the at the City of San Gabriel Planning Department due to the sensitive nature of the materials.</p>	ACE and General Contractor	Caltrans District 7 (Acting for SHPO)	Pre- Construction
	<p><b>CR8:</b> Prior to issuance of construction permits, updated documentation of San Gabriel Mission Arcángel shall be completed in accordance with Historic American Buildings Survey (HABS) Guidelines and Standards, in compliance with the Secretary of the Interior's Standards for Architectural and Engineering Documentation. The resulting HABS report shall include narrative discussion of the significance of the building in context, its physical conditions, historic and updated measured drawings, historic maps and current locator mapping, historic with large-format current-condition photographs, and a historic context statement documenting the history and significance of the resource. The documentation shall be prepared by a qualified historic architect, with the services of a qualified architectural historian. The original archival-quality documentation shall be offered material to the Historic American Buildings Survey for inclusion in the permanent collection of the Library of Congress. Archival copies of the documentation shall be donated to local repositories, including the main San Gabriel Library, the City of San Gabriel, and local historic preservation advocacy groups. This mitigation measure shall be completed prior to commencement of construction activities.</p>	ACE	Caltrans District 7 (Acting for SHPO)	Pre- Construction
	<p><b>CR9:</b> A noise management and monitoring plan shall be adopted for the proposed project with measures such as maximum noise limits and specified hours for noisier construction activities. The adopted noise management plan should include provisions for continuous noise monitoring throughout the duration of the project. It shall be undertaken in consultation with a registered engineer, experienced in noise and vibration control studies with demonstrated success in transit projects (hereinafter, qualified noise and vibration consultant). The Noise Management and Monitoring Plan will be consistent with Chapter 9: Noise of the City of San Gabriel's General Plan. Noise thresholds shall be clearly expressed in project construction specifications, under direction of the qualified noise and vibration consultant, subject to review by qualified structural engineer and incorporated in any applicable project construction cost estimates. If noise studies indicate significant effects on historic properties, temporary soundwalls shall be erected to reduce the level of effect to less than significant.</p>	ACE	Caltrans District 7 (Acting for SHPO)	Pre- Construction

TABLE 7-1: MITIGATION MONITORING AND REPORTING PROGRAM				
Impact	Mitigation Measure	Responsible Agency	Enforcing Agency	Timing
There is potential for impacts resulting from construction noise and vibration at the historic structures located closest to the proposed project. (con't)	<p><b>CR10:</b> A vibration management and continuous monitoring plan shall be developed and adopted to protect historic resources and ensure against damage caused by vibration or differential settlement caused by vibration during project construction and operation activities. The vibration management and monitoring plan shall include continuous vibration monitoring through the duration of the project and for a period of no less than one year following project completion. It shall be undertaken in consultation with a registered engineer, experienced in noise and vibration control studies with demonstrated success in transit projects (hereinafter, qualified noise and vibration consultant).</p> <p>The vibration management and continuous monitoring plan shall constitute a blended approach, setting up survey targets on the building's crack monitors across existing cracks at the direction of the qualified structural engineer, in order to observe displacements. The use of survey targets and crack monitors will be coupled with continuous vibration monitoring. Continuous monitoring protocol shall include electronic monitoring equipment specified by the noise and vibration consultant at specified historic properties during construction and after, to continuously measure whether ground displacement during construction and operation is approaching the levels at which damage to the historic resources may be anticipated.</p> <p>Measurement of vibration would be undertaken using specialized monitors with instrumentation "seismographs" capable of recording both ground and airborne vibration. The seismographs or other measuring devices may be left unattended, set to trigger an emission level exceeding a predetermined, set level. Vibration event reports would be reviewed continuously in the first week of construction and demolition activity; with appropriate durations (e.g. alternating days, bi-weekly or weekly) established in consultation with the qualified noise and vibration consultant, in consultation with the qualified structural engineer.</p> <p>Construction shall be halted if levels of vibrations are found to exceed levels established in the Vibration Management and Monitoring Plan. The resident engineer must stop work in the immediate vicinity if significant vibration levels are reached. Construction may continue elsewhere as long as vibration levels remain below the thresholds established in the Vibration Management and Monitoring Plan. ACE will notify specific property owners in the event that significant vibration levels are reached. Such levels shall be clearly expressed in project construction specifications, under direction of the qualified noise and vibration consultant, subject to review by qualified structural engineer and incorporated in any applicable project construction cost estimates.</p> <p>If necessary, repair of inadvertent damage differential settlement, vibration, or project construction shall be performed in compliance with the Standards for Treatment under the direction of a qualified structural engineer in consultation with, and subject to review and approval by, a qualified historic architect or architectural historian and the City of San Gabriel Planning Department. The cost of such repairs shall be borne by ACE. ACE is not responsible for damage caused by natural evants such as earthquakes.</p>	ACE and General Contractor	Caltrans District 7 (Acting for SHPO)	Pre-Construction and Construction
	<p><b>CR11:</b> Post-construction surveys, commensurate with and parallel to the level of effort in project Pre-Construction surveys shall be prepared to document condition of the specified historic properties, commenced within the first two months of project completion. The project Resident Engineer shall notify the qualified structural engineer and qualified architectural historian, once the project is substantially completed (e.g., rail traffic is operational in trench). If the Resident Engineer fails to notify the qualified structural engineer and architectural historian, those parties shall notify ACE and shall commence preparation of Post-Construction Surveys.</p> <p>If, at the discretion of the qualified structural engineer in consultation with the qualified architectural historian, it is found that damage has occurred as a result of project-related activities, repair of that damage shall be undertaken in conformance with the Standards for Treatment under the direction of a qualified structural engineer in consultation with a qualified historic architect or architectural historian. The cost of such repairs shall be borne by ACE.</p>	ACE and General Contractor	Caltrans District 7 (Acting for SHPO)	Operation

<b>TABLE 7-1: MITIGATION MONITORING AND REPORTING PROGRAM</b>				
<b>Impact</b>	<b>Mitigation Measure</b>	<b>Responsible Agency</b>	<b>Enforcing Agency</b>	<b>Timing</b>
There is potential for impacts resulting from construction noise and vibration at the historic structures located closest to the proposed project. (con't)	<b>CR12:</b> All visible project-related features in the vicinity of the historic properties identified in the project clearance documentation, subject to review and approval by SHPO (including, walls, barriers, and fences), shall be reviewed by a qualified historic architect or architectural historian for conformance with the Standards for Treatment, as they relate to setting and effects to districts and neighborhoods. The resulting project designs shall be subject to courtesy review and comment by representatives of the City of San Gabriel Planning Department and interested historic preservation advocacy groups.	ACE	Caltrans District 7 (Acting for SHPO)	Pre-Construction and Construction
	<b>CR13:</b> Subject to owner consent, to mitigate effects and impacts to the Mission San Gabriel Arcángel, preparation and submittal of a National Historic Landmark (NHL) application for the Mission San Gabriel Arcángel shall be undertaken by a qualified architectural historian. ACE shall ensure that the NHL Nomination is submitted to SHPO and the National Park Service and oversee amendments or modifications to the application until it is either designated or rejected by the National Park System Advisory Board and Secretary of the Interior. The nomination shall be prepared in collaboration with local historic preservation advocacy groups, as identified by the qualified architectural historian in consultation with the City of San Gabriel.	ACE	Caltrans District 7 (Acting for SHPO)	Pre-Construction
	<b>CR14:</b> Continuous noise and vibration monitoring for a minimum of the first one year of operation shall be undertaken by the qualified noise and vibration consultant, with collaboration by the qualified structural engineer (see Stipulation IV.H above). The duration and frequency of operational monitoring shall be at the discretion of the qualified noise and vibration consultant, with collaboration by the qualified structural engineer, but shall be no less frequent than the first week of operation, and unless vibrations levels are found to be harmful, after one month, then bi-monthly, etc.	ACE and General Contractor	Caltrans District 7 (Acting for SHPO)	Operation
	<b>CR15:</b> Repair of damage caused by vibration related to the proposed project to specified properties, during construction or the three years following, shall be undertaken as undertaken in conformance with the Standards for Treatment under the direction of qualified structural engineer in consultation with a qualified historic architect or architectural historian. The cost of such repairs shall be borne by ACE.	ACE	Caltrans District 7 (Acting for SHPO)	Operation
The destruction of fossils as a result of human-caused ground disturbance would be an adverse impact.	<b>PR1:</b> All project-related ground disturbances that could potentially affect Quaternary older alluvial deposits will be monitored by a qualified paleontological monitor on a full-time basis, as this geologic unit is determined to have a high paleontological sensitivity. Project-related excavations that occur in surficial sediments and younger Quaternary alluvium (estimated to be present at ground surface to a depth of 14 feet or less) will be spot-checked by the project paleontologist to ensure that underlying sensitive sediments are not being impacted.	ACE and General Contractor	Caltrans District 7 (Acting for SHPO)	Pre-Construction and Construction
	<b>PR2:</b> A qualified paleontologist will be retained to supervise monitoring of construction excavations. Paleontological resource monitoring will include inspection of exposed rock units during active excavations within sensitive geologic sediments. The monitor will have authority to temporarily divert grading away from exposed fossils to professionally and efficiently recover the fossil specimens and collect associated data. The qualified paleontologist will prepare monthly progress reports to be filed with ACE (if requested).	ACE	Caltrans District 7 (Acting for SHPO)	Pre-Construction and Construction
	<b>PR3:</b> At each fossil locality, field data forms will be used to record pertinent geologic data, stratigraphic sections will be measured, and appropriate sediment samples will be collected and submitted for analysis.	ACE and General Contractor	Caltrans District 7 (Acting for SHPO)	Construction
	<b>PR4:</b> Recovered fossils will be prepared to the point of curation, identified by qualified experts, listed in a database to facilitate analysis, and repositied in a designated paleontological curation facility. The most likely repository is the Los Angeles County Museum of Natural History (LACMNH).	ACE	Caltrans District 7 (Acting for SHPO)	Construction
	<b>PR5:</b> The qualified paleontologist will prepare a final monitoring and mitigation report to be filed with ACE and the repository.	ACE and General Contractor	Caltrans District 7 (Acting for SHPO)	Post-Construction

<b>TABLE 7-1: MITIGATION MONITORING AND REPORTING PROGRAM</b>				
<b>Impact</b>	<b>Mitigation Measure</b>	<b>Responsible Agency</b>	<b>Enforcing Agency</b>	<b>Timing</b>
There is the potential to encounter groundwater during excavation activities associated with the project.	<b>HW1:</b> In the event groundwater is encountered, the project site shall be dewatered during construction. This shall involve the short-term removal of minor amounts of groundwater and would not affect groundwater supplies. Construction staging plans shall include provisions for the diversion of stormwater to avoid upstream flooding. The design of the proposed project shall include a permanent drainage system to remove the water from the depressed railroad alignment; in order to minimize impacts of flooding that may occur during heavy storm events.	ACE	City of San Gabriel Public Works Division	Pre-Construction and Construction
During construction, temporary disruption of storm drains could result in flooding upstream from the proposed project	<b>HW2:</b> Under the statewide National Pollutant Discharge Elimination System (NPDES) General Construction Permit, the project proponent, ACE, must submit a Notice of Intent (NOI) to the State Water Resource Control Board (SWRCB) prior to commencement of construction activities. In addition, a Stormwater Pollution Prevention Program (SWPPP) must be prepared and implemented at the project site and revised as necessary as administrative or physical conditions change. The SWPPP will include BMPs that address source reduction and provide measures and controls necessary to mitigate potential pollutant sources. The SWPPP will be available to the public under Section 308(b) of the Clean Water Act (CWA) and will be made available to the SWRCB upon request. Required elements of the SWPPP include: <ul style="list-style-type: none"> <li>• A site description addressing the elements and characteristics specific to the site;</li> <li>• Descriptions of Best Management Practices (BMPs) for erosion and sediment control;</li> <li>• BMPs for construction waste handling and disposal;</li> <li>• Implementation of approved local plans;</li> <li>• Proposed post-construction controls, including a description of local post-construction erosion and sediment control requirements; and</li> <li>• Non-stormwater management.</li> </ul>	ACE and General Contractor	City of San Gabriel Public Works Division, SWRCB, LACDPW, USACOE, and City of Alhambra	Pre-Construction and Construction
	<b>HW3:</b> ACE shall coordinate with United States Army Corps of Engineers (USACOE) to ensure construction of the rail bridge over Alhambra Wash is built to maintain existing flow capacity	ACE	USACOE	Pre-Construction
	<b>HW4:</b> ACE shall coordinate with Los Angeles County Department of Public Works (LACDPW) to ensure the lowered Rubio Wash is built to maintain existing flow capacity.	ACE	LACDPW	Pre-Construction
	<b>HW5:</b> A flood permit from the Los Angeles Flood Control District and a Section 1601 Streambed Alteration Agreement from California Department of Fish and Game (CDFG) may be required. In addition, a Section 404 Nationwide Permit from the USACOE and a Section 401 Water Quality Certification from the RWQCB may also be required for the proposed project. Consultation shall be conducted with the San Gabriel and Los Angeles Rivers and Mountains Conservancy (RMC), CDFG, Regional Water Quality Control Board (RWQCB), and USACOE to identify any permit requirements for the lowering of the Rubio Wash and the potential impacts to the Alhambra Wash.	ACE	CDFG, Los Angeles RMC, RWQCB, and USACOE	Pre-Construction

<b>TABLE 7-1: MITIGATION MONITORING AND REPORTING PROGRAM</b>				
<b>Impact</b>	<b>Mitigation Measure</b>	<b>Responsible Agency</b>	<b>Enforcing Agency</b>	<b>Timing</b>
Construction of the project could potentially impact water quality	Refer to Mitigation Measure <b>HW2</b>	ACE and General Contractor	City of San Gabriel Public Works Division and SWRCB	Pre-Construction and Construction
The project would modify drainage patterns in the site	Refer to Mitigation Measures <b>US4</b> and <b>US5</b>	ACE	City of San Gabriel Public Works Division, City of Alhambra Utilities Department, LACDPW	Pre-Construction and Construction
Excavation activities associated with project construction could result in the potential for soil to be exposed and eroded.	<b>GS1:</b> During final design, trench wall configurations and the areas of the trench near existing improvements shall be designed to include temporary struts, tieback anchors, ground improvement, temporary excavation support, temporary shoring, and/or other recommended installations detailed in the project Preliminary Engineering Report, to limit the lateral deflections of the trench walls.	ACE	City of San Gabriel Building and Safety Division and City of Alhambra	Pre-Construction
	<b>GS2:</b> Soil testing shall be conducted during the final design phase, and should any localized expansive soils be identified, they shall be addressed by the final project design. The corrosion potential of project site soils shall also be evaluated. Expansive soils shall not be used as structure or permeable backfill. Appropriate geotechnical design techniques shall be implemented to address the potential for seismically-induced ground liquefaction and settlement, as well as provisions for wet conditions or perched water conditions along the Alhambra and Rubio Washes.	ACE	City of San Gabriel Building and Safety Division and City of Alhambra	Pre-Construction
	<b>GS3:</b> Standard erosion control BMPs shall be used to minimize erosion during construction of the project. Retaining walls shall be constructed for long-term slope stabilization. Where appropriate, erosion prevention planting shall be used in conjunction with a geofabric.	ACE and General Contractor	City of San Gabriel Building and Safety Division and City of Alhambra	Construction
Construction of the trench or structures could potentially expose people to adverse effects due to seismic activity	<b>GS4:</b> In order to minimize potential adverse impacts associated with seismic activity and liquefaction, design of the project shall incorporate current seismic design standards to withstand seismic ground shaking and liquefaction that would result from a maximum credible earthquake.	ACE and General Contractor	City of San Gabriel Building and Safety Division	Pre-Construction
The project could potentially be located on expansive soils	Refer to Mitigation Measure <b>GS2</b>	ACE	City of San Gabriel Building and Safety Division	Pre-Construction

TABLE 7-1: MITIGATION MONITORING AND REPORTING PROGRAM				
Impact	Mitigation Measure	Responsible Agency	Enforcing Agency	Timing
The project could potentially expose people to adverse effects due to ground shaking	Refer to Mitigation Measure <b>GS4</b>	ACE and General Contractor	City of San Gabriel Building and Safety Division	Pre-Construction
The project could expose people to adverse effects due to lateral spreading, subsidence, or collapse	Refer to Mitigation Measure <b>GS4</b>	ACE and General Contractor	City of San Gabriel Building and Safety Division	Pre-Construction
The project site is located within an eighth of a mile of hazardous waste sites. As such, the potential for encountering contaminated soils and/or groundwater during the proposed project construction, particularly during excavation, exists. Once the project is constructed, operation of the project would not generate hazardous materials or	<b>HH1:</b> A Phase II Environmental Site Assessment (ESA) that shall further characterize hazardous waste potential at the project site, including the potential for encountering contaminated soils and/or groundwater will be prepared. In the event that contaminated soils and/or groundwater are identified as affecting the project, a remediation plan will be developed and submitted for review and approval to the affected cities and responsible agencies. No construction activities shall occur unless remediation to State exposure standards is possible and until approval of the remediation plan. All subsequent construction activities shall be conducted in accordance with the remediation plan.	ACE	DTSC	Pre-Construction
	<b>HH2:</b> During excavation, a qualified environmental consultant approved by the city in which excavation shall occur, shall observe the exposed soil for visual evidence of contamination. If visual contamination indicators are observed during excavation or grading activities, all work shall stop and an investigation shall be designed and performed to verify the presence and extent of contamination at the site. A qualified and approved environmental consultant shall prepare a report detailing results and recommend actions to ensure compliance with State exposure standards. The recommendations shall be reviewed and approved by the Los Angeles County Fire Department Health Hazardous Materials Division or California Department of Toxic Substance Control (DTSC) prior to the resumption of grading and construction activity and all further activity, including remediation shall be in conformance with approved recommendations. The investigation shall include collecting samples for laboratory analysis and quantifying contaminant levels within the proposed excavation and surface disturbance areas. Subsurface investigation shall determine appropriate worker protection and hazardous material handling and disposal procedures appropriate for the subject site.	ACE and General Contractor	City of San Gabriel, City of Alhambra, Los Angeles County, or the City of Rosemead	Construction
	<b>HH3:</b> Areas with contaminated soil determined to be hazardous waste shall be excavated by personnel who have been trained through the Occupational Safety and Health Administration (OSHA) recommended 40-hour safety program (29CFR1910.120), with an approved plan for excavation, control of contaminant releases to the air, and off-site transport or on-site treatment. Health and safety plans prepared by a qualified and approved industrial hygienist shall be developed to protect the public and all workers in the construction area. Health and safety plans shall be reviewed and approved by the appropriate agencies such as the Los Angeles County Fire Department Health Hazardous Materials Division or DTSC.	ACE and General Contractor	City of San Gabriel Building and Safety Division and LACoFD or DTSC	Pre-Construction



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wastes.	<b>HH4:</b> Excavations below the elevations of groundwater could experience strong seepage and require dewatering. The contractor shall observe the groundwater for visual evidence of contamination or unusual odors. The contractor shall comply with all applicable regulations and permit requirements for construction dewatering. This may include laboratory testing, treatment of contaminated groundwater or other disposal options.	ACE and General Contractor	City of San Gabriel Building and Safety Division	Construction
	<b>HH5:</b> The following plans shall be prepared and implemented prior to construction: health and safety plan, waste management plan, sampling and analysis plan, a plan for possible hazardous materials or emergencies during construction and a work plan for the remediation of any hazardous wastes encountered. The work plan shall include such measures as removal, on-site treatment if necessary, and safe transport of contaminated soils and materials to approved hazardous materials disposal sites.	ACE	City of San Gabriel Building and Safety Division	Pre-Construction
The project site may contain hazardous materials which would need to be transported off-site during construction. Additionally, during operations, trains with hazardous material cargo would utilize the trench.	Refer to Mitigation Measure <b>PS3</b>	ACE	SGFD, AFD, and LACoFD	Pre-Construction
The project is located adjacent to San Gabriel High School and within a quarter-mile of several other schools. During operations, trains with hazardous material cargo would utilize the trench.	Refer to Mitigation Measures <b>HH1 to HH5</b>	ACE and General Contractor	Refer to Mitigation Measures <b>HH1 to HH5</b>	Pre-Construction and Construction

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<b>Impact</b>	<b>Mitigation Measure</b>	<b>Responsible Agency</b>	<b>Enforcing Agency</b>	<b>Timing</b>
The project site may contain hazardous materials which would need to be transported off-site during construction.	Refer to Mitigation Measures <b>HH1</b> to <b>HH5</b>	ACE and General Contractor	Refer to Mitigation Measures <b>HH1</b> to <b>HH5</b>	Pre-Construction and Construction
Temporary delays to emergency vehicles would occur in the project area during construction.	Refer to Mitigation Measure <b>PS3</b>	ACE	SGFD, AFD, and LACoFD	Pre-Construction
Construction of the project could impact water quality of the Alhambra Wash and Rubio Wash, which, although not considered wetlands, empty onto the Los	<b>NC1:</b> The City shall comply with Section 402 of the Clean Water Act and NPDES standards during and following construction to ensure that dirt, construction materials, pollutants, or other human associated materials are not discharged from the project area. A certification from the Regional Water Quality Control Board will be required prior to project construction.	ACE and General Contractor	RWQCB	Pre-Construction and Construction
Construction of the project would introduce new landscaping to the project area.	<b>NC2:</b> If new landscaping is provided as part of the project, planting of invasive species shall be avoided	ACE	City of San Gabriel Building and Safety Division	Pre-Construction

TABLE 7-1: MITIGATION MONITORING AND REPORTING PROGRAM				
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Construction activities associated with the project could affect nesting birds in the project area.	<b>NC3:</b> Ground-disturbing and vegetation removal activities associated with construction of the project shall be performed outside of the breeding season for birds, or between September 1 and January 31. If these project activities cannot be implemented during this time period, the project applicant should retain a qualified biologist to perform preconstruction nest surveys to identify active nests within and adjacent to (up to 500 feet) the project area. If the preconstruction survey is conducted early in the nesting season (February 1–March 15) and nests are discovered, a qualified biologist may remove the nests only after it has been determined that the nest is not active (i.e., the nest does not contain eggs, nor is an adult actively brooding on the nest). Any active non-raptor nests identified within the project area or within 300 feet of the project area should be marked with a 300-foot buffer, and the buffer area would need to be avoided by construction activities until a qualified biologist determines that the chicks have fledged. Active raptor nests within the project area or within 500 feet of the project area should be marked with a 500-foot buffer and the buffer avoided until a qualified biologist determines that the chicks have fledged. If the 300-foot buffer for non-raptor nests or 500-foot buffer for raptor nests cannot be avoided during construction of the project, the project applicant should retain a qualified biologist to monitor the nests on a daily basis during construction to ensure that the nests do not fail as the result of noise generated by the construction. The biological monitor shall be authorized to halt construction if the construction activities cause negative effects, such as the adults abandoning the nest or chicks falling from the nest.	ACE and General Contractor	City of San Gabriel Building and Safety Division	Pre-Construction and Construction
Construction of the project could adversely affect mature trees in the project area.	<b>NC4:</b> ACE shall comply with the provisions of the City of San Gabriel's tree protection ordinance. If any trees protected by the ordinance are to be removed or damaged during construction, ACE shall consult with the City of San Gabriel prior to removal and obtain the necessary permits or approvals. If any native trees are removed, replacement trees shall be planted on-site or at an adjacent site. A certified arborist shall be contracted to conduct a pre-construction survey and provide recommendations for mitigation ratios and permitting for species that need to be removed.	ACE and General Contractor	City of San Gabriel Building and Safety Division	Pre-Construction and Construction
Intersection impacts would occur at the intersection of Mission Road/Del Mar Avenue with the closure of both	<b>CT2:</b> In order to minimize the incrementally increased delay impacts at the intersection of Mission Road/Del Mar Avenue during the AM peak hour due to the closure of Del Mar Avenue at the UPRR tracks, signal phasing shall be modified. Modification of the signal phasing at this intersection during the AM peak hour shall include turning off the signal phase or closing the westbound approach of El Monte Street. This action would result in a delay of 21.3 seconds and operate at LOS C in the AM peak hour. The PM peak hour would result in a delay of 24.9 seconds and operate at an LOS C. Implementing this measure would result in no adverse impacts associated with intersection operation of Mission Road/Del Mar Avenue in the AM peak hour during the closure of Del Mar Avenue.	ACE	Caltrans and City of San Gabriel Engineering Division	Pre-Construction

<b>TABLE 7-1: MITIGATION MONITORING AND REPORTING PROGRAM</b>				
<b>Impact</b>	<b>Mitigation Measure</b>	<b>Responsible Agency</b>	<b>Enforcing Agency</b>	<b>Timing</b>
Del Mar Avenue and Ramona Street	<b>CT6:</b> In order to minimize the incrementally increased delay impacts at the intersection of Mission Road/Del Mar Avenue during the AM peak hour due to the closure of Del Mar Avenue at the UPRR tracks, signal phasing shall be modified. Modification of the signal phasing at this intersection during the AM peak hour shall include turning off the signal phase or closing the westbound approach of El Monte Street. This action would result in a delay of 32.8 seconds and operate at LOS C in the AM peak hour. The PM peak hour delay would be 48.1 seconds and operate at a LOS D. Implementing this measure would result in no adverse impacts associated with intersection operation of Mission Road/Del Mar Avenue in the AM peak hour during the closure of Ramona Street.	ACE	Caltrans and City of San Gabriel Engineering Division	Pre-Construction
	<b>CT7:</b> ACE shall prepare a detailed detour and haul route plan for the partial closure of San Gabriel Boulevard. ACE shall consult the Cities of Alhambra, San Gabriel, Rosemead, and the County of Los Angeles regarding the most feasible detour routes. Additionally, ACE shall consult these jurisdictions regarding haul routes that result in the least amount of queuing and left-turns. The recommended routes provided in the traffic study shall be submitted for review.	ACE	City of San Gabriel, City of Alhambra, Los Angeles County, and the City of Rosemead	Pre-Construction
Intersection impacts would occur at the intersection of Mission Road/Del Mar Avenue with the closure of both Del Mar Avenue and Ramona Street	<b>CT1:</b> ACE shall prepare a detailed detour and haul route plan for the closures of Ramona Street and Mission Road. ACE shall consult the Cities of Alhambra, San Gabriel, Rosemead, and the County of Los Angeles regarding the most feasible automobile and school bus detour routes. Additionally, ACE shall consult these jurisdictions regarding haul routes that result in the least amount of queuing and left-turns. The recommended routes provided in the traffic study and Transportation Management Plan (TMP) shall be submitted for review.	ACE	City of San Gabriel, City of Alhambra, Los Angeles County, and the City of Rosemead	Pre-Construction
	<b>CT5:</b> ACE shall prepare a detailed detour and haul route plan for the closure of Del Mar Avenue. ACE shall consult the Cities of Alhambra, San Gabriel, Rosemead, and the County of Los Angeles regarding the most feasible automobile and truck detour routes. Additionally, ACE shall consult these jurisdictions regarding haul routes that result in the least amount of queuing and left-turns. The recommended routes provided in the traffic study shall be submitted for review.	ACE	City of San Gabriel, City of Alhambra, Los Angeles County, and the City of Rosemead	Pre-Construction
Metro Lines 176 and 487 and Montebello Transit Line 20 would be temporarily re-routed to continue service during road closures	<b>CT3:</b> ACE shall coordinate with Metro regarding the re-routing of Line 487 during the Ramona Street closure and of Line 176 during the Mission Road closure. Metro shall approve the detour route, which may include elements or be the same detour route described in this document. Ensuring that the route maintains most of the service prior to construction would result in no adverse impacts.	ACE	Metro	Pre-Construction

<b>TABLE 7-1: MITIGATION MONITORING AND REPORTING PROGRAM</b>				
<b>Impact</b>	<b>Mitigation Measure</b>	<b>Responsible Agency</b>	<b>Enforcing Agency</b>	<b>Timing</b>
The closure of Ramona Street would result in temporarily re-routing school bus routes for San Gabriel High School, Mission High School, and Mission	<b>CT4:</b> ACE shall schedule the closing of Ramona Street to coincide with the summer months so as to avoid impacts to school bus routes to San Gabriel High School, Mission Elementary School and Mission High School. ACE shall coordinate with the Alhambra Unified School District and officials at San Gabriel High School, Mission Elementary School and Mission High School prepare a detour route that shall ensure minimal changes to bus schedules. The detour route shall be distributed to students and parents and made available to the public for refinement and consensus.	ACE	AUSD and SGUSD	Pre-Construction
The proposed project would contribute to an incrementally cumulative traffic impact during construction.	<b>CM1:</b> ACE shall coordinate with the Cities of San Gabriel, Alhambra and Rosemead to obtain construction schedules for major projects in the project area. In addition, ACE shall furnish each city with anticipated construction schedules and notify the cities as changes occur.	ACE	City of San Gabriel, City of Alhambra, Los Angeles County, and the City of Rosemead	Pre-Construction
	<b>CM2:</b> ACE shall prepare and implement a Transportation Management Plan during construction that identifies street closures and detour routes.	ACE	City of San Gabriel, City of Alhambra, Los Angeles County, and the	Pre-Construction
Construction activity would increase regional emissions. The construction impacts to air quality are short term in duration and, therefore, will not result in adverse or long term conditions.	<b>For Fugitive Dust</b>			
	<b>CAQ/AQ1:</b> The construction contractor shall comply with Caltrans' Standard Specifications Section 7-1.01F and Section 10 of Caltrans' Standard Specifications. Section 7-1.01F specifically requires compliance by the contractor with all applicable laws and regulations related to air quality, including air pollution control district and air quality management district regulations and local ordinances. Section 10 is directed at controlling dust. If dust palliative materials other than water are to be used, material specifications are contained in Section 18.	General Contractor	ACE	Construction
	<b>CAQ/AQ2:</b> Water or dust palliative shall be applied to the site and equipment as frequently as necessary to control fugitive dust emissions.	General Contractor	ACE	Construction
	<b>CAQ/AQ3:</b> Soil binder shall be spread on any unpaved roads used for construction purposes, and all construction parking areas.	General Contractor	ACE	Construction
	<b>CAQ/AQ4:</b> Trucks shall be washed off as they leave the right of way as necessary to control fugitive dust emissions.	General Contractor	ACE	Construction
	<b>CAQ/AQ5:</b> Construction equipment and vehicles shall be properly tuned and maintained.	General Contractor	ACE	Construction
	<b>CAQ/AQ6:</b> Low-sulfur fuel shall be used in all construction equipment as provided in California Code of Regulations Title 17, Section 93114.	General Contractor	ACE	Construction
	<b>CAQ/AQ7:</b> A dust control plan shall be developed documenting sprinkling, temporary paving, speed limits, and expedited revegetation of disturbed slopes as needed to minimize construction impacts to existing communities.	ACE and General Contractor	ACE	Pre-Construction
	<b>CAQ/AQ8:</b> Equipment and materials storage sites shall be located as far away from residential and park uses as practical.	ACE and General Contractor	ACE	Pre-Construction and Construction
	<b>CAQ/AQ9:</b> Construction areas shall be kept clean and orderly.	General Contractor	ACE	Construction
	<b>CAQ/AQ10:</b> Environmentally sensitive areas shall be established for sensitive air receptors within which construction activities involving extended idling of diesel equipment would be prohibited.	ACE and General Contractor	ACE	Pre-Construction and Construction
<b>CAQ/AQ11:</b> Track-out reduction measures such as gravel pads shall be used at project access points to minimize dust and mud deposits on roads affected by construction traffic.	General Contractor	ACE	Construction	

<b>TABLE 7-1: MITIGATION MONITORING AND REPORTING PROGRAM</b>				
<b>Impact</b>	<b>Mitigation Measure</b>	<b>Responsible Agency</b>	<b>Enforcing Agency</b>	<b>Timing</b>
	<b>CAQ/AQ12:</b> All transported loads of soils and wet materials shall be covered prior to transport to reduce deposition of particulate during transportation.	General Contractor	ACE	Construction
	<b>CAQ/AQ13:</b> Dust and mud that are deposited on paved, public roads due to construction activity and traffic shall be removed to decrease particulate matter.	General Contractor	ACE	Construction
	<b>CAQ/AQ14:</b> Construction traffic shall be routed and scheduled to reduce congestion and related air quality impacts caused by idling vehicles along local roads during peak travel times.	ACE and General Contractor	Caltrans and Cities	Pre-Construction and Construction
	<b>CAQ/AQ15:</b> Mulch or plant vegetation shall be installed as soon as practical after grading to reduce windblown particulate in the area.	General Contractor	ACE	Construction
	<b>For regional emissions of all criteria pollutants except NOx</b>			
	<b>CAQ/AQ16:</b> Contractors shall utilize electricity from power poles rather than temporary diesel or gasoline generators.	General Contractor	ACE	Construction
	<b>CAQ/AQ17:</b> Contractors shall utilize alternative fueled off-road equipment.	General Contractor	ACE	Construction
	<b>CAQ/AQ18:</b> Contractors shall configure construction parking to minimize traffic interference.	General Contractor	ACE	Construction
	<b>CAQ/AQ19:</b> Contractors shall provide temporary traffic controls, such as a flag person, during all phases of construction to maintain smooth traffic flows.	General Contractor	ACE	Construction
	<b>CAQ/AQ20:</b> Contractors shall provide dedicated turn lanes for movement of construction trucks and equipment on-and off-site.	General Contractor	ACE	Construction
	<b>CAQ/AQ21:</b> Contractors shall schedule construction activities that affect traffic flow on arterial system to off-peak hours.	General Contractor	ACE	Construction
	<b>CAQ/AQ22:</b> All diesel powered construction equipment in use shall require control equipment that meets, at a minimum, Tier III emissions requirements. In the event Tier III equipment is not available, diesel powered construction equipment in use shall require emissions control equipment with a minimum of Tier II diesel standards.	General Contractor	ACE	Construction
	<b>CAQ/AQ23:</b> During project construction, the developer shall require all contractors to turn off all construction equipment and delivery vehicles when not in use or prohibit idling in excess of five minutes.	ACE and General Contractor	ACE	Construction
Alternative 1 construction activity would result in increased noise levels associated with equipment, trucks, and shoofly track operations. Construction noise would result in an adverse impact at all of the closest residential land	<p><b>CN/N1:</b> The construction contractor shall utilize temporary noise barriers (e.g., solid walls or sound attenuation blankets) capable of reducing noise levels by 10 dBA to block construction noise at sensitive land uses. The locations of the noise barriers are as follow:</p> <ul style="list-style-type: none"> <li>• Buildings on San Gabriel High School Campus Closest to Tracks</li> <li>• Entire San Gabriel High School campus including areas where no impact is predicted</li> <li>• Residences on West Main Street</li> <li>• San Gabriel Mission and small park/green area southwest of Mission Road</li> <li>• Residences along East Main Street between Del Mar Avenue and San Gabriel Boulevard</li> <li>• Residences east of Rubio Wash. East end of barrier would be at the industrial property at southwest corner of Walnut Grove Avenue and Clanton Street.</li> <li>• Extend to 250 feet west Rubio Wash, if feasible.</li> </ul>	ACE and General Contractor	ACE	Construction

<b>TABLE 7-1: MITIGATION MONITORING AND REPORTING PROGRAM</b>				
<b>Impact</b>	<b>Mitigation Measure</b>	<b>Responsible Agency</b>	<b>Enforcing Agency</b>	<b>Timing</b>
<p>uses, the northern part of the San Gabriel High School campus, the San Gabriel Mission, the Asian Youth Center, and several other institutional land uses without mitigation. Measure CN1 would reduce noise levels by 10 dBA and would eliminate most impacts. The exceptions would be the residences at the furthest west and east edges of construction activity and four institutional land uses. The residential land uses along with Alhambra Municipal Golf Course and Winston Smoyer Community Garden are generally in the transition area</p>	<p><b>CN/N2:</b>The construction contractor shall ensure that the construction noise levels at representative sensitive receptors do not exceed 80 dBA at the following locations:</p> <ul style="list-style-type: none"> <li>• North of Mission Rd., Almansor to Alhambra Wash</li> <li>• San Gabriel High School</li> <li>• West Main Street, Ramona to Mission Road</li> <li>• San Gabriel Mission</li> <li>• West Main Street, Mission Road to Del Mar Avenue</li> <li>• North of Tracks, Rubio Wash to Walnut Grove Avenue</li> </ul> <p>and 82 dBA at East Main Street, Mission Road to San Gabriel Blvd.</p>	General Contractor	ACE	Construction
	<p><b>CN/N3:</b> A noise-monitoring program shall be performed under the direction of ACE or the construction contractor. The monitoring program shall be designed to demonstrate that the contractor is in compliance with the noise limits detailed in the construction contract specifications.</p>	ACE and General Contractor	ACE	Construction
	<p><b>CN/N4:</b> The contractor shall be required to ensure that equipment is well maintained and equipped with mufflers.</p>	General Contractor	ACE	Construction
	<p><b>CN/N5:</b> Low-noise construction procedures shall be implemented.</p>	General Contractor	ACE	Construction
	<p><b>CN/N6:</b> Hauling shall be limited to between the hours of 7:00 a.m. and 7:00 p.m.</p>	ACE and General Contractor	ACE	Construction

TABLE 7-1: MITIGATION MONITORING AND REPORTING PROGRAM				
Impact	Mitigation Measure	Responsible Agency	Enforcing Agency	Timing
<p>where the tracks will go from at-grade to the trench. The trench would be approximately ten feet deep at the Alhambra Wash. The construction in this area would be less intensive than at areas where the trench will be the full depth. Sufficient noise control would be achievable with Control Measures CN2 through CN7. Therefore, general construction noise would not result in an adverse impact.</p>	<p><b>CN/N7:</b> The construction contractor shall submit a noise plan detailing how the construction will be performed in a manner that will not exceed the limits specified in Mitigation Measure CN/N2. The plan shall be prepared by a qualified acoustical engineer and should be approved by the resident engineer before construction is initiated. The noise control plan shall include an inventory of the equipment, the estimated noise level at 50 feet for each major piece of equipment, calculations of the noise levels at sensitive receptors, and, noise reduction measures for any locations where the predicted noise levels exceed the limits specified in Mitigation Measure CN/N2.</p>	<p>General Contractor</p>	<p>ACE</p>	<p>Pre-Construction</p>
<p>Construction activities associated with the project would temporarily increase ambient noise levels in the project vicinity above existing levels</p>	<p>Refer to Mitigation Measures <b>CN/N1</b> through <b>CN/N7</b>.</p>	<p>ACE and General Contractor</p>	<p>ACE</p>	<p>Pre-Construction and Construction</p>



<b>TABLE 7-1: MITIGATION MONITORING AND REPORTING PROGRAM</b>				
<b>Impact</b>	<b>Mitigation Measure</b>	<b>Responsible Agency</b>	<b>Enforcing Agency</b>	<b>Timing</b>
<p>Operation of the shoofly track would not result in an adverse vibration building damage or annoyance impact. Vibration associated with heavy-duty equipment would exceed the annoyance impact threshold at 35 residential land uses and the Asian Youth Center. Measures CV1 through CV5 would ensure that the vibration standards are not exceeded at sensitive receptors.</p>	<p><b>CV/V1:</b> A standard pre-construction survey shall be performed to document the existing condition of all structures in the vicinity of the construction site.</p>	ACE	Cities of Alhambra, San Gabriel, and Rosemead, and Los Angeles County	Pre-Construction
	<p><b>CV/V2:</b> The following vibration limits shall be utilized to minimize the potential for damage to buildings and historic structures, and to reduce potential for intrusive vibration at sensitive receptors such as residences and schools especially during the nighttime hours when people are trying to sleep:</p> <ul style="list-style-type: none"> <li>• Damage to normal buildings – 0.5 inches per second PPV;</li> <li>• Damage to historic buildings – 0.12 inches per second PPV;</li> <li>• Annoyance to residential buildings (daytime) – 0.022 inches per second PPV;</li> <li>• Annoyance to residential buildings (nighttime) – 0.016 inches per second PPV; and</li> <li>• Annoyance to office space, schools, churches, and other institutional land uses – 0.016 inches per second PPV</li> </ul>	ACE and General Contractor	Cities of Alhambra, San Gabriel, and Rosemead and Caltrans per MOA	Construction
	<p><b>CV/V3:</b> Vibration monitoring should be completed during construction activity to verify that construction vibration limits are not exceeded. If vibration from the test hits approaches or exceeds the limits, equipment activity shall be reduced until the vibration amplitudes at all sensitive buildings are below the applicable limit.</p>	General Contractor	Cities of Alhambra, San Gabriel, and Rosemead and Caltrans per MOA	Construction
	<p><b>CV/V4:</b> Low-vibration construction procedures shall be implemented (e.g., drilled holes instead of impact pile driving).</p>	General Contractor	ACE	Construction
	<p><b>CV/V5:</b> If complaints are received and monitoring shows that the annoyance limit is being exceeded, the contractor shall implement an alternative approach that reduces the vibration level to below the applicable standards.</p>	General Contractor	ACE	Construction

Appendix A  
Initial Study Checklist

## APPENDIX A CEQA CHECKLIST

### 4.1 INTRODUCTION

This section contains the complete CEQA Initial Study Checklist showing the level of impact under each environmental topic area. Below are the four impact categories as defined by CEQA. In each topic area, the appropriate impact category will be determined as it relates to that topic area.

#### DEFINITION OF IMPACT CATEGORIES

**No Impact:** The designation for those environmental topics where the proposed project would have no effect.

**Less-Than-Significant Impact:** The designation for those environmental topics where a change may occur as a result of the proposed project, however, the change would not exceed established impact threshold levels.

**Less-Than-Significant Impact with Mitigation Incorporated:** The designation assigned to environmental topics for which adverse effects can be reduced to a less-than-significant level with implementation of specific conditions and measures. The mitigation measures are listed after the discussion of the affected topic area.

**Potentially Significant Impact:** The designation assigned to environmental topics for which adverse effects cannot be reduced to a less-than-significant level by mitigation measures.

**4.2 CEQA CHECKLIST**

Potentially Significant Impact      Less-Than-Significant Impact with Mitigation Incorporated       Less-Than-Significant Impact      No Impact

**ISSUES**

**I. AESTHETICS. Would the project:**

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

**II. AGRICULTURAL RESOURCES. Would the project:**

- a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance, as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?
- b) Conflict with existing zoning for agricultural use, or a Williamson Act Contract?
- c) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?

**III. AIR QUALITY. Would the project:**

- a) Conflict with or obstruct implementation of the applicable air quality plan?
- b) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?
- c) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard (including releasing emissions which exceed quantitative thresholds for ozone precursors)?

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated <input type="checkbox"/>	Less-Than-Significant Impact	No Impact
<b>ISSUES</b>				
d) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**IV. BIOLOGICAL RESOURCES. Would the project:**

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) 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 US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) 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 US Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Conflict with any local policies or ordinances protecting biological resources, such as tree preservation policy or ordinance (e.g., oak trees or California walnut woodlands)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**V. CULTURAL RESOURCES: Would the project:**

a) Cause a substantial adverse change in significance of a historical resource as defined in State CEQA '15064.5?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
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	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated <input type="checkbox"/>	Less-Than-Significant Impact	No Impact
<b>ISSUES</b>				
b) Cause a substantial adverse change in significance of an archaeological resource pursuant to State CEQA '15064.5?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**VI. GEOLOGY AND SOILS. Would the project:**

a) Exposure of people or structures to potential substantial adverse effects, including the risk of loss, injury or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? Refer to division of Mines and Geology Special Publication 42.	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
ii) Strong seismic ground shaking?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iii) Seismic-related ground failure, including liquefaction?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
iv) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potential result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) 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?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Potentially Significant Impact      Less-Than-Significant Impact with Mitigation Incorporated       Less-Than-Significant Impact      No Impact

**ISSUES**

**VII. HAZARDS AND HAZARDOUS MATERIALS. Would the project:**

- |  |                          |                                     |                                     |                                     |
|--|--------------------------|-------------------------------------|-------------------------------------|-------------------------------------|
| a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?  | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?  | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?  | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?                                   | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            |
| e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area? | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| f) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for the people residing or working in the area?  | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |
| g) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?  | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/>            |
| h) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?   | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/>            | <input checked="" type="checkbox"/> |

**VIII. HYDROLOGY AND WATER QUALITY. Would the proposal result in:**

- |   |                          |                                     |                          |                          |
|---|--------------------------|-------------------------------------|--------------------------|--------------------------|
| a) Violate any water quality standards or waste discharge requirements? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|---|--------------------------|-------------------------------------|--------------------------|--------------------------|

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated <input type="checkbox"/>	Less-Than-Significant Impact	No Impact
<b>ISSUES</b>				
b) Substantially deplete groundwater supplies or interfere with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned land uses for which permits have been granted)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Place housing within a 100-year flood plain as mapped on federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
h) Place within a 100-year flood plain structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
i) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
j) Inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>IX. LAND USE AND PLANNING. Would the project:</b>				
a) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>



	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated <input type="checkbox"/>	Less-Than-Significant Impact	No Impact
<b>ISSUES</b>				
b) Conflict with 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, coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>X. MINERAL RESOURCES. Would the project:</b>				
a) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
b) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
<b>XI. NOISE. Would the project:</b>				
a) Exposure of persons to or generation of noise in levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exposure of people to or generation of excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
d) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
f) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Potentially Significant Impact      Less-Than-Significant Impact with Mitigation Incorporated       Less-Than-Significant Impact      No Impact

**ISSUES**

**XII. POPULATION AND HOUSING. Would the project:**

- |  |                          |                                     |                          |                                     |
|--|--------------------------|-------------------------------------|--------------------------|-------------------------------------|
| a) Induce substantial population growth in an area either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)? | <input type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> | <input checked="" type="checkbox"/> |
| b) Displace substantial numbers of existing housing necessitating the construction of replacement housing elsewhere?   | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |
| c) Displace substantial numbers of people necessitating the construction of replacement housing elsewhere?   | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/>            |

**XIII. PUBLIC SERVICES. Would the project result in:**

- |   |                          |                                     |                          |                          |
|---|--------------------------|-------------------------------------|--------------------------|--------------------------|
| a) Substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services: |                          |                                     |                          |                          |
| Fire protection?  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Police protection?  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Schools?  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Parks?  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
| Other governmental services (including roads)?  | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |

**XIV. RECREATION. Would the project:**

- |  |                          |                                     |                          |                          |
|--|--------------------------|-------------------------------------|--------------------------|--------------------------|
| a) Would the project increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/> | <input type="checkbox"/> |
|--|--------------------------|-------------------------------------|--------------------------|--------------------------|

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated <input type="checkbox"/>	Less-Than-Significant Impact	No Impact
<b>ISSUES</b>				
b) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

**XV. TRANSPORTATION/TRAFFIC. Would the project:**

a) Cause an increase in traffic, which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to ratio capacity on roads, or congestion at intersections)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
c) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
d) Substantially increase hazards to a design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
e) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
f) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
g) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

**XVI. UTILITIES AND SERVICE SYSTEMS. Would the project:**

a) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
b) 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?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
c) Require or result in the construction of new stormwater drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

	Potentially Significant Impact	Less-Than-Significant Impact with Mitigation Incorporated <input type="checkbox"/>	Less-Than-Significant Impact	No Impact
<b>ISSUES</b>				
d) Have sufficient water supplies available to serve the project from existing entitlements and resource, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project=s projected demand in addition to the provider=s existing commitments?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f) Be served by a landfill with sufficient permitted capacity to accommodate the project’s solid waste disposal needs?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
g) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

**XVII. MANDATORY FINDINGS OF SIGNIFICANCE**

- |  |                          |                                     |                                     |                          |
|--|--------------------------|-------------------------------------|-------------------------------------|--------------------------|
| a) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of 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? | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |
| b) Does the project have impacts which are individually limited, but cumulatively considerable? (@Cumulatively considerable@ means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects).  | <input type="checkbox"/> | <input type="checkbox"/>            | <input checked="" type="checkbox"/> | <input type="checkbox"/> |
| c) Does the project have environmental effects which cause substantial adverse effects on human beings, either directly or indirectly?   | <input type="checkbox"/> | <input checked="" type="checkbox"/> | <input type="checkbox"/>            | <input type="checkbox"/> |

**4.3 DETERMINATION OF SIGNIFICANCE**

On the basis of the initial study checklist and evaluation:

- I find that the proposed project COULD NOT have a significant effect on the environment, and a NEGATIVE DECLARATION will be prepared.
- I find that although the proposed project could have a significant effect on the environment, there will not be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A MITIGATED NEGATIVE DECLARATION will be prepared.
- I find that the proposed project MAY have a significant effect on the environment, and an ENVIRONMENTAL IMPACT is required.
- I find that the proposed project MAY have a “potentially significant impact” or “potentially significant unless mitigated” impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable analysis as described on attached sheets. An ENVIRONMENTAL IMPACT REPORT is required, but it must analyze only the effects that remain to be addressed.
- I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier EIR or NEGATIVE DECLARATION pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier EIR or NEGATIVE DECLARATION, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

**ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED**

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a “Potentially Significant Impact” as indicated by the checklist on the following pages:

- |   |  |   |
|---|--|---|
| <input type="checkbox"/> Aesthetics             | <input type="checkbox"/> Hazards & Hazardous Materials | <input type="checkbox"/> Public Services                    |
| <input type="checkbox"/> Agricultural Resources | <input type="checkbox"/> Hydrology & Water Quality     | <input type="checkbox"/> Recreation                         |
| <input type="checkbox"/> Air Quality            | <input type="checkbox"/> Land Use & Planning           | <input type="checkbox"/> Transportation/Traffic             |
| <input type="checkbox"/> Biological Resource    | <input type="checkbox"/> Mineral Resources             | <input type="checkbox"/> Utilities & Service Systems        |
| <input type="checkbox"/> Cultural Resources     | <input type="checkbox"/> Noise                         | <input type="checkbox"/> Mandatory Findings of Significance |
| <input type="checkbox"/> Geology & Soils        | <input type="checkbox"/> Population & Housing          |   |

**INITIAL STUDY CHECKLIST (to be completed by the Lead Agency)**

**BACKGROUND**

<b>PROPOSER NAME</b>		<b>PHONE NUMBER</b>
<b>PROPOSER ADDRESS</b>		<b>PROPOSER REPRESENTATIVE</b>
<b>AGENCY REQUIREING CHECKLIST</b>		<b>DATE SUBMITTED</b>
<b>PROPOSAL NAME (if applicable)</b>		

## Appendix B

### Section 4(f) Evaluation

## APPENDIX B SECTION 4(f) EVALUATION

Section 4(f) of the Department of Transportation Act of 1966, as amended, (49 United States Code (USC) 303) states that the US Department of Transportation (USDOT) may not approve the use of land from a significant publicly owned public park, recreation area, wildlife refuge, or any significant historic site unless a determination is made that:

- There is no feasible and prudent alternative to the use of land from the property; and
- The action includes all possible planning to minimize harm to the property resulting from such use.

A Section 4(f) use is defined as 1) permanent acquisition of a protected resource for a transportation project, or 2) temporary but adverse use of a protected resource. A Section 4(f) constructive use occurs when a transportation project does not incorporate land from a protected resource, but the proximity of impacts of the project are so severe that the attributes that qualify the resource for protection under Section 4(f) are substantially impaired or diminished.

Section 6009(a) of the Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU), Pub. L. 109-59, amended existing Section 4(f) legislation at Section 138 of Title 23 and Section 303 of Title 49, USC. The first substantive revision to Section 4(f) since the 1966 USDOT Act, Section 6009 was amended to simplify the process and approval of projects that have only a *de minimis* impact, analysis of avoidance alternatives are not required and the Section 4(f) evaluation process is complete for the particular resource.

For parklands, a finding of *de minimis* impacts is made when, after public notice and opportunity for a public review and comment, the transportation project will not adversely affect the activities, features and attributes of the park eligible for protection under Section 4(f); and the finding has received concurrence from the officials with jurisdiction over the park. For historic sites, a finding of a *de minimis* impacts is made when, in accordance with the consultation process required under Section 106 of the National Historic Preservation Act (16 USC 470f), that the transportation program or project will have no adverse effect on the historic property.

The Appendix contains the Section 4(f) evaluation of impact of the San Gabriel Trench Grade Separation project on historic properties, as parklands would not be affected as part of the proposed project. The Section 4(f) evaluation includes a description of each protected resource that may be impacted by the project. The description of each resource includes information on the location and characteristics of the property impacts, impacts of the project on the property, alternatives evaluated to avoid using the resources and measures to minimize harm, and coordination with the agency having jurisdiction over the resource. Section 1.0 Purpose and Need more fully describes the purpose and need for the project, as well as the proposed alternative.

### Purpose and Need

The purpose of the proposed project is to eliminate traffic delays and safety hazards associated with the four proposed intersections in the San Gabriel Valley. The San Gabriel Trench Grade Separation Project is proposed to:

- Provide congestion relief in order to improve traffic flow through the City of San Gabriel
- Improve the safety of four intersections for vehicle travel in the City of San Gabriel
- Improve the safety and operation of the UPRR through the City of San Gabriel



- Reduce air pollution emissions (regionally and locally)

In addition, the purpose of the proposed project is to:

- Contribute to the overall regional economy by enhancing the region's ability to handle the dramatic growth in goods movement that is anticipated to occur
- Help achieve the goals of SCAG's 2008 RTP

The need for this project arises from:

- Growing demand and reliance of the region's economy on the efficient movement of goods through the region
- Increased congestion in the area of the proposed project
- Increased traffic accidents from vehicle-train collisions in the project area

## **Proposed Alternative**

### **Alternative 1 – Proposed Project (San Gabriel Trench Grade Separation Project)**

The project site is located at the UPRR Alhambra Subdivision in the Cities of San Gabriel, Alhambra, Rosemead and the County of Los Angeles. The trench would be located approximately between milepost (MP) 489.5 and MP 491.8. The west end, the project site is generally located near the intersection of Mission Road and Almansor Street; the east end of the project site is generally located near the intersection of the UPRR and Walnut Grove Avenue. The project site is generally contained within the Alhambra Subdivision of the UPRR right-of-way. Although the length of the project site is approximately 2.2 miles, the actual trench that would be constructed (including retaining walls and other features) would be 1.4 miles and would generally be bounded by Alhambra Wash on the west and Rubio Wash on the east.

The grade separations at Ramona Street, Mission Road, Del Mar Avenue, and San Gabriel Boulevard will be achieved by lowering the track under these crossings in a trench and constructing bridge structures over the railroad at each crossing location. The existing track depression through Alhambra would be continued eastward through the City of San Gabriel. The rail line would return to grade where it crosses Rubio Wash, east of San Gabriel Boulevard. It is anticipated that Ramona Street, Mission Road, and Del Mar Avenue would remain at their current elevations. San Gabriel Boulevard would be raised slightly and the rail line depressed to accomplish the grade separation. New permanent drainage culverts or bridge structures would also be provided at the Alhambra Wash and the Rubio Wash. New rights-of-way will not be required for any project component.

A shoofly track will be provided on the north side of the trench during construction to maintain railroad operations.<sup>1</sup> The proposed width of the trench is 58 feet (17.68 meters), which will allow for construction of a single track, a service road and a future second track. A 20-foot (6.1-meter) spacing will be provided between the two tracks and 15 feet (4.57 meters) of clearance will be provided to the south wall of the trench. The maximum vertical gradient of the track will not exceed a nominal 1.15 percent grade. A minimum of 23.5 feet (7.32 meters) of vertical clearance will be provided between the top of the rail and underside of the bridge structures. Project construction is preliminarily scheduled to commence in 2011 and be completed in 2014. Project construction cost is estimated to be approximately \$498 million. The project is programmed with state Trade Corridor Improvement Funds (\$336.6) with additional funds

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<sup>1</sup>A shoofly is a temporary stretch of track that allows trains to travel around an accident or construction site.

being sought from the following sources: federal, state/Public Utilities Commission, Los Angeles Metropolitan Transportation Authority and railroad contribution.

## Section 4(f) Properties

### Historic Sites

To inventory historic resources in the project area, an APE was established in accordance with Section 106 of the National Historic Preservation Act (NHPR) of 1966, as amended. The architectural APE consists of full and partial take parcels as well as easements surrounding the direct APE. It also includes parcels approximately one parcel away from the direct APE, the San Gabriel Mission District Core, and parcels with potential noise and vibration effects. The direct (archeological) APE encompasses all ground disturbances associated with the project, including an approximately 2.4-mile-long segment of the approximately 100-foot wide railway corridor in the Cities of Alhambra, San Gabriel and Rosemead. In addition to the 100-foot wide segment of the existing UPRR Alhambra subdivision, portions of Ramona Street, Mission Road, Junipero Serra Drive, Clary Avenue, Del Mar Avenue, San Gabriel Boulevard, Commercial Avenue, and Santa Fe Avenue were surveyed as part of the direct APE.

As discussed in Section 2.1.10 (Cultural Resources), of the 99 resources evaluated for historic significance, 17 are eligible for the National and California Registers.

One (1) resource was determined to have the potential for Section 4(f) impacts.

- **Mission San Gabriel Arcángel, 428 S. Mission Drive, San Gabriel.** The Mission San Gabriel Arcángel was separately listed by in the National Register of Historic Places by the Keeper in 1971, and was designated State Historic Landmark No. 158 in 1935. This resource is also listed in the California Register. The mission is the anchor property for the Mission San Gabriel Arcángel Historic District.

### Archaeological Resources.

As discussed in Section 2.1.10 (Cultural Resources), survey relocated two previously recorded cultural resources, Chapman's Millrace and Mission Era Deposits within the project direct APE. These resources were combined into one resource named San Gabriel Mission Site (CA-LAN-184H).

This resource was determined to have the potential for Section 4(f) impacts.

**Chapman's Millrace.** This resource was originally recorded by Schmidt in 2000 as four masonry constructs in two parallel arrangements. Three of these are massive constructions of mortared stone and fragmented mission brick and tile (*ladrillos* and *tejas*), while the fourth appears to be constructed entirely of cement and *ladrillos*. These features have been interpreted as the remains of the millrace (water intake) for Chapman's Mill, a grain processing facility that Joseph Chapman constructed for the San Gabriel Mission in 1823.

Chapman's Mill stood about 200 feet south of the mission and featured a 13.5-foot-diameter undershot waterwheel housed in a masonry chamber that drove large millstones in a separate gear room. The long-abandoned mill was subjected to archaeological excavations on at least two occasions: in 1894 by Dr. Hiram A. Reid and in 1934 by Edith B. Webb. The ruins of Chapman's Mill were destroyed during the construction of a subdivision street in 1941 (Webb 1952:166). Neither excavation was fully reported. SWCA archaeologists relocated the four masonry constructs that comprise the millrace and identified two

additional fragments likely associated with the millrace located on the north side of the UPRR tracks approximately 50 meters northwest of the previously recorded millrace location. These fragments are not in-situ but are constructed in a similar fashion as the millrace. These six features consist of whole and fragmentary bricks and tiles embedded in concrete. The bricks are poorly oxidized and display a distinctive orange exterior and black interior.

## **Impacts**

### **Historic Sites**

#### *Direct Use*

Based on the preliminary engineering plans prepared in July 2009, there are no areas where historic sites may be acquired for use as a result of the proposed improvements. Therefore, direct use of Section 4(f) would not occur under the proposed action.

#### *Temporary Use*

Under the project, no areas of identified historic resources would be temporarily used.

#### *Constructive Use*

*Construction Effects.* Under the proposed project, improvements such as trench excavation and trench wall construction would be located directly adjacent to the San Gabriel Mission. Therefore, construction-related constructive use of historic sites would occur under the project.

*Operation Effects.* With operation of the proposed project the UPRR would operate within a trench below grade rather than its current at-grade configuration. Vibration associated with the operation of the UPRR would be expected to be similar to current conditions, as such; a Section 4(f) impact would not be expected to occur. Noise levels at the site would be reduced due to the below-grade configuration which would shield the San Gabriel Mission from noise associated with the train traveling on the track. Further, noise associated with train horns would also be reduced as the trains would no longer sound horns while traveling through the intersection of Ramona Street and Mission Road, near the San Gabriel Mission to satisfy California Public Utilities Commission requirements for warning devices at railroad grade crossings.

### **Archeological Resources**

#### *Direct Use*

Implementation of the proposed project would include the direct use of the Chapman's Millrace. Chapman's Millrace is currently believed to extend through the UPRR right-of-way from north to south. Construction of the project would require the destruction and removal of Chapman's Millrace. Portions of the Millrace would be exposed and could be excavated during utility relocation or shoofly construction. This resource is being recommended as being eligible for listing on the NRHP as part of the San Gabriel Mission site. SHPO concurrence on this recommendation has not yet occurred.

#### *Temporary Use*

Under the proposed project, Section 4(f) impacts to archeological resources would be permanent, a temporary use would not occur at the project site.

#### *Constructive Use*

Under the proposed project, Section 4(f) impacts to archeological resources would be permanent, a constructive use would not occur at the project site.

## **Avoidance Alternatives**

The proposed project is an improvement to an existing railroad line located within the established UPRR right-of-way and includes the grade separation of four intersections, as described above. As described in Section 1.0 Introduction, an above grade alignment was considered, but eliminated due to the potential for constructive use impacts on the San Gabriel Mission. An above grade alignment would block views of the San Gabriel Mission, thereby diminishing its overall character, potentially resulting in permanent 4(f) impacts. Due to the urbanized character of the area, extending the project beyond its current right-of-way would also require the acquisition of homes and businesses currently located along the corridor. Consideration of an alignment that would extended to the south, outside the UPRR alignment would have resulted in impacts to San Gabriel High School and the publically-owned Alhambra Golf Course. Raising the intersections over the railroad was also infeasible due to engineering constraints. As a result of these factors, no feasible alternatives have been identified.

## **Measures to Minimize Harm**

### *Historic Sites*

As described above, implementation of the project would not result in a direct use of Section 4(f) lands for historic sites.

There is potential for impacts resulting from constructive use of the San Gabriel Mission located less than 100 feet immediately north of the project site. Impacts that would occur would be associated with construction noise and vibration. However, Section 2.4.2 Construction Noise and Vibration indicates that while there would be a construction noise impact at the San Gabriel Mission; these potential impacts are temporary and can be mitigated by the measures described in Section 2.4.2. The analysis included in Section 2.4.2 also indicated that vibration impacts would not occur at the San Gabriel Mission. However, the potential for noise and vibration impacts will be further evaluated in the Finding of Effect for the proposed project.

### *Archeological Resources*

Chapman's Millrace is located within the UPRR right-of-way and would be destroyed and removed to accommodate the proposed project. Measures provided in Section 2.1.10 Cultural Resources include exhausting the potential for data recovery at the site.

## **Consultation and Coordination**

ACE has consulted with local jurisdictions including the Cities of San Gabriel, Alhambra and Rosemead to assure their participation in the planning process for the proposed action.

## **Finding**

FHWA will make a final decision about whether there is direct, temporary, or construction use of Section 4(f) resources within the project site based on the existing evaluation. Aside for the Section 4(f) use, consultation and coordination with the Cities of San Gabriel, Alhambra and Rosemead will continue to ensure that all measures to minimize harm to Section 4(f) resources within the project site would be undertaken.

## Appendix C

### Title VI Policy Statement

**DEPARTMENT OF TRANSPORTATION**

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*Flex your power!  
Be energy efficient!*

January 14, 2005

**TITLE VI  
POLICY STATEMENT**

The California Department of Transportation under Title VI of the Civil Rights Act of 1964 and related statutes, ensures that no person in the State of California shall, on the grounds of race, color, national origin, sex, disability, and age, be excluded from participation in, be denied the benefits of, or be otherwise subjected to discrimination under any program or activity it administers.

A handwritten signature in black ink that reads "Will Kempton".

WILL KEMPTON

Director

## Appendix D

### San Gabriel Relocation Plan

# DRAFT RELOCATION IMPACT REPORT

for

## SAN GABRIEL TRENCH PROJECT CITY OF SAN GABRIEL

Prepared by  
ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY

August 2003  
Revised September 28, 2007



## TABLE OF CONTENTS

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### EXHIBITS

*Exhibit A*  
PROJECT AREA MAP

*Exhibit B*  
REGIONAL AREA MAP

*Exhibit C*  
RELOCATION ASSISTANCE BENEFITS DESCRIPTION

*Exhibit D*  
REPLACEMENT SITE COMPARISON CHART

*Exhibit E*  
DATA SHEET AND RECOMMENDATION SUMMARY - FINAL RELOCATION IMPACT REPORT  
And Summary of Conclusions (Exhibit 10-Ex-4B)

*Exhibit F*  
*SPREADSHEET OF BUSINESS CHARACTERISTICS*  
*SPREADSHEET OF RESIDENTIAL CHARACTERISTICS*

*Exhibit G*  
*PHOTOGRAPHS*

*Exhibit H*  
*BIBLIOGRAPHY*

## I. INTRODUCTION

The Alameda Corridor – East Construction Authority, “ACE,” on behalf of the San Gabriel Valley Council of Governments, a California Joint Powers Authority is responsible for oversight of the ACE Project. The Authority’s Board consists of representatives from ACE Corridor cities wherein major improvements are planned. These cities include Pomona, El Monte, Industry, Montebello, West Covina, San Gabriel and the County of Los Angeles. The Authority is responsible for designing and building the planned improvements and for keeping the key stakeholders, residents and businesses informed during the process.

The ACE Project consists of \$912 million in improvements along the two rail lines in the San Gabriel Valley, the former Southern Pacific Line and the Union Pacific Line. Improvements include grade separations (underpasses or overpasses) of 21 grade crossings, street widening, re-striping, parking controls near 13 grade crossings and safety and signal improvements of up to 55 grade crossings.

The ACE Project has a two-phase eight-year construction schedule. Phase I is scheduled for construction between the years 2000 and 2004. Phase II is to occur between the years 2004 and 2007.

The ACE Project extends from downtown Los Angeles at the north end of the Alameda Corridor Project, easterly to the San Bernardino County line. The ACE corridor parallels the I-10 San Bernardino Freeway and the SR-60 City of West Covina Freeway, passing through multiple cities in the San Gabriel Valley.

The ACE Project offers numerous benefits to Southern California. Both environmental and economic benefits will result to better move goods through the region and to save commuters and residents’ valuable time. The ACE Project is evaluated consistent with the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA). The ACE Project will assist in the elimination of 221 tons of air pollutants annually in the worst air basin in the nation and move international trade valued at \$314 billion to and from the ports more efficiently and safely through the San Gabriel Valley. It will improve mobility in the San Gabriel Valley and help to preserve an estimated 192,000 new jobs projected for the area by year 2020. The ACE project will also reduce daily vehicle delay by 64 percent in year 2020, eliminate noise from train horns around locations where new grade separations are proposed, and reduce train/vehicular accidents by 59 percent in year 2020 from an estimated 5.03 to 2.07 percent of accidents annually.

The focus of this relocation impact report is on the San Gabriel Trench, located in the City of San Gabriel. The purpose and need for this grade separation project is to decrease vehicular and pedestrian crossing delays at Del Mar Ave. and Union Pacific railroad tracks.

The purpose of this relocation report is to provide ACE with summary and statistical information regarding the potential impact of this project to occupants within the project limits. (See attached Project Area Map Exhibit A). Specifically, this report is concerned with the identification of potential impacts that may occur as a result of the demolition of existing structures, proposed displacement of occupants, and a presentation of plan to mitigate respective impacts.

The implementation of this project may cause the displacement of seven (7) commercial establishments and three (3) residential tenants. Interviews were conducted with nearly all potentially displaced occupants

and a project site follow-up inspection occurred on September 24, 2007 to confirm continued occupancy of the potential displacees. A resource study was undertaken to ascertain the availability of adequate replacement residential and commercial sites. This report profiles the project area population, describes the resource survey and details ACE's relocation assistance program.

To obtain information necessary for this report, a door-to-door survey was conducted of residential tenants, and business operators in the project area. Personal on-site interviews were completed with 8 of the 10 potentially displaced residential and commercial occupants within the project site. Occupants were encouraged to respond to ensure that their comments would be included in this Relocation Impact Report. Interviews were conducted in English and Chinese. An interpreter was used to assist in interviewing the Chinese speaking persons.

As a result of the various funding sources involved in the development of the ACE Project, Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, Federal Highway Administration (FHWA) Relocation Guidelines and the Alameda Corridor – East Construction Authority Right of Way Guidelines Manual will be complied with in the implementation of the relocation assistance program.

## II. PROJECT DESCRIPTION AND PROJECT AREA CHARACTERISTICS

The San Gabriel Trench Project will provide a grade separation in the City of San Gabriel at the Del Mar crossing and Union Pacific railroad tracks. The grade separation will be accomplished by depressing Union Pacific Railroad (UPRR) and allowing Del Mar Avenue at approximately the same grade.

The proposed project would impact twelve (11) parcels with seven (7) business owners and three (4) residential tenants. Two of the tenants occupy single-family residences and one of the tenants occupies a residential unit that is in the airspace above a commercial establishment. Of the 11 cases, all but 2 was interviewed. The nine (9) persons interviewed indicated that they were aware of the proposed project.

The Self-Storage Corporation has 75 units that are used for self-storage of personal property. The units vary in shape and size and approximately 90 percent are occupied. This business has been in operation since 1991. In addition, there is an upper level townhouse apartment containing approximately 1400 sq. ft consisting of 2 bedrooms and 2 bathrooms. The tenants that occupy this unit do not pay rent, as they are the resident managers of the business.

An automobile repair shop is located in the project area. It is equipped with a waiting area, offices, and a small to medium size warehouse and distribution counter for the sale of auto parts. There are a total of 18 employees working at this business. The total occupied space for this location is approximately 15,000-sq. ft. This business also occupies 326 Del Mar, a location that will not be impacted by the project.

- A second automobile repair shop occupies approximately 15,000 sq. ft. This large industrial site has a small office and 4 repair bays located in the garage. According to the manager, it is estimated that there are 10 to 14 full-time employees.
- A wood molding and manufacturing shop occupies approximately 3,000 sq. ft. The business has been at this location for approximately 5 years. There are 2 full-time employees working at this business

location. The business has a large dust collection system that is connected to all machinery and is necessary in order to mold wood at this site.

- ❑ There is a woodworking company that specializes in custom moldings and woodwork. This business occupies approximately 4,500 sq. ft. 500 sq. ft. of which is used for office space. The remaining 4,000 sq. ft. is a warehouse, which is used for the manufacturing of wood products. There are a total of 4 full-time employees working at this business location.
- ❑ There is a gourmet meat products company that specializes in beef jerky and sausage. It manufactures and distributes from this industrial site consisting of 4,800 sq. feet. Approximately 1,500 sq. ft is used for warehouse purposes and 700 sq. ft is used for an office area. There are a total of 10 full-time employees working at this business location. The business has occupied this location since 2000.
- ❑ Also in the project area is an office supply company that specializes in tapes and ribbons. This business has occupied this location for approximately 3 years. This industrial unit is mainly used for warehouse, storage and shipping supplies.
- ❑ An audio videocassette distribution business is no longer in business. The company, when it was in business, occupied approximately 4,500 sq. ft. A large warehouse with high ceilings is used as housing for large amounts of inventory. There are a total of 5 full-time employees working at this business location. This business has occupied the project site since 1993.
- ❑ An Asian youth center is located within the project area. The center owns and occupies approximately 6,000-sq. ft of commercial property. The center has been at this location since 1997 and provides social services consisting of several outdoor youth activities and educational classrooms for Asian youth. They also occupy administrative offices approximately 500 ft north of the community center.

The businesses located at 242, 246 and 250 Clary Avenue; no longer occupy the office space. All three offices were vacant with for lease signs in the window. However the office located at 256 Clary Avenue was also vacant but the company Board Band Products, which is 50 feet east of the vacant office, is using the warehouse space for pallet breakdown, storage and preparation for distribution.

Loss of employees does not appear to be an issue in this project. Of the businesses interviewed, all have indicated an interest in relocating and maintaining their employees. Therefore, it is anticipated that there will be no actual loss of jobs due to the proposed Grade Separation Project.

### **III. PROJECTED DATE OF DISPLACEMENT**

As of the writing of this updated DRIR, the expected date to begin acquisition is not known; therefore the onset of relocation activities can not yet be determined.

### **IV. ANALYSIS OF RELOCATION RESOURCES SURVEY**

The ACE relocation staff personally inspected the site of all potentially impacted residential and commercial site occupants in the project area to assess the potential needs for replacement locations and for relocation services. Additionally, ACE has engaged in preliminary investigations through door-to-door surveys, internet searches, review of classified advertisements and communication with local real estate

professionals to determine the general availability of for lease and for sale property listings in the immediate and surrounding areas of the City of San Gabriel.

The study area primarily consists of housing units built in the 1950's. The active sales, as of 9/12/2007 for the project area's zip code, 91775 and 91776, shows that there were some 61 houses for sales with a minimum price of \$450K, a maximum of \$1.8 mil and median midpoint of some \$698K. Twenty three houses were reported sold as of 9/12/07 with escrow closing in August. It shows a minimum sales price of \$552K, a maximum of \$1.8 mil with a midpoint of some \$705K. These prices are based on a study conducted from Realtor.com. A local real estate company (Keller Williams Realty) shows that, for the area code 91776, the average sales price for a 2 bedroom is \$499,497.00 and for a 3 bedroom the price is \$575,797.00. No 1 bedrooms were reported sold for the reporting period of September 1 through September 30 2007.

The same research identified residential rental replacement sites; the rents vary between \$1.50– \$1.75 per square foot. This is an average for 1 bedroom, 2 bedroom and 3 bedrooms units.

Discussions with a local commercial real estate company near San Gabriel revealed the following for San Gabriel and surrounding cities: Rental rates vary between \$0.80 and \$2.00 per square foot and for sale properties vary between \$193.08 per square foot and \$203.00 per square foot. Alhambra, Irwindale, Baldwin Park and Monrovia will provide a wider range of commercial leasing and sales opportunities

#### **Results of Survey – July 2003 and September 2007: (SEE EXHIBIT D)**

The preliminary investigation indicated there are an adequate number of replacement units available to accommodate the needs of the displaced residential occupants and businesses in the project area.

The housing market availability is expected to remain adequate through the time of displacement.

Based on the results of this survey, it seems feasible that the displaced tenants and businesses in the San Gabriel Trench Project area will have an adequate supply of available replacement units to select. Therefore, it appears feasible and reasonable that the relocation project can proceed successfully.

#### **V. RELOCATION ASSISTANCE SERVICE**

ACE will provide all relocation assistance activities in accordance with the Uniform Relocation Assistance and Real Property Policies Act of 1970, as amended. Relocation resources shall be available to all displaced without discrimination (*SEE EXHIBIT C*).

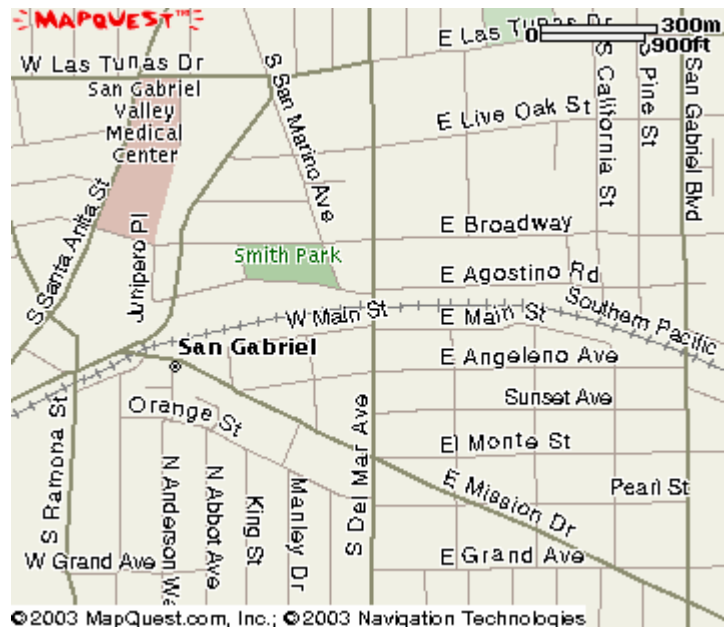
#### **VI. NON CITIZEN RULE**

ACE recognizes and will comply with Public Law 105-117, which amended the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 to prohibit an alien who is not lawfully present in the United States from receiving assistance under that Act.

# EXHIBITS

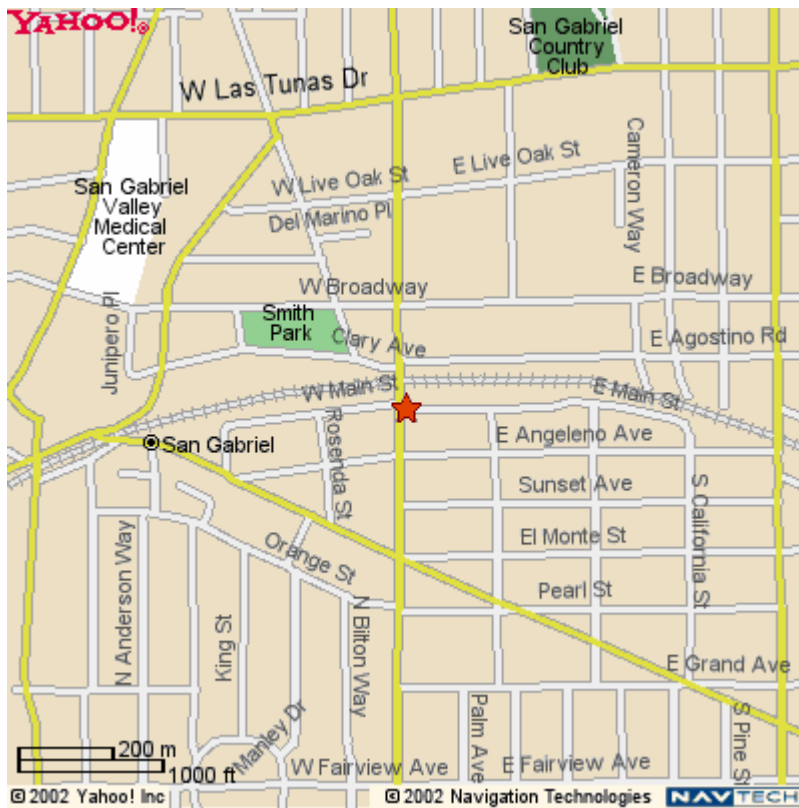
# A

## PROJECT AREA MAP



# B

## REGIONAL AREA MAP





# C

## RELOCATION ASSISTANCE BENEFITS DESCRIPTION

## EXHIBIT C

### I. IMPORTANT RELOCATION ASSISTANCE INFORMATION

- ❑ The following explanation is general in nature and is not intended to be a complete statement of Federal and State relocation laws and regulations. Any questions concerning relocation should be addressed to the Alameda Corridor – East (ACE) Construction Authority.
- ❑ Any persons to be displaced will be assigned to a relocation advisor, who will work closely with each displacee in order to see that all payments and benefits are fully utilized, and that all regulations are observed, thereby avoiding the possibility of displacee jeopardizing or forfeiting any of their benefits or payments. At the time of the first written offer to purchase, occupants are given a detailed explanation of the ACE's relocation services. To avoid loss of possible benefits, no individual, family, business, farm or nonprofit organization should commit to purchase or rent a replacement property without first contacting an ACE relocation advisor.

### II. RELOCATION ASSISTANCE ADVISORY SERVICES

- ❑ In accordance with the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended, ACE will provide relocation assistance to any person, business, farm or nonprofit organization displaced as a result of the acquisition of real property for public use. ACE will assist displacees in obtaining comparable replacement housing by providing current and continuing information on the availability and prices of both houses for sale and rental units that are "decent, safe and sanitary." Nonresidential displacees will receive information on comparable properties for lease or purchase. (For business, farm, and nonprofit organization relocation services, see Section IV.)
- ❑ Residential replacement dwelling referrals will be in equal or better neighborhoods at rents or prices within the financial ability of the individuals and families displaced, and reasonably accessible to their places of employment. Before any displacement occurs, comparable replacement dwellings that are open to all persons regardless of race, color, religion, sex, and national origin, and which are consistent with the requirements of Title VI of the Civil Rights Act of 1964, will be offered to displacees. Assistance will also include supplying information concerning Federal and State assisted housing programs, and any other known services being offered by public and private agencies in the area.
- ❑ Persons who are eligible for relocation payment(s) and who are legally occupying a residential property required for the project will not be asked to move without first being given at least 90 days written notice, and not unless at least one decent, safe, and sanitary replacement residence, available on the market, is offered to them by ACE.

### III. RESIDENTIAL RELOCATION PAYMENT PROGRAM

The Relocation Payment Program will help eligible residential occupants by paying certain costs and expenses. These costs are limited to those necessary for or incidental to the purchase or rental of a replacement property. Any actual moving costs in excess of the 50 miles are the responsibility of the displacee. The Residential Relocation Program can be summarized as follows:

### **Moving Cost**

Any displaced person who lawfully occupies the acquired property, regardless of the length of occupancy in the property acquired, will be eligible for reimbursement of moving costs. Displacees will receive either the actual reasonable costs involved in moving themselves and personal property up to a maximum of 50 miles, or a fixed moving cost based on a schedule.

### **Purchase Supplement**

In addition to a moving and related expense payment, fully eligible homeowners may be entitled to payments for increased costs of replacement housing.

Homeowners who have owned and occupied their property for 180 days or more prior to the date of the first written offer to purchase the property, may qualify to receive a price differential payment and may qualify to receive reimbursement for certain nonrecurring costs incidental to the purchase of a replacement property. An interest differential payment is also available if the interest rate for the loan on the replacement dwelling is higher than the loan rate on the displacement dwelling, subject to certain limitations on reimbursement based upon the replacement property interest rate. The maximum combination of these three supplemental payments that the owner-occupant can receive is \$22,500. If the total entitlement (without the moving payment) is in excess of \$22,500, the "Last Resort Housing Program" will be used. (See explanation of "Last Resort Housing Program" below.)

### **Rental Supplement**

Tenants who have occupied the property to be acquired by ACE for 90 days or more and owner – occupants of 90 – 179 days prior to the date of the first written offer to purchase property may qualify to receive a rental differential payment. This payment is made when ACE determines that the cost to rent a comparable "decent, safe, and sanitary" replacement dwelling will be more than the present rent of the displacement dwelling. As an alternative, the tenant may qualify for a down payment benefit designed to assist in the purchase of a replacement property and the payment of certain costs incidental to the purchase, subject to certain limitations noted below under the Down Payment Section. The maximum amount payable to any tenant of 90 days or more and any owner – occupant of 90 – 179 days, in addition to moving expenses is \$5,250. If the total entitlement for rental supplement exceeds \$5,250, the Last Resort Housing Program will be used.

In addition to the occupancy requirements, in order to receive any relocation benefits, the displaced person must buy or rent and occupy a "decent, safe, and sanitary" replacement dwelling within one year from the date that ACE takes legal possession of the property, or from the date the displacee vacates the displacement property, whichever is later.

### **Down Payment**

The down payment option has been designed to aid owner occupant of 90 – 179 days and tenants with no less than 90 days of continuous occupancy prior to ACE's first offer to purchase. The down payment and incidental expenses cannot exceed the maximum payment of \$5,250. The one year eligibility period in which to purchase and occupy a "decent, safe, and sanitary" replacement dwelling will apply.

### **Last Resort Housing**

Federal regulations (49 CFR 24) contain the policy and procedure for implementing the Last Resort Housing Program of Federal – aid projects. Last resort housing benefits are, except for the amounts of payments and methods in making them, the same as those benefits for standard residential relocation, as

explained above. Last Resort Housing has been designed primarily to cover situations where a displacee cannot be relocated because of lack of available comparable replacement housing, or when the anticipated replacement housing payment exceeds the \$5,250 (90 day occupant) and \$22,500 (180 day owner occupant) limits of the standard relocation procedure, because either the displacee lacks the financial ability or other valid circumstances. In certain exceptional situations Last Resort Housing may also be used for tenants of less than 90 days.

### **Other Relocation Information**

- ❑ After the first written offer to acquire property has been made, ACE will, within a reasonable length of time, personally contact the displacees to gather important information, including the following:
- ❑ Preferences in area of relocation:
- ❑ Number of people to be displaced and the distribution of adults and children according to age and sex;
- ❑ Location of school and employment;
- ❑ Specific arrangements needed to accommodate any family members' special needs;
- ❑ Financial ability to relocate into comparable replacement dwelling which will adequately house all members of a family.

### **NONRESIDENTIAL RELOCATION ASSISTANCE PROGRAM**

- ❑ The Nonresidential Relocation Assistance Program provides assistance to businesses, farms, and nonprofit organizations in locating suitable replacement property, and reimbursement for certain costs involved in relocation. The Relocation Advisory Assistance Program will provide current lists of properties offered for sale or rent, suitable for a particular business's specific relocation needs. The types of payments available to eligible businesses, farms, and nonprofit organizations, are moving and related costs, and possibly reestablishment expenses. A displacee may elect a fixed in-lieu payment instead of moving and related costs and reestablishment expenses.
- ❑ The moving and related costs can be summarized as follows:

### **MOVING EXPENSES**

- ❑ Moving expenses may include the following actual, reasonable costs:
- ❑ Transportation of personal property limited to 50 miles or less. Distances beyond 50 miles are not eligible, unless the Authority determines that relocation beyond 50 miles is justified.
- ❑ Packing, crating, unpacking, and uncrating of the personal property.
- ❑ Disconnecting, dismantling, removing, reassembling, and reinstalling relocated machinery, equipment, and other personal property, and certain substitute personal property. This includes connection to utilities available nearby. It also includes modifications to the personal property necessary to adapt it to

the replacement site, or the utilities at the replacement site, and modifications necessary to adapt the utilities at the replacement site to the personal property (Expenses for providing utilities from the right of way to the building or improvement are excluded.)

- ❑ Storage of personal property not to exceed 12 months, unless the authority determines that a longer period is necessary.
- ❑ Insurance for the replacement value of personal property in connection with the move and necessary storage.
- ❑ Any license, permit, or certification required for the operation at the replacement location. However, the payment shall be based on the remaining useful life of existing license(s), permit(s) or certification(s) of the business.
- ❑ The replacement value of property lost, stolen, or damaged in the process of moving (not through the fault or negligence of the displacee, their agent, or their employee) where insurance covering such loss, theft, or damage is not reasonably available.
- ❑ Professional services necessary for (i) planning the move of the personal property, (ii) moving the personal property, and (iii) installing relocated personal property at the replacement location.
- ❑ Relettering signs and replacing stationery on hand at the time of displacement that is made obsolete as a result of the move.
- ❑ Actual direct loss of tangible personal property incurred as a result of moving or discontinuing the operation. The payment shall consist of the lesser of
  - 1.) The fair market value of the item for continued use at the displacement site, less the proceeds from its sale. (To be eligible for payment, displacee must make a good faith effort to sell the personal property, unless the Authority determines that such effort is not necessary. When payment for property loss is claimed for goods held for sale, the fair market value shall be based on the cost of the goods to the business, not the potential selling price.) Or
  - 2.) The estimated cost of moving the item, but with no allowance for storage. (If the operation is discontinued, the estimated cost shall be based on a moving distance of 50 miles.)
- ❑ The reasonable cost incurred in attempting to sell an item that is not to be relocated.
- ❑ Purchase of substitute personal property. If an item of personal property which is used as part of the operation is not moved but is promptly replaced with a substitute item that performs a comparable function at the replacement site, displacee will be entitled to payment for the lesser of:
  - 1.) The cost of the substitute item, including installation costs at the replacement site, less any proceeds from the sale or trade-in of the replaced items.
  - 2.) The estimated cost of moving and reinstalling the replaced item, based on the lowest acceptable bid or estimate obtained by the Authority, but with no allowance for storage.
- ❑ Searching for a replacement location. Displacees are entitled to reimbursement for actual expenses, not to exceed \$2,500.00, as the Authority determines to be reasonable, which are incurred in searching for a replacement location including
  - 1.) Transportation
  - 2.) Meals and lodging away from home
  - 3.) Time spent searching, based on reasonable salary or earnings
  - 4.) Fees paid to a real estate agent or broker to locate a replacement site, exclusive of any fees or commissions related to the purchase of such site
- ❑ Provision of utilities from right of way to improvements on the replacement site.
- ❑ Licenses, fees and permits when not paid as part of moving expenses.
- ❑ Professional services in connection with the purchase or lease of a replacement site.
- ❑ Utility charges, excluding impact fees

## REESTABLISHMENT EXPENSES

In addition to the payments available above, a small business, farm or nonprofit organization may be eligible to receive a payment, not to exceed \$10,000, for the expenses actually incurred in relocating and reestablishing at a replacement site.

They include, but are not limited to, the following:

- ❑ Repairs or improvements to the replacement real property as required by law, code or ordinance.
- ❑ Modifications to replacement property to accommodate the business operation or make replacement structure suitable for conducting business.
- ❑ Construction and installation costs for exterior signing to advertise business.
- ❑ Redecoration or replacement of soiled or worn surfaces at the replacement site, such as paint, paneling or carpeting.
- ❑ Advertisement of replacement location.
- ❑ Estimated increased costs of operation during the first two years at the replacement site for such items as:
  - 1.) Lease or rental charges
  - 2.) Personal or real property taxes
  - 3.) Insurance premiums

# D

## REPLACEMENT SITE COMPARISON CHART

### Business

Address	Type of Business Entity	Number Of Employees	Business Character	Building And land space	Property Owner or Tenant	Number of years at site
405 S Del Mar	Self Storage	Not Know	Storage Units	approx 85,000	Owner	10 years
330 & 339 S. Del Mar	Car repair	14	Auto Repair	15,745	Owner	18 Years
130 Augustino A&B	Car Repair	10	Auto Repair	Unknown	Owner	10 years
260 Cleary	Gourmet Food Products	6	Gourmet Meat Products-(Beef-Jerky and Sausage)	15,393	Tenant	10 years
130 Augustino #C	Wood Working	Not known	Custom Wood Working	Unknown	Not Known	Not known
242 Clary Ave	Vacant	N/A	N/A	17,027	N/A	N/A
246 Clary Ave	Vacant	N/A	N/A	15,860	N/A	N/A
250 Clary Ave	Vacant	N/A	N/A	15,860	N/A	N/A
256 Clary Ave	Warehouse	Not known	Cable supplies & distribution	16,740	Owner	Not known
100 Clary Ave	Community Center	Not Known	Social & Physical services	17,036	Owner	10 years

### Residential

Address	Own/Tenant	OccupiedY/N	Type of Structure	Owner	Square Footage	Condition
313 E Main	Not Known	Y	SFR	Majetcik Flerda	3,746	Very Good
325 E Main	Not Known	Vacant	SFR	Wells Fargo	5,136	Dilapidated/Abandon
327 E Main	Not known	Y	SFR	Ester Scandoval, Maria Barbon	1,577	Good
405 Del Mar	Not Known	Not Known	Townhouse	Not Known	1,400	Not Known

# E

## DATA SHEET AND RECOMMENDATION SUMMARY FINAL RELOCATION IMPACT REPORT

ALAMEDA CORRIDOR – EAST CONSTRUCTION AUTHORITY  
DATA SHEET AND RECOMMENDATION SUMMARY  
FINAL RELOCATION IMPACT REPORT

EXHIBIT  
10-EX-4B

Date: July 28, 2003 updated September 2008

Dist. Co. Rte. KP (P.M.)

E.A. \_\_\_\_\_

Fed. Proj. No. \_\_\_\_\_

FY Start Cert. Const.  
(reg. acq.) Date Date

EIS Clearance Date:

Project Limits: See project limits map

Type of Project: A grade separation project

### MAGNITUDE OF DISPLACEMENT

Residential Units	Eligible	Non-Eligible
Single-Family Residences		
Owner-occupied	1	
Tenant-occupied	2	
Multi-Family Units		
Mobile Homes		
Vacant Units		
Others		
Total Residential Units .....	4	0
Nonresidential Units .....	7	0
Displacement Period:	Unknown at this time	
Est. Lead Time Required:	12 Months	
Est. Person Years Required:	1	



### RECOMMENDATIONS

	Yes	No
No Re-Rent Policy .....	X	
Last Resort Housing..... (If "yes", estimated number of units required ___3)	X	
Field Office Required .....		X
Acquisition Priorities Required .....		X
Other Recommendations (in general terms):	None	

**SUMMARY OF CONCLUSIONS DRIR DATA SHEET AND SUMMARY OF RECOMMENDATIONS  
EXHIBIT 10-EX-4B**

In summary, the subject data sheet reflects the total number of eligible displaced residents and businesses. All but one (1) business owner / operator in the San Gabriel Trench Project area was personally interviewed. Based on the information obtained from the interview and the site inspection, it appears that all businesses are lawful occupants of property in the project area and are eligible for relocation assistance due displaced businesses and residential tenants.

The displacement period is not yet determined, therefore, it seems reasonable that adequate time is being allowed for proper planning of the relocation program and notification to the affected businesses.

- ❑ At this time ACE does not have a re-rent policy. However, during the period between acquisition or possession of property, by ACE, and site vacation, execution of an interim rental agreement may be required of the existing businesses. As of the writing of this document, ACE does not intend to re-rent any of the properties in the subject project area.
- ❑ Due to the limited number of affected residential occupants and businesses being displaced by the project and due to the fact that ACE has offices within a reasonable distance from the project area, a site office will not be required for this project.

At this time, there has been no request for consideration of a hardship or protection acquisition.

Overall, the affected business proprietors and residential tenants appear to be cooperative. According to a survey of available and suitable replacement units in and adjacent to the San Gabriel area, there appears to be an adequate number of replacement properties available to accommodate the displaced residential tenants, homeowners, and businesses in the San Gabriel Trench Project area.

**F**  
**SPREADSHEET OF BUSINESS CHARACTERISTICS**  
**SPREADSHEET OF RESIDENTIAL CHARACTERISTICS**

**Businesses**

ACE Parcel No.	Type of Business Entity	Number Of Employees	Business Character	Building And land space	Property Owner or Tenant	Number of years at site
04H	Self Storage	4	Storage Units	approx 84,942 sf	Owner	14 years
04I	Car repair	14	Auto Repair	15,745	Owner	18 Years
04J1	Car repair	Unknown	Auto Repair	Unknown	Owner	10 years
04F	Gourmet Products	6	Gourmet Meat Products-(Beef-Jerky and Sausage)	15,393	Tenant	10 years
04J2	Wood Working	Not known	Custom Wood Working	3,000	Not Known	Not known
04B	Vacant	N/A	N/A	17,027	N/A	N/A
04C	Vacant	N/A	N/A	15,860	N/A	N/A
04D	Vacant	N/A	N/A	15,860	N/A	N/A
04E	Office Supplies	3	Warehouse	unknown	Tenant	3 years
04G	Social Services	Unknown	Community Center	17,036	Owner	10 years

## Residential

ACE Parcel No.	Assessors Parcel No.	Move in Date	Make Up of Household	Number of Bedrooms	Bedroom's Required	Current Rent	Monthly Income	Comments
4m	5368-001-006	N/A	N/A	Not Known	N/A	N/A	N/A	
4n	5368-001-034	March 2003	Unknown	3	3	Unknown	Unknown	Property is vacant/Abandon
4o	5368-001-003	1959	Unknown	3	3	N/A	Unknown	Both occupants receive SSI
4h	5362-017-002	Unkown	Unknown	2	2	Unknown	Unknown	Was unable to interview owner of unit

**G**

**PHOTOGRAPHS**

H

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# Appendix E

## Acronyms



## APPENDIX E ACRONYMS AND ABBREVIATIONS

µg/m <sup>3</sup>	micrograms per cubic meter
AB939	Integrated Waste Management Act
ACE	Alameda Corridor – East Construction Authority
ACM	asbestos containing material
ADT	average daily traffic
AF/Y	acre feet per year
AMSL	above mean sea level
ANSI	American National Standards Institute
APE	Area of Potential Effect
AQMP	Air Quality Management Plan
ASLHA	American Speech-Language-Hearing Association
ASHRAE	American Society of Heating, Refrigeration and Air Conditioning Engineers
ASR	Archeological Survey Report
AST	aboveground storage tank
ASTM	American Society for Testing and Materials
ATSAC	Automated Traffic Surveillance and Control
Basin	South Coast Air Basin
BMP	Best Management Practice
BNSF	Burlington Northern and Santa Fe
CAA	Clean Air Act
CAAQS	California Ambient Air Quality Standards
Cal/EPA	California Environmental Protection Agency
Caltrans	California Department of Transportation
Cal/OSHA	California Occupational Safety and Health Administrative

CARB	California Air Resources Board
CBC	California Building Code
CCR	California Code of Regulations
CEQ	Council on Environmental Quality
CEQA	California Environmental Quality Act
CHP	California Highway Patrol
CHPS	Collaborative for High Performance Schools
CMA	Critical Movement Analysis
CNEL	Community Noise Equivalent Level
CO	carbon monoxide
County	County of Los Angeles
CWA	Clean Water Act
dB	decibel
dba	A-weighted decibel
DOT	U.S. Department of Transportation
DTSC	Department of Toxic Substances Control
EA	Environmental Assessment
EIR	Environmental Impact Report
ESA	Environmental Site Assessment
FHWA	Federal Highway Administration
FONSI	Finding of No Significant Impact
FTA	Federal Transit Administration
g	gram
HAZNET	Hazardous Waste Information System
HCM	Highway Capacity Manual
HPSR	Historical Property Survey Report

HRA	Health Risk Assessment
HRER	Historical Resources Evaluation Report
HVAC	Heating Ventilation and Air Conditioning
IAQ	indoor air quality
ICU	Intersection Capacity Utilization
IS	Initial Study
ITE	Institute of Transportation Engineers
kV	kilovolt
LAFD	Los Angeles Fire Department
LARWQCB	Los Angeles Regional Water Quality Control Board
LAUSD	Los Angeles Unified School District
LBP	lead-based paint
L <sub>dn</sub>	day-night level
L <sub>eq</sub>	equivalent sound level
L <sub>max</sub>	maximum sound level
L <sub>min</sub>	minimum sound level
LOS	level of service
LUST	leaking underground storage tank
LUSTIS	Leaking Underground Storage Tank Information System
L <sub>xx</sub>	percentile exceeded sound level
Metro	Los Angeles County Metropolitan Transportation Authority
MMRP	Mitigation Monitoring and Reporting Program
MOU	Memorandum of Understanding
MOC	Memorandum of Cooperation
mph	miles per hour
NAAQS	National Ambient Air Quality Standards

NEPA	National Environmental Policy Act
NHPA	National Historic Preservation Act
NO	nitric oxide
NO <sub>2</sub>	nitrogen dioxide
NOP	Notice of Preparation
NO <sub>x</sub>	nitrogen oxides
NPDES	National Pollutant Discharge Elimination System
NRHP	National Register of Historic Places
O <sub>3</sub>	ozone
OSHA	Occupational Safety and Health Administration
Pb	lead
PCB	poly-chlorinated biphenyls
PEA	Preliminary Endangerment Assessment
PEIR	Program Environmental Impact Report
PGA	Peak Ground Acceleration
PM <sub>2.5</sub>	particulate matter 2.5 microns or less in diameter
PM <sub>10</sub>	particulate matter 10 microns or less in diameter
POV	Personal Occupancy Vehicle
ppm	parts per million
ROC	reactive organic compounds
ROW	right of way
RTP	Regional Transportation Plan
RWQCB	Regional Water Quality Control Board
SAFETEA-LU	Safe, Accountable, Flexible, Efficient, Transportation Act – A Legacy for Users
SB	Senate Bill
SCAG	Southern California Association of Governments

SCAQMD	Southern California Air Quality Management District
SCE	Southern California Edison
SGVCOG	San Gabriel Valley Council of Governments
SHPO	State Historic Preservation Office
SO <sub>2</sub>	sulfur dioxide
SO <sub>4</sub>	sulfates
SO <sub>x</sub>	sulfur oxides
SWPPP	Storm Water Pollution Prevention Plan
SWRCB	State Water Resources Control Board
TAC	toxic air contaminants
TIA	transportation impact assessment
UBC	Uniform Building Code
UPRR	Union Pacific Railroad
USCS	Unified Soil Classification System
USEPA	United States Environmental Protection Agency
UST	underground storage tank
V/C	volume to capacity
VOC	volatile organic compounds

## Appendix F

### List of Technical Studies

## APPENDIX F LIST OF TECHNICAL STUDIES

Below is a list of studies used in preparation of the San Gabriel Trench EIR/EA. All studies are available to the public at ACE's office located at:

Alameda Corridor-East Construction Authority  
4900 Rivergrade Road, Suite A120  
Irwindale, CA 91706-1446  
Contact: Ricky Choi, Community Relations Project Manager  
Tel: (626) 962-9292 ext. 154  
Fax: (626) 472-0094  
Email: [rchoi@theaceproject.org](mailto:rchoi@theaceproject.org)

*Archaeological Survey Report for the San Gabriel Trench Grade Separation Project, Cities of San Gabriel, Alhambra, and Rosemead, Los Angeles County, California.* SWCA Environmental Consultants, July 2009.

*Biological Resources Assessment Letter Report for the Alameda Corridor East – San Gabriel Trench Grade Separation Project, City of San Gabriel, Los Angeles County, California.* SWCA Environmental Consultants, February 18, 2009

*Construction Noise and Vibration Impact Assessment, San Gabriel Trench Grade Separation.* ATS Consulting, November 2007.

*Draft Relocation Impact Report for San Gabriel Trench Project City of San Gabriel.* Alameda Corridor – East Construction Authority, August 2003, Revised September 28, 2007.

*Draft Preliminary Engineering Report (Advanced Engineering Concept Plan).* Moffat & Nichol, September 3, 2008

*Extended Phase I Report for the San Gabriel Trench Grade Separation Project, Cities of San Gabriel, Alhambra, and Rosemead, Los Angeles County, California.* SWCA Environmental Consultants, August 2009.

*Paleontological Resources Assessment of the San Gabriel Trench Separation Project, Cities of Alhambra, San Gabriel, and Rosemead; Los Angeles County, California.* SWCA Environmental Consultants, September 2009.

*Paleontologic Resources Literature Review and Mitigation Plan – Alameda Corridor - East, Los Angeles County California.* San Bernardino County Museum, Section of Paleontology, Revised September 1999.

*Right of Way & Easement Report.* Moffat & Nichol, February 12, 2009

*Traffic Study for the San Gabriel Alameda Corridor (ACE) Railroad Trench Construction.* KOA Corporation, September 29, 2009.

*Transportation Management Plan for the Alameda Corridor East – Construction Authority San Gabriel Railroad Trench Construction Revised Report.* JMD, August 12, 2009.